

# **The Entrepreneur as System Architect**

Designing narrative forms of open source business model



**Justin Alexander Larner**

This dissertation is submitted for the degree of

Doctor of Philosophy

May 2019

School of Computing and Communications



# Declaration

This thesis has not been submitted in support of an application for another degree at this or any other university. It is the result of my own work and includes nothing that is the outcome of work done in collaboration except where specifically indicated.

Excerpts of this thesis have been published in the following conference manuscript:

Larner, J. (2016). Using personas and scenarios in co-creating stakeholder involvement in organisational governance.

Presented at the *International Social Innovation Research Conference (ISIRC) 2016*, Glasgow, UK.

Justin Alexander Larner, BSc, MA, MRes  
Lancaster University, UK.



# Abstract

In the digital platform economy, individual freelance workers are matched to their temporary employers through online systems. Workers interact with platform firms individually, undermining collective action and hence worker power. This is an issue for policy, as these workers do not have the protections afforded to those in traditional industries. The platform economy has also enabled open source, where the software architect creates a boundary around the software code they accept from a distributed group of contributors. The role of the software architect raises interesting questions about power in what can be seen as a form of networked organisation.

Open source can be viewed as a narrative of software code and discussions about it that create a boundary around the project. Open source can also be framed as a business model, where value created by contributors is captured by the software architect for the benefit of both contributors and users. Business models can be viewed as a narrative that can both express and create a desired future for the entrepreneur. The potential of open source to inform narrative forms of business model is the research area. Taking a social constructionist perspective, this study used workshop and participant observation techniques to engage with the founders and other stakeholders in three case study organisations.

The empirical contribution is that a narrative form of open source business model can have a power-balanced structure through a discursive process of boundary management. The methodological contribution is that annotated portfolio techniques can reveal an entrepreneur's business model design from ethnographic data. The theoretical contribution is the importance of conceptual integrity to business models as well as to software engineering. The issue of conceptual integrity can be explored further in future research on factors in business model success.



# Acknowledgements

This thesis is the outcome of many twists and turns on my research journey, a journey that I could not have completed without the help of many others. In particular I would like to thank:

The Engineering and Physical Sciences Research Council, for funding this research through the Digital Economy Programme (RCUK Grant EP/G037582/1), which supports the HighWire Centre for Doctoral Training.

My supervisors, Nick Dunn and Edward McKeever, for their support and advice that helped me discover the deeper and darker outcomes of this research.

My original supervisors, Keith Cheverst and Matt MacDonald, for helping me discover that my research was a design process.

Gordon Blair, for his role in creating the uniquely interdisciplinary HighWire Centre for Doctoral Training, and for encouraging me to apply for a place in it.

My HighWire DTC colleagues, particularly Louise Mullagh, Paul Kelly, Gerasimos Balis, Cefn Hoile, Steve Forshaw, Bran Knowles, Lisa Thomas, Ian Aspin and Joe Lindley.

Tish Brown and Kate Wright, the HighWire DTC administrators, for their support and practical help during key moments in my journey.

Angus Soutar, for his unfailing emotional and practical support over many years, and for the discussion which inspired me to put the words “open source guild” in that order.

Mike Knowles and Michael Hallam, for the many and intensive discussions that I have had with them over the past few years, which have helped to shape my perception of what an organisation could be if personal values and meaning are taken into account.

Joanne Tippett and Simon Harrison, for offering the right work at the right time.

Åke Walldius, for his collaboration in bringing together guilds and trade unions, and for supporting my research visit to KTH Royal Institute of Technology where I realised the importance of the digital platform economy.

Anne Larner, for allowing me to turn my childhood bedroom into an office for the last year of writing, and for her apple crumble with custard.

Justin Larner, May 2019.

# Contents

<b>1</b>	<b>Introduction</b>	<b>23</b>
1.1	Introduction to the chapter . . . . .	23
1.2	Background to the research . . . . .	24
1.3	Research problem and rationale . . . . .	24
1.3.1	Research problem: worker power in the platform economy . . . . .	24
1.3.2	Rationale for study: open source business models . . . . .	25
1.4	Aims, objectives and contributions . . . . .	26
1.5	Structure and research questions . . . . .	27
1.6	Conclusion to the chapter . . . . .	32
<b>2</b>	<b>Research Problem and Rationale for Study</b>	<b>35</b>
2.1	Introduction to the chapter . . . . .	35
2.2	Research problem . . . . .	36
2.2.1	The rise of the digital platform economy . . . . .	36
2.2.2	The role of workers in the platform economy . . . . .	37
2.2.3	Issues for policy in the platform economy . . . . .	38
2.3	Ownership of firms in the platform economy . . . . .	39
2.3.1	Extractive organisational ownership . . . . .	40
2.3.2	Generative organisational ownership . . . . .	42
2.4	Organisational forms in the platform economy . . . . .	43
2.4.1	The potential for alternative forms of working . . . . .	43
2.4.2	Organisational models that reflect the pre-platform economy . . . . .	44
2.4.3	Organisational models that are unique to the platform economy . . . . .	45
2.5	Open source, narratives and business models . . . . .	46
2.5.1	Open source software . . . . .	46
2.5.2	Open source as narrative form of organisation . . . . .	47
2.5.3	Open source as a power-balanced structure . . . . .	48

2.5.4	Open source as a narrative form of business model . . .	48
2.6	Rationale for study . . . . .	49
2.6.1	Worker power in the platform economy . . . . .	49
2.6.2	Research objective and initial research question . . . . .	50
2.7	Conclusion to the chapter . . . . .	50
<b>3</b>	<b>Literature Review</b>	<b>53</b>
3.1	Introduction to the chapter . . . . .	53
3.2	Literature review methodology . . . . .	54
3.3	Theoretical stance and research philosophy . . . . .	56
3.3.1	Theoretical stance: institutional forms of power . . . . .	56
3.3.2	Research philosophy: social constructionism through narratives . . . . .	57
3.4	A narrative definition and framework . . . . .	59
3.4.1	Narratives and stories . . . . .	59
3.4.2	Narrative components . . . . .	60
3.4.3	Narrative definition . . . . .	62
3.4.4	A narrative framework . . . . .	63
3.5	Entrepreneurship as a narrative . . . . .	64
3.5.1	Creating entrepreneurial reality . . . . .	64
3.5.2	Narratives as entrepreneurial boundaries . . . . .	65
3.5.3	Entrepreneurship as a narrative . . . . .	66
3.6	Open source as a narrative . . . . .	68
3.6.1	Open source software . . . . .	69
3.6.2	Open source as a private-collective model . . . . .	69
3.6.3	Open source governance . . . . .	70
3.6.4	Open source as a fluid boundary . . . . .	71
3.6.5	Open source as a narrative . . . . .	72
3.7	Business models as narratives . . . . .	74
3.7.1	Introduction to business models . . . . .	75
3.7.2	Business models as a logic for creating value . . . . .	75
3.7.3	Business models as a framework for economic output . . . . .	76
3.7.4	Business models as a template for boundary-spanning activities . . . . .	77
3.7.5	Components of a business model . . . . .	78
3.7.6	Business models as narratives . . . . .	79
3.8	A narrative form of open source business model . . . . .	84
3.8.1	Open source and business models . . . . .	84
3.8.2	Open innovation and business models . . . . .	84

<i>CONTENTS</i>	11
3.8.3 A narrative form of open source business model . . . . .	85
3.8.4 Potential contribution to knowledge . . . . .	91
3.9 Theoretical context and research area . . . . .	92
3.9.1 Theoretical context . . . . .	92
3.9.2 The research area . . . . .	93
3.9.3 Research question for empirical work . . . . .	93
3.10 Conclusion to the chapter . . . . .	94
<b>4 Methodology and Research Design</b>	<b>97</b>
4.1 Introduction to the chapter . . . . .	97
4.2 Philosophical position . . . . .	98
4.2.1 Ontological position . . . . .	98
4.2.2 Epistemological position . . . . .	99
4.2.3 Axiological position . . . . .	99
4.2.4 Form of reasoning adopted . . . . .	100
4.3 Potential research approaches . . . . .	102
4.3.1 The research context . . . . .	103
4.3.2 A case study approach . . . . .	105
4.3.3 Connecting action research with design . . . . .	105
4.3.4 Design methods . . . . .	107
4.4 Research design: Stage 1 . . . . .	108
4.4.1 Engagement with 3rd Way Coop and ESTA . . . . .	108
4.4.2 Drawing out themes through narratives . . . . .	109
4.4.3 Expressing themes in the form of personas . . . . .	110
4.4.4 Desiderata for business model design . . . . .	111
4.5 Research design: Stage 2 . . . . .	112
4.5.1 Personas, scenarios and values . . . . .	112
4.5.2 Engagement with Shared Future . . . . .	114
4.6 Research design: Stage 3 . . . . .	115
4.6.1 Ethnographic data from 3rd Way Coop and ESTA . . . . .	115
4.6.2 Business model design using annotated portfolios . . . . .	116
4.6.3 Narrative forms of open source business model . . . . .	117
4.7 Quality, validity, generalisability and reliability . . . . .	117
4.8 Conclusion to the chapter . . . . .	119
<b>5 Empirical Data</b>	<b>121</b>
5.1 Introduction to the chapter . . . . .	121
5.2 Stage 1: Narratives and personas . . . . .	122
5.2.1 Excerpts from the 3rd Way narrative . . . . .	122
5.2.2 Workshop with 3rd Way Coop . . . . .	128

5.2.3	Excerpts from the ESTA narrative . . . . .	130
5.2.4	Workshop with ESTA . . . . .	135
5.2.5	Desiderata for business model design . . . . .	138
5.3	Stage 2: Personas, scenarios and stories . . . . .	146
5.3.1	Preparation for the workshop with Shared Future . . .	146
5.3.2	Shared Future workshop: Personas and stakeholders .	147
5.3.3	Shared Future workshop: Personas and boundaries . .	150
5.3.4	Shared Future workshop: Personas and values ranking . . . . .	154
5.3.5	Shared Future workshop: Potential organisation design	157
5.3.6	Shared Future workshop: Reflections . . . . .	159
5.3.7	Shared Future's business model: boundary judgements	160
5.4	Stage 3: An annotated portfolio of data . . . . .	167
5.4.1	Initial analysis of 3rd Way and ESTA data . . . . .	167
5.4.2	Ethnographic data as an annotated portfolio . . . . .	170
5.5	Conclusion to the chapter . . . . .	185
<b>6</b>	<b>Discussion of Findings</b>	<b>187</b>
6.1	Introduction to the chapter . . . . .	187
6.2	A power-balanced membership model . . . . .	188
6.2.1	A natural metaphor of membership organisation . . . .	188
6.2.2	The natural membership organisation's environment .	189
6.2.3	The natural membership organisation's founding group	191
6.2.4	A power-balanced natural form of membership organi- sation . . . . .	191
6.3	A fluid permeable business model . . . . .	192
6.3.1	A narrative form of fluid business model . . . . .	192
6.3.2	Design of a fluid permeable business model . . . . .	196
6.4	A narrative form of open source business model . . . . .	197
6.5	Empirical contribution . . . . .	203
6.6	Contribution to the literature . . . . .	205
6.7	Methodological contribution . . . . .	206
6.8	Conclusion to the chapter . . . . .	207
<b>7</b>	<b>Overall Findings and Main Conclusions</b>	<b>209</b>
7.1	Introduction to the chapter . . . . .	209
7.2	Contribution to theory . . . . .	210
7.2.1	A power-balanced business model . . . . .	210
7.2.2	Conceptual integrity in a membership network . . . .	213
7.3	Contribution to policy development . . . . .	214

7.4	Contribution to practice . . . . .	215
7.5	Limitations of the study . . . . .	216
7.5.1	Limitations of the methodology . . . . .	216
7.5.2	Limitations of the findings . . . . .	217
7.6	Implications for further research . . . . .	217
7.7	Conclusion . . . . .	219
<b>8</b>	<b>References</b>	<b>221</b>
<b>A</b>	<b>Initial Analysis Appendix: 3rd Way Coop</b>	<b>253</b>
A.1	Nodes\\Purposeful intent . . . . .	253
A.1.1	Nodes\\Purposeful intent\cultural values . . . . .	253
A.1.2	Nodes\\Purposeful intent\founder . . . . .	254
A.1.3	Nodes\\Purposeful intent\individual limitations . . . . .	256
A.1.4	Nodes\\Purposeful intent\purpose . . . . .	257
A.1.5	Nodes\\Purposeful intent\stakeholders . . . . .	257
A.1.6	Nodes\\Purposeful intent\values . . . . .	260
A.2	Nodes\\Enacted by human or other actors . . . . .	261
A.2.1	Nodes\\Enacted by human or other actors\ community . . . . .	261
A.2.2	Nodes\\Enacted by human or other actors\ members . . . . .	261
A.2.3	Nodes\\Enacted by human or other actors\open source	262
A.2.4	Nodes\\Enacted by human or other actors\scale . . . . .	262
A.2.5	Nodes\\Enacted by human or other actors\ software . . . . .	263
A.3	Nodes\\Particular incidents or events . . . . .	266
A.3.1	Nodes\\Particular incidents or events\ accountability . . . . .	266
A.3.2	Nodes\\Particular incidents or events\ knowledge . . . . .	266
A.3.3	Nodes\\Particular incidents or events\learning . . . . .	266
A.3.4	Nodes\\Particular incidents or events\legitimacy . . . . .	269
A.3.5	Nodes\\Particular incidents or events\market . . . . .	269
A.3.6	Nodes\\Particular incidents or events\stories . . . . .	269
A.3.7	Nodes\\Particular incidents or events\structure . . . . .	270
A.3.8	Nodes\\Particular incidents or events\vision . . . . .	276
A.4	Nodes\\Causal sequence . . . . .	277
A.4.1	Nodes\\Causal sequence\decision-making . . . . .	277
A.4.2	Nodes\\Causal sequence\sustainability . . . . .	278

A.5	Nodes\\Reflect reality and create it . . . . .	278
A.5.1	Nodes\\Reflect reality and create it\\financial value . . . . .	278
A.5.2	Nodes\\Reflect reality and create it\\governance . . . . .	281
A.5.3	Nodes\\Reflect reality and create it\\peer review . . . . .	282
A.5.4	Nodes\\Reflect reality and create it\\property rights . . . . .	283
A.6	Nodes\\Context . . . . .	285
A.6.1	Nodes\\Context\\competencies . . . . .	285
A.6.2	Nodes\\Context\\investors . . . . .	286
A.6.3	Nodes\\Context\\licence . . . . .	286
A.6.4	Nodes\\Context\\relationships . . . . .	287
A.6.5	Nodes\\Context\\resources . . . . .	288
A.7	Nodes\\Specific point of view . . . . .	288
A.7.1	Nodes\\Specific point of view\\desired future . . . . .	288
A.8	Nodes\\New point of view . . . . .	290
A.8.1	Nodes\\New point of view\\inner lives . . . . .	290
A.8.2	Nodes\\New point of view\\leadership . . . . .	290
A.8.3	Nodes\\New point of view\\motivations . . . . .	294
A.8.4	Nodes\\New point of view\\personal development . . . . .	294
A.8.5	Nodes\\New point of view\\potential future . . . . .	296
A.8.6	Nodes\\New point of view\\transformation . . . . .	297
A.9	Nodes\\Become institutionalised . . . . .	298
A.9.1	Nodes\\Become institutionalised\\boundary- spanning . . . . .	298
A.9.2	Nodes\\Become institutionalised\\collaboration . . . . .	298
A.9.3	Nodes\\Become institutionalised\\intellectual property . . . . .	299
A.9.4	Nodes\\Become institutionalised\\organic structure . . . . .	300
<b>B</b>	<b>Initial Analysis Appendix: ESTA</b>	<b>301</b>
B.1	Nodes\\Purposeful intent . . . . .	301
B.1.1	Nodes\\Purposeful intent\\conflict . . . . .	301
B.1.2	Nodes\\Purposeful intent\\individual limitations . . . . .	301
B.1.3	Nodes\\Purposeful intent\\narrative . . . . .	303
B.1.4	Nodes\\Purposeful intent\\values . . . . .	303
B.2	Nodes\\Enacted by human or other actors . . . . .	305

B.2.1	Nodes\\Enacted by human or other actors\\ community . . . . .	305
B.2.2	Nodes\\Enacted by human or other actors\\fluid space	311
B.2.3	Nodes\\Enacted by human or other actors\\focal or- ganisation . . . . .	312
B.2.4	Nodes\\Enacted by human or other actors\\group . . .	312
B.2.5	Nodes\\Enacted by human or other actors\\ members . . . . .	312
B.2.6	Nodes\\Enacted by human or other actors\\ network . . . . .	313
B.2.7	Nodes\\Enacted by human or other actors\\open source	315
B.2.8	Nodes\\Enacted by human or other actors\\scale . . .	315
B.2.9	Nodes\\Enacted by human or other actors\\ software . . . . .	317
B.3	Nodes\\Particular incidents or events . . . . .	317
B.3.1	Nodes\\Particular incidents or events\\ accountability . . . . .	317
B.3.2	Nodes\\Particular incidents or events\\ knowledge . . . . .	319
B.3.3	Nodes\\Particular incidents or events\\learning . . . .	320
B.3.4	Nodes\\Particular incidents or events\\market . . . .	320
B.3.5	Nodes\\Particular incidents or events\\stories . . . .	320
B.3.6	Nodes\\Particular incidents or events\\structure . . . .	322
B.3.7	Nodes\\Particular incidents or events\\vision . . . .	325
B.4	Nodes\\Causal sequence . . . . .	325
B.4.1	Nodes\\Causal sequence\\decision-making . . . . .	325
B.4.2	Nodes\\Causal sequence\\identification of needs . . . .	325
B.4.3	Nodes\\Causal sequence\\process . . . . .	328
B.4.4	Nodes\\Causal sequence\\software architect . . . . .	329
B.4.5	Nodes\\Causal sequence\\sustainability . . . . .	329
B.5	Nodes\\Reflect reality and create it . . . . .	335
B.5.1	Nodes\\Reflect reality and create it\\financial value . . . . .	335
B.5.2	Nodes\\Reflect reality and create it\\governance . . . .	337
B.5.3	Nodes\\Reflect reality and create it\\peer review . . . .	337
B.5.4	Nodes\\Reflect reality and create it\\revenue . . . . .	338
B.5.5	Nodes\\Reflect reality and create it\\value proposition . . . . .	339
B.6	Nodes\\Context . . . . .	339

B.6.1	Nodes\\Context\competencies . . . . .	339
B.6.2	Nodes\\Context\partners . . . . .	340
B.6.3	Nodes\\Context\relationships . . . . .	340
B.7	Nodes\\Specific point of view . . . . .	340
B.7.1	Nodes\\Specific point of view\desired future . . . . .	340
B.7.2	Nodes\\Specific point of view\information . . . . .	340
B.7.3	Nodes\\Specific point of view\value capture . . . . .	341
B.7.4	Nodes\\Specific point of view\value creation . . . . .	345
B.8	Nodes\\New point of view . . . . .	346
B.8.1	Nodes\\New point of view\inner lives . . . . .	346
B.8.2	Nodes\\New point of view\leadership . . . . .	348
B.8.3	Nodes\\New point of view\personal development . . . . .	348
B.8.4	Nodes\\New point of view\potential future . . . . .	352
B.8.5	Nodes\\New point of view\power . . . . .	353
B.8.6	Nodes\\New point of view\transformation . . . . .	354
B.9	Nodes\\Become institutionalised . . . . .	355
B.9.1	Nodes\\Become institutionalised\assemblages of institutions . . . . .	355
B.9.2	Nodes\\Become institutionalised\collaboration . . . . .	355
B.9.3	Nodes\\Become institutionalised\organic structure . . . . .	358
B.9.4	Nodes\\Become institutionalised\relationship building . . . . .	361
B.9.5	Nodes\\Become institutionalised\shared narrative . . . . .	361

# List of Figures

1.1	Structure of the thesis and research questions . . . . .	28
3.1	Literature review structure . . . . .	56
4.1	The research methods used in this study in three stages . . .	108
5.1	Open Source Guild Flyer . . . . .	123
5.2	Mike Knowles creating the Super Salesman Steve persona . .	129
5.3	The personas Social Sam and Super Salesman Steve . . . . .	130
5.4	The Info Store idea created by Michael Hallam . . . . .	136
5.5	The personas Despot Dan and Ambassador Alf . . . . .	137
5.6	Values coding in Shared Future’s documents . . . . .	148
5.7	Some of the personas created by Shared Future . . . . .	149
5.8	Stakeholders in Shared Future . . . . .	151
5.9	Personas created by Shared Future with annotated values . .	152
5.10	Personas created by Shared Future with annotated values (con- tinued) . . . . .	153
5.11	Scenario planning in the Shared Future workshop . . . . .	154
5.12	Scenarios of the persona’s relationships to the organisation . .	155
5.13	Shared Future Are You? stakeholder narratives . . . . .	156
5.14	Shared Future organisational design . . . . .	158
6.1	Natural model of membership organisation . . . . .	189
6.2	Natural model of membership organisation in its environment	190
6.3	Natural model of membership organisation founding group . .	190
6.4	Shared Future’s business model design . . . . .	197
6.5	3rd Way Coop’s business model design . . . . .	202
6.6	ESTA’s business model design . . . . .	202
6.7	The narrative form of open source business model . . . . .	204
7.1	Power relations in the narrative form of open source business model . . . . .	211

A.1	Publicity for 3rd Way's Super Insulation product . . . . .	255
A.2	The Glowinkowski Model of Behaviour adopted by Mike Knowles	257
A.3	Excerpt from a Quaker and Business meeting about the purpose of business . . . . .	258
A.4	The Caux Round Table Principles for Responsible Business . .	259
A.5	ICSF Five Stages of Social Replication . . . . .	263
A.6	Email from Mike Knowles on the 2nd March 2015 mentioning the potential for Open Source Guilds . . . . .	264
A.7	Document from Mike Knowles outlining 3rd Way's vision and strategy . . . . .	268
A.8	First part of a document from Mike Knowles on the 5th December 2013 outlining 3rd Way's developing structure . . . . .	271
A.9	Second part of a document from Mike Knowles on the 5th December 2013 outlining 3rd Way's developing structure . . . . .	271
A.10	First slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way's developing structure . . . . .	272
A.11	Second slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way's developing structure . . .	273
A.12	Third slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way's developing structure . . . . .	273
A.13	Fourth slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way's developing structure . . .	274
A.14	Fifth slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way's developing structure . . . . .	274
A.15	Sixth slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way's developing structure . . . . .	275
A.16	Seventh slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way's developing structure . . .	275
A.17	Diagram by Mike Knowles on the 5th of August 2015 outlining 3rd Way's structure . . . . .	276
A.18	Excerpt from Guardian article 16th February 2016 that connected with sustainable business . . . . .	279
A.19	Excerpt from transcript of Ban Ki-moon's call for support on 25th October 2013 . . . . .	280
A.20	Excerpt from a document sent by Mike Knowles about the problems with the patent system . . . . .	284
A.21	Core values of Initiatives of Change . . . . .	289
A.22	3rd Way statement on Values Based Leadership 19th February 2016 . . . . .	291

A.23 Excerpt on the future of work from the Global Opportunity Report 2016 . . . . .	292
A.24 Information on an event about public leadership for young people . . . . .	293
A.25 Excerpt on leadership from a report on the TIGE conference 2013 . . . . .	293
A.26 Information on the basic ideas behind Initiatives of Change . .	295
A.27 Information on the aims and objectives of Initiatives of Change	296
A.28 Information on the University for the Common Good, an initiative of Glasgow Caledonian University . . . . .	297
A.29 Information on the Transformational Business Network . . .	298
A.30 Excerpt from report on farming in Romania that highlights difficulties in coordination between different activities . . . .	299
B.1 The Lens of Understanding diagram that Michael Hallam related to personas . . . . .	302
B.2 Diagram by Michael Hallam that shows how the ESTA Consortium could satisfy the four bottom lines . . . . .	302
B.3 Annotated diagram of the ESTA consortium by Michael Hallam on the 5th February 2016 highlighting the importance of values . . . . .	304
B.4 ESTA Health and Wellbeing Directory produced in 2015 . . .	306
B.5 First part of a paper drafted by Michael Hallam showing how the four bottom lines relate to each other . . . . .	307
B.6 Second part of a paper drafted by Michael Hallam showing how an organisation can relate to its environment . . . . .	308
B.7 Third part of a paper drafted by Michael Hallam offering a systems approach to considering unknowns . . . . .	309
B.8 Fourth part of a paper drafted by Michael Hallam incorporating the author's idea that Maslow's hierarchy of needs could be inverted . . . . .	310
B.9 Fifth part of a paper drafted by Michael Hallam showing how the four bottom lines could relate to each other . . . . .	311
B.10 Decentralised organisation structure proposed by Michael Hallam in 2003 . . . . .	314
B.11 Ideas for how ESTA could relate to its wider community through the Money Loop drawn by Michael Hallam . . . . .	316
B.12 Excerpt from the document Using the ESTA logo Audit, terms and conditions . . . . .	318

B.13 The Money Loop system diagram created by Michael Hallam on 19th July 2016 . . . . . 321

B.14 The Money Loop system diagram created by Michael Hallam on 23 August 2016 . . . . . 322

B.15 Organic model of organisation created by Michael Hallam . . . 323

B.16 Possible extent of the “No Brand” concept for how ESTA could scale up created by Michael Hallam in February 2016 . . . . . 324

B.17 Excerpt from a Locality report on the future of public services 326

B.18 The Needs Wheel diagram that informed Michael Hallam’s thinking . . . . . 327

B.19 First part of a presentation that Michael Hallam made to Cat Smith, Lancaster’s Member for Parliament on the 5th October 2016 . . . . . 329

B.20 Second part of a presentation that Michael Hallam made to Cat Smith, Lancaster’s Member for Parliament on the 5th October 2016 . . . . . 330

B.21 The Quadruple Bottom Line Framework of Indicators used in audits of ESTA members . . . . . 331

B.22 The Seven Peaks Model, created by Michael Hallam to relate consciousness to sustainability . . . . . 331

B.23 The Quadruple Bottom Line Framework of Indicators used in audits of ESTA members . . . . . 332

B.24 First excerpt from the document From Three Sectors to Four, showing how Michael Hallam developed the Quadruple Bottom Line . . . . . 333

B.25 Second excerpt from the document From Three Sectors to Four, showing how Michael Hallam developed the Quadruple Bottom Line . . . . . 334

B.26 Part of a spreadsheet showing Michael Hallam’s interpretation of the work of Yehuda Tagar from 2003 on humanising the workplace . . . . . 335

B.27 Excerpt from a paper by Yehuda Tagar from 2003 on humanising the workplace that inspired Michael Hallam . . . . . 336

B.28 Diagram created by Michael Hallam showing how the proposed ESTA Consortium could work . . . . . 337

B.29 Excerpt from an online book by Charles Hugh Smith, asserting that all individuals have the power to change the economic system . . . . . 338

B.30 Diagram from a paper by Mark van Vugt outlining the 4i Framework, or how information can relate to belonging . . . . .	342
B.31 Excerpt from a document on the Lancaster Food Loop Game circulated by Michael Hallam in June 2015 . . . . .	343
B.32 The author's contribution to keeping money local in 2015 . . .	345
B.33 Good Will Ill Will, a diagram created by Michael Hallam to emphasise the importance of personal development as well as vision . . . . .	347
B.34 Part of a spreadsheet showing Michael Hallam's development of the seven stages of becoming a person introduced by Carl Rogers . . . . .	348
B.35 The contents page of a document produced by Michael Hallam on 22 July 2016 compiling meeting notes and other reflections	349
B.36 Leaflet produced by Michael Hallam, emphasising ESTA's four bottom lines . . . . .	351
B.37 Part of a document compiled by Michael Hallam on the Twelve Leverage Points proposed by Donella Meadows . . . . .	353
B.38 Part of a document on the Commons Society, which Michael Hallam identified as having a structure similar to that of ESTA	356
B.39 Excerpt from an article by Jo Confino highlighting Jeremy Rifkin's perspective on the potential for technology to create a collaborative commons . . . . .	359
B.40 Excerpt from a report produced by Michael Hallam on why he created Lancaster Ethical Trading Association (ESTA) . . . .	360



# Chapter 1

## Introduction

### 1.1 Introduction to the chapter

The Internet has enabled new ways of working, often called the collaborative or sharing economy, which have been promoted as enabling more efficient use of both material resources and people's time. Digital software platforms enable the collaborative economy, but they also enable the "gig economy" of freelance workers, who lose the legal and social protections that they would have as employees. Workers in the platform economy interact with platform firms individually, undermining their power to take collective action.

Open source, as a means of collaboration of distributed individuals to produce computer software, also relies on the digital platform economy, but there is a balance of power between contributors and the software architect. This balance of power could inspire new business models in the platform economy that also have a balance of power between the focal firm and its worker network.

The aim of this study is to investigate how open source can inform the development of narrative forms of business model that offer a balance of power between workers and firms. This aim is fulfilled by a number of objectives, including reviewing the relevant literature, establishing a theoretical foundation, conducting an empirical study with three case study organisations, and discussing the empirical findings with reference to the literature review.

This chapter first summarises the background to the study and the research problem, then the empirical, methodological and theoretical contributions, then offers an outline of the remaining thesis chapters, together with the research questions.

## 1.2 Background to the research

This research is inspired by the author's experience of involvement at staff, management and director level in a range of organisations that worked for social benefit from 1993 to 2010. In these organisations, despite dedicated staff and volunteers plus adequate funding to meet a clearly identified social need, they struggled with internal conflict and other problems. Previous research at Liverpool John Moores University from 2008 to 2010 identified that membership involvement in organisational governance is a particular issue when membership is open to all (Larner and Mason, 2014), which helped to address the lack of research into governance issues in social enterprise (Low, 2006; Spear et al., 2009). Research on governance issues connected with the author's work on the wider applicability of open source undertaken at Manchester University during 2010 and 2011 to be a starting point for this study. The other starting point is the research problem of the growing digital platform economy, with its erosion of worker power.

## 1.3 Research problem and rationale

### 1.3.1 Research problem: worker power in the platform economy

Digital technologies enable sharing of resources on a scale not seen before, which Botsman and Rogers (2010) described as “collaborative consumption”. Collaborative consumption evolved into the collaborative or sharing economy, defined as ‘using internet technologies to connect distributed groups of people to make better use of goods, skills and other useful things’ (Stokes et al., 2014, p. 10). New ways of working could potentially contribute to the solidarity economy by enabling direct democracy and citizens to self-organise, but these technologies ‘arguably still operate on assumptions that do not fully contribute to the co-creation of human economies’ (Vlachokyriakos et al., 2017, p. 3133), instead reflecting existing assumptions in society.

These assumptions in society are particularly evident in the rise of the digital platform economy. Kenney and Zysman (2016, p. 61) define platforms as ‘multisided digital frameworks that shape the terms on which participants interact with one another’. Digital platforms can facilitate social media such as Facebook, enable marketplaces such as Ebay or create new forms of business such as Uber. In the platform economy, the main actors are the companies that own the platforms, such as Uber, Airbnb or Deliv-

eroo; customers, who receive goods or services via the platform; and freelance workers who provide the goods or services (De Groen et al., 2016). When goods or services are provided on a paid basis, employers hold far greater market power than workers, including unilaterally setting wages for each task (Kingsley et al., 2015), which favours the work going to low-wage economies (Irani and Siberman, 2013).

According to the OECD Employment Outlook Report (2017), the platform economy is currently less than 1% of the total economy, but this proportion is growing rapidly, thus the issue of power in the platform economy is a growing problem. In the platform economy, software platforms themselves embody power relations between workers and their temporary employers, an example of how technology can be a delegated form of power (Brey, 2008). The technology that enables the current platform operators to create a dispersed and temporary workforce can also enable those workers to take collective action. However, collective action is currently limited to workers creating Internet-based forums to share knowledge and experience (Fabo et al., 2017). These forums can benefit workers who use them, but don't directly change power relations between those workers and platform operators. It is thus important to find business models that can offer more of a balance of power between workers and firms in the platform economy. Open source, as a mechanism for collaboration that operates in the platform economy, offers the potential to create alternative business models.

### **1.3.2 Rationale for study: open source business models**

Open source originated as a method of producing computer software where any number of individuals or firms can view, use and contribute to the source code of a software project via the Internet (DiBona et al., 1999). Their contributions are coordinated by the software architect, who creates a boundary round the code they choose to distribute (Weber, 2004). Open source has been framed as a narrative, of both the software code itself and the discussions and correspondence around it (Bagozzi and Dholakia, 2006). Open source can also be viewed as a form of organisation, where organisations are goal-directed, boundary-maintaining and socially constructed (Aldrich and Ruef, 2006). Open source can thus be viewed as a narrative form of organisation, where discussion and correspondence enable goals for the project to be communicated to contributors, while the software code itself forms the project boundary. Open source can also be considered as a business model (O'Mahony, 2007), where the software architect captures the value created

by contributors for the benefit of both contributors to and users of the software. Open source can thus be viewed as a narrative form of business model, which is the research topic for this study.

## **1.4 Aims, objectives and contributions**

### **Aim**

To investigate how open source can inform the development of narrative forms of business model that offer a balance of power between workers and firms in the platform economy.

### **Objectives**

1. Undertake a literature review to examine how the concepts of narratives, entrepreneurship, open source and business models can connect;
2. Propose a narrative form of open source business model from the literature;
3. Undertake an empirical study of businesses that have adopted elements of the narrative form of open source business model;
4. Use the empirical data to establish how businesses can operate with a power-balance between their founder and a membership community;
5. Establish the relevance of membership business models that operate with a power-balance between founder and membership to the platform economy;
6. Make proposals for further empirical work.

This thesis makes empirical, methodological and theoretical contributions in fulfilling these objectives.

### **Contributions**

The empirical contribution made by this study is to propose a narrative form of open source business model that has been developed from analysis of data from three case study organisations. This model is potentially generalisable from the experience of these organisations to other organisations wishing to create and capture value through a member network.

The contribution to methodology is to extend the use of annotated portfolios from human-computer interaction (Gaver, 2012; Gaver and Bowers, 2012) to entrepreneurship and business contexts. Analysis of empirical data in this study as an annotated portfolio uses the narrative form of open source business model developed in the Literature Review chapter to frame case study data as a business model design process.

The theoretical contribution is to first highlight that open source operates as a power-balanced structure, building on the writing of Stephen Weber (2004), and that businesses could similarly adopt a power-balanced structure as part of their business model. The second theoretical contribution is to connect the literature on software design to the findings of this study to highlight the importance of conceptual integrity (Brooks, 2010) to both successful software design and successful business models. The narrative form of open source business model that has been developed in this study could offer an alternative to cooperative business models in the platform economy, maintaining conceptual integrity through a focal firm while involving a network of contributors. This theoretical contribution opens up a hypothesis to be tested in future research, that conceptual integrity can be a causal factor in successful business models.

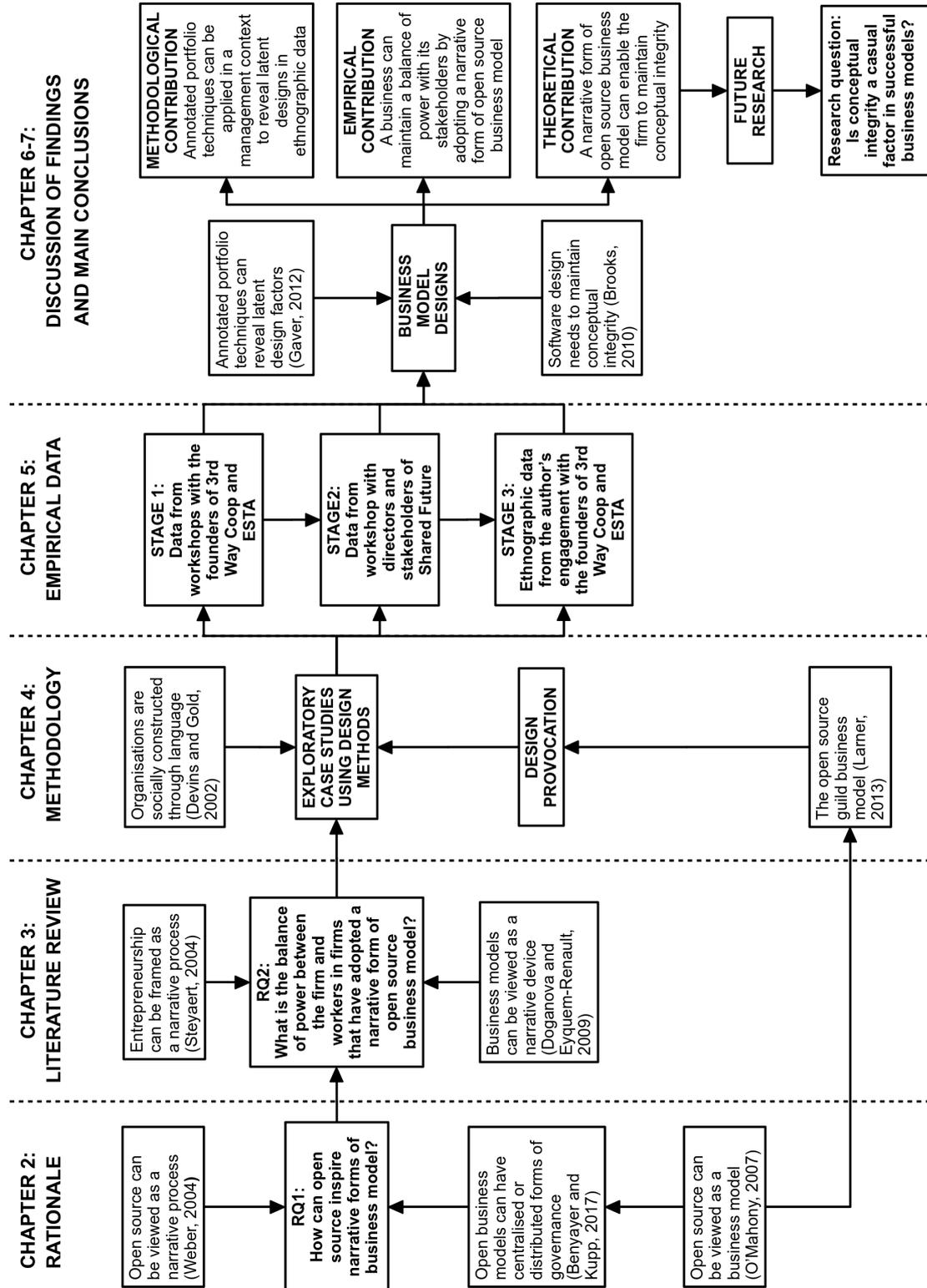
## 1.5 Structure and research questions

The rest of the chapters that make up this thesis are summarised below, together with the research questions. Figure 1.1 shows the key concepts driving this study and how the research questions are developed and answered.

### **Chapter 2: Research Problem and Rationale for Study**

Business models in the digital platform economy are introduced as the research problem, where a comparatively small firm can use a software platform to control the terms on which a large group of employers interact with their temporary employees. The issue of how platform firms can exert power over workers is an increasing problem for policy, as a platform can potentially replace entire industries or services. Open source also operates in the platform economy, but with a power-balance between the software architect and contributors that is created by the open nature of the software code and discussions about it, which form a shared narrative. Open source can be considered as a narrative form of business model in the platform economy,

Figure 1.1: Structure of the thesis and research questions



where the narrative of the software code and discussions form the boundary of the open source project. As a potential new area of research, the research question is framed as a broad research proposition and exploratory research question:

*Proposition:* Open source can be framed as a narrative and as a business model. Linking the concepts of open source and narratives could inspire narrative forms of business model.

*RQ1:* “How can open source inspire narrative forms of business model?”.

*How examined:* Through an integrative literature review that examines how the concepts of narratives, open source and business models can connect.

### **Chapter 3: Literature Review**

The Literature Review chapter frames the relevant literature on entrepreneurship, business models and open source as narratives. It adopts a socially constructionist perspective, that organisations or business models can be created through narratives. Narrative forms of business model can connect with open source as a narrative, in that such a business model could enable a single individual or small group to coordinate a much larger creative network. The Literature Review offers a synthesis of the literature that helps answer the exploratory research question RQ1 identified in the previous chapter, concluding that open source can inspire narrative forms of business model that have fluid boundaries and a balance of power between the focal firm and its worker membership network. The experience of open source software projects suggests that a firm that adopts this form of business model could gain competitive advantage from having a worker membership, who also benefit from being part of the network. As a new area of research, the research question is still exploratory, presented as a research proposition and a second research question:

*Proposition:* A narrative form of open source business model can offer a balance of power between the focal firm and their member network.

*RQ2:* “What is the balance of power between the firm and workers in firms that have adopted a narrative form of open source business model?”.

*How examined:* Through an empirical study of businesses that have adopted elements of the narrative form of open source business model developed in the Literature Review chapter.

#### **Chapter 4: Methodology and Research Design**

The Methodology and Research Design chapter presents the research design and methods used to answer RQ2 identified in the Literature Review. The methodology builds on a perspective that organisations and business models can be created through language, which implies abductive, or design reasoning. This study uses workshop and case study methods to examine how data from engagement with entrepreneurs can lead to the design of business models. The study took an exploratory case study approach, following a design process in three stages, with three case study organisations:

In Stage 1, the author conducted workshops with the founders of 3rd Way Coop and Lancashire Ethical Trading Association (ESTA) using personas to represent their stakeholders.

In Stage 2, the author conducted a workshop with directors and stakeholders of Shared Future CIC using personas and scenarios.

In Stage 3, the author analysed ethnographic data from engagement with the founders of 3rd Way Coop and ESTA as an annotated portfolio of business model designs.

The analysis in Stage 3 is informed by prior theoretical framing, which in this study is the narrative form of open source business model developed in the Literature Review chapter.

#### **Chapter 5: Empirical Data**

The Empirical Data chapter presents an initial analysis of the data from the author's engagement with three case study organisations. Engagement with 3rd Way Coop was from late 2013 to autumn 2016, while engagement with ESTA was from mid 2014 to autumn 2016. In the third case, Shared Future, the engagement was shorter-term, from March to July 2016. The empirical data used in this study from each of the three stages was:

In Stage 1, the author used notes from meetings and email correspondence with the founders of 3rd Way Coop and ESTA to create a narrative based on the author's immersion in their work. The narrative, together with notes and photographs from a workshop

with each founder using personas to represent stakeholders are the data for this stage.

In Stage 2, the author first gathered organisational data on Shared Future, then engaged with founders and members of the organisation in a day-long series of workshops. The workshops applied persona and scenario design techniques to explore Shared Future's relationship with its stakeholders.

In Stage 3, the data from the author's engagement with the founders of 3rd Way Coop and ESTA was analysed using the narrative form of open source business model developed in the Literature Review as a framework.

## **Chapter 6: Discussion of Findings**

The Discussion of Findings chapter offers further analysis of empirical data to answer the research question proposed in the Literature Review, to present how this study makes an empirical contribution, a methodological contribution and a contribution to literature.

The empirical contribution made by this study is the narrative form of open source business model, where the founder creates a founding narrative of vision and values which in turn attracts members to their network. As a business model, the founding group sets the boundary of the membership network and captures value from that network, which benefits the members as well the founding group.

The methodological contribution of this study is to extend the use of annotated portfolios from human-computer interaction design to the design of business models. Annotated portfolio techniques could be helpful in working with entrepreneurs, where a narrative of their past, present and desired future can be annotated as a portfolio of business model designs.

The contribution to literature made by this study is how a narrative form of open source business model can promote conceptual integrity. Conceptual integrity refers to the overall vision of a software design project, which in successful projects is held by one or at most a small group of individuals. Despite its potential usefulness, this idea has not been applied in the area of entrepreneurship or business models.

## **Chapter 7: Overall Findings and Main Conclusions**

The Overall Findings and Main Conclusions chapter summarises the findings of this study and considers its implications for theory, practitioners op-

erating within the platform economy and for policy development. The contribution to theory is to link the notion of conceptual integrity as proposed by Fredrick Brooks (2010) in the context of software design to business models. Conceptual integrity helps explain the success of open source (Weber, 2004), and could also explain why attempts to promote worker power in the platform economy such as platform cooperatives have not become mainstream. This chapter proposes a new research question as a starting point for further research that can be framed in terms of hypothesis testing:

*Proposition:* That conceptual integrity in a business model is linked with the success of businesses based on that model.

*Independent or causal variable:* Degree of conceptual integrity.

*Dependent or outcome variable:* Business model success.

*Hypothesis:* A business model that exhibits a greater degree of conceptual integrity will be more successful than one that does not.

*Null hypothesis:* The degree of conceptual integrity in a business model does not correlate to business success.

*Research question:* “Is conceptual integrity a casual factor in successful business models?”.

*How it can be examined:* Through qualitative and quantitative empirical research studies.

The chapter then offers potential areas for further research in the fields of participatory design methods, entrepreneurship, business models and management science.

## 1.6 Conclusion to the chapter

After introducing the study’s background as the author’s previous research into organisational governance and open source, this chapter then introduced the research problem as erosion of worker power in the digital platform economy. The rise of the platform economy is a concern to policy makers worldwide, as it threatens to reverse steady gains in worker rights gained in the last 100 years. Open source has extended from its origins in computer software to inform business models in the platform economy. Framing open source as a narrative of the software code and discussions around it offers the potential to create alternative business models that offer a balance of power between the firm and its workers.

The aim of this study is to investigate how open source can inform the development of narrative forms of business model that offer a balance of power between workers and firms in the platform economy. Objectives include establishing the gap in the literature where a specific contribution can be made and undertaking empirical work with entrepreneurs that wish to adopt a form of business model based on open source.

The next Research Problem and Rationale chapter explores the problem of worker power in the platform economy and offers an initial research question RQ1, “How can open source inspire narrative forms of business model?” for further exploration in the following Literature Review chapter.



# Chapter 2

## Research Problem and Rationale for Study

### 2.1 Introduction to the chapter

The Internet, particularly the mobile internet, has enabled new ways of collaboration online, including sharing skills, goods and other resources. This has generally been seen as a positive development that can enable these resources to be unlocked and promote social capital. These digital technologies have also enabled new ways of working where freelance workers are matched with their customers through a software system. These workers perform tasks such as transport and domestic services. The software systems that enable this form of work are described as platforms, and the commerce that takes place through them as the platform economy. Workers in the platform economy can benefit from the range of opportunities to gain freelance work, but some writers have highlighted that this creates a “gig economy” where workers lose the legal and social protections that they would have as employees, and have called for measures to deal with the situation.

The platform economy has also enabled the development of open source, originally a method of producing computer software. Open source is where any number of individuals or companies can view, use and contribute to the source code of a software project via the Internet. Open source relies on a digital platform to collect contributions and distribute the completed software. This platform enables the software architect to coordinate the contributions of a large distributed group of software developers who interact individually with the platform. In this respect, open source resembles other platform economy initiatives, in that an individual or small group can de-

termine who will contribute and on what terms. In open source, however, the power of the software architect to determine which contributions are accepted is balanced by the contributors being able to take the freely available source code and find a new software architect. This balance of power has interesting implications for business models that are inspired by open source.

This chapter explores the broader issues raised by the digital platform economy and the potential of open source to inspire business models that can promote value creation and capture for the benefit of workers as well as the firm.

## **2.2 Research problem**

### **2.2.1 The rise of the digital platform economy**

By the late 1990s, the growth of the Internet enabled a distributed form of work, where many individuals could make a small contribution to a larger project online. At first, this was seen as comparable to the invention of printing in the original medieval Renaissance (DiBona et al., 1999), but a more critical perspective then prevailed (e.g., Ettliger, 2014). By the mid 2000s, access to the Internet became ubiquitous enough to enable crowdsourcing (Howe, 2006), where companies like iStockphoto, InnoCentive and Amazon Mechanical Turk solicited contributions from amateurs in the fields of photography, research and administration, undercutting professionals in those fields. Despite this de-professionalisation, crowdsourcing was still generally viewed in a positive light, with authors such as Brabham (2008) claiming that the ‘web provides a perfect technology capable of aggregating millions of disparate, independent ideas’ which could develop skills and confidence in participating individuals, while conceding that these individuals were paid less than professional designers would be. While these and other authors have emphasised the positive effects of the collaborative economy, the same technology has been used to create new forms of paid work, raising concerns about erosion of worker rights.

Baldwin and Woodard (2009) highlight that the term “platform” was adopted by industrial economists to describe a system or institution that mediates transactions between agents. Later writing by Baldwin (2012, p. 7) highlights that ‘a system with undivided ownership of the core will attract more outside investment in innovation than one with divided ownership’, a key factor in the development of the platform economy. With the

rise of digital platforms in the 2000s, several writers have used the term “platform economy” to distinguish a growing trend towards monetisation of the digital platforms that people use to communicate and increasingly gain employment. Kenney and Zysman (2016, p. 61) define digital platforms as ‘multisided digital frameworks that shape the terms on which participants interact with one another’. In this view of the platform economy, platforms can include social media such as Facebook, marketplaces such as Ebay and services such as Uber.

### **2.2.2 The role of workers in the platform economy**

Other writers take a narrower view of the platform economy, focusing on the role of workers. De Groen et al. (2016) frame the platform economy as involving the main actors of the companies that own the platforms, such as Uber, Airbnb or Deliveroo; the customers, who receive goods or services via the platform; and the freelance workers who provide the goods or services. Coase (1937) defined a firm as where an entrepreneur protects workers from fluctuating markets, in which workers would otherwise have to trade their labour individually. By working within the firm, the workers get a regular wage, while the entrepreneur gets the assurance that they will have labour when they need it. If everything works well, the entrepreneur makes a profit, the workers get a regular wage and the market gets less expensive products through reduced transaction costs.

During the 20th century, firms tended to get larger due to factors such as the telephone and the telegraph which reduced the cost of organising (Coase, 1937). In the digital platform economy, the firm (or corporation as it is now more commonly known), still acts as an employer in a market where transaction costs approach zero. The platform operator creates an algorithm that matches workers with customers, but the workers don’t benefit from regular employment, they take on tasks as and when they are given them. Although the platform operator might claim not to be a firm in the traditional sense (Kenney and Zysman, 2016), they are still directing resources, which is how a firm overcomes transaction costs (Coase, 1937), even if this allocation is indirectly through an architecture that enables a specific kind of interaction (Srnicek, 2016).

Castells (2011) highlights that in a networked society, power is exerted primarily through the network rather than through traditional institutions. Reinforcing this perspective on the power of the network, Fuchs (2014) highlights a darker side to the collaborative economy, where the writings of Marx

take on a renewed relevance in a networked world where users must communicate (coercion) through commercially owned networking sites (alienation) in their everyday lives, in the process creating content that is used for profit by these companies (expropriation). These digital labourers end up being the new proletariat, or “precarariat” (Bradley, 2014), reflecting their precarious position in the gig economy (Kenney and Zysman, 2016). This precarious position is due to digital platforms which allow exertion of asymmetric power, leading to the “taking economy” rather than the sharing economy (Calo and Rosenblat, 2017).

Freelance workers now perform a range of tasks in the platform economy that include transport, household repairs, information work and domestic service, but in doing so they take on the risks of self-employment while the platform owners take a steady commission from operating the platform (Smith and Leberstein, 2015). The Frankfurt Paper on Platform Based Work (2016, p. 2) makes a similar point, highlighting that these workers as independent contractors are ‘typically excluded from the legal and social protections established for employees over the last hundred years’. These issues are about stakeholder power in firms, where a stakeholder is “any group or individual who can affect, or be affected by, the achievements of an organization’s purpose” (Freeman, 1984, p. 54). Later writing by Freeman, however, took a different perspective, defining stakeholders as participants in the ‘human process of joint value creation’ (1994, p. 415). However, participants don’t always get the share of the value they create, due to power imbalances.

### **2.2.3 Issues for policy in the platform economy**

In the platform economy, employers hold far greater market power than workers, including unilaterally setting wages for each task (Kingsley et al., 2015), and finding the lowest payment through the global network, which favours the work going to low-wage economies (Irani and Siberman, 2013). The Taylor Report (Taylor et al., 2017) calls for two-way flexibility in how workers engage as “dependent contractors” with these platforms rather than the current one-sided flexibility of the platform operator who can control pay rates and availability of work. Weber (2004) highlights how the centralised steam engines that powered the Industrial Revolution were mirrored in the publicly traded firms and the view of capital that went with them, which continue to the present day. The term “platform capitalism” has been used to describe firms who use the platform economy to gain private profit (Bauwens

and Niaros, 2017), which has become an issue for policy.

The platform economy has been promoted as enabling collaboration and sharing, but its real value to firms is being able to lower transaction costs of accessing goods, services and particularly workers (Drahokoupil and Fabo, 2016). Workers interact with platform firms individually, deterring collective action, which is further deterred by the firms adopting mechanisms such as de-listing (Graham and Woodcock, 2018). These mechanisms for isolating workers have led to what Fabo et al. describe as ‘a ‘cybertariat’ – a marginalised mass of semi-skilled virtual workers, languishing on the edges of the labour market and in general strengthening the neoliberal economic order, benefiting capital owners over workers’ (2017, p. 165). Kenney and Zysman (2016) call for greater social protections for these workers, including welfare systems that not only protect the workers but enable change. Job Security Councils in Sweden are a good example of how to adapt social protection policies so that they can more effectively assist workers to cope with economic changes that are potentially disruptive (OECD, 2017). Another way for workers to deal with these economic changes is through collective action, where they are aligning with unions, creating guild-like organisations and worker-led platform cooperatives (Vandaele, 2018). These forms of collective action highlight the issue of ownership of firms in the platform economy, which is considered in the next section.

## **2.3 Ownership of firms in the platform economy**

The platform economy is an example of disruptive innovation, where old heavy systems can be replaced by new lightweight ones (Mulgan and Leadbeater, 2013). Stokes et al. (2014) highlight the challenges that this disruptive innovation gives to policy making and regulation, including that they may be outside current regulations, and what risks and benefits these innovators could bring. They offer the example of short-term accommodation, where a platform such as Airbnb could have an effect on tourism, the housing market, taxation and neighbourhood planning, replacing the heavy existing infrastructure with individuals offering their spare rooms to paying guests.

The potential for disruptive innovation highlights the power exerted by the platform economy, where a software system can potentially replace entire industries. Gaventa, in the context of citizen engagement, highlights

that achieving real change means engaging with and understanding the meaning of power (2006). One means of exerting power is through ownership, where this ownership can be extractive or generative. Bauwens and Niaros (2017) distinguish between extractive and generative ownership of a firm, where extractive ownership is characterised by short-term profit maximisation, absentee ownership, governed by market prices and where capital is the master. Generative ownership on the other hand, is characterised by contributing positively to life over the longer term, an ownership that is rooted in its stakeholder community, governed by its social and ethical mission and where capital is the organisation's friend rather than its master. Kenny and Zysman (2016, p. 66) reinforce this view of the platform economy by asking the questions, 'Who owns or controls the platform?', 'How is value created' and 'Who captures the value?'. A number of authors have identified several models of services operating in the platform economy (Scholtz, 2017; Scholtz, 2016; Kenny and Zysman, 2016; Stokes et al., 2014) which can be viewed as extractive or generative.

### **2.3.1 Extractive organisational ownership**

#### **Crowdsourcing**

Crowdsourcing was introduced by Howe (2006) as where Open Source principles can be applied to fields outside of software', enabling new business models. For example, Amazon Mechanical Turk is a crowdsourcing platform that allows software developers 'access to a diverse, on-demand workforce through a flexible user interface or direct integration with a simple API' (Amazon Mechanical Turk, 2019). The people they employ through the platform become invisible to end users of the platform, who gain their human intelligence at the lowest price through the global network (Irani and Silberman, 2013). This platform has the extractive characteristics of absentee ownership and short-term profit maximisation.

#### **Competitive crowdsourcing**

Competitive crowdsourcing, or open innovation can offer opportunities for members of the public to become engaged in research and design activities which would otherwise be undertaken by professionals, such as InnoCentive (2019) who invite companies to draw on their 'diverse global network of over 400,000 creative and smart minds to tackle'. The winner gets a prize and their design is used by the firm, however Scholtz (2017) highlights how

competitive crowdsourcing can be extractive, for example in a competition held by 99 Designs, the requester gained 116 designs for \$300, one designer was paid \$180 and 99 Designs got \$120. There is thus a lot of labour being extracted for a small fee, which has implications for workers in the future being able to make a living wage (Ettlenger, 2014).

### **On-demand labour**

Uber and Lyft are examples of on-demand labour, where both platforms offer an alternative to taxi services provided by people driving their own cars (Scholtz, 2017). Although this is promoted as a spare-time activity, in practice drivers end up working full-time for less than minimum wage. Although these platforms can offer flexible work that could be valuable to some individuals, they are ultimately extractive in that workers are paid very little while the platform operator makes private profit from commissions (Kenney and Zysman, 2016).

### **Service-providing platforms**

Airbnb is an example of a service-providing platform, where the initial idea was that individuals could rent out a spare room for short periods as an alternative to a hotel, where they and their customer would benefit from the arrangement. This would seem to be an example of the sharing economy in action, where under-utilised resources held by individuals can help others who need temporary accommodation. However, a platform such as Airbnb can be extractive in that it takes a commission from every transaction which then becomes private profit. These platforms also lead to second-order effects, where existing industries are shaken up (Kenny and Zysman, 2016), in this case having a negative effect on the hotel industry (Zervas et al., 2015). These second order effects could have further implications for society.

### **Social media**

Social media such as Facebook and Twitter have been viewed as exploiting the “digital labor” of their users in creating content that is then used to target advertising (Scholz, 2017). These social media platforms are extractive in that they have the characteristics of using freely given content to make private profit from targeted advertising. At the same time, it could be argued that they are generative in contributing positively to people’s lives through

communication and sharing (Stokes et al., 2014). This generative aspect of the platform economy can extend to generative organisational ownership.

### **2.3.2 Generative organisational ownership**

#### **Labour brokerage**

In contrast to the extractive forms of labour brokerage, Scholtz (2017) identifies a more ethical form of labour brokerage, such as MobileWorks, who pays minimum wage for their workers and sees them as a valuable resource rather than replaceable sources of labour. Ethical labour brokerages are generative in that they have a social and ethical mission and contribute to positively to the life of their members.

#### **Platform cooperativism**

Scholz (2016) identifies platform cooperativism as a form of democratic ownership model in the platform economy, using similar technology to existing platforms. Organisations based on this model would still need to compete in the marketplace, but their competitiveness will be enhanced by not needing to make a large private profit and through a lower turn-over of workers (Anzilotti, 2018). Platform cooperatives are governed through democratic ownership of their stakeholder community (Platform Co-op, 2019), thus they have a generative form of organisational ownership.

#### **Union co-ops**

Union co-ops are where unions support the development of cooperative platforms, an example of this development in action is Green Taxis in Denver (Bauwens and Niaros, 2017). Union co-ops have the generative characteristics of an ownership that is rooted in its stakeholder community, and of being governed by their social and ethical mission.

#### **Produser-owned platforms**

Scholz (2016, p. 16) identifies that users can become producers who own their own platforms, or 'produsers'. For example, Stocksy is an artist-owned cooperative that offers a stock photo service similar to that of platforms like iStock, but with a much greater artist commission. Produser-owned platforms have the generative characteristics of being owned by their stakeholder community and contributing positively to the lives of members of that community.

**Labour mutuals**

Labour mutuals enable freelance workers to receive regular payments and gain some of the benefits and protections of salaried workers, established mainly in Europe, such as SMart in Belgium (Bauwens and Niaros, 2017). Labour mutuals have the generative characteristics of being owned by their stakeholder community and contributing to its quality of life.

**Collaborative learning**

Wikipedia is a platform that allows anyone to contribute to a freely available online encyclopaedia. It is an example of collaborative learning, where peer review shapes its content (Stokes et al., 2014). Collaborative learning platforms such as Wikipedia can have the generative characteristics of maximising social benefit and operating to a social and ethical mission while not being run for private profit.

**Open source software**

Open source software is produced by a dispersed group of programmers, coordinated by a software architect. Open source originated in the early 1990s, when Linus Torvalds solicited contributions to the evolving Linux operating system via an email mailing list (DiBona et al., 1999). However, anyone could (and still can) download Linux and use it, and like in the producer platforms, the software user can progress to software developer (Weber, 2004). Open source has the generative characteristic of being owned by its stakeholder community, where their creativity can contribute positively to the software that they then use and benefit from. Open source can be seen as a type of organisational form, which are considered in the next section.

## **2.4 Organisational forms in the platform economy**

### **2.4.1 The potential for alternative forms of working**

Information technology can reinforce the existing capitalist society, but also enable alternative forms of working (Fuchs, 2014). Hargrave and Van de Ven (2006) highlights the role that collective action plays in institutional innovation, where activists mobilise resources, act to challenge existing institutional structures, eventually finding a synthesis between the old and

the new. Recent developments illustrate such a process in action in the context of the platform economy. Nowak (2015) points out that trade unions are more relevant than ever for the growing number of freelance workers in the service economy, while Deakin (2006) called for the return of the guilds.

The Frankfurt Paper on Platform Based Work (2016, p. 3) calls for a ‘co-operative turn’ in the platform economy, where ‘workers, clients, platform operators, investors, policy makers, and worker organizations work together to improve outcomes for all stakeholders’. This perspective is reinforced by Scholz (2017), who points out that the sharing economy can benefit carers, ex-prisoners and recent immigrants in giving them opportunities for paid work. However, Scholz is concerned that the sharing economy reflects the individualistic values of the current neoliberal economy, and calls for platform cooperatives as an alternative. This section explores the forms an organisation can take in both the current platform economy and the alternative approaches to the platform economy that are inspired by peer production and the commons as a shared resource for workers.

### **2.4.2 Organisational models that reflect the pre-platform economy**

Considering extractive ownership models that reflect the pre-platform economy, Kenny and Zysman (2016) describe on-demand labour as a form of “putting-out”, a term that originated before centralised factories, where people would assemble goods in their homes. The platform economy extends putting-out from producing goods to providing services such as those via Uber or Lyft. Crowdsourced labour can also be seen as a form of putting-out, with its ultimate form perhaps being Amazon Mechanical Turk (2019), where globally crowdsourced workers become embedded in a software program, invisible to the end user. Competitive crowdsourcing adds the element that not all the labourers are paid, only the one that the employer judges to be worthy. Service providing platforms such as Airbnb are not a new model, but the platform economy enables a scaling up world-wide beyond that possible in a pre-platform era.

Generative ownership models that reflect a pre-platform economy include platform cooperatives, where worker and consumer cooperatives originated around 1800. However, worker cooperatives have often experienced issues with unskilled management and lack of authority over workers (Cornforth, 1983). Trade union platform cooperatives have been inspired by the threat that the platform economy presents to traditional forms of organ-

ising, particularly trade unions (Bauwens and Niaros, 2017), so again are not a new model. Producer-owned platforms (Scholtz, 2016) have some elements in common with the medieval guilds, in that they are associations of workers in the same trade or profession, as are labour mutuals. As well as organisational models that reflect the pre-platform economy, there are organisational models that are unique to the platform economy.

### **2.4.3 Organisational models that are unique to the platform economy**

Digital social media platforms such as Facebook and Twitter are unique to the platform economy, in their extent and the ability for the platform to monetise the daily lives of their users through targeted advertising (Kenney and Zysman, 2016). Collaborative learning, as in Wikipedia, is again unique to the platform economy, where the platform facilitates coordination of contributions from many distributed volunteers under a peer review system (Konieczny, 2010). Peer review of contributions from a distributed network of volunteers also characterise open source, which co-evolved with the platform economy from a simple email list to managed software repositories. Peer review and production relies on a commons of knowledge which all contributors can access through a digital platform (von Krogh et al., 2012)

Benkler (2002) points out that historically there have been two ways of organising: markets, where price determines decisions on alternative forms of action; and firms, where managers make decisions on how to use resources; however, he identifies that there is a third way of organising, the commons. The commons is a concept that originated in the Middle Ages, as a collective land tenure for the production of crops by member farmers (De Moor, 2008), but can suffer from the “tragedy of the commons”, where each farmer only bears a fraction of the whole cost of overgrazing the land (Hardin, 1968). The Internet enables the return of the commons, but as the Internet is effectively a limitless resource, doesn’t suffer from the tragedy of the commons (Bauwens and Niaros, 2017).

A digital commons can enable based peer production, where a decentralised commons can be accessed by volunteer individuals who make the decision on what they wish to contribute to the common goal (Benkler, 2002). This self-selection is complemented by peer review or some other mechanism to ensure that only suitable contributions are accepted. The Wikipedia online encyclopaedia is an example of this kind of peer production, where anyone can submit an article, which is then moderated through discourse, with

the ultimate decision being made by an editor (Benkler and Nissenbaum, 2006). Peer production can promote the intrinsic motivations of creativity (Bagozzi and Dholakia, 2006; von Krogh et al., 2012) and virtuous behaviour (Benkler and Nissenbaum, 2006). The digital commons has enabled the development of open source, which will be explored in the next section.

## **2.5 Open source, narratives and business models**

### **2.5.1 Open source software**

The first mention of open source in the context of software was in 1996 (FoRK Archive, 1996), but open source as it is now understood was coined by Christine Peterson at a key meeting of individuals within the free software community, focusing on the openness rather than the free aspect (Peterson, 2018). Open source was seen as less restrictive to business than Free Software, allowing companies to keep some intellectual property (IP) private while open sourcing the remainder (DiBona et al., 1999).

Open source software relies on an Internet platform to enable contributors to read, add to and submit code, where any user of the software can become a contributor by submitting code to the software architect. Their submission is accepted at the sole discretion of the software architect, in the process creating the boundary between code that is accepted and code that is not. The software architect can be a group rather than a single individual, as in the development of Linux, where Linus Torvalds worked with a group of key developers as the project grew (DiBona et al., 1999). Open source, as a mechanism for collaboration, has the advantages of less in the way of structure and overheads than consortia, also consortia can break down due to differences amongst members (Perens, 2005). The software architect, in playing a unifying role in bringing together contributions, is thus key to the governance of an open source software project.

In smaller open source software projects, governance becomes about ‘who has the right, recognized as legitimate by the community as a whole to redistribute modified versions of the software’, often termed the software architect (Weber, 2004, p. 161). As an open source project grows, this architect needs to work with others to share the workload, raising issues of governance within this group. O’Mahony (2007) sees open source as ‘community-managed governance’, based on the five principles of independence, plural-

ism, representation, decentralised decision-making, and autonomous participation. In this respect, larger software projects build on the role of the individual software architect, in that a group makes the decision on which contributions are accepted rather than an individual. The role of the software architect can be explained by considering open source as a narrative form of organisation.

### **2.5.2 Open source as narrative form of organisation**

Bobrow and Whalen (2002) highlighted the importance of narratives in the Eureka knowledge system at Xerox, where technicians adapted the system to their needs, creating a community of practice (Lave and Wenger, 1991) in the process. Bagozzi and Dholakia (2006, p. 1099) highlight how open source user communities have the characteristics of ‘consciousness of kind, whereby members feel an intrinsic connection with other members and a collective sense of separation from nonmembers’, which in open source user groups ‘take the form of a shared narrative’. Weber (2004, p. 15) highlights that it is ‘ideas rather than technology’ that were behind both the first and second industrial revolutions, and also behind open source. These ideas can be communicated through narratives, where the software code itself forms a narrative that is shared by all contributors. As a narrative, open source could be considered as a form of organisation.

Organisations can be framed as goal-directed, boundary-maintaining and socially constructed, as defined by Aldrich and Ruef (2006), where an activity system, or set of routines, distinguishes them from families and other small groups. Weber (2004) considers open source to be at the interface between a network and a hierarchy, where boundary spanning is key, while Krishnamurthy (2006) frames open source as an ecosystem or virtual organisation. As such an organisation, the boundary-maintaining equivalent of a constitution in open source is the software licence such as the General Public Licence, as the licence sets out how stakeholders will relate to each other (Weber, 2004). However, while in open source there are no mechanisms for formal accountability, open source still meets the criteria for identifying an organisation of intentionality, mobilisation of resources, creating formal boundaries and exchange of resources with outsiders (Katz and Gartner, 1988). This perspective of open source as a narrative form of organisation suggests that open source could be applicable in domains other than software.

Weber (2004, p. vii) considers open source from a political economy per-

spective, as ‘an emerging technological community that seemed to solve what I see as very tricky but basically familiar governance problems, in a very unfamiliar and intriguing way’, while Konieczny (2009) claims that initiatives based on the principles of open source, particularly Wikipedia, have the potential to overcome the “iron law” in organisations of evolving an oligarchy that eventually takes control. Lejeune (2010, p. 18) highlights how open source projects such as Open Directory, Debian and Wikipedia have evolved ‘mediated collectives’ where there is discussion leading to decisions on who does what, but they are not wholly democracies. Open source has an apparent paradox in how power operates, which can be explored by considering it as a power-balanced organisational structure.

### **2.5.3 Open source as a power-balanced structure**

Power can be framed in terms of discourse, which can draw the boundaries of what is possible (Gaventa and Cornwall, 2000), through creating structures of shared meaning (Holzscheiter, 2005). Linking more closely with open source, van Dijk (2016) framed power in terms of shared knowledge and ideologies. In open source, the shared knowledge is the source code, and the ideologies include the notion that the source should be open. The software architect draws the boundaries of the organisation through accepting contributions to the code at their sole discretion. This openness of the source code means that the power of the software architect to create an organisational boundary is balanced by the power of contributors to choose a new software architect. In practice, however, this “forking” is relatively rare (Weber, 2004). It is the software architect’s narrative, expressed as both a vision for solving a particular problem and through the software code itself, that inspires contributions to the project. Open source can thus be viewed as a power-balanced form of organisational structure. This view of open source implies that it could be applicable to business, including to business models.

### **2.5.4 Open source as a narrative form of business model**

A business model is essentially how the firm creates and captures value (Shafer et al., 2005; Chesbrough, 2006), and gains revenue from it (Chesbrough, 2010). Later writing extends the business model beyond the boundary of the firm (Zott et al., 2011), including how the firm’s business model can become part of that of investors, suppliers and customers (Mason and Spring, 2011). Järvi and Pellinen (2011) distinguish between one-sided and two-sided business models in the technology sector, where the one-sided

business model is characterised by the traditional value chain, and the two-sided business model 'brings together two groups of users, namely suppliers and customers' (p. 22). In the platform economy, virtual organisations can be formed by members working apart while appearing unified to the outside world (Kuusisto, 2017).

Open source can thus be framed as a business model, where the software architect performs the boundary-spanning role through the contributions they accept through a digital platform, governed by their vision and strategy. The software architect, by soliciting and accepting contributions, is capturing the value created by contributors for the benefit of both contributors and users of the software. This value capture aspect of open source indicates that open source could be viewed as a business model. Framing open source as both a narrative and a business model opens up the potential for narrative forms of business model based on open source that could operate in the platform economy, enabling value capture for both the firm and a network of contributors. The next section summarises the research problem, of worker power in the digital platform economy, and introduces the research area, of narrative forms of open source business model.

## **2.6 Rationale for study**

### **2.6.1 Worker power in the platform economy**

The digital economy has led to new forms of working, where freelance workers perform a range of tasks that include transport, household repairs, information work and domestic service. These workers are matched with their temporary employers through software platforms such as Uber, Airbnb or Amazon Mechanical Turk, where Kenney and Zysman (2016, p. 61) note that these 'digital platforms... shape the terms on which participants interact with one another', giving power to the corporations that operate them. According to the OECD Employment Outlook 2017 report, the platform economy is only 1% of the total economy (OECD, 2017), but this proportion is growing rapidly, thus this issue is becoming significant. Individuals who interact with digital platforms to find temporary employers are now being seen as a new class of proletariat, or "precariat", who lack the legal and social protections of employees (Fuchs, 2014). The issue of power in the platform economy is one that is only just becoming a topic for academic research, such as the iLabour Project (2019), creating the opportunity to make a contribution. Power is exerted in the platform economy through the busi-

ness models adopted by platform firms, hence this study focuses on business models, in particular the research area of narrative forms of open source business model.

### **2.6.2 Research objective and initial research question**

Benyayer and Kupp (2017, pp. 36-37) distinguish between centralised and distributed forms of governance in open business models, where centralised governance is where ‘a central company (e.g. a platform) defines for all the community’ and distributed governance is where ‘the rules are defined by the community itself through a collaborative process’. The perhaps unique quality of open source considered as a narrative form of business model is that it combines centralised and distributed governance in a power-balanced structure. This perspective on open source opens up an opportunity to investigate the potential for narrative forms of open source business model, leading to the initial research objective and research question. At this stage, the research question is exploratory, and has thus been framed as a research proposition rather than in terms of hypothesis testing:

*Research proposition:* Open source can be framed as a narrative and as a business model. Linking these concepts could inspire narrative forms of business model.

*RQ1:* “How can open source inspire narrative forms of business model?”.

*How examined:* Through an integrative literature review that examines how the concepts of narratives, open source and business models can connect.

This research question is the starting point for the Literature Review chapter, which explores related literature, identifies where a contribution can be made and offers a more specific research question that can be explored through empirical work.

## **2.7 Conclusion to the chapter**

Following initial positive responses to the collaborative economy, made possible by digital platforms operating over the Internet, increasing concern has been expressed about the rise of the “precariat”, or the new proletariat, undertaking a range of services for customers who are selected by a digital platform. The platform operator is able to extract value through adopting

a business model in which workers interact individually with the organisational boundary, thus deterring collective action. An alternative model of ownership is the generative model, characterised by a social and ethical mission rather than short-term profit maximisation. Generative models include open source, a method of organising creative work that has unique characteristics.

Open source originated as a method of producing computer software, where any number of individuals or companies can view, use and contribute to the source code of a software project via a digital platform. Their submission is accepted at the sole discretion of the software architect, in the process creating the boundary between code that is accepted and code that is not. This boundary framing, together with value creation and value capture, characterises a business model. In open source, the value created by contributors in terms of improved software is captured by the software architect for the benefit of all contributors and users. However, there is a tension in open source between the power of the software architect to define the boundaries of the software code and the power of contributors to choose a new software architect.

Narratives can be a helpful way of looking at power relations in open source and in business models inspired by open source. Linking these concepts could inspire narrative forms of business model, leading to the research question RQ1, “How can open source inspire narrative forms of business model?”. The next chapter is the Literature Review, which aims to answer RQ1 by investigating related work in the area of narrative forms of organisation, open source and business models.



# Chapter 3

## Literature Review

### 3.1 Introduction to the chapter

The previous Research Problem and Rationale for Study chapter introduced the research problem as worker power in the growing digital platform economy, where firms have adopted business models that extract value from workers via a digital platform, creating a power imbalance. The platform economy has also enabled the development of open source as a form of collaboration, where the value generated by collaborators on an open source software project can be retained for their benefit by the software architect. In open source there is a balance of power between the software architect and contributors, which suggests that it could inspire business models that have a balance of power between workers and the firm. It is these new forms of business model that are examined in this study.

From a social constructionist theoretical stance, this literature review chapter takes an integrative approach to first consider the literature on narratives to develop a framework to view entrepreneurship, open source and business models; then considers where these concepts can intersect. There appears to be a gap in the literature in this specific area, of narrative forms of business model based on the principles of open source. This gap in the literature offers a promising area for further theoretical and empirical work on business models as narratives, focusing on where this form of business model connects with open source. The chapter concludes by proposing the research area as this potential to create power-balanced narrative forms of business model.

## 3.2 Literature review methodology

Approaches to writing a literature review can be divided into integrative, theoretical and methodological (Cooper, 1984), while narrative forms of review can bring together and summarise a body of literature (Baumeister, 2013). Taking the narrative approach a step further, Torraco (2005, p. 356) advocates the integrative literature review as ‘a form of research that reviews, critiques, and synthesizes representative literature on a topic in an integrated way such that new frameworks and perspectives on the topic are generated’.

In this study, where the research area crosses the disciplinary boundaries of management, computing and design, an integrative approach to the literature review could uncover new perspectives, but the volume of literature to cover from each of the disciplines could be overwhelming. This literature review will thus take an approach where the initial research topic proposed at the beginning of the review will be focused through addressing subtopics (Denney and Tewksbury, 2013). In this literature review, the initial research topic is the potential for open source to inspire narrative forms of business model.

The starting point for this literature review is the research question RQ1 developed in the previous chapter, “How can open source inspire narrative forms of business model?”. This question was broken down into five key concepts:

1. business models;
2. narrative approaches to business;
3. open source;
4. narrative approaches to open source;
5. open source as a business model.

These five key concepts then leads to three sets of search terms:

1. “business model” AND “narrative” (concepts 1 and 2);
2. “business model” AND “open source” (concepts 1, 3 and 5);
3. “open source” AND “narrative” (concepts 3 and 4).

These search terms were entered into the ABI/Inform Complete academic database, a key resource for finding business related literature, in October

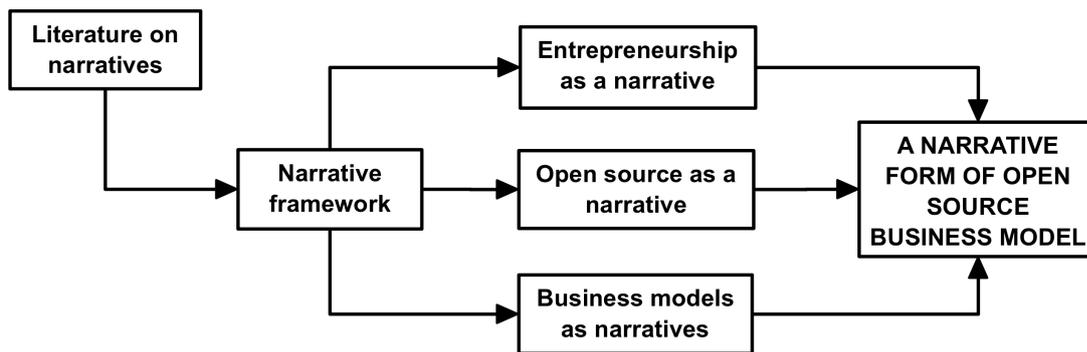
2018. The time frame was the previous two years (October 2016 to October 2018). Additional searches were made in ScienceDirect and JSTOR, using the same search terms. Manual searches were also conducted through the journals *Organization Studies* and the *Journal of Business Models*. Relevant articles were chosen according to these criteria identified from the previous Rationale chapter, that they covered some aspect of:

- Boundary issues;
- Business models;
- Definition (of each main concept);
- Design;
- Entrepreneurship;
- Guilds and commons;
- Narratives;
- Open innovation;
- Open source;
- Platform economy;
- Other;
- Ownership;
- Power issues.

The literature search identified 96 articles, which were classified in a spreadsheet according to the concepts in the above list with one-line summaries to enable other themes to be identified. Together with additional articles in their references and others identified by the author, these articles formed the basis for the literature review. Figure 3.1 shows how the literature on narratives, entrepreneurship, open source and business models is synthesised to arrive at the narrative form of open source business model that is presented at the end this chapter.

The literature review is underpinned by the researcher's theoretical stance, which is detailed in the next section.

Figure 3.1: Literature review structure



### 3.3 Theoretical stance and research philosophy

#### 3.3.1 Theoretical stance: institutional forms of power

The key theoretical stance that underpins this study is that power can take the forms of being overt, hidden and invisible (Lukes, 1974), where power relations can operate invisibly by shaping the boundaries of a space and the discourses that are possible within it (Gaventa, 2006). Gaventa builds on the writings of Hayward, who points out that freedom ‘is the capacity to participate effectively in shaping the social limits that define what is possible’ (1998, p. 2), so power is not just about being able to participate in a space, but also to define what that space is.

Invisible power can take the forms of tacit and institutionalised power (Hogget et al., 2009), where institutions emerge from a ‘reciprocal typification of habitualized actions by types of actors’ (Berger and Luckmann, 1967, p. 72), but are then seen as external, or alienated, from those actors (Alvesson and Skölderberg, 2009). Actors can be human or non-human, including human creations such as software (Jäger and Maier, 2016). In an organisational context, Tsoukas (1996, p. 23) draws on the concept of institutionalisation to frame the ‘character of the firm as a discursive practice: a form of life, a community, in which individuals come to share an unarticulated background of common understanding’, which Weick (1995) described as sensemaking.

### **3.3.2 Research philosophy: social constructionism through narratives**

The theoretical stance adopted for this study is founded on a particular ontology, or a perspective on reality; together with an epistemology, or a view on what constitutes knowledge. This study takes a social constructionist philosophy, or that social reality is created through a discursive process (Berger and Luckmann, 1967). Polkinghorne (1988, p. 1) has argued that narrative is ‘the primary form by which human experience is made meaningful’, while Bruner (1991, p. 5) presented the ‘possibility of narrative as a form not only of representing but of constituting reality’. Bruner’s perspective builds on that of Ricoeur (1979) who highlighted the potential for fiction to not only represent social reality but produce it. In particular, Ricoeur asserts that ‘fiction redescribes reality’ (1979, p. 139) and that in science, fiction can help enact reality through ‘redescription by models’ (p. 141). It is this productive, enactive quality of narratives that is of interest in this study, which considers how an entrepreneur can create narrative forms of business model. These narrative forms of business model can potentially capture the fluid interdependencies that form organisations (Weick, 1979).

Guba and Lincoln (1994, p. 108) defines ontology in the form of a question, ‘What is the form and nature of reality and, therefore, what is there to be known about it?’, while Krauss (2005, p. 758) sees ontology as ‘the philosophy of reality’. Gray (2009, p. 17) highlights that there are two main opposing ontologies in Western thought:

1. Being, which links to positivism, a belief in an unchanging world that is there to be discovered by the researcher.
2. Constructivism, where meaning is created by the subject’s interactions with the world.

This study takes the latter approach, founded on an ontological perspective that aspects of reality are socially constructed (Berger and Luckmann, 1967). The perspective of Barlebo Wenneberg (2001, referenced in Alveson and Skölderberg, 2009) is helpful here, in distinguishing between critical, social, epistemological and ontological perspectives on social constructionism. The critical perspective shows that taken-for-granted assumptions about the world are socially constructed, while the social perspective presents society as being produced through shared meaning. The epistemological perspective sees knowledge as being socially constructed while the ontological perspective sees reality as being socially constructed. This study

follows Barlebo Wenneberg's (2001) perspectives in these respects:

*A critical* perspective on social constructionism is that what seems to be taken for granted or inevitable in society can be changed, and even got rid of altogether (Hacking, 1999). In this study, that perspective implies what constitutes an organisation or business model in society can be challenged, and even changed.

*A social* perspective on social constructionism implies that organisations or business models can be created through shared meaning. In particular, Devins and Gold (2002, p. 112) highlighted that 'business organisations can be understood as a particular form of life... created and sustained by language and the coordination of meaning between managers, staff and a multitude of others who have an interest in its existence'.

*An epistemological* perspective on social constructionism implies that knowledge on business models and organisations based on a particular business model can be socially constructed, where language can function 'as both a means for communication and as collectively shared meaning-structures' (Holzscheiter 2005, p. 723).

*An ontological* perspective on social constructionism implies that some aspects of reality are socially constructed. This can include business models as a form of narrative and organisations based on these business models. However, when these organisations are created, they then take on a reflexive relationship to their creators, being experienced as something other than human (Fairhurst and Putnam, 2004). Giddens (1976, p. 121) framed this relationship as structuration when he wrote that 'social structures are both constituted by human agency and yet at the same time are the very medium of this constitution'. Giddens (1991) then developed the concept of structuration further to claim that reflexivity can be institutional as well as individual.

The concept of habitus is helpful in framing the theoretical stance adopted in this study. Bourdieu (1989) introduced the concept of habitus as a person's 'mental structures through which they apprehend the social world' (p. 18), or their taken-for-granted assumptions. In groups, habitus can lead to the group adopting a leader or spokesperson who is a 'personification of a social fiction to which they give life, in and through their very being,

and from which they receive in return for their power' (Bourdieu, 1989, p. 24). These social fictions can be created and maintained through narratives, which gain power from representing the 'personal mental models of members, or the shared knowledge and ideologies of groups and organizations' (van Dijk, 2016, p. 71).

This section has presented the philosophy and theoretical stance that underpins this study, that narratives can exert an invisible form of power to shape organisational boundaries. The next section first defines what a narrative is, then develops the definition into a framework that is used in subsequent sections to view entrepreneurship, open source and business models as narratives.

## **3.4 A narrative definition and framework**

### **3.4.1 Narratives and stories**

Narratives play a key role in an individual's reflexive life making process, where Bruner (1991, p. 5) presented the 'possibility of narrative as a form not only of representing but of constituting reality'. This constructionist perspective builds on that of Ricoeur (1979) who highlighted the potential for fiction to not only represent social reality but produce it. It is this productive quality of narratives that is of interest in this study, which considers how an entrepreneur can create narrative forms of business model.

The distinction between narratives and stories is contested, with some writers using these terms interchangeably and others highlighting differences between them, often defining one in terms of the other. The definitions of stories offered by various authors include that 'Storytelling or, more formally, oral narrative is defined as the verbal presentation of a series of events meaningfully connected in a temporal and causal way' (McKenzie, 2011, p. 134); and 'individuals use stories to make sense of their lived experiences and to organize these experiences within their narratives' (Hawkins and Saleem, 2012, p. 204). The definitions of narratives offered by various authors include that narratives 'are viewed as the cognitive framework that guides an individual in making sense of experiences' (Hawkins and Saleem, 2012, p. 208) and that they 'are socially constructed discourses that not only derive their meaning from that context but also frame policies for subsequent action and interpretation.' (Flory and Iglesias, 2010, pp. 116-117).

Although definitions of both narratives and stories vary, there is some consensus that a story is an account of events or experience (Boje, 2001;

McKenzie, 2011; Solouki, 2017; Gherardi et al., 2018), that enable interpretation or sense-making (Boje, 1991; McKenzie, 2011; Hawkins and Saleem, 2012). Some authors also highlight that a story has a causal element (Czar-niawska, 1998; McKenzie, 2011). Several writers add “plot” as the element that develops a story into a narrative, building on the causal element (Boje, 2001; Feldman et al., 2004; Bartel and Garud, 2009; Solouki, 2017) to portray events as a coherent meaningful whole (Feldman et al., 2004; McKenzie, 2011; Solouki, 2017; Gherardi et al., 2018). Narratives take place in a frame of reference (Pentland, 1999), context (Flory and Iglesias, 2010) or setting (Solouki, 2017), and offer new ways of looking at it (Bartel and Garud, 2009).

Not all authors use the terms story and narrative in this way, for example Gabriel (2000, 2004) appears to use narrative where other authors use story and vice versa. There is a clear difference between storytelling as part of a narrative and description, which Sibierska identifies as a ‘stylistic choice, such as the use of a metaphor or a change in the chronological order, which are somehow synonymous with and inherent in the act of storytelling, and not describing’ (2017, p. 50).

Narratives as a form of discourse can exist not only as text, but also as actions, images, mime or material objects (Hawkins and Saleem, 2012; Ryan, 2012; Sibierska, 2017) and through spaces, as in architecture (Fairclough, 2016; Ropo and Höykinpuro, 2017). Narratives can exist not only on the individual level, but also on a group and societal levels (Gabriel, 2004). The group level of narratives includes organisational narratives (Pentland, 1999; Boje, 2001; Hawkins and Saleem, 2012). It is narratives at the organisational level that are of interest in this study, particularly business models. The rest of this section develops a framework that can enable narratives to be applied in a business context, starting with identifying the components of a narrative.

### **3.4.2 Narrative components**

A narrative has key components, where again there is some consensus amongst authors. Burke (1945, p. xv) offers the dramatic pentard:

1. Act (what took place);
2. Scene (the situation or context in which the act was performed);
3. Agent (who performed the act);

4. Agency (that enabled the actor to perform the act);
5. Purpose (of the act).

Burke (1969, p. 443) then referred to a potential sixth term, Attitude, or how the agent performs the act, which reveals their state of mind. Bruner (1991) identified ten features of narrative:

1. Narrative diachronicity (events occurring over time);
2. Particularity (particular happenings that result from people acting in a setting);
3. Intentional state entailment (these happenings must be relevant to the intentional state held by the people acting in a setting, including their beliefs, desires, theories and values);
4. Hermeneutic composability (where a narrative expresses a meaning that is consistent between its whole and its parts);
5. Canonicity and breach (the narrative acknowledges accepted canonical scripts, then present a new way of looking at them);
6. Referentiality (as well as referring to reality, narrative can create it);
7. Genericness (genres are ways of telling that predispose certain mind-sets);
8. Normativeness (or cultural legitimacy, where any imbalance between the five elements of Burke's pentard leads to Trouble);
9. Context sensitivity and negotiability (including narrative intention);
10. Narrative accrual (or how stories from the past can become institution-alised).

Pentland (1999, pp. 712-713), in the context of organisational processes, outlines the typical features of a narrative as:

1. Sequence in time (where the events are understood to take place in sequence, even if not presented chronologically);
2. Focal actor or actors (the narrative is about someone or something);
3. Identifiable narrative voice (which reflects a specific point of view);

4. “Canonical” or evaluative frame of reference (narratives encode a sense of right and wrong, a moral context);
5. Other indicators of content and context (which can include time, place, attributes of characters and other information which helps place the narrative).

Downing (2005, pp. 193-196), in the context of entrepreneurship, offers the SENSE framework:

1. Storylines (that reflect the understanding actors have of individual and collective identities and events);
2. Emplotment (a largely unconscious process of fitting storylines into plots that have expected patterns);
3. Narrative Structuring (the expected narrative patterns are elaborated, structured and contextualised);
4. Enactment (the elaborated narrative structures are acted upon, and become institutionalised through habitual action).

Ryan (2007, pp. 28-29) considers narratives as having the dimensions of:

- Spatial (a world populated by individual human or other beings);
- Temporal (the world is situated in time and is significantly transformed by non-habitual events);
- Mental (these events include purposeful action by intelligent agents with their own mental life);
- Formal and pragmatic (the sequence of events form a causal chain and leads to closure, at least some of the events are seen as fact, and the story must communicate something meaningful).

These narrative components can then be built up to create a definition of narratives and a narrative framework for the purposes of this study.

### **3.4.3 Narrative definition**

Considering the perspectives introduced in this section, particularly those offered by Burke (1945, 1969), Bruner (1991), Pentland (1999) and Ryan (2007), a working definition of narratives for the purpose of this study is:

A narrative expresses and enacts the purposeful intent of human or other actors who have an agency and inner life. Narratives have a plot, that depicts particular incidents or events occurring in a causal sequence. A narrative expresses an initial point of view within a specific context or frame of reference, but then offers a new point of view. Narratives express a consistent meaning that can both reflect reality and create it. They can become institutionalised through enactment of narrative structures.

This definition is the basis for a narrative framework for this study, which is presented below.

### 3.4.4 A narrative framework

In order to be helpful in this study, the above definition will need to become a framework that can be applied in the context of business models. Presented as a framework, the characteristics of narratives are that they:

1. Depict the **purposeful intent** of human or other actors;
2. Are **enacted by human or other actors** who have an agency and inner life;
3. Depict **particular incidents or events**;
4. The depicted incidents or events occur in a **causal sequence**;
5. Express a consistent meaning that can both **reflect reality and create it**;
6. Are set within an accepted **context** or frame of reference;
7. Express a **specific point of view** on the context or frame of reference;
8. Offer a **new point of view** on this context or frame of reference;
9. Can **become institutionalised** as structures.

This section has developed a narrative framework that can be applied in a range of contexts. It is an organisational context that is of interest in this study, which focuses on how an entrepreneur can use narratives to create the boundaries that define their business model. The narrative framework presented here is used in subsequent sections in this chapter to evaluate entrepreneurship as a narrative, open source as a narrative and business models as narratives. The next section applies this framework to consider entrepreneurship as a narrative.

## 3.5 Entrepreneurship as a narrative

This section explains how an entrepreneur's narrative can be a mechanism for establishing their identity, then gaining legitimacy for their vision of a potential future from stakeholders. The entrepreneur can then establish the boundaries of an organisation through narratives. This section applies the narrative definition in Section 3.4.4 to consider if entrepreneurship can exist as a narrative, starting with how narratives can create entrepreneurial reality.

### 3.5.1 Creating entrepreneurial reality

An entrepreneur is 'someone who had risked their own money and resources in the founding and development of a venture and who was the dominant decision maker in the firm' (Clarke and Holt, 2010, p. 72). As a process, entrepreneurship is about 'recognising and pursuing opportunities with regard to the alienable and inalienable resources currently controlled with a view to value creation (Chell, 2007, p. 18).

Entrepreneurship can be seen as a cultural rather than economic process where the entrepreneur's identity, shaped by their life course experiences can be expressed as a narrative (Foss, 2004). Entrepreneurial identity can be as much about 'participation in narrative and dramatic processes' as it is about their products or services (Downing, 2005, p. 199). Steyaert (2004, p. 9) highlights entrepreneurship as a social process, drawing on the work of the Russian philosopher Bakhtin to frame entrepreneurship as 'a form of co-authorship in the form of collective stories, dramatic scripts, generative metaphors and concurring discourses'. These narrative processes can then bring about the entrepreneur's future goals in a process of becoming (Boutaiba, 2004), that creates institutions. Smith and Anderson (2004, p. 130) reinforce this perspective when they claim entrepreneurship 'is about creating value and new realities and narrative enables these values to be transmitted and perhaps even to be transformed into new entrepreneurial realities'. Going beyond the individual entrepreneur, narratives can be 'an elegant way of transmitting values' (Buckler and Zien, 1996, p. 394), which could be to potential stakeholders in the enterprise that is coming into being. The concept of stakeholders was introduced by Freeman (1984), as the individuals or groups which could affect or be affected by a firm's activities. The concept was developed further by Mitchell and Wood (1997), who considered stakeholders in terms of their power and the relationship they had with the firm.

### 3.5.2 Narratives as entrepreneurial boundaries

Language is the mechanism by which the individual adopts an entrepreneurial identity, of becoming a person who had risked their own resources and were now the dominant decision maker (Clarke and Holt, 2010). In the context of social entrepreneurship, Jones et al. (2008) found that this identity construction was through narratives as a dynamic process. When the entrepreneur has established an organisation, narratives are then key to decision making, as they can not only communicate information (McKenzie, 2011), but also the meaning of that information (O'Connor, 1997). Narratives are also key to the entrepreneur being able to establish legitimacy and secure greater involvement of stakeholders (Garud et al., 2014). Once created, however, the organisation gains an independent existence, not only in the minds of participants and stakeholders, but in the physical world, through documents, buildings and other artefacts. Business organisations can be defined in terms of their boundaries, where entrepreneurs use narratives to set those boundaries.

Organisations are defined as 'goal-directed, boundary-maintaining and socially constructed systems of human activity', where control of their boundaries is through membership (Aldrich and Ruef, 2006, p. 4). Smith and Anderson (2004, p. 130) claim that narrative as a form of discourse is 'the creative carrier of information and values between the sender and the receiver, hence narrative, like entrepreneurship, is a boundary-spanning activity', and that this boundary setting aspect of organisations is what distinguishes an organisation from a more casual grouping of individuals. Boundary shaping through discourse underlies the concept of boundary judgements, where stakeholders can contest the boundaries created by an organisation (Ulrich, 2000; Ulrich and Reynolds, 2010).

Jäger and Maier (2016) highlight that the creation of material objects can be a non-linguistic form of discourse that can exert power. In this, they draw on the concept of dispositives, where knowledge is embedded into both discourse and material objects (Foucault, 1980). Fairclough (2016) takes a similar perspective, viewing discourses as having aspects of interactions, being able to form identities or be materialised as objects. Gherardi (2016) created the term "formativeness" to describe how an organisation comes into being through a discursive process.

Faraj et al. (2011, p. 1232) frames virtual organisations as a fluid space, where narratives 'represent a collective understanding of how individual behaviors interrelate over time', aided by mechanisms which turn individual

conscious and unconscious narratives into collective narratives. These collective narratives can function as a boundary object, or ‘objects that live in multiple social worlds and which have different identities in it’ (Star and Griesemer, 1989, p. 438). Boundary objects in an organisational context are constituted of artefacts, including models, which enable meaning to be negotiated through a common language; and processes, including routines and procedures (Wenger, 2000). These boundary objects can take the form of legal documents, which have their reality as a printed or on-line document, upon which symbolic functions are then overlaid (Searle, 1998). In this case, the symbolic function of the legal document is to frame the organisation as a boundary-spanning activity. In this respect, the ‘organic social structure’ that is created by relationship building and dialogue then becomes formalised into a ‘hard frame’ of formal accountability, control systems, legal documents, etc. (Bate et al., 2000, p. 448).

### 3.5.3 Entrepreneurship as a narrative

Organisations can be socially constructed by the entrepreneur, but then take on their own independent objective existence, which can be already formed, in a process of becoming, or grounded in action (Fairhurst and Putnam, 2004). The latter perspective relates to that of Giddens (1979, 1984), where institutional structures are formed from practices, but in turn constrain further action. This study adopts the perspective of organisations as a process rather than a structure, following Weick et al. (2005) and Santos and Eisenhardt (2005) in framing organisations as emerging through entrepreneurial sensemaking and sensegiving, which can be enabled by narratives. The view of entrepreneurship as a narrative can be evaluated in terms of the narrative framework offered in Section 3.4.4:

1. *Purposeful intent*: Solouki argues that ‘an intentional action has the structure of a narrative’ (2017, p. 335), relating this claim to the framework of purpose, mental plan and performance introduced by Schutz (1953). Narratives can bring about the entrepreneur’s goals in a process of becoming (Boutaiba, 2004) and communicate information about the enterprise to stakeholders (McKenzie, 2011). Narratives can also be a powerful tool for maintaining and communicating values across generations in family businesses (Flory and Iglesias, 2010).
2. *Enacted by human or other actors*: Entrepreneurs exchange information about ‘organizing, opportunity identification, sales and financing’

through narrative (McKenzie, 2011, p. 134). An organisation can be enacted into being by an entrepreneur through a discursive process (Pentland, 1999; Gherardi, 2016), which can be expressed in actions, material objects (Sibierska, 2017), or as a fluid space (Faraj et al., 2011).

3. *Particular incidents or events*: Downing (2005, p. 285) identifies that one mechanism that can bring about and develop organisations is the entrepreneur's 'vision, self-belief, and adaptive learning', in contrast to the prevalent perspective of accountability and legitimacy. This vision can be conveyed using narratives as both sense-making and sense-giving (Weick, 1995).
4. *Causal sequence*: Downing (2005) identifies a sequence from emotionally significant storylines to plots, narrative structuring and finally enactment of the entrepreneur's narrative. Fletcher (2003) highlights how this entrepreneurial activity is 'dynamic and constantly emerging, being realised, shaped and constructed through social processes' (p. 127).
5. *Reflect reality and create it*: Imagination can act as both a creative and sensemaking process in an organisational context (Komporezos-Athanasiou and Fotaki, 2015). Imagination can be expressed as a narrative, which in turn can create a version of reality in an entrepreneurial context as a boundary-spanning activity (Smith and Anderson, 2004). A business model can be viewed as 'both a calculative and a narrative device' that 'allows entrepreneurs to explore a market and to bring their innovation – a new product, a new venture and the network that supports it – into existence' (Doganova and Eyquem-Renault, 2009, p. 1560).
6. *Context*: Creating narratives can help with an entrepreneur's sense-making (Hawkins and Saleem, 2012) in a particular context (O'Connor, 1997). These narratives are an example of an 'organic social structure' that is created by the entrepreneur's relationship building and dialogue, which then becomes formalised into a 'hard frame' of formal accountability, control systems, legal documents etc. (Bate et al., 2000, p. 448).
7. *Specific point of view*: An entrepreneur's past can be expressed through narratives, which can be a sense-making process of the entrepreneur's

life course and identity (Foss, 2004). This self-narrative relates to a more universal experience as a carrier of both personal and cultural values (Polkinghorne, 1991).

8. *New point of view*: In creating their business model, the entrepreneur needs to be seen as legitimate by stakeholders, this is where storytelling can help in establishing the legitimacy of a potential future (Garud et al., 2014). This mechanism of sense-making can lead to individual or organisational transformation (Downing, 2005).
9. *Become institutionalised*: Narratives can be expressed at the organisational level (Gabriel, 2004), as material objects (Hawkins and Saleem, 2012) and become institutionalised through narrative accrual (Bruner, 1991). These institutionalised narratives are then experienced as being separate from their human creators (Fairhurst and Putnam, 2004) and can then function as a boundary object (Star and Griesemer, 1989) that can play a sense-making and sense-creating role for stakeholders (Jensen, 2013).

This section has introduced entrepreneurship as a narrative, where the entrepreneur's narrative can be enacted as an organisation through a discursive process with stakeholders as potential members. In particular, Boje (1991, p. 106) proposes a 'theory of organization as a collective storytelling system in which the performance of stories is a key part of members' sense making and a means to allow them to supplement individual memories with institutional memory'. The perspective on organisations as a storytelling narrative that forms an institutional memory links with open source, which is a collaborative method of software production. In open source, contributors write sections of software code that form part of a larger body of code that is available to all. The next section explores the literature on open source from a number of perspectives, then uses the framework developed in Section 3.4.4 to frame open source as a narrative.

### **3.6 Open source as a narrative**

This section introduces open source as a collaborative mechanism for software production and outlines the perspectives that authors have used to explain how open source works. Open source can be viewed as a private-collective model, as a system of governance based around distribution, and as a fluid dynamic space. After presenting these perspectives, this section

then considers open source as a narrative, using the framework from Section 3.4.4.

### 3.6.1 Open source software

Computer software is produced through a process of writing the source code, in a specific language that can be interpreted by the system (Chopra and Dexter, 2007). Before the writing, there is a process of specification and design for the purpose the software will fulfil (Brooks, 1987). Software is generally produced in a team environment, where the specification is broken down into tasks that an individual software developer can fulfil. The source code is generally held in commercial confidence by the firm producing the software (DiBona et al., 1999), however open source offers a radically different approach. A useful definition of open source is offered by JISC (2006, p. 1):

- The source code is available to the end-user;
- The source code can be modified by the end-user;
- There are no restrictions on redistribution or use;
- The licensing conditions are intended to facilitate continued re-use and wide availability of the software, in both commercial and non-commercial contexts.

This definition views open source from the perspective of the software user. From the perspective of the software developer, open source can be viewed as a process of collective action (Bonaccorsi and Rossi, 2003), based on shared values and trust (Nolan et al., 2007). Building on the collective aspect further, several authors view open source as a private-collective model.

### 3.6.2 Open source as a private-collective model

In the context of the British iron industry in the nineteenth century, Allen (1983) found that sharing information on production methods enabled the individual firm to gain more information than they disclosed, and that this sharing benefited an entire industry. Open source can be viewed from an economic perspective as a private-collective model (von Hippel and von Krogh, 2003; Bonaccorsi and Rossi, 2003; Ulhøi, 2004). In this model, open source software developers contribute privately to software that then becomes freely available to all. This sharing of source code through ‘virtual

collaborative structures' Albers et al. (2008) enables the formation of a commons, or 'set of shared, accessible community resources' (Kazman and Chen, 2009, p. 76). In turn, the commons enables a peer review process which openly finds faults and fixes them (Lee and Cole, 2003).

There is an apparent dilemma with open source, that if the source code is freely downloadable, there is nothing to stop anyone just using the software and not contributing to it, where all users start as free riders (Perens, 2005). This "free riding" dilemma could be a problem, but von Hippel and von Krogh (2003) argue that but in practice contributors gain private benefits that are only available to them and not to free riders. This point is reinforced by Weber (2004, p. 153), who highlights that there could still be free riding, but open source benefits from a 'network good' in that 'the value of a piece of software to any user increases as more people use the software on their machines and in their particular settings'. Ghosh (2005), when considering the free riding issue, compared open source to a tribal cooking pot, where each individual puts in some item of food that add together to make a stew. However, with open source, as it is freely downloadable, there is always some "stew" as it can be replicated indefinitely.

Other writers challenge this private-collective model, in particular Buchanan (1965, p. 3), in proposing an economic theory of membership clubs highlighted that in co-operative membership, 'the utility that an individual receives from its consumption depends upon the number of other persons with whom he must share its benefits'. However, in open source software, an infinite number of persons can benefit, and the utility increases with increases in the number of members (Ulhøi, 2004). These issues have led a number of open source projects to go beyond the simple model of a software architect and community of contributors.

### **3.6.3 Open source governance**

Open source presents an interesting challenge, as a 'governance system that holds together a community of producers around this counterintuitive notion of property rights as distribution' (Weber, 2004, p. 1). In this view of property as distribution, the coordinator of an open source project, or software architect, can at their sole discretion decide what code will be included in a distribution, however anyone else can take the code and offer their version instead. A software architect will thus need to consider the wishes of their contributors, or risk losing their decisive influence over the project. This is an issue of governance, where open source governance has been defined by

Markus as ‘the means of achieving the direction, control, and coordination of wholly or partially autonomous individuals and organizations on behalf of the OSS development projects to which they jointly contribute’ (2007, p. 152).

Lejeune (2010, p. 18) highlights how open source projects such as Open Directory, Debian and Wikipedia have evolved ‘mediated collectives’ where there is discussion leading to decisions on who does what, but they are not wholly democracies. In this view, (O’Mahony, 2007, p. 145) identified the principles of community managed governance as independence (from any one sponsor); pluralism (maintains multiple approaches and points of view); representation (of members in community-wide decisions) and decentralised decision-making (delegation of some aspects of decision-making); and autonomous participation (enabling participants to contribute on their own terms).

However, taking a community managed approach means dealing with authority. In the case where the software architect solely makes the decisions, they hold the authority over the software project, but the contributors can exert a collective form of authority by choosing a new software architect. Etzioni (1959) points out that establishing a shared basis of authority is the first step towards establishing governance. However, democratic governance has problems with scale and complexity (O’Mahony and Ferraro, 2007), and may not be applicable to open source projects with their more permeable boundaries (Aksulu and Wade, 2010). The perspective of open source as a permeable boundary relates to the concept of open source as a fluid boundary.

#### **3.6.4 Open source as a fluid boundary**

Open Space was pioneered in 1985 at the Organization Transformation Conference as, out of an apparent free for all, the conference became self organising after all the participants had made their wishes clear, establishing the ‘law of two feet’, where participants feel free to move towards what will best serve their needs (Owen, 2008). Extending these self-organising principles to the Internet, Albors et al. (2008) claim that the internet can enable the creation of ‘virtual collaborative structures’, which would need to be based on shared values and trust, ‘at the level of the individual for an online community to be formed’ (Nolan et al., 2007, p. 53). In smaller open source software projects, governance becomes about ‘who has the right, recognized as legitimate by the community as a whole to redistribute modified versions

of the software' (Weber 2004, p. 161). This view of governance in open source is one where the boundaries of an open source project are fluid rather than formal.

Open source as fluid boundaries enables a flow of resources for knowledge collaboration in a dynamic space rather than as a structural mechanism for organising (Faraj et al., 2011). In open source, the software architect shapes the boundaries of the project through the contributions they accept to the software code. In this boundary shaping activity, the software architect works towards a goal that is shared with contributors, to create software for a particular purpose. In this goal setting, the software architect, defining the space that contributors work in, exerts invisible power relations (Weber, 2004). The overall process followed by the software architect fulfils Simon's observation in the context of computing that the 'question is how to build a reliable system from unreliable parts' (1969, p. 19), the software architect selects and assembles the reliable parts from those offered by contributors.

What may be unique about open source is that the software code itself is a narrative that forms the boundary of the project. This software code is itself a form of language that communicates to a computer system how to perform a particular task, where this language enables construction of meaning to both the computer system and to the individuals contributing software code. Taking a view of open source as a narrative, it is more of an adhocracy than a democracy, based on semiformal decentralised structures (Konieczny, 2010) in an open system (Aksulu and Wade, 2010). In this respect, open source may be able to overcome the issues with governance within a commons identified by Ostrom (2010), in particular free-riding and collective choice in decision making.

### **3.6.5 Open source as a narrative**

The notion of open source as a narrative has been investigated by relatively few authors. Drawing on the philosophy of Alasdair MacIntyre, von Krogh et al. (2012, p. 650) identify in the context of open source software that 'human behavior cannot be decoupled from ethical considerations about what people strive for and the narratives they construct about their life'. This narrative can be seen in terms of an improvised performance, where the developing software code 'must be constantly negotiated and constructed from moment to moment' (Chopra and Dexter, 2007, p. 107). Weber offers an interesting perspective on open source organisational forms as 'social constructivist narratives', where power relations are embodied in software code, and can be

analysed from that code (2004, p. 133). These views on open source as a narrative can be evaluated by considering open source in terms of the narrative framework offered in Section 3.4.4:

1. *Purposeful intent*: Open source projects are created through an intent to fulfil a particular purpose (Hars and Ou, 2002). Contributors participate in open source software projects from both intrinsic motivations towards ‘socially meaningful participation’ (Bach and Twidale, 2010, p. 70) and extrinsic motivations of enhanced career prospects (Krishnamurthy, 2006) and fulfilling personal needs (Hars and Ou, 2002).
2. *Enacted by human or other actors*: Creating computer software is a process of writing, which can be compared to the writing of poetry or other creative works (Chopra and Dexter, 2007). In the case of software, the process of writing enacts the software code into being, capable of performing a useful task.
3. *Particular incidents or events*: Open source as a narrative of the code itself and discussion around it (Weber, 2004), is focused on the development of a particular software project.
4. *Causal sequence*: The development of open source software can be seen as a causal sequence in two respects. The first is that open source software follows an established sequence of identification of needs, then a community of developers forms, coordinated by the software architect to produce software that can meet that need (Weber, 2004). The second is that the software code itself must follow a causal algorithmic sequence in order to work (Chopra and Dexter, 2007).
5. *Reflect reality and create it*: The software code is a form of language, which in turn can create a structure of shared meaning (Holzscheiter, 2005) in the software code itself. This structure of shared meaning reflects the reality of the software code. Open source follows a peer review process of continually finding faults and fixing them through a process of ‘continuous criticism of existing versions and a rapid feedback’ (Lee and Cole, 2003, p. 643), re-creating the reality of the code.
6. *Context*: Open source software licences such as the General Public Licence create a framework for developing open source software projects (DiBona et al., 1999; Weber, 2004). However, these projects remain relatively unstructured compared to closed source software projects (Aksulu and Wade, 2010).

7. *Specific point of view*: The motivations of software developers are primarily intrinsic (Krishnamurthy, 2006; Bitzer et al., 2007; Bach and Twidale, 2010), arising from their inner lives, including a wish for personal development (Aksulu and Wade, 2010). These motivations lead to a specific point of view on how an open source software project should evolve, including that open source is about gaining power by giving away (Bergquist and Ljungberg, 2001).
8. *New point of view*: An open source community is one that ‘makes itself through hacking practices of sharing, circulation, and the constant transformation of things’ (Delgado, 2013, p. 66), in this case the software code itself is transformed.
9. *Become institutionalised*: User communities develop around open source projects that become institutionalised through group intentions, facilitated by shared narratives (Bagozzi and Dholakia, 2006). Open source projects can work with firms through boundary organisations (O’Mahony and Bechky, 2008).

This section has introduced open source as a narrative, where an individual software developer’s imagination creates a vision for software that solves a problem or fulfils a need. Weber (2004, p. 15) highlights that it is ‘ideas rather than technology’ that were behind both the first and second industrial revolutions, and also behind open source, giving the latter political and economic dimensions. These dimensions imply that open source could be applied to other contexts, particularly to business.

Open source has been linked with business by a number of authors (Shah, 2006; O’Mahony, 2007; Dahlander and Magnusson, 2008), particularly through open innovation (Philbin, 2014; Hossain and Anees-ur-Rehman, 2016; Chesbrough, 2017). In particular open source and open innovation can inspire new business models (Chang et al., 2007; Rajala et al., 2012; Benyayer and Kupp, 2017). This linking of open source to business models via open innovation suggests that if open source can be considered as a narrative, business models could also be considered as a narrative. The next section introduces business models and frames them as narratives.

### **3.7 Business models as narratives**

This section first introduces business models as a contested concept that authors find it difficult to agree on, then explores the various conceptualisa-

tions of the business model offered by Klang et al. (2014). These conceptualisations are: a logic for a firm's strategic choices in creating and capturing value; a framework for translating technological development to economic output; a template for boundary-spanning activities; and a narrative device for structuring discourses in venture creation. The section then presents the components of a business model, before considering business models as narratives, using the framework developed in Section 3.4.4.

### 3.7.1 Introduction to business models

The first use of the term “business model” was in the context of business training games, where Bellman et al. found that ‘many more problems arise to plague us in the construction of these business models than ever confronted an engineer’ (1957, p. 474). The use of business models was not widespread until the early 2000s, where the concept gained renewed relevance in the context of the Internet and e-business (DaSilva and Trkman, 2014). At about this time, innovation extended from products and services to business models with the growth of the Internet (George and Bock, 2011). However, problems with business models have persisted, with Porter noting that ‘The definition of a business model is murky at best. Most often, it seems to refer to a loose conception of how a company does business and generates revenue’ (2001, p. 73). Subsequent attempts to define the concept have been characterised by a lack of consensus and even confusion (Shafer et al., 2005) and that it is poorly understood despite its importance to management (Teece, 2010; Jensen, 2013).

There have been a number of literature reviews in recent years, each of which have aimed for a definitive framing of the business model concept, while acknowledging that it is difficult to pin down (e.g. Wirtz et al., 2016; Wirtz and Daiser, 2018). A reason for this diversity is offered by Zott et al. (2011), who point out that the business model literature has developed in silos, each located in a different discipline.

### 3.7.2 Business models as a logic for creating value

An early definition of business models focused wholly on the firm, viewing the business model as ‘an architecture of the product, service and information flows, including a description of the various business actors and their roles; and a description of the potential benefits for the various business actors; and a description of the sources of revenues’ (Timmers, 1998, p. 2). As the business model concept developed, it was viewed as a mechanism for

creating and capturing value (Shafer et al., 2005; Chesbrough, 2006; Zott et al., 2011).

A firm's business model from a value creation perspective 'describes the rationale of how an organization creates, delivers, and captures value' (Osterwalder and Pigneur, 2010, p. 14). This conceptualisation of a business model is reinforced by Teece (2010, p. 179) who offers the definition, 'A business model articulates the logic, the data and other evidence that support a value proposition for the customer, and a viable structure of revenues and costs for the enterprise delivering that value'. Al-debei and Avison (2010, pp. 372-373) also focus on value, proposing that 'value proposition, value network, value architecture, and value finance are the main dimensions' of a business model. DaSilva and Trkman take a more resource-based view, and 'argue that business models represent a specific combination of resources which through transactions generate value for both customers and the organization' (2014, p. 382). This perspective where firms use resources to create value leads to a view of business models as a framework for economic output.

### **3.7.3 Business models as a framework for economic output**

A resource-based view has influenced many conceptualisations of business models, where Tapscott et al. (2000) frame a business model in terms of how the firm uses both internal and external resources to create value that is differentiated from its competitors. Resources can be technological, which is particularly relevant in the realm of Internet-based firms, where Chesbrough and Rosenbloom (2002, p. 532) frame a business model as a 'coherent framework that takes technological characteristics and potentials as inputs, and converts them through customers and markets into economic outputs'. This technology can be in the form of physical objects, processes (Arthur, 2009) or even knowledge (Mokyr, 2004). A resource-based view of business models involves a wider perspective than just the firm to include its interaction with other firms, where DaSilva and Trkman (2014) argue that resources in themselves don't offer any value to customers: this value is gained through transactions using those resources.

Although Timmers (1998, p. 2) referred to 'sources of revenues', it was Chesbrough and Rosenbloom (2002, p. 529) who introduced the business model as one that 'connects technical potential with the realization of economic value'. Morris et al. (2005, p. 727) built on this perspective to frame a

business model as a ‘concise representation of how an interrelated set of decision variables in the areas of venture strategy, architecture, and economics are addressed to create sustainable competitive advantage in defined market’. A firm exists to create and deliver economic value for its customers, while capturing a proportion of that value for itself (Chesbrough, 2006). In this view of a business model, as well as making a value proposition, it also needs to specify how the firm will gain revenue from creating that value (Chesbrough, 2010). This conceptualisation of business models also includes strategic elements, where the business strategy leads to the business process via the business model (Osterwalder et al., 2005). However, the business model itself is not the same as a business strategy (Shafer et al., 2005; Teece, 2010). Business models that take into account economic output implies a perspective wider than that of the individual firm, which then implies that the business model needs to consider the boundaries of the firm and boundary-spanning activities.

#### **3.7.4 Business models as a template for boundary-spanning activities**

The business model as logic focuses on the firm and how it can gain value, while business model as a framework for economic output focuses on the firm and its transactions in a wider network. These transactions involve taking into account the firm’s transaction efficiency and decisions about boundaries (Morris et al., 2005). Taking a similar perspective on a firm’s boundaries, Zott and Amit (2010, p. 216) refer to the business model as ‘a system of interdependent activities that transcends the focal firm and spans its boundaries’. Zott et al. (2011, p. 1020) develop this thinking further to highlight that ‘the business model is a new unit of analysis that is distinct from the product, firm, industry, or network; it is centered on a focal firm, but its boundaries are wider than those of the firm’. Taking the boundary-spanning perspective a stage further, Mason and Spring (2011, p. 1033) highlight that, by ‘divulging different parts of the business model to investors, suppliers and customers, the business model (or fractions of it) becomes sited in the business models of others’. Considering the boundary of a firm, the business model can become a boundary object (Doganova and Eyquem-Renault, 2009), ‘playing an important sense-making and sense-creating role for various stakeholders’ (Jensen, 2013, p. 62), which can be through story-telling (Corsaro, 2018). This sense-making role leads onto a narrative perspective on business models.

### 3.7.5 Components of a business model

In identifying the components of a business model, the perspective offered by Doganova and Eyquem-Renault (2009, p. 1568) is helpful, where they ‘consider the business model as a material object, as a scale model of the new venture’, also that of DaSilva and Trkman (2014, p. 380) where they see it as a ‘simulation of the real world through a model’. Thus, the business model will need to contain all the components that would be found in the business itself. Morris et al. (2005, p. 730) offer a useful set of questions that underlie a business model:

- How do we create value?
- Who do we create value for?
- What is our source of competence?
- How do we competitively position ourselves?
- How we make money?
- What are our time, scope, and size ambitions?

These questions are a starting point for identifying the components of a business model. Several recent authors have identified business model components from their literature reviews (Al-debei and Avison, 2010; Nenonen and Storbacka, 2010; Zott et al., 2011; Fielt, 2013; Spieth and Schneider, 2016; Wirtz et al., 2016). The business model components identified by these authors can be summarised in a number of categories that represent stages in developing a business model:

1. *Personal factors*: behavioural norms; belief system; business actors; capabilities; leadership; mission; personal factors; relationships; roles.
2. *Resources*: assets; competencies; information; investor factors; knowledge; reputation; resources.
3. *Opportunities*: markets; opportunities; technology.
4. *Stakeholders*: alliances; competitors; stakeholders; government; partners; relationships; suppliers.
5. *Value creation and capture*: economic value; sustainable returns; value capture; value creation; value exchange; value network; value proposition; transformation of inputs.

6. *Strategy*: business logic; configuration; concept; differentiation; strategic choices; strategic control; strategic objectives; strategy; sustainability.
7. *Boundaries*: boundary-spanning; business networks; network of firms; network structure; partnerships; scope; stakeholder network.
8. *Structure*: architecture; governance; structure.
9. *Activities*: activities; distribution; implementation; operations; processes; products.
10. *Customers*: customer relationships; customers; customer selection; customer target.
11. *Revenue and costs*: costs; finance; price; revenues; revenue sources; transactions.
12. *Profit*: profit formula; profit potential; profits.

These business model components then contribute to considering business models as narratives.

### **3.7.6 Business models as narratives**

Some authors view business models as a narrative, where Margetta (2002, p. 4) saw business models as ‘stories that explain how enterprises work. A good business model answers Peter Drucker’s age old questions: Who is the customer? And what does the customer value?’. Downing (2005, p, 186) views a business model as ‘set of expectations about how the business will be successful in its environment’ which can be expressed as a narrative. Doganova and Eyquem-Renault (2009) frame the business model in terms of narrative devices that are co-created with stakeholders to enable a shared understanding. Taking this thinking a stage further, they propose that the ‘business model is not only an input of the encounters between the entrepreneurs and the allies that they seek to enroll, but also an output thereof’ (2009, p. 1566). This perspective is reinforced by Araujo and Easton (2012), who claim that the business model ‘begins to perform the world it narrates with every successful iteration’ (p. 316).

The narrative approach to business models links with the institutional approach, where institutions are ‘rules, norms, and beliefs that enable and constrain action and make social life predictable and meaningful’ (Vargo and Lusch, 2016, p. 11). These discursive perspectives are reinforced by Wieland

et al. (2017), who define business models as ‘dynamic assemblages of institutions that, through the performative practices (i.e., actions, constructions) of actors, reciprocally link and influence technological and market innovation and contribute to the viability of these actors and the viability of the service ecosystems of which they are a part’ (p. 926). These views on business models as a narrative can be evaluated by considering business models in terms of the narrative framework offered in Section 3.4.4:

1. *Purposeful intent*: One of the ‘decision variables’ to gain competitive advantage identified by Morris et al. (2005, p. 730) is personal and investor factors, including ‘time, scope, and size ambitions’, another is the firm’s sources of competence and leadership. Business models are generally created by groups of individuals as they are focused on action (Ahokangas and Myllykoski, 2014), however a ‘single actor, on the other hand, can propose a business model’ (Wieland et al., 2017). Narratives can be an effective means of transmitting values and beliefs in a business context, particularly when there is conflict between them (Denning, 2006).
2. *Enacted by human or other actors*: ‘The business model is a narrative and calculative device that allows entrepreneurs to explore a market’ (Doganova and Eyquem-Renault, 2009, p. 1559), and as it becomes successful, a business model ‘begins to perform the world it narrates’ (Araujo and Easton, 2012, p. 316). The definition of business models offered by Chesbrough (2006) focuses on activities, ‘First, it defines a series of activities that will yield a new product or service in such a way that there is net value created throughout the various activities. Second, it captures value from a portion of those activities for the firm developing the model’ (p. 108).
3. *Particular incidents or events*: Business models are ‘stories that explain how enterprises work’ (Margetta, 2002, p. 4), framed in terms of a particular firm in its context, which is ‘rooted in the experience and knowledge of the focal actors’ (Ahokangas and Myllykoski, 2014, p. 8). The business model is both a narrative and calculative means of exploring a market (Doganova and Eyquem-Renault, 2009), which itself can be enacted (Chesbrough, 2010). George and Bock (2011, p. 99) view business models as ‘the design of organizational structures to enact a commercial opportunity’. Amit and Zott (2001, p. 493) defined a business model as the ‘content, structure and governance of transactions designed so as to create value through the exploitation of

business opportunities' while Jensen (2013) highlighted that exploring opportunities can take place across organisational boundaries.

4. *Causal sequence*: The Business Model Canvas shows how value flows from the business to customers (Osterwalder and Pigneur, 2010). Business model innovation follows a process of analysis, ideation, feasibility prototyping, decision-making, implementation and finally sustainability (Wirtz and Daiser, 2018). The business model evolves from informal beginnings through trial and error (Morris et al., 2005), where, through 'a more precise definition of market needs, customer benefits, users, and resources, the opportunity progresses first to become a business concept, and then ultimately matures into a business model' (Ahokangas and Myllykoski, 2014, p. 11). A business model 'helps articulate and make explicit key assumptions about cause-and-effect relationships and the internal consistency of strategic choices' (Shafer et al., 2005, p. 202). A business model can thus inform a firm's strategy, but it is not in itself a strategy (Shafer et al., 2005; Teece, 2010).
5. *Reflect reality and create it*: Margetta (2002) proposed that 'A good business model begins with an insight into human motivations and ends in a rich stream of profits' (p. 3), while Perkmann and Spicer viewed a business model as 'a text that re-describes and re-constructs reality' (2010, p. 5). A business model first and foremost identifies the value proposition, then how the firm will generate and gain revenue (Chesbrough, 2010). A business model needs to have an 'underlying economic logic' for how the firm can deliver value to its customers at a cost that means they can remain in business (Margetta, 2002, p. 4), including in financial terms (Al-debei and Avison, 2010). Teece (2010) offers a more comprehensive profit-centred definition as where 'the enterprise creates and delivers value to customers, and then converts payments received to profits' (p. 173). One factor in determining costs is the firm's organisational boundary, which can be set to minimise governance costs (Santos and Eisenhardt, 2005), in themselves a form of transaction costs (Coase, 1937).
6. *Context*: A business model can be viewed as a boundary object (Star and Griesemer, 1989), mediating between the firm and its context (Doganova and Eyquem-Renault, 2009), where a transactive view of business models frames them in terms of boundary-spanning transactions (George and Bock, 2011). Value is 'generated through the transactions made with the use of resources' (DaSilva and Trkman, 2014, p. 382),

while Kornberger (2017) proposes that a ‘resource-based view suggests that sustainable competitive advantage is rooted in an organization’s specific resources, competencies, and capabilities’ (p. 186). A firm’s value network ‘can include suppliers, partners, distribution channels, and coalitions that extend the company’s own resources’ (Shafer et al., 2005, p. 202). Jensen (2013, p. 67) defines a business model as ‘a focal firm’s core logic for creating, delivering and capturing value within a stakeholder network’. Taking this thinking a step further, Kornberger (2017) highlights that, in contrast to the focus on a single firm in the past, a focal firm now ‘plays the role of the system architect, shaping relationships among suppliers, partners, and other network members’ (p. 178). Perkmann and Spicer (2010) highlight that business models are ‘representations that create material effects such as enrolling buyers and suppliers, persuading investors, and directing employees’ (p. 5). Mason and Spring (2011) point out that, by ‘divulging different parts of the business model to investors, suppliers and customers, the business model (or fractions of it) becomes sited in the business models of others’.

7. *Specific point of view*: A business model ‘cannot be assessed in the abstract; its suitability can only be determined against a particular business environment or context’, including being ‘unpalatable for competitors to replicate’ (Teece, 2010, pp. 191-192). A business model is thus developed with reference to context and stakeholders and their expectations (Downing, 2005). The business model can thus ‘support a shared understanding among various participants’ (Doganova and Eyquem-Renault, 2009, p. 1568).
8. *New point of view*: Narratives can both communicate information and the meaning of that information (O’Connor, 1997), potentially opening up new ways of looking at a particular entrepreneurial context. The business model evolves through trial and error (Morris et al., 2005), where Ahokangas and Myllykoski (2014) frame business models in terms of creation and transformation through practice. Taking transformation a step further, ‘transformational leadership theory seeks to identify the characters and processes that enable leaders to transform their followers’ (Boland et al., 2008, p. 18).
9. *Become institutionalised*: A business model can be viewed as ‘a system of interdependent activities that transcends the focal firm and spans

its boundaries' (Zott and Amit, 2010, p. 6). Klang et al. (2014) identify themes in business models of internal artefacts, relational mechanisms and 'external stakeholders, which exist beyond the boundaries of the firm' (p. 468). Business models can function as 'as a boundary object playing an important sense-making and sense-creating role for various stakeholders, despite their individual approaches and understandings of the term' (Jensen, 2013, p. 62). In a digital economy context, Lakhani et al. (2012, p. 8) 'suggest that task decomposition and knowledge distribution provide a framework for the choice of firm boundaries'. Institutions, in the form of aids to collaboration, guide the formation of business models, which can be framed as 'dynamic assemblages of institutions' (Wieland et al., 2017, p. 926) that have a performative role through a range of actors in the market (Araujo and Easton, 2012) that fulfils the core roles of convincing, legitimising, and guiding social action (Perkman and Spicer, 2010). In particular, narrative forms of business models can create institutional norms and beliefs (Vargo and Lusch, 2016), as an 'organic social structure' created by relationship building and dialogue, which then becomes formalised into a 'hard frame' of formal accountability, control systems, legal documents etc. (Bate et al., 2000, p. 448).

Applying the framework from Section 3.4.4 shows that business models can be viewed as a narrative, of particular interest is the assertion that a single actor can create a business model (Wieland et al., 2017). This links with the point made by Shah et al. (2005), that an open source project only needs a single individual to maintain and develop it. This point highlights that there are common aspects to open source and business models when framed as narratives, which will be explored further in the next section. In particular, a narrative form of business model could enable a single individual or small group to coordinate a much larger creative network, as highlighted by Weber (2004).

The next section brings together the concepts of open source as a narrative, business organisations as narratives and business models as narratives, to explore how power relations could operate in a business that operates according to the principles of open source. It then proposes a narrative form of open source business model as a potential contribution to knowledge.

## **3.8 A narrative form of open source business model**

### **3.8.1 Open source and business models**

Open source was developed as a means of enabling peer production of software that was more friendly to business than Free Software (DiBona et al., 1999). The first business models around open source were arguably the first packaged distributions of Linux that included proprietary software in 1993 (Weber, 2004). Businesses were quick to adopt hybrid strategies that drew on some aspects of open source (Shah, 2006) while retaining proprietary ownership such as crowdsourcing (Howe, 2006) and open labour markets (Irani and Silberman, 2013).

This thinking developed to consider how Free and Open Source Software communities could benefit as well as the firm, with Dahlander and Magnusson (2008) highlighting ‘how firms make use of FOSS communities: (1) accessing communities to extend the resource base; (2) aligning firm strategies with the community; and (3) assimilating communities in order to integrate and share results’. In this perspective, the firm is still dominant, operating to its business model, but drawing on the resources of an open source community. A more integrated approach is Second-Generation Open Source, where the firm employs programmers and maintains control over the source code but engages with and benefits from an open source community (Watson et al., 2008).

O’Mahony highlighted that the term open source ‘has come to mean many things: a type of software license, an approach to software development, a type of community, and a type of business model (2007, p. 147). Considering open source at a more fundamental level, Aksulu and Wade (2010) highlight that ‘an open source system usually allows for more diversity and creative instability, allowing much higher levels of interaction and contributing to elevated levels of innovation’. In the context of business, open innovation has enabled firms to enhance their business models.

### **3.8.2 Open innovation and business models**

The development of the Internet has reduced transaction costs which can in turn cause entire industries to have to re-organise (Hagel and Singer, 1999). This fundamental change in how businesses are structured relates to the work of Hargrave and Van de Ven (2006), who emphasise the role of collec-

tive action in institutional innovation, highlighting that collective action is a political process where activists mobilise resources, act to challenge existing institutional structures, and eventually find a synthesis between the old and the new. Chesbrough and Crowther (2006), from research with early adopters of technology conclude that open innovation is more widely applicable than its original high-tech context. Nenonen and Storbacka (2010, p. 43) point out that ‘value is considered to be co-created among various actors within the networked market’ rather than by individual firms, which has implications for business models. Open innovation can lead to new business models, including those based on open source, where open source business models can be categorised as ‘deployment, hybridization, complements, and self-service’ (Chesborough and Appleyard, 2007, p. 73). Ulhøi (2004, pp. 1108-1109) uses private property theory and a model of collective agency to consider open source as a mechanism for innovation through ‘critical knowledge sharing’, where ‘knowledge and experience have the interesting feature that they tend to grow when shared’.

However, creating new mechanisms for creating and exchanging knowledge raises the question of intellectual property rights. In an open source software context, O’Mahony (2003) highlights the importance of contributors retaining the rights to open source software while publicly giving it away while Merges (1996, p. 167) points out the problems with property rights being asserted in science research, in particular when ‘members of the commons deal with outsiders, informal rights give way to formal rights’. Benyayer and Kupp (2017, p. 33) identify ‘five major dimensions of open business models: motivation, object, community, actions and governance’, where governance can be centralised as in the platform economy, or distributed, ‘when the rules are defined by the community itself through a collaborative process’ (p. 37). Euchner (2013) distinguishes between open-boundary innovation, where the firm makes its boundaries more permeable to allow innovation and open source innovation, a more radical restructuring of the firm to allow open governance. This more radical restructuring of the firm could be achieved through a narrative form of open source business model.

### **3.8.3 A narrative form of open source business model**

A narrative form of open source business model brings together entrepreneurship as a narrative from Section 3.5.3, open source as a narrative from Section 3.6.5 and business models as narratives in Section 3.7.6, using the

narrative framework developed in Section 3.4.4:

1. *Purposeful intent*: A narrative form of open source business model enables a business founder to express their intent through a narrative, in a similar way to how the founder of an open source project expresses an intent to fulfil a particular purpose (Hars and Ou, 2002). The founder could be a single actor (Wieland et al., 2017) or a group of individuals (Ahokangas and Myllykoski, 2014). The founder's personal and cultural values can be conveyed using narratives (Polkinghorne, 1991) to stakeholders. These stakeholders can then contribute to the narrative, investing their time and potentially aligning their goals with the founder. Narratives can be an effective means of transmitting values and beliefs in a business context, particularly when there is conflict between them (Denning, 2006). A narrative form of business model that involves stakeholders could potentially overcome the personal time and scope limitations of the individual entrepreneur identified by Morris et al. (2005).
2. *Enacted by human or other actors*: The entrepreneur's narrative can be expressed in writing, as in any creative work, where creative pieces of writing, such as poetry, are generally the work of a single individual, as is computer software (Chopra and Dexter, 2007). Brooks (1987) pointed out that in computer software, 'design must proceed from one mind, or from a very small number of agreeing resonant minds', which Brooks later framed as conceptual integrity (2010). However, large software projects tend to lose this unity as the number of developers grows (Brooks, 1987). Open source, with its voluntary participation coordinated by the software architect, can overcome the problems of scale identified by Brooks without resorting to command and control systems (Weber, 2004). In a narrative form of open source business model, a single entrepreneur (or a very small group of entrepreneurs) can co-ordinate a larger stakeholder group through a narrative that stakeholders can contribute to, thus potentially harnessing their creativity in a similar way to how an open source project draws on the creativity of a distributed community of software developers. The developing narrative can then be enacted into being through a discursive process with stakeholders (Pentland, 1999; Gherardi, 2016). As the narrative becomes enacted, it can take the form of a fluid space (Faraj et al., 2011), or material objects (Sibierska, 2017), which could include creating a formal organisation. This form of business model

extends the activity-based definition of business models proposed by Chesbrough (2006) to capture value for both the focal organisation and their network members. In the digital platform economy, the narrative could take the form of software, which can enable a narrative form of open source business model to operate like an open source project.

3. *Particular incidents or events*: Business models are ‘stories that explain how enterprises work’ (Margetta, 2002, p. 4), framed in terms of a particular firm in its context. Downing (2005, p. 285) identifies that one mechanism that can bring about and develop organisations is ‘vision, self-belief, and adaptive learning’, in contrast to the prevalent perspective of accountability and legitimacy. This vision can be conveyed using narratives that can be both sense-making and sense-giving (Wieck, 1995). A narrative form of open source business model allows the entrepreneur to develop their business through narratives that communicate their vision, beliefs and wished for future to a particular community, which in turn is ‘rooted in the experience and knowledge of the focal actors’ (Ahokangas and Myllykoski, 2014, p. 8). In this respect, this form of business model can be a means of exploring a market (Doganova and Eyquem-Renault, 2009) and opportunities across organisational boundaries (Jensen, 2013). This form of business model could offer a greater range of opportunities for positioning within the market place than the focal organisation or their members could gain alone.
4. *Causal sequence*: Downing (2005) identifies a sequence from emotionally significant storylines to plots, narrative structuring and finally enactment of the narrative through entrepreneurship. Business models can show a causal sequence starting with an opportunity, then progressing to a business concept, then a business model (Ahokangas and Myllykoski, 2014). As a narrative, an open source form of business model can continuously innovate, where business model innovation follows a process of analysis, ideation, feasibility prototyping, decision-making, implementation and finally sustainability (Wirtz and Daiser, 2018). An entrepreneur who adopts a narrative form of open source business model will follow a causal sequence starting with their business idea, expressing it as a narrative, then identifying stakeholders who can contribute to the narrative. This sequence is similar to that followed by the software architect in establishing a new open source software project, of identifying needs, then recruiting a community of

developers (Weber, 2004). In this form of business model, as a narrative it can enable the entrepreneur to articulate cause-and-effect relationships and strategic choices, which is one of the functions of a business model identified by Shafer et al. (2005).

5. *Reflect reality and create it*: Savage et al. (2018) frame organisations in terms of fiction and its ability to make an organisational world. In this view, a narrative form of open source business model can be seen as ‘a text that re-describes and re-constructs reality’ (Perkmann and Spicer, 2010, p. 5), in a process of peer review with rapid feedback (Lee and Cole, 2003). This form of business model reflects reality in that it is founded on the entrepreneur’s exploration of the opportunities in their environment and allows the founder to explore their market (Doganova and Eyquem-Renault, 2009). Exploration of the market will then help the founder to identify their value proposition and how they will gain revenue (Chesbrough, 2010). In building a community of stakeholders through shared narratives, this form of business model can ‘support a shared understanding among various participants’ (Doganova and Eyquem-Renault, 2009, p. 1568), and then it ‘begins to perform the world it narrates’ (Araujo and Easton, 2012, p. 316). In this performance, the narrative can clearly differentiate the developing business and its stakeholders as a structure of shared meaning (Holzscheiter, 2005), that is experienced as being separate from its human creators (Fairhurst and Putnam, 2004). In this form of business model, the focal organisation can capture value from their stakeholder network for the benefit of both the organisation and its network, particularly financial value (Al-debei and Avison, 2010), which then contributes to profits (Teece, 2010). If the focal organisation fails to capture this value, the network could find a new focal organisation, in the process making a boundary judgement (Ulrich, 2000). As a network, members can reduce costs by sharing suppliers, and reduce costs to customers by working at a larger scale with other members. Another factor in determining costs is the firm’s organisational boundary, which can be set to minimise governance costs (Santos and Eisenhardt, 2005), in themselves a form of transaction costs (Coase, 1937). This form of business model can enable the entrepreneur to recruit members of their network as partners in the growing enterprise, which in turn can extend their resources (Shafer et al., 2005). As members, they would benefit from the network in a similar way to contributors to an open source project,

who can benefit from their own contributions and those of other contributors.

6. *Context*: Organisations that adopt a narrative form of open source business model will develop with reference to context and stakeholder expectations (Downing, 2005). These expectations can be made sense of through narratives, which can help with sense-making at an organisational level (Hawkins and Saleem, 2012) and for stakeholders (Jensen, 2013). A narrative form of open source business model, through being shared with stakeholders, can become part of their business models, as identified by Mason and Spring (2011). Taking this thinking a step further, Kornberger (2017) highlights that, in contrast to the focus on a single firm in the past, a focal firm now ‘plays the role of the system architect, shaping relationships among suppliers, partners, and other network members’ (p. 178). A narrative form of open source business model could enable the founder to gain competitive advantage from sourcing resources and competencies (Kornberger, 2017) from the member network as well as from within the focal organisation. This form of business model could be implemented using a licence inspired by open source software licences such as the General Public Licence, which create a framework for open source software projects (DiBona et al., 1999; Weber, 2004).
7. *Specific point of view*: An entrepreneur’s past can be expressed through narratives, which can be a sense-making process of the entrepreneur’s life course and identity (Foss, 2004), capturing what they know (Smith and Anderson, 2004), and which can then extend to a imagined desired future (O’Connor, 2004). As this future becomes enacted through narratives, the entrepreneur’s imagination can act as both a creative and sensemaking process in an organisational context (Komporozos-Athanasίου and Fotaki, 2015). A narrative form of open source business model can express the ‘core logic for creating and capturing value’ of the business (Shafer et al., 2005, p. 204), and can enable a shared understanding (Doganova and Eyquem-Renault, 2009) between the founder and stakeholders.
8. *New point of view*: In creating their business model, the entrepreneur needs to be seen as legitimate by stakeholders, this is where storytelling can help in establishing the legitimacy of a potential future (Garud et al., 2014). A narrative form of open source business model

could, like an open source software project, inspire individuals to participate from intrinsic motivations (Krishnamurthy, 2006; Bitzer et al., 2007; Bach and Twidale, 2010), arising from their inner lives, including a wish for personal development (Aksulu and Wade, 2010). These motivations could lead to a new point of view on how a business model should evolve, inspired by the notion that open source is about gaining power by giving it away (Bergquist and Ljungberg, 2001). Narratives, in being able to both communicate information and the meaning of that information (O'Connor, 1997), can enable new ways of looking at a particular context. As a sense-making process, the narrative can lead to individual or organisational transformation (Downing, 2005). In a narrative form of open source business model, the community of stakeholders operates like an open source community, where there is a constant transformation (Delgado, 2013), in this case transformation through practice (Ahokangas and Myllykoski, 2014).

9. *Become institutionalised:* As the founding entrepreneur develops their business through adopting a narrative form of open source business model, it can adopt a suitable legal form to protect core intellectual property that the business and its associated stakeholder community are founded on. The community of stakeholders becomes institutionalised through narrative accrual (Bruner, 1991) of norms and beliefs (Vargo and Lusch, 2016) in a similar way to how the developer community in an open source software project becomes institutionalised (Bagozzi and Dholakia, 2006). In this respect, this form of business model can be viewed as 'dynamic assemblages of institutions' for collaboration (Wieland et al., 2017, p. 926) that evolve through trial and error (Morris et al., 2005). Narrative forms of business models can create institutional norms and beliefs (Vargo and Lusch, 2016), as an 'organic social structure' created by relationship building and dialogue, which then become formalised as needed into a 'hard frame' of formal accountability, control systems and legal documents (Bate et al., 2000, p. 448). This form of business model is one where the entrepreneur and their developing enterprise plays a focal role in a network of stakeholders who can become members. In this respect, this form of business model is a networked model rather than focusing on a single firm (Kornberger, 2017). This form of business model can perform the boundary-spanning function identified by Zott and Amit (2010) through developing a shared narrative that network members

can both contribute to and benefit from.

Applying the framework from Section 3.4.4 uncovers a potential narrative form of open source business model that has a similar power-balance between the core and stakeholders as an open source project has between the software architect and contributors. In this respect, the narrative form of open source business model is one based on systems and institutions (Wieland et al., 2017). The analysis above demonstrates how the components of a narrative form of open source business model can operate. This conceptual exercise raises the question of if it is possible to create a networked form of business model that operates as a narrative. This is an area where there is a potential contribution to knowledge.

### **3.8.4 Potential contribution to knowledge**

This literature review has revealed that there is little literature on open source as a narrative, and also little literature on business models as a narrative. Where these areas of literature meet, in narrative forms of business model based on open source, there appears to be no previous literature. There are existing models that have some aspects of the narrative form of open source business model proposed here. These include OuisShare (2019), which promotes collaboration based on complementary skills, but emphasises horizontal governance rather than the more hierarchical focal organisation and membership in the proposed model. Another similar model is Daemo, which is a democratic form of organisation for the platform economy that offers a guild-like peer review process, drawing on open source (Whiting et al., 2017). However, Daemo uses a form of representative governance which is not present in the proposed model. The open source guild business model, offered by Larner (2013), re-invented by Pearce (2014) as the ‘TODO’ network, and developed further by Larner et al. (2017) is perhaps the closest existing model to the narrative form of open source business model proposed in this chapter. In the open source guild model, the medieval guilds, as a pre-industrial form of network organisation (Deakin, 2006), are used as a metaphor, comparing the role of the software architect to the masters in the medieval guilds (Larner et al., 2017). The open source guild model could thus be a starting point to develop a narrative form of open source business model.

This section has used the narrative framework developed in Section 3.4.4 to propose a potential narrative form of open source business model. This model can potentially have a similar power-balance between the core busi-

ness and its stakeholder network that exists in an open source project between the software architect and their contributor network. Investigating this potential is the research area, which is proposed in the next section.

## 3.9 Theoretical context and research area

### 3.9.1 Theoretical context

The empirical work that is documented in this study builds on that of a number of authors, in particular Berger and Luckmann (1967), Simon (1969), Bourdieu (1989), Bruner (1991), Giddens (1991), Weick (1995), Weber (2004), Foss (2004), O'Connor (2004), Downing (2005), Gaventa (2006), Kornberger (2017) and Wieland et al. (2017). Before introducing the research question, it may be helpful to set the research area in terms of the theoretical stance and research philosophy that were introduced at the beginning of this chapter in Section 3.3.

Herbert Simon, in his book *Sciences of the Artificial* (1969) offered insight into why social reality (Berger and Luckmann, 1967) might exist. He pointed out that limitations in human cognitive abilities led to the development of cognitive frames, rules and routines, which Bourdieu (1989) framed as a person's habitus, or the taken-for-granted assumptions that make up their social world. In groups, institutionalisation through habitus can reduce the cognitive load on individuals by group members electing and giving power to a leader as a 'personification of a social fiction to which they give life' (Bourdieu, 1989, p. 24). This social fiction can be expressed as a narrative, where Bruner (1991) claimed that narrative can constitute social reality and Weick (1995) suggested how this might happen, through both sense-making and sense-giving. Giddens (1991) introduced structuration theory, where human agency can construct social structures, then through institutionalisation, these structures then constrain human agency. This constraint exerts an invisible, tacit form of power, shaping the perception of what discourses are possible (Gaventa, 2006).

In entrepreneurship, a founding entrepreneur can, from their identity and wishes for the future (Foss, 2004; O'Connor, 2004), propose their goals as a narrative. This narrative in turn can inspire stakeholders who share the entrepreneur's goals and who are willing to give power to the entrepreneur as leader.

In open source, the software architect exerts invisible power relations through defining the space that contributors work in, which is the narrative

formed by software code and discussions around it (Weber, 2004). However, the contributors can challenge this power exerted by the software architect by taking the source code and finding a new software architect. The software architect is necessary in open source, to reduce the cognitive load on individuals through a group form of habitus (Bourdieu, 1989). This willingness of contributors to give power to the software architect creates a balance of power. Open source can be considered as a business model (O'Mahoney, 2007), which creates the potential for narrative forms of business models that also have this balance of power. These narrative forms of open source business model are the research area.

### **3.9.2 The research area**

This chapter has brought together the literature on open source and business models, using narratives as a framework. It proposes a narrative form of open source business model which could offer a similar power-balance between founder and members to the balance that exists in open source projects between the software architect and contributors. The literature review presented in this chapter has thus answered the exploratory research question RQ1 proposed in the previous Rationale chapter, "How can open source inspire narrative forms of business model?". The narrative form of open source business model developed in this chapter could enable an entrepreneur to recruit a community of members who can both contribute to and benefit from the focal organisation.

Investigating this potential to create power-balanced narrative forms of business model is the research area for this study. This research area addresses one of the research priorities identified by Wieland et al. (2017, p. 939), 'What role do narratives play in the formation and development of technologies, business models, and markets? How do cocreated narrative infrastructures enable and constrain agency and shape institutionalization processes?'. This research area could also contribute to developing business models that address the problem identified in the previous Rationale chapter, of business models that exert power over workers in the platform economy.

### **3.9.3 Research question for empirical work**

The proposed research area leads to a more specific exploratory research question than that proposed in the previous chapter:

*Research proposition:* A narrative form of open source business model can offer a balance of power between the focal firm and their member network.

*RQ2:* “What is the balance of power between the firm and workers in firms that have adopted a narrative form of open source business model?”.

*How it will be examined:* Through an empirical study of businesses that have adopted elements of the narrative form of open source business model developed in the Literature Review chapter.

The methodology to address this research question takes a case study approach using design methods, where the open source guild model (Larner, 2013) was offered as a design provocation, as it is the nearest existing model to the narrative form of business model proposed in this literature review. The methodology and methods used, including participant observation and design workshops, are detailed in the next chapter.

### **3.10 Conclusion to the chapter**

This chapter has taken an integrative approach to review the literature on narrative approaches to entrepreneurship, business models and open source. The review is from a social constructionist perspective, focusing on the power exerted by discourse in society, where narratives are a form of discourse that can both reflect and create institutions through shared meaning. The literature on narratives was first analysed to arrive at a definition for the purposes of this study which is shown in Section 3.4.3, then a narrative framework in Section 3.4.4 that was used to frame entrepreneurship as a narrative, open source as a narrative, and business models as a narrative.

Business models have been poorly defined and poorly understood, but there is some agreement that the components of a business model include personal factors, competence, opportunities, activities, value creation, value capture, boundaries, context, costs and profit. The business model can be viewed as a boundary object, where narratives can be an important aspect of boundary spanning. Narrative forms of business model can connect with open source as a narrative, in that they could enable a single individual or small group to coordinate a much larger creative network. Considering business models as a narrative and how this could connect with open source as a narrative opens up the potential for new business models that

have the fluid boundaries and power-balanced structure of open source. The literature review thus answers the research question RQ1 proposed in the previous chapter, “How can open source inspire narrative forms of business model?”.

There is little literature on open source as a narrative, and also little literature on business models as a narrative. Where these areas of knowledge meet, narrative forms of business model based on open source, there appears to be no previous literature. The open source guild is the closest model in the existing literature, although it not framed as a narrative form of business model. There is thus potential to investigate these forms of business model, where a narrative form of open source business model can offer a balance of power between the focal firm and their member network. The proposed research area leads to RQ2, a more specific exploratory research question, “What is the balance of power between the firm and workers in firms that have adopted a narrative form of open source business model?”. The following Methodology and Research Design chapter documents the research methodology and methods that were used to explore this research question.



# Chapter 4

## Methodology and Research Design

### 4.1 Introduction to the chapter

The previous Literature Review chapter explored the literature on business models, narratives and open source, concluding that there was a gap in the area of narrative forms of open source business model. The empirical work that is presented in this study aims to answer the research question RQ2, “What is the balance of power between the firm and workers in firms that have adopted a narrative form of open source business model?”. This chapter documents the research methodology and research design adopted in this study.

Underpinning this study is the theoretical stance is that organisational reality, including business models, can be created through narratives, which aligns with the epistemological position of critical theory. Critical theory is where the researcher enters into a dialogue with research participants to enable understanding of how structures in society have gained their own reality independent of their creators, and how these structures could be changed. This perspective implies research is a change process, not so much about observing the world as it is but exploring what it could be.

Research approaches that are about change include action research and design methods. These approaches imply abductive reasoning, or pattern discovery rather than pattern matching, in a research process that aims to create rather than discover knowledge. Abductive reasoning suggests a design approach, where design can be seen as a process of co-evolution of problem definition and solution formulation. This study applies a design methodology in three stages with three case study organisations. The

first stage uses narratives and persona techniques in workshops with the founders of two of the cases study organisations. Personas are widely used in human-computer interaction, where they can represent the users of a software system. In this study, personas are used to represent the stakeholders in an organisation. The second stage uses personas and scenarios in a design workshop with a third case study organisation, while the third stage uses annotated portfolio techniques to analyse ethnographic data from the first two case study organisations. Analysis of the ethnographic data as an annotated portfolio in the third stage of this study was undertaken using the narrative form of open source business model from the Literature Review as a framework, an example of using prior theory to inform a design process.

## **4.2 Philosophical position**

The Literature Review in Section 3.3 introduced the theoretical stance as where narratives can exert invisible power to create social reality, particularly the social reality of business organisations. This philosophy of social constructionism through narratives implies that this study will take a socially constructionist ontology. This section presents the philosophical position adopted in this study.

### **4.2.1 Ontological position**

This study follows Barlebo Wenneberg's perspective in acknowledging that, although the perception of reality is to some extent socially constructed, there remains a reality that is independent of people's perceptions of it (2001, cited in Alvesson and Skölderberg, 2009). Giddens highlighted how this independent form of social reality can come into existence through structuration theory, which focuses on the processes through which individual actions create the structures that make up society, but then these structures then constrain future action in a recursive process (Giddens, 1984).

The philosopher Bhaskar offers a helpful viewpoint on society that builds on the structuration approach 'in which human agents are neither passive products of social structures nor entirely their creators but are placed in an iterative and naturally reflexive feedback relationship to them' (Davies, 2008, p. 19). Devins and Gold (2002, p. 112) highlighted that 'business organisations can be understood as a particular form of life... created and sustained by language and the coordination of meaning between managers,

staff and a multitude of others who have an interest in its existence'. Once created, however, the organisation gains an independent existence, not only in the minds of participants and stakeholders, but in the physical world, through documents, buildings and other artefacts.

This research is thus conducted from the perspective that institutions, including organisations, are socially constructed through shared meaning (Devins and Gold, 2002), in the process becoming their own form of external reality that affects individuals who are part of it (Berger and Luckmann, 1967; Bhaskar, 1998) and to some extent are created by it (Giddens, 1984). The perspective of organisations as socially constructed implies that research on them can also be a process of social construction, which leads to the epistemological position of critical theory.

### **4.2.2 Epistemological position**

Guba and Lincoln (1994) introduce critical theory as where the researcher enters into a dialogue with research participants. This dialogue enables understanding of how structures in society have gained their own reality independent of their creators and how these structures could be changed. Easterbrook et al. (2008), in the context of software engineering, defines critical theory as a perspective that 'judges scientific knowledge by its ability to free people from restrictive systems of thought', while Hofkirchner (2007, p. 478) sees research as a 'political act, because knowledge empowers different groups within society, or entrenches existing power structures' in the context of social systems which have the capacity to 're-invent themselves'.

However, one problem with critical theory is that it sees people in terms of them being 'socially, politically, economically and technically disenfranchised' and that the researcher's job is to emancipate them (Crabtree et al., 2009) but from whose perspective? If it from the researcher's, this is effectively imposing their view of reality on that of the participants. Sengers et al. (2005) offer a way forward in that critical theory can be applied to the researcher's wish to make changes, starting by becoming aware of their own taken-for-granted assumptions. In this study, the researcher wishes to discover new business models that have the potential to overcome the issues with worker power in the platform economy documented in Chapter 2.

### **4.2.3 Axiological position**

Hedlund-de Witt et al. (2014, p.14) defines axiology in terms of a 'perspective on what a "good life" is, in terms of morals and quality of life' and 'our

most cherished ethical and aesthetic values'. In a research study, the values of research participants are inherent in research based on the critical theory and constructionist paradigms (Guba and Lincoln, 1994, p. 112). Cole et al. (2005, p. 332) highlight that action research and design research share an axiology that is 'evident in the manner in which both value the relevance of the research problem, and emphasis on practical utility and theoretical knowledge simultaneously'. This view of the research process relates to Gergen's (2014) view of research as replacing 'the captivating gaze on the world as it is with value based explorations into what it could be' (p. 287). Considering values also means considering the values of the researcher, where Heron (1996) proposes sharing of the researcher's values with research participants, particularly where they affect the choice of research area and methodology. In this study, the research participants were entrepreneurs who wished to create new forms of business model, which connected with the author's wish to investigate business models based on open source.

#### **4.2.4 Form of reasoning adopted**

Trochim (2000) defines the research methodology as 'the specific ways... that we can use to try to understand our world better'. The foundation of this search for knowledge is the form of reasoning adopted by the researcher. The two main forms of reasoning are deductive, which aims to test a theory through specific hypotheses; and inductive, which is a process of moving from observations to theory through pattern matching. As well as inductive and deductive reasoning, Alvesson and Skölderberg (2009, p. 4) argue for abductive reasoning, where abduction is a process of discovering patterns that bring understanding, where an abductive process 'alternates between (previous) theory and empirical facts whereby both are successively reinterpreted in the light of each other'. In this study, the previous theory is the narrative form of open source business model developed in Section 3.8.3. Abductive reasoning can simply be known as design reasoning (Cross et al., 1992) points out that, and design as a 'co-evolution' process of problem definition and solution formulation (Dorst and Cross, 2001, p. 425). These three forms of reasoning can be summarised as (Trochim, 2000; Gray, 2009; Alvesson and Skölderberg, 2009):

##### **Deductive**

1. Identify a situation that is a problem or opportunity to gain knowledge;

2. Observe the situation closely to gain an understanding of it;
3. Create a theory about the situation, expressed as a hypothesis with independent (cause) and dependent (outcome) variables;
4. Test the theory, controlling for other variables, aiming to demonstrate (or not) a causal relationship between the identified variables;
5. The theory can then help address the problem or explain the situation.

### **Inductive**

1. Identify a situation that is a problem or opportunity to gain knowledge;
2. Observe the situation closely to gain an understanding of it;
3. Identify patterns or themes observed in the situation that can be expressed as causal relationships between independent and dependent variables;
4. Formulate a theory to express this causal relationship;
5. The theory can then help address the problem or explain the situation.

In practice, inductive and deductive approaches alternate, as theory is first created, then tested. However, both deductive and inductive approaches aim to understand an existing situation without changing it, i.e. to discover knowledge. An abductive (design) approach aims to create rather than discover knowledge.

### **Abductive**

1. Identify a situation that is a problem or opportunity to gain knowledge;
2. Observe the situation closely to gain an understanding of it;
3. Create designs that represent a desired change in the situation;
4. Identify patterns or themes in the designs that indicate a causal relationship between aspects of the (changed) situation;
5. Formulate a theory to express this causal relationship;
6. The theory can then help address the problem or explain the situation.

Abductive reasoning can create hypotheses, where Peirce (1958, cited in Berry, 2014, p. 127) asserts that abduction ‘is the process of forming an explanatory hypothesis. It is the only logical operation which introduces any new idea; for induction does nothing but determine a value, and deduction merely evolves the necessary consequences of a pure hypothesis’.

Buchanan (1992) highlights the role of design in being able to deal with the ‘wicked problems’ identified by Rittel and Webber (1973, p. 155) that aren’t amenable to science or engineering approaches. In particular, design reasoning can help deal with complexity, where Kurtz and Snowden (2003, p. 468) highlight that science and engineering can only operate effectively in ‘ordered domains’, where cause and effects are known or knowable. When entering unordered domains, sense-making is about identifying emergent patterns in complex relationships through design probes and narrative techniques (Kurtz and Snowden, 2003). Using narrative techniques in a design context introduces the possibility that these patterns are created rather than discovered, or as Coyne (2005) put it, are design concepts ‘waiting to be identified in language, or are they created through the discourse?’ (p. 15).

This study used design techniques to create and make sense of business models in the complex situation of entrepreneurs establishing their business with a range of stakeholders. Before arriving at this methodology, however, a number of potential research approaches were considered.

### **4.3 Potential research approaches**

Any research approach needs to be consistent with the theoretical stance adopted for this study, that organisations and their business models can be socially constructed through narratives. This stance implies a research methodology that is about creating rather than discovering knowledge, and where narratives could be part of the research process. However, this perspective of knowledge creation rather than discovery brings with it the need for the researcher’s reflexivity. Alvesson and Skölderberg (2009) call for reflexivity in social science research, where the researcher is aware of their role in the interpretation of empirical data and knowledge production. This perspective is reinforced by Law and Urry (2004, p. 403), who claim that ‘methods are never innocent and that in some measure they enact whatever it is they describe into reality’, implying a responsibility on the part of the researcher to consider what social reality they might help bring into being. This section introduces the research context, then documents the potential research approaches that were considered for this study, and why the nar-

rative design approach taken was adopted.

### 4.3.1 The research context

The research context for this study is the author's long-term engagement with the founders of 3rd Way Coop and Lancashire Ethical Trading Association (ESTA), both micro-businesses based in the North West of England. There was also a shorter engagement with Shared Future, a micro-business with a network of associates based in the North West of England. The author's background in non-profit management and recent research on the problems with social enterprise governance (Larner and Mason, 2014) connected with the experience of these entrepreneurs, an example of theoretical sensitivity (Gray, 2009).

These case study organisations were found by the author offering to meet with entrepreneurs and business founders to discuss the open source guild model (Larner, 2013) during 2013 and 2014. The criteria for case study selection were that the founders or directors were actively interested in the open source guild model to the extent of wishing to incorporate it into their business model. Case study selection was thus purposive, of entrepreneurs who were interested in the research topic. The unit of analysis was the founding entrepreneur and their network, where in both cases they were an entity that had 'the characteristics of a bounded system and have boundary-maintaining processes organized around the persistence of the unit and the perpetuation of its activities' (Aldrich and Ruef, 2006, p. 30). Each case study organisation is introduced briefly below.

#### 3rd Way Coop

The author was introduced to Mike Knowles, the founder of 3rd Way Coop, by a consultant specialising in helping non-profit organisations choose the most appropriate legal structures and governance arrangements. Mike had developed Super Insulation, a product that could revolutionise how buildings are insulated and help deal with energy poverty worldwide. At the time of the first meeting with the author in November 2013, Mike was developing a multilevel organisational structure, including recruiting apprentices who would be trained to install their Super Insulation product. Mike was seeking investment to produce Super Insulation, but potential investors were only interested in making maximum profit, they didn't share his values. Mike was very interested in the open source guild model, as it had the potential to solve his dilemma concerning patents, investors and values. Guild-like

models could enable vocational education and peer mentoring, which connected with his desire to overcome energy poverty world-wide. The open source aspects of the model could enable some of the intellectual property to be made available to people working their way out of poverty, but those of a high commercial value could be held in trust for social benefit. Discussions with Mike Knowles continued until October 2016, as 3rd Way's business model evolved.

### **Lancashire Ethical Trading Association (ESTA)**

The author met Michael Hallam, the founder of Lancaster Ethical Trading Association (ESTA) at a Global Futures event organised by Lancaster University Environment Centre in May 2014. In the first discussions in June 2014, the author and Michael explored the connection between the open source guild model and ESTA as a values-based business network that promoted economic success through personal development. ESTA developed from Michael's experience in the UK voluntary sector, particularly Transition Towns in Totnes, where he experienced problems with decision-making. With ESTA, Michael aimed to move away from the voluntary sector by creating a business association that promoted economic success through personal development. These initial discussions with Michael confirmed the correspondence between how ESTA operated and the open source guild model, in particular that the founding micro-business (in this case ESTA Community Interest Company) admits members to the association at its discretion based on shared values (in this case of personal development). Discussions with Michael Hallam continued until October 2016, as ESTA's business model has evolved.

### **Shared Future CIC**

The author met with a director of Shared Future in March 2016, who connected the open source guild model with their business model and were interested in exploring this form of business model further. Shared Future was established in 2009, constituted as a Community Interest Company based in the North West of England. Shared Future is developing as a mechanism for associates to get and deliver work that they couldn't do by themselves. Shared Future has a board of five directors and a network of associates as internal stakeholders, together with external stakeholders including commissioners, partner organisations and the general public. However, some associates had expressed confusion about what Shared Future is and what

it can offer both to them and to potential funders. At the time of the author's engagement, Shared Future was experiencing rapid growth but was experiencing confusion about its identity, prompting a review of the organisation. Following further correspondence, the author agreed to facilitate one of their Give it Away Day workshops in June 2016, focusing on their values and relationship with stakeholders in a guild-like collaborative network. Preparation for the workshop in May 2016 involved reviewing organisational documents and Shared Future's online presence, while follow-up interviews with three of their directors in July 2016 yielded additional reflections.

### **4.3.2 A case study approach**

A case study approach has been advocated by Yin (2009, p. 18) as being particularly appropriate to investigate a 'phenomenon in depth', where 'the boundaries between phenomenon and context are not clearly evident', as in this study, which focuses on how a founder's narrative can be shared with stakeholders. However, Yin takes a positivist approach to case study research, claiming that it relies on theoretical propositions. However, the use of theoretical propositions is an example of what Alvesson and Deetz (2000) identify as the tendency for even qualitative research to be based on 'nineteenth century positivist assumptions' including an 'objective external reality' (p. 61). However, case study research can be based on other ontologies, for example Robson (2002) classifies case studies as exploratory, descriptive, explanatory and improving. The latter category links with action research, as it is not just about gaining knowledge about the studied phenomenon but making change to improve it in some way.

### **4.3.3 Connecting action research with design**

Action research is generally seen as being introduced by Lewin (1947), but as Cassell and Johnson (2006) point out, it is a very diverse topic, with a multitude of approaches and a lack of clear theoretical foundation. Checkland and Howell (1998, p. 12) in an organisational context, described action research as a methodology that both instigates and researches a change process within an organisation as a 'a collaborative process' enabling 'reflective learning'. Later writers developed the concept of action research further, Ellis and Kiely (2000) characterised it as a 'broadly interventionist approach to change and improvement that enables individuals, groups and organisations to use reflection on action in a problematic situation as a basis for the

creation of new actions and knowledge' (p. 83). In a community development context, Stringer (2007) offers a definition of action research as 'a systemic approach to investigation that enables people to find effective solutions to problems they confront in their everyday lives' which 'focuses on specific situations and localized solutions' (p. 1). Gray (2009, p. 313) highlights the common features of the various approaches to action research as:

1. Research subjects are themselves researchers or are involved in a democratic partnership with a researcher.
2. Research is seen as an agent of change.
3. Data are generated from the direct experiences of research participants.

Considering how action research can relate to the theoretical stance adopted in this study, the epistemological perspective of critical theory implies a participatory form of action research, which is 'driven by a vision of what ought to be; knowledge of what is right and wrong from the point of view of human values' (Park, 1999, p. 148). Participatory forms of action research aim to break down power relations between the researcher and participants, enabling the latter to change their situation and find alternative forms of organising (Cassell and Johnson, 2006). The founders of each of the three case study organisations were driven by a vision what ought to be, in terms of finding new ways of organising and new business models. A participatory approach to engagement would thus be appropriate to work with these founders.

Participatory forms of action research are an area where action research links with design. Cole et al. (2005) claimed that action research and design research are similar in that they both 'directly intervene in real-world domains and effect changes in these domains'. Torbert and Taylor (2008) also highlight the links between 'action inquiry' and design as based in 'a holistic understanding that also tries to act and inquire at the same time', aiming to 'generate productivity, transformation and emancipation' (p. 241). From a participatory design perspective, Light and Akama (2012) claim that 'design work is action research – changing the contexts, the people and the design practitioner through designing' (p. 69). These views of action research suggest that this study can use design methods within a case study approach.

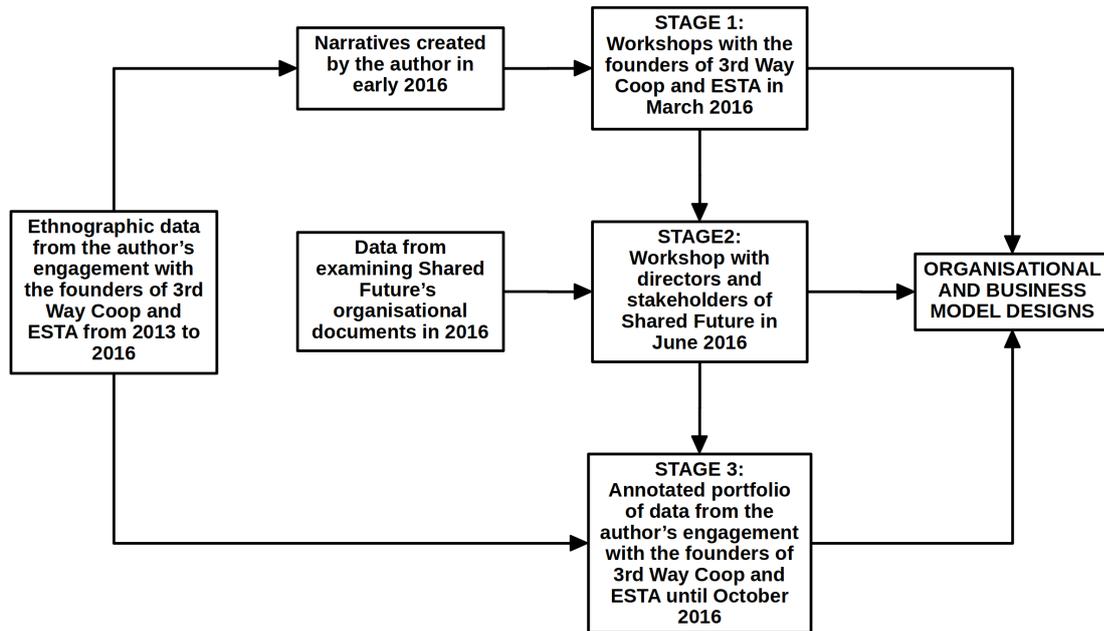
#### 4.3.4 Design methods

Design thinking is becoming increasingly important in business as a means of establishing customer needs and creating new products and services to meet those needs (Brown, 2008) through a process of grounding in needs, iteration of possible designs and reflection (Zimmerman et al., 2007). Nelson and Stolterman (2012, p. 35), however, point out that design has been appropriated by business as a problem-solving technique while not fully appreciating how design is an ‘inquiry into the ideal’ focusing on what is desirable but does not yet exist. Or, as Simon put it, design is ‘concerned with how things ought to be, with devising artifacts to attain goals’ (1969, p. 59). Design in an organisational context is concerned with the third and fourth orders of design, where the third order is about behaviour and action; and the fourth order is about environments and systems (Buchanan, 1999). Taking this perspective, design in an organisational context can include creating new business models.

Considering design in the context of critical theory leads to critical design, introduced by Dunne and Raby (2001) and developed further by Bowen (2007, p. 1) as ‘critical design practices’ that can enable ‘stakeholders to engage with novel situations and consequently engage in creative thinking about future possibilities’. Such critical design practices include speculative design (Dunne and Raby, 2013) co-design (Fuad-Luke, 2009) and participatory design. This perspective relates to the critical design approach advocated by Bardzell and Bardzell (2013, p. 3304), which can offer insight into existing social structures by creating new ones that promote ‘social change, from the present to a hoped-for future that is attainable but not immediately within reach’.

This study used design methods with three case study organisations, in three stages. In the first stage, the author used meeting notes and correspondence with the founders of 3rd Way Coop and ESTA to create narratives of engagement with them. These narratives were then the starting point for workshops in March 2016 with each founder, which used the design technique of personas to represent their organisation’s stakeholders. The outcomes from Stage 1 were organisational designs that took an organic metaphor and had a power-balanced structure. In the second stage used organisational data from Shared Future as a starting point for a workshop with directors and associates in June 2016. This workshop used the design techniques of personas and scenarios to explore stakeholder involvement in Shared Future. The outcome of the second stage was a business model that

Figure 4.1: The research methods used in this study in three stages



had narrative elements. The third stage returns to the data from 3rd Way Coop and ESTA from the beginning of the author's engagement with their founders from 2013 and 2014 until autumn 2016. This ethnographic data was analysed as an annotated portfolio of potential business designs. The outcome of this stage was a narrative form of open source business model. Figure 4.1 shows the methodology, which is documented in further detail in Sections 4.4 to 4.6.

## 4.4 Research design: Stage 1

The section documents the methodology used for the first stage of engagement with the founders of 3rd Way Coop and ESTA, where notes from previous meetings and e-mail correspondence became a design process through the use of narrative and persona techniques.

### 4.4.1 Engagement with 3rd Way Coop and ESTA

The case study organisations 3rd Way Coop and ESTA were introduced briefly in Section 4.3.1. In the initial meeting with each founder, the author offered the open source guild model as a starting point for discussion. This model can be seen as a design provocation (Bardzell and Bardzell, 2013) which enabled each founder to explore their evolving business model by offering a potential solution (Dorst and Cross, 2001). In that sense, the provo-

cation is to intentionally change the research situation. The open source guild model did this by being just strange enough (Bardzell et al., 2012; citing Dunne and Raby, 2001) to stimulate thought and discussion. The open source guild model acted as a boundary object, in the sense of creating a shared space focused around a common object for design work (Star and Griesemer, 1989). This boundary object helped bring about the fluid approach to design advocated by Wolf et al. (2006), where discussion can naturally blend into design work.

The author continued to meet with each founder in 2014, 2015 and 2016, exploring in depth how their developing business model connected with the research area. Meeting notes were verified after each meeting and these notes subsequently contributed to the data for this study, together with email correspondence. The discussions were helped by the author becoming a member of both organisations. In the case of 3rd Way Coop, this was by becoming a member of the founder's community of stakeholders, including attending both internal and external meetings with other stakeholders. In the case of ESTA, the author became a member of the ESTA business club, attending meetings with other members as well as with the founder. This prolonged engagement with the founders and involvement with their organisations led to the study taking on aspects of ethnography, a theme that is developed further in Stage 3. At this stage, however, the data was used to create a narrative of the author's engagement with each founder.

#### **4.4.2 Drawing out themes through narratives**

Narratives of an organisation's potential future could help to draw out the entrepreneur's 'desiderata' or 'preformed desires', where each narrative represents an ultimate particular (Nelson and Stolterman, 2012) of the founder's design of their organisation, including scenarios of its development (Stanford, 2007). Narratives could thus contribute to a design process, in this case of business models. The first stage of this study explored how ethnographic data could become a narrative which can then inspire a design process.

In early 2016, the author edited together meeting notes and correspondence with the founder of each case study organisation, together with organisational documents, into an approximately 3,000-word narrative presented in chronological order. These narratives didn't include specific details of dates, times etc. to protect the confidentiality of the participants. The narrative was a form of analysis that drew on the author's immersion in the data (Robson, 2002) and in the research setting (Krauss, 2005). Organi-

sational designs that arose during the engagement with each organisation were also included in the narrative as images. These narratives were then the starting point for a workshop with each founder in March 2016 that used the design technique of personas.

### 4.4.3 Expressing themes in the form of personas

Personas were introduced by Cooper (1999) as fictional individuals who can represent users in human-computer interaction design. Grudin and Pruitt (2002) developed the concept of personas further, where they advocated using detailed ethnographic data to create personas that represent groups of consumers in product design. Norman (2004) proposed an alternative approach where ad hoc personas are created from the designer's intuition, background and experience rather than from extensive data gathering, while Blythe and Wright (2006) offer personas based on fiction to help designers reflect and gain deeper insights. A third approach, one perhaps more relevant to this study, is where personas can contribute to reflection and reframing practice through discussions about groups of stakeholders rather than individual users (Källhammer and Nilsson, 2012).

In the workshops with the founders of 3rd Way Coop and ESTA, personas were used to represent key groups of stakeholders. The author created several personas before the workshop and encouraged participants to create further personas during it. The workshop started with the founder considering and commenting on the narrative offered by the author. In both cases they added to the narrative and appeared to find it useful for reflection on their development since the author first engaged with them. Each founder responded differently to the personas. Michael Hallam, the founder of ESTA created a number of personas that were caricatures of typical ESTA members and other stakeholders, including Despot Dan, a would-be empire builder who 'leaves in frustration'. Mike Knowles, the founder of 3rd Way Coop, only created two additional personas, but these were based in deep reflection on the importance of values, particularly Super Salesman Steve's desire to 'exceed our human targets'.

In these workshops, although applying the personas technique led to some interesting findings and reflection by participants, it didn't make the best use of the wealth of data offered by the author's long-term engagement with each founder. The initial personas were created from a narrative which in turn was the outcome from the researcher's immersion in ethnographic data. Such a process is time-consuming and difficult for other researchers

to validate or replicate. However, it did yield useful findings which informed the design of business models using desiderata, or design criteria.

#### 4.4.4 Desiderata for business model design

Desiderata (Nelson and Stolterman, 2012) helped bring out aspects of the author's engagement with each founder that were relevant to business model design. Considered in design terms, the data as narrative expresses each founder's "desiderata" or "preformed desires", encompassing functionality, practicalities, motivation for designing, potential products and services, aesthetics and performance measures (Nelson and Stolterman, 2012). Gaver and Bowers (2012) offer a number of categories of choices that influence the design of an artefact, not always consciously, including functionality, aesthetics, practicalities, and motivation for designing it, the people for whom it is intended and sociopolitical concerns. In the context of organisational design, Stanford (2007) offers categories of culture, systems, structure, people, performance measures and processes, products and services and operating context. Combining the two sets of categories in an organisational context leads to:

- functionality;
- aesthetics;
- practicalities;
- motivation for designing;
- culture;
- systems;
- structure;
- people for whom it is intended;
- performance measures and processes;
- products and services;
- operating context;
- sociopolitical concerns.

These desiderata are applied by the author in Section 6.2 of the Discussion of Findings chapter to the data in Section 5.2 of the Empirical Data chapter to create a natural metaphor of membership organisation.

The next stage used a less time-consuming and more rigorous methodology to engage with a third case study organisation. The importance of values was key to the author's use of personas and scenarios with Shared Future, a network of consultants based in the North West of England. The methods used in working with this third organisation are documented in the next section.

## **4.5 Research design: Stage 2**

This section documents the methodology used with the third case study organisation, Shared Future, which was introduced briefly in Section 4.3.1. The engagement with Shared Future was over a shorter time period than that with 3rd Way Coop and ESTA, from March to July 2016. The engagement included meetings with directors of the organisation, analysis of organisational documents, and a day workshop with directors and other stakeholders in June, followed by reflective interviews with key participants in July. The workshop with Shared Future again used personas as a design technique.

### **4.5.1 Personas, scenarios and values**

Although personas have been used extensively in human-computer interaction design and in product design (Grudin and Pruitt, 2002; Floyd et al., 2008; Miaskiewicz and Kozar, 2011), there has been relatively little work with personas in a management or governance context. Kronqvist and Salmi (2011) explored organisational culture by creating personas representing each role in the organisation with participants in workshops which were then refined in later workshops. Bodker et al. (2012, p. 94) explored the use of personas in participatory design in the context of local government, where they found personas to be useful to present data about the 'experiences and attitudes' of users in the design process. However, in the end, they preferred to work with real users rather than abstract them using personas, finding that their application of personas couldn't really support participatory design. Pellicciaro (2014) used personas to represent stakeholders in the development of collaborative local food projects. However, recent work by Marsden and Haag (2016) offers the potential for using personas for crit-

ical reflection, which could be helpful to explore an organisation's relationship with its stakeholders.

Personas could thus be a promising technique in the context of developing narrative forms of business model which enable an entrepreneur to recruit and work with a community of stakeholders. However, the literature on personas, which is mainly in the context of human-computer interaction, reveals a dilemma:

1. If personas are created using detailed data on users, the problem is that the data can never be detailed enough and that the personas are still no substitute for working with actual users in a participatory design process (Bødker et al., 2012).
2. If personas are created by designers without using data, the problem is that the personas then reflect the attitudes and goals of the designers rather than users (Marsden and Haag, 2016).

In either case, the personas risk being stereotyped (Chapman and Milham, 2006; Turner and Turner, 2011), with user or designer characteristics. However, the work of Källhammer and Nilsson (2012) offers the potential for a third perspective on personas, where they can prompt critical reflection on attitudes and beliefs. In this third perspective, stereotyping can be an advantage, as the stereotyped personas can represent stakeholder characteristics but not those of particular individuals.

Personas can draw out aspects of the of the people creating them, including unconscious aspects, which relates to the work of Cowan and Todorovic (2000), who identified that values could be consciously held, hidden or deep, where deep unconsciously held values underpin a person or organisation's behaviour. This perspective leads to the concept of value-led personas which can:

1. Express a value that is relevant to the organisation.
2. Represent stakeholders in the organisation.
3. Be presented in the form of a cartoon and quotation.

The value-led personas can then be actors in scenarios of an organisation's future strategic development, including scenarios of adopting new a business model.

Scenarios include a setting and agents or actors, each of whom have goals or objectives (Carroll, 2000), taking the form of stories with personas as the

focal point (Nielsen, 2012). Stanford (2007) highlights how scenarios can be used in business, including as part of an organisational design process. Scenarios can involve personas as actors, a technique for representing users within scenarios and creating meaning together (Nielsen, 2012). Personas and scenarios were used in the workshop with Shared Future, which took a design approach.

### 4.5.2 Engagement with Shared Future

Engagement with Shared Future started with establishing the values held by the organisation. These values were derived from analysis of organisational documents using NVivo, an example of Computer-Assisted Qualitative Data Analysis Software (CAQDAS). This software enabled coding of the text from each document that corresponded to a particular value. The starting point for coding was based on the values and motivations frameworks offered by Schwartz (1992), Ryan and Deci (2000), Nakamura and Csikszentmihalyi (2002) and Hoggett et al. (2009), with other values being identified as coding progressed.

Following the document analysis, the author facilitated a day-long workshop with Shared Future in June 2016 to investigate their relationships with stakeholders. The workshop was documented by the author taking notes and photographs, with additional photos taken by participants. Video or audio recording was not used in the workshop, as this can be inhibiting to participants (Stringer, 2007). In the workshop, the author presented six initial value-led personas created from the values that had been coded most often in the document analysis. Each persona was clearly stereotyped, taking the form of a cartoon drawing, brief quotation and alliterative name. The aim of the stereotyped personas was to convey the key values held by Shared Future in the form of a stakeholder. For example, Competent Charles conveys the value of competence, where Shared Future is a group of competent people working together. The quotation “I’ve developed my business skills tremendously – but I still don’t know what Shared Future is” expresses the dilemma of the organisation as being hard to define. Workshop participants then quickly created many more personas in a similar style.

Taking a design approach using personas enabled potential solutions to be explored, together with gaining a deeper appreciation of the problem (Buchanan, 1992). In particular, personas are a design technique that can offer the potential to stimulate critical reflection (Källhammer and Nilsson, 2012; Marsden and Haag, 2016), in this case on the values held by the or-

ganisation and its stakeholders. The personas were then actors in a scenario planning exercise that explored the organisation's boundary both in the present and in the future. One workshop participant thought that Shared Future could be analogous to a theatre flat, which is a painted backdrop that can be a focus for a range of activity. Company storytelling emerged as discussions continued, as a potentially significant method of communication with major stakeholders, and in the business model created by one of the workshop participants.

Narratives were significant in the third stage of this study, which returns to the data from the author's long-term engagement with 3rd Way Coop and ESTA, and considers how ethnographic data can contribute to the design of narrative forms of open source business model.

## **4.6 Research design: Stage 3**

### **4.6.1 Ethnographic data from 3rd Way Coop and ESTA**

This use of ethnographic data was a significant change in the methodology adopted in this study. The initial intention was that the discussions with the founders of 3rd Way Coop and ESTA would lead up to a formal series of workshops with each organisation using personas and scenarios. However, both founders proved reluctant to engage with formal workshops, hence the limited data informing Stage 1 of this study. This was a dilemma, as the author had collected a wealth of data during the period of engagement with these two organisations. Reflection on this dilemma in late 2016 led to the realisation that using all the ethnographic data from the two case study organisations could allow for a more rigorous and replicable design process. After the author discussed this realisation with the founders and with the Lancaster University ethics committee, both founders agreed that all the notes, email correspondence and organisational documents from the author's engagement could be used as data. As data, the author's notes of meetings with the founders of 3rd Way Coop and ESTA, together with email correspondence and organisational documents are examples of 'data found in the everyday world' (Silverman, 2007, p. 9) rather than from interviews or focus groups. This data could then be retrospectively analysed (Davies, 2008) using the narrative form of open source business model developed in Section 3.8.3 as a framework.

At the start of the author's engagement, the open source guild model (Larner, 2013) was offered to each founder as a focus for discussions. This

model can be viewed as a design provocation (Bardzell and Bardzell, 2013) or as a boundary object (Star and Griesemer, 1989), in that the model offered a new perspective on doing business which could provoke reflection. Design research is proposed by Zimmerman and Forlizzi as creating an artefact which ‘functions as a specific instantiation of a model – a theory – linking the current state to the proposed, preferred state’ (2008, p. 44). In this view of design research, the artefacts are the ethnographic data from the author’s engagement with the founders of 3rd Way Coop and ESTA. Annotated portfolio techniques were used as a form of thematic analysis to reveal the business model design aspects of the ethnographic data. NVivo software was again used for this analysis, using the narrative form of open source business model developed in Section 3.8.3 as a framework.

#### **4.6.2 Business model design using annotated portfolios**

In this study, the data from engagement with the founders of 3rd Way Coop and ESTA embodies designs for their hoped for future, including how their organisation can work as a business, or its potential business model. Taking a design perspective, the research process is about articulating these embodied models as artefacts. Annotated portfolios, originally developed in the context of classroom assessment (Yancey, 1992), were first used in a design context in developing clinical treatment strategies in mental health (Lavori and Dawson, 1998). Annotated portfolios were then re-introduced by Gaver (2012) in the context of human-computer interaction as a method that could bring together a number of artefacts and identify the design aspects that were common amongst them through text annotations. The concept was developed further by Gaver and Bowers (2012) and Bowers (2012), who propose that annotated portfolios could enable ‘theory formation, in the explanatory rather than the predictive sense’ (Gaver and Bowers, 2012, p. 48). Annotated portfolios are an example of intermediate-level knowledge, where design produces artefacts, which can then be abstracted to produce knowledge through an intermediate construct (Löwgren, 2013).

In this study annotated portfolios are used in the way suggested by Zimmerman and Forlizzi (2008, p. 44), where designers can create an artefact which ‘functions as a specific instantiation of a model – a theory – linking the current state to the proposed, preferred state’. In this stage, the design of a preferred business model is embodied in the ethnographic data, which expresses the wishes of each founder towards their preferred state, including their business model. By applying theory, in this case the narrative form

of open source business model proposed in the Literature Review chapter, as a framework in annotating the ethnographic data, the latent designs in that data can be revealed. Taking the logic of using annotated portfolios a step further, as well as multiple designs within a single organisation, the portfolios could extend to considering designs created by multiple organisations. This implies a return to the case study approach, but in a design context. Taking an annotated portfolio approach to using ethnographic data in a design process could go some way to addressing the criticisms of ethnography and design made by Crabtree et al. (2009), in particular that ethnography can end up as a 'literary exercise'.

### **4.6.3 Narrative forms of open source business model**

In this study, the narrative form of open source business model developed in Section 3.8.3 was used as a framework to create the annotated portfolio. Using this framework focused the process on the research area and research context. From analysis using this framework, the ethnographic data can emerge as a narrative form of open source business model, considering each founder's desiderata, or wishes and desires for the future. This process of analysis helped reveal the narrative form of open source business model that each case study organisation has adopted, and which is embodied in the ethnographic data. The findings in this chapter contribute to the design of a more generic form of narrative open source business model in the Discussion of Findings chapter.

## **4.7 Quality, validity, generalisability and reliability**

Although this study takes a design approach in its analysis of case study data, as with any other research study, its findings need to satisfy the criteria of quality, validity, generalisability and reliability. A key aspect of any research project is the validity of its findings, where Robson (2002) finds four aspects of validity:

1. Construct, the extent to which operational measures reflect the intentions of the research and the research questions. In this study, the operational measures were developed through the three stages of empirical data gathering. In the third stage, analysis of ethnographic data from two case study organisations using a number of frameworks re-

veals the narrative form of business model adopted by each one. This analysis relates directly to the research intentions and the research question.

2. Internal, considering causal factors, is there a third factor that is affecting the results? The analysis of ethnographic data in the Stage 3 of empirical data gathering reveals the factors that influenced the business model adopted by the case study organisations.
3. External, the extent to which it is possible to generalise the findings of the research. In this study, generalisability is weakened in this study by only having two long-term case studies plus one shorter case study, but strengthened by the connection of the research topic to multiple areas of literature.
4. Reliability, this is the extent to which the findings could be replicated by other researchers. Clearly documenting the research process in the Empirical Data chapter, and the use of NVivo software that allows comprehensive reporting in Stage 2 and 3 contributes to the reliability of this study in allowing findings to be traced back to the data.

In the specific context of qualitative research, measures to ensure quality and validity as a qualitative research process include (adapted from Patton, 2002, p. 544-546):

1. Dependability, which entails 'following a systematic process systematically' as shown in the following Empirical Data chapter.
2. Triangulation, in practice to 'capture and report multiple perspectives rather than seek a single truth'. In this study, methodological triangulation was through multiple methods (design workshops, participant observation and analysis of documents) in a three stage process. Case study was through long-term engagement with two different case study organisations, together with a third case study organisation. Data triangulation was through data from participant observation, meeting notes, email correspondence, organisational documents and design workshops.
3. Reflexivity, or understanding how the researcher's own experiences and background affects understanding, the researcher's background is explained in Section 4.3.1 as being relevant to the research context.

4. Encourage dialogue ‘among perspectives rather than aiming at singular truth’, achieved by involving research participants as co-researchers where possible. For example, in the workshop with Shared Future, participants were encouraged to develop and adapt the methods offered by the author.
5. Gaining deeper understanding of specific cases within their own context rather than generalising across multiple cases, achieved in this project by considering each case separately before cross-case analysis.

Ethnographic approaches can potentially offer a high degree of validity through prolonged engagement with research subjects and the research context, together with the opportunities to connect the data with previous and developing theory (LeCompte and Goetz, 1982; Golden-Biddle and Locke, 1993; Davies, 2008). This validity can be enhanced through strategies such as prolonged contact with participants, triangulation of data, checking interpretations with research participants, taking a reflexive approach to potential researcher bias and reporting discrepant information (Creswell, 2007).

## **4.8 Conclusion to the chapter**

This chapter has documented the methodology and research design adopted to investigate the research question RQ2, “What is the balance of power between the firm and workers in firms that have adopted a narrative form of open source business model?”. The foundation for the methodology is the theoretical stance adopted for this study, that an entrepreneur can exert an invisible form of power through narratives as a form of institutionalisation to create organisational reality. This study takes an epistemological position of critical theory, which implies that research is about a change process, or not so much about observing the world as it is, but exploring what it could be. Research as exploration of what could be implies a design approach, where design methods have been applied to organisation design and could also be applicable to business model design. In this study, the author applied design methods in three stages to answer the research question.

The first stage used personas to represent stakeholders in workshops with the founders of 3rd Way Coop and ESTA as case study organisations. This stage led to organisational model designs with a power-balanced structure, thus partially answering the research question. However, it wasn’t clear at this stage how these organisational models could become business models.

The second stage used personas and scenarios in a workshop to explore stakeholder involvement in Shared Future as a third case study. This stage was successful in that a business model with narrative elements was created by a workshop participant, but again didn't fully answer the research question, as it wasn't clear if this business model was power-balanced.

The third stage returned to 3rd Way Coop and ESTA as case studies, where the ethnographic data from the author's long term engagement with their founders could contribute to a design process. The design technique of annotated portfolios was used to reveal the latent designs in this data. Thematic analysis using the narrative form of open source business model proposed in the Literature Review chapter as a framework led to a number of business model designs that had a power-balanced structure, thus answering the research question RQ2.

The following Empirical Data chapter presents the data that was gathered during this study. After the introduction to the chapter, the first section documents the outcomes of the persona workshops held with the founders of 3rd Way Coop and ESTA in March 2016. The second section presents the document analysis, workshop and follow-up interviews conducted with Shared Future in March to July 2016. The third section presents analysis of the ethnographic data from the author's engagement with the founders of 3rd Way Coop and ESTA as an annotated portfolio.

# Chapter 5

## Empirical Data

### 5.1 Introduction to the chapter

This chapter presents the empirical data gathered during this study from three case study organisations in three stages to answer the research question RQ2, “What is the balance of power between the firm and workers in firms that have adopted a narrative form of open source business model?”. The author engaged with the founders of 3rd Way Coop and ESTA from 2013 to 2016, meeting with each founder and with other stakeholders several times a year during that time. The data from this engagement included meeting notes, plus email correspondence and organisational documents is shown in Appendices A and B. Two different methods were used to analyse this data, shown in Stage 1 and 3 in this chapter. Stage 2 is an additional case study with Shared Future undertaken in 2016.

In Stage 1, the data formed the basis of a narrative of the author’s engagement with each organisation. This narrative was then used in a reflective workshop with the founders of 3rd Way Coop and ESTA in March 2016 that used the design technique of personas. Excerpts from each narrative are shown in Section 5.2, plus data from the workshops.

In Stage 2, the author engaged with Shared Future, the third case study organisation in this study, from March to July 2016. Data from Shared Future included organisational documents plus information from their website and Twitter feed. Analysis of the data elicited the organisation’s values and stakeholders, which the author used in a workshop with Shared Future directors and other stakeholders in June 2016. This workshop used the design techniques of personas and scenarios to explore how Shared Future could develop its business model. The data from this workshop and from subsequent reflections with participants is shown in Section 5.3.

In Stage 3, the data from the author's engagement with the founders of 3rd Way Coop and ESTA up to October 2016 was analysed as an annotated portfolio, using the narrative form of open source business model that had been developed in Section 3.8.3 of the Literature Review as a framework. This analysis focused on the data that was relevant to the research question, and is shown in Section 5.4, with initial analysis shown in Appendices A and B.

## 5.2 Stage 1: Narratives and personas

The starting point for discussions with the founders of 3rd Way Coop and ESTA in the first stage of this study was the open source guild model (Larner, 2013), which both case study founders wished to apply in developing their business model. Figure 5.1 shows the information about the open source guild model initially offered to each founder.

The author edited together notes from meetings and email correspondence with the founder of each case study organisation, together with organisational documents, into an approximately 3,000-word narrative presented in chronological order. The author also created a number of personas that were inspired by immersion in and reflection on the narrative for each organisation. These narratives and personas were then the starting point for a workshop using persona techniques with each founder in March 2016.

### 5.2.1 Excerpts from the 3rd Way narrative

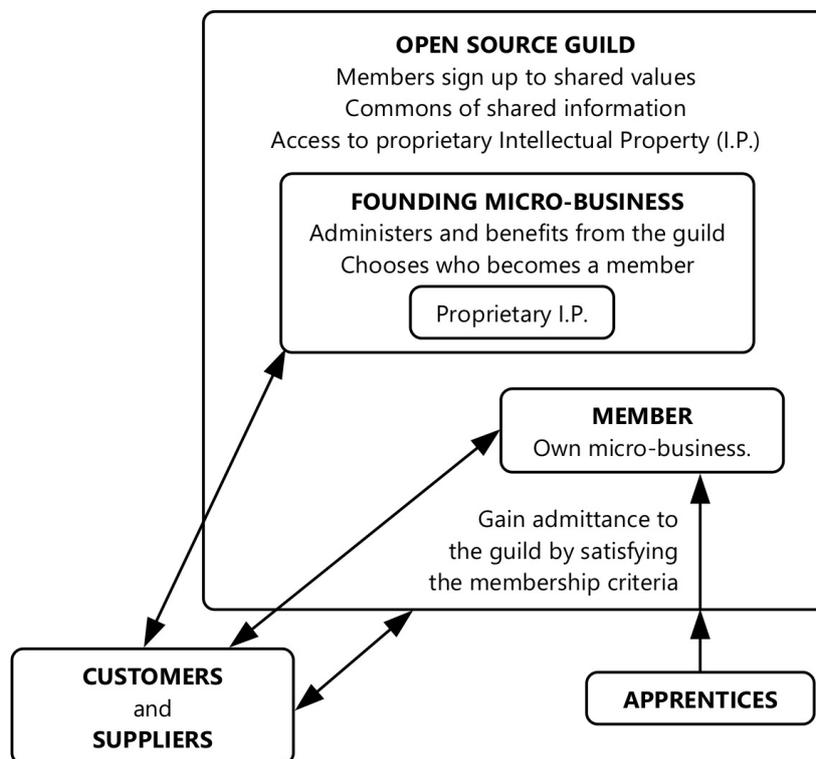
The background to Mike's engagement in this study was summarised in the first part of the author's narrative:

*Mike is an experienced engineer, having established Alphason Designs in the 1980s which produced a world-class hi-fi tone arm, other hi-fi equipment and specialist furniture. More recently his interests have focused on how he could apply this engineering expertise to bring people out of energy poverty, building on his work over the last 20 years with Initiatives of Change. IofC have been working for over 80 years to create a world free from fear, hate and greed, through sharing experience and promoting change, first within individuals, then through them in the wider world. Mike has been working every morning for many years to listen to his 'still, quiet inner voice' and taking appropriate action for change.*

Figure 5.1: Open Source Guild Flyer

# THE OPEN SOURCE GUILD

- › The open source guild has been developed by applying the principles of open source to the original medieval guilds, enabling micro-businesses to work together in a digitally networked economy.
- › Open source is a way of collaborating with others through an online pool of shared information, or commons.
- › Sharing is restricted to members of the guild to allow them to develop their businesses around the commons.
- › The founding micro-business establishes the guild, chooses who can be a member, maintains the commons and protects the proprietary intellectual property (which can be just a name or logo).



*Mike has developed Super Insulation as a patented form of Vacuum Insulation Panel, which has the potential to enable any building to be insulated to PassivHaus standards, or 90% energy saving compared to when it is uninsulated. The key difference between Super Insulation and conventional insulation is the amount needed, 50mm instead of 250mm.*

This background on 3rd Way's work inspired the author to create the persona Warm Wynette, "*Me and the kids are lovely and warm now you've put that insulation in*".

*Super Insulation is no more expensive to produce than conventional building insulation, and can be applied to existing buildings easily, thus it can enable any dwelling to be insulated and lift the inhabitants out of energy poverty. In the UK, potentially 20 million homes could benefit. The next stage would be to create Community Energy Co-operatives where the energy poor are included in the ownership of housing development. Housing incorporating both Super Insulation and renewable energy sources (particularly solar panels) can be net producers of energy, so the energy poor become the energy rich.*

The energy poor being transformed into the energy rich inspired Elderly Edna, "*I like to see the meter going backwards*". Mike wished to use this invention for social good, in particular to help deliver UN Millennium Development Goals, rather than for private profit. When the author first met Mike in November 2013, he was experiencing a dilemma with regard to his business model and relationships with stakeholders, particularly investors:

*However, potential investors who could provide the essential capital would want a greater share in the business of 30%, running the risk that it could fall into the hands of people who would develop Super Insulation for profit rather than for social good. Such finance would bring with it conflict between the profit orientated motives of investors and Mike's motives, which were to create a business that contributed to the social goal of alleviating energy poverty. Ethical investors would be happy with 20% and a gradually rising value of their investments but were harder to find, especially in the time available. This conflict was expressed not only in 3rd Way's relationship with potential investors, but also within 3rd Way itself, as Mike's Development Director was advocating*

*seeking conventional business investors who could get Super Insulation off the ground. There was a real dilemma here, as Mike didn't want to compromise on values and sell his invention, but didn't want to go bankrupt either, or be marginalised by investors whose only motive was profit.*

These discussions highlighted the importance of values and Values Based Leadership:

*Values were key to finding a way out of the dilemma, particularly Values Based Leadership as advocated by Glowinkowski Consultants. Mike felt clear from many years of experience that the right leadership team and the right stakeholders will lead to 'enthalpy' (energy contributing to a shared purpose) whereas the wrong ones will lead to 'entropy' (energy wasted in conflict).*

The author expressed this dilemma as the persona Money Matthew, "It's all very well wanting to do good, but your projections show bankruptcy in 3 months". Mike was interested in the Open Source Guild model as it potentially offered a way to resolve this dilemma:

*The Super Insulation patents are the core intellectual property and must be protected against exploitation by putting them in a trust. These patents could then be licensed to a commercial business, who had the required shared values, direction and concern for energy poverty. This company could seek conventional investment as the investors would not get the patents, only an exclusive licence for them for a number of years. 3rd Way Commonwealth could then recruit social enterprises as franchisees. Installers of Super Insulation and energy assessors could work within a guild structure that will enable them to share experience through peer mentoring and create a body of knowledge that will benefit existing and new members. The guild can enable vocational education, which Mike identifies as the biggest barrier to socio-economic development.*

These new workers and developments inspired the author to create the Working William persona, "I've got a great job now installing house insulation. Next year I can buy a share in some land and build my home". Further discussion in 2013 and early 2014 linked guild-like models to values:

*...the guild model aims to embed values in an organisation, connecting with the work of the Quakers in "Creating value through*

*values". Values are the foundation of the Quadruple Bottom Line that the conventional economic, social and environmental triple bottom line can build on.*

This discussion inspired the author to create the persona Quaker Quentin, "We really want to work with 3rd Way, they express our philosophy of *Creating Value Through Values*". Mike was extremely busy during the rest of 2014 and through into 2015, but remained in contact by email, exploring the implications of the Open Source Guild model further:

*In February 2015, Mike had managed to get a grant which would enable the first case studies to happen and hence secure further funding. In March 2015, Mike outlined the potential for future development where pilot installations of Super Insulation with Sustainable Homes, a network of 70 social landlords, could work with the Open Source Guild model to 'support skills and capacity development'.*

This ethical investment inspired the persona Angel Andrew, "I really like what 3rd Way is doing, and want to support it". The author finally met with Mike again in July 2015. During the meeting, Mike observed that the founder is key to the organisation:

*Organisational structures can only go so far, however, it is the character of the founder which is the organisation's DNA, however the right structures can help propagate that DNA and ensure a healthy organisation. Interestingly, the Quakers have found that even the healthiest of organisations seem to die after a few hundred years, perhaps organisations have a natural lifespan just like people, the DNA gets degraded slightly every time new people (cells) take over.*

However, discussion of these wider issues would have to wait a while, as in October Mike reported that he was:

*'under extreme, inhuman and intolerable pressure' to push through the 'valley of death' in getting the initial orders for Super Insulation which would then lead to further finance. He didn't even have time to recruit and induct people to help, he just had to get through it and to the other side. Mike observed that the technical innovation wasn't the hard part, the 'human factor in innovation is 100x more important and more difficult than the technical innovation'.*

Following further email correspondence, the author was able to meet with Mike in November 2015 and February 2016:

*In February 2016, a meeting in Switzerland was a breakthrough for Mike, opening up the possibility of bringing together the leaders in Vacuum Insulation Panel technology together in a consortium to help deliver the UN Sustainable Energy for All objectives. The technology can achieve 90% energy savings in contrast to existing initiatives such as energy monitoring which achieves 7%.*

The UN involvement inspired the persona UN Nigel, “*Just a minute, we were happy with 7% energy savings, now they’re proposing 90%, what is this?*”. A meeting in March 2016 focused on values and leadership:

*Mike is seeking a key individual to work with in a relevant organisation who shares his values, understands the significance of the product and who can make decisions. Mike saw the open source guild model as being ‘all about education’, if people learn at school about different ways people could work together then they could see outside the structure, see that there are alternatives. Mike is now ready to set up the Joy at Work Foundation, to his knowledge no one has set up a trust to hold IP of commercial value before, this relates to the guild model, ‘without the open source guild, you can’t do it’, this is the missing element that brings it all together. Guilds can assure quality standards and offer peer to peer mentoring. These standards distinguish guilds from other knowledge communities, where sharing knowledge only goes so far. A vision to serve a common good drives a guild, as with open source. The open source guild model could be a ‘missing part of the jigsaw’ for organisations such as the P2P Foundation, Open Source Ecology and Fab Lab. The open source guild could be seen as ‘soft technology’, in contrast to the hard technology of vacuum insulation panels.*

This discussion of quality standards inspired the persona Housebuilder Harry, “*When I see the 3rd Way guild mark, I know I’m getting the right stuff*”. This narrative and the personas created by the author were the starting point for a workshop with Mike Knowles, the founder of 3rd Way Coop.

### 5.2.2 Workshop with 3rd Way Coop

The workshop with Mike Knowles, the founder of 3rd Way Coop, took place in 3rd Way's office in Adlington, Lancashire in March 2016. To hold the workshop, Mike cleared a space on the table amongst the electronic components and other parts for the prototype machinery that would produce Super Insulation.

Discussion of the narrative in the workshop highlighted further aspects of Mike's background. He has been interested in the social side of business starting with Alphason, his first company that made Hi-Fi equipment and furniture. He remembered how it was 'lovely to see people realise their potential' at Alphason, which had always been about 'family values at work'. Mike then realised the importance of energy poverty, and started working in this field. He was then introduced to Initiatives of Change, which is a group of natural leaders working to shared values, 'things just happen with a minimal organisational structure', where an 'instant team' could form, even by people who had not met before.

Mike then considered the personas offered by the author, Mike described these personas as 'a bit idealistic' but 'If we can take personas further, I'm all for it'. He then reflected on the attributes of a sales and marketing worker, that they would need to be outward looking, have good social skills, be a team player and be people focused. The persona Social Sam is a team player, has a people focus and driven by the value of "I'm only as good as my team". It is the team who deliver the objectives, his role is to facilitate the team. Mike observed that personalising it brings out the values behind the dry words, however Social Sam only brings out one facet of a role. Another facet is results, this about a high achiever and a good market penetrator, exceeding customer expectations. Mike wondered how to represent these facets in a cartoon and quotation, coming up with the quotation, "I am only head of sales and marketing because of the qualities of the sales and marketing team".

Considering another persona, Super Salesman Steve (shown being drawn in Figure 5.2 and complete in Figure 5.3), Mike found it hard to come up with a quotation, where the salesman gains great personal satisfaction from selling Super Insulation as many people will benefit. Emotional intelligence underpins the management world of facts and figures. How can Steve express his joy at achieving all these social targets at the end of the board meeting? Mike thought that 'Super Salesman Steve is a story', story telling is very powerful. Figure 5.3 shows the personas Social Sam and Super Salesman

Figure 5.2: Mike Knowles creating the Super Salesman Steve persona

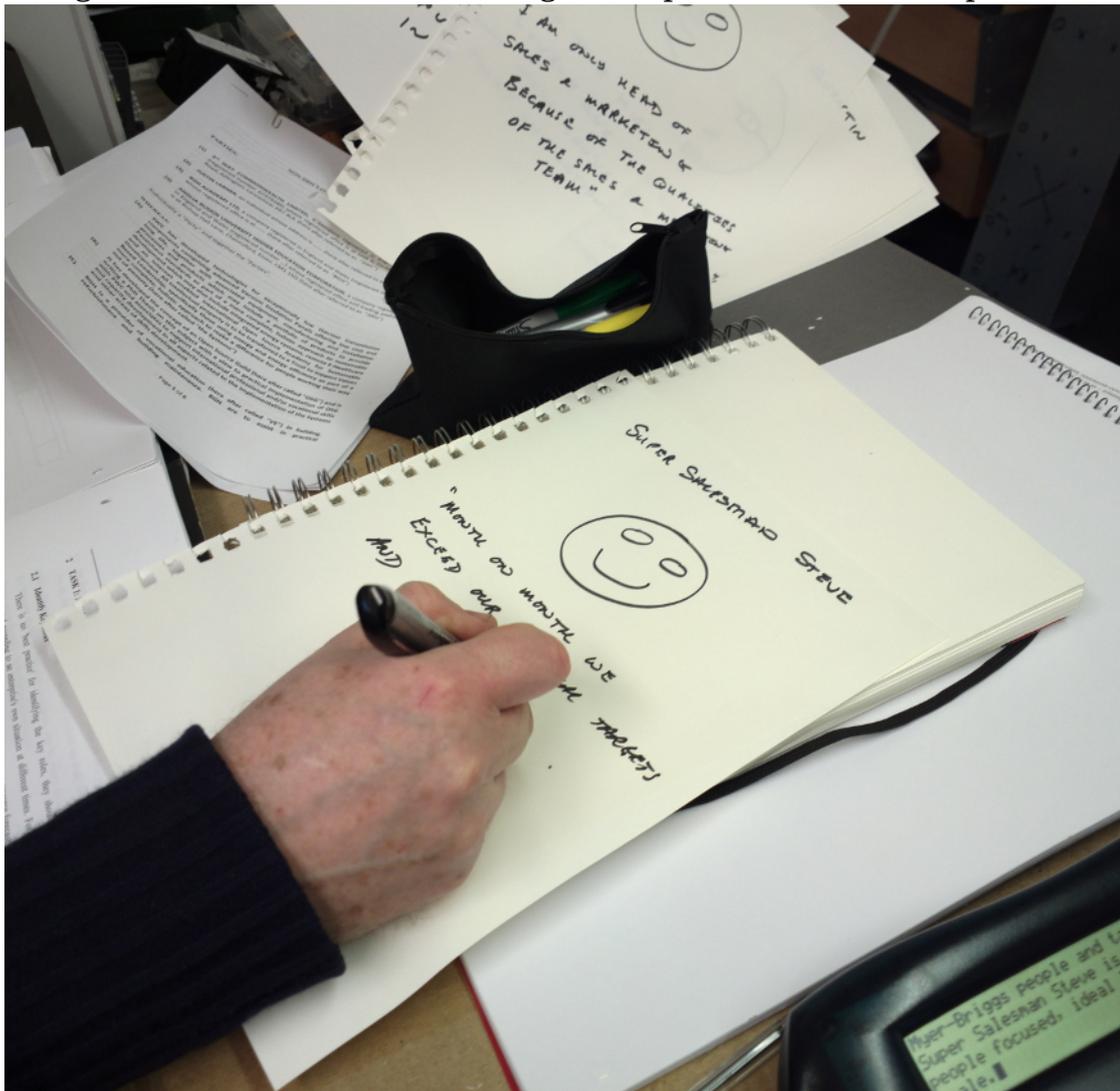
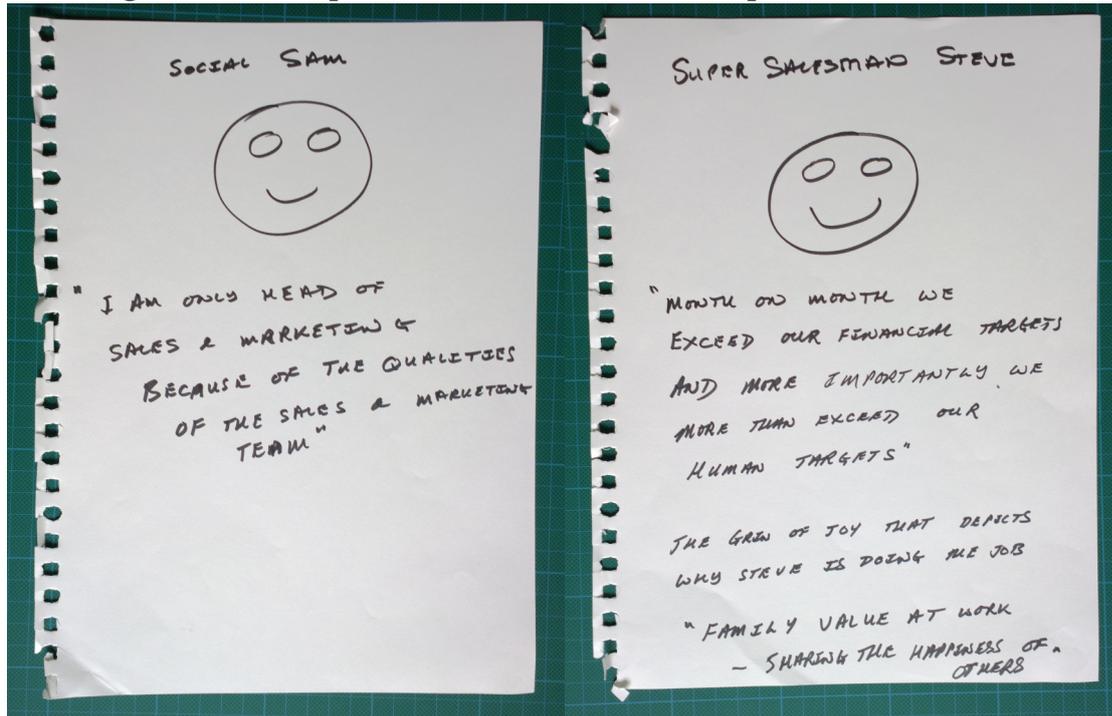


Figure 5.3: The personas Social Sam and Super Salesman Steve



Steve.

After some discussion, the words were very business-like, it was the grin of joy that brings in why Steve is doing the job in the first place, the value, the desire to make the world a better place. Mike observed that ‘it took some teasing out’, linking in with Myer-Briggs and Glowinksiki’s concept of Values Focused Leadership. The Myer-Briggs scale has axes of people and task focus. Super Salesman Steve is both task and people focused, ideally 70% on each scale, “Month on month we exceed our financial targets and more importantly we more than exceed our human targets” which Mike highlighted was “family value at work – sharing the happiness of others”.

### 5.2.3 Excerpts from the ESTA narrative

The background to Michael’s engagement in this study was summarised in the first part of the author’s narrative:

*Michael Hallam’s previous work with Transition Towns in Totnes included developing the ‘Clockwork Orange’ bottom-up model which became ‘central’ to their development. This model highlighted the importance of lateral rather than vertical connections within an organisation. The typical ‘social schizophrenia’ voluntary sector set-up in Totnes eventually became the incentive for Michael to*

*move to Lancaster and start up ESTA as a business club, carefully avoiding any associations with the voluntary sector. One issue with volunteering is that not everyone can volunteer, this needs independent resources. Using a business model to promote sustainability offers the possibility of making a living while working for a better future.*

This background inspired the author to create the persona Voluntary Victor, “We must have a democratic structure to involve everyone”. Michael offered a reason why Voluntary Victor wishes to be involved in organisations with a democratic structure:

*In his previous work, Michael observed that marginalised people in society are attracted to organisations that promote open decision-making as they can have a voice as stakeholder and ‘make a difference’. However, many groups that wish to promote social good have ‘confused equality at the level of human relationships with equality of decision-making’, where the latter implies competence. In this situation, decision-making can be undermined by one or two individuals with the result that issues were not addressed and decision-making became replaced by giving needy individuals attention.*

*The core of ESTA is a Community Interest Company with Michael as sole director. The Association works to the ‘fourth bottom line’, where the bottom lines are economic, environmental, social and personal. ESTA is values-based rather than rules-based, where ‘prescription-based systems lead to creative gridlock’. Conventional membership organisations based on democracy are rules-based, these organisations can be manipulated by individuals to their own interests.*

The rules-based aspect of typical membership organisations inspired the persona Rules Robert, “Let’s check in the articles what to do”, who holds up decision-making. Discussions with Michael then considered how ESTA’s organisational model linked with the open source guild model offered by the author:

*The emphasis on intrinsic values links with Michael’s founding principle of the fourth bottom line of personal development. A key dimension of the quadruple bottom line is personal development, where Michael added to the seven stage process from Carl*

*Rogers. At around the fifth stage, the person becomes capable of self-reflection and embraces change rather than resists it.*

*The CIC at the core of ESTA corresponds to the founding micro-business in the open source guild model, which admits members to the guild at its discretion based on shared values. In ESTA, Michael fulfils that role, admitting members at his discretion, based on shared values and a commitment to personal development. Members of the Association are specifically not members of the CIC, which avoids the voluntary sector and cooperative problem of creating committees of too many inexperienced decision-makers.*

These discussions continued, in December 2014 this focused on developing the idea of ESTA as a natural metaphor:

*An analogy is that fungi are joined by tendrils in the soil, that what appear to be individual plants can act as one organism, similarly in ESTA individual micro-businesses joined by the Association and able to act together. This seemed to be happening in practice, with connections now being formed in smaller groups of members, rather than the larger groups when ESTA started. From these connections in smaller groups, 'bits of infrastructure drop out', such as when Gilson's bag shop became a centre for recycling Jiffy bags, once they had a room-full they were able to sell them in bulk to a specialist recycler.*

The natural metaphor inspired the Organism ESTA persona, "We can work better under a shared identity", likening ESTA as an organisation to a multi-celled organism. The discussion then extended to how ESTA could operate within its local community. Michael had been working with the Lancaster CVS, who were developing a consortium of local organisations that ESTA could lead.

*The project could create a 'holistic community based civil service', operating through an information commons that will offer a digest of current legislation to help people deal with it now that legal aid is getting harder to obtain.*

Working within the local community could extend to developing the local economy:

*Another potentially powerful development is promoting how money circulating in the local economy generates wealth, where if Michael*

*spends £25 with a local business, who then buys from another local business who then commissions Michael for some work, he then gets the money back, but real value has been created as well (from nothing). Michael estimates that 50% of money spent with local businesses generates as much wealth again as it circulates round the loop, but 66% spent locally would triple local wealth and 75% would quadruple it.*

Michael developed the natural metaphor further at an ESTA networking meeting in April 2015:

*Michael observed that the growth of ESTA is ‘slow, emergent’ through an organic process of ‘building business by building relationships’.*

An example of these relationships being successful was expressed by the author creating the persona Successful Susan, “*I joined ESTA two years ago and it just clicked, my business has gone from strength to strength*”. Further exploration of these themes in July 2015 considered the ESTA model in relation to traditional forms such as co-ops:

*A problem with traditional co-ops is ‘social paranoia’, where one individual can block the whole group. In contrast, the Quaker decision-making process is more like a design process.*

Michael continued reflecting on these issues, considering how ESTA members could create groups and consortia:

*In July 2015, an ESTA networking meeting focused on setting up a consultancy consortium within ESTA. There have been previous attempts to create consortia, particularly the Social Enterprise Network, but they didn’t work out. Potential members could offer a wide range of skills and experience. There is already a health-care group within ESTA, setting up the consortium could follow a similar process, including creating ‘a common narrative’.*

By December 2015, Michael was again looking at ESTA’s relationship with the local economy:

*Discussion with Michael and another consortium member highlighted that ESTA is about making real change in society based on shared values, rather than superficial change. One real change is to create local wealth, where the Lancaster economy is worth £2Bn a year, at the moment 50% of money is spent locally. Going to 66% would add another billion to the economy. 75% would*

*add another billion again, 80% yet another billion, but at this point there will be diminishing returns. Michael has now created the Food Loop Game where participants collect receipts from local businesses and they are then added up to show local spending.*

Returning to the open source guild model in December 2015 and January 2016, Michael developed ESTA's model further:

*Considering how ESTA relates to the open source guild model, Michael pointed out that a guild master is one who 'understands the value of protecting an open space' (like open source). Generally people self select to participate (like open source), only rarely is necessary to exclude someone. The guild master 'has to be facilitating all the time', trying to 'facilitate everyone's objectives for them'.*

*Michael had now re-structured ESTA to have two levels of Basic and Associate members. The basic membership is for a year, and offers access to networking. This group is 'self-maintaining' for £4 a month. The first year of basic membership is an opportunity to 'shake people out' after the year. Those not shaken out can become an associate member after undertaking an Ethical Accreditation.*

This self selection aspect of ESTA's membership policy inspired the persona Puzzled Peter, "I joined ESTA a while back, or I think I did. Never found out what it was, just a load of people in a room talking".

*Members could contribute to mediation in the case of conflict (with Michael still making the final decision). The mediation process would always seek a win-win situation which in Michael's experience can lead to a 'transformation', by an empathetic going with them on their journey of realising what they did wrong and what they can do to right the situation. This transformation deepens relationships, and is at the heart of how ESTA works. Psychopaths would find it hard to manipulate the organisation, but there's 'nothing for them to get hold of, nothing here'.*

*The ESTA website has been revamped, with a clearer Member Offers section. The four bottom lines are now presented as economic well-being, environmental care, social well-being and personal development.*

This narrative and the personas created by the author were the starting point for a workshop with Michael Hallam, the founder of ESTA.

### 5.2.4 Workshop with ESTA

The workshop with Michael Hallam, the founder of ESTA, took place in The Borough, an independent cafe-bar in Lancaster in March 2016. The discussion of this narrative in the workshop first connected the open source guild model to the CLIME model offered by Charles Hugh Smith (2015). Smith's model has similarities to the open source guild model, but has severe penalties for freeloading (as with ESTA, where people will be expelled for freeloading). Smith suggested a money structure very similar to the Food Loop Game, but with local currency. In practice, sterling could be used as a local currency by tracking spending patterns. This tracking would then enable the possibility of people just exchanging services instead of using money. In ESTA, people are succeeding as individual organisations but would benefit from 'contributing to a common pot', co-creating a common infrastructure, this could be an extension of their marketing budget. Part of this common infrastructure will be an on-line Info Store (shown in Figure 5.4), to avoid the information being held by corporations which could go bust at any time. A possible model is the archive.org website, which keeps copies of websites in case the original gets lost.

Michael then considered the personas offered by the author. He saw Voluntary Victor as representative of typical voluntary sector practice, while Rules Robert can be useful for making sure everything hangs together and doesn't go wrong, but he could end up 'grinding everything down', with not much of an imagination. Successful Susan would prompt a celebration, while Puzzled Peter is one of the members that didn't get what ESTA was about and quietly went away. Michael thought personas could be used in three ways:

1. To represent values held by stakeholders, this is useful to develop systems and products that people can engage with.
2. To represent a group or organisation as a persona.
3. To externalise problems experienced by an individual in a counselling context, linking with the work of Yehuda Tagar. After iterating a few times, the deeper problems are uncovered.

The work with personas continued in a further meeting later in March 2016, where Michael created several personas, first asking 'are they ESTA members, member types or people associated with ESTA?'. The first persona was Fix It Francis, "*We have to make everyone aware of all the problems in this*

Figure 5.4: The Info Store idea created by Michael Hallam

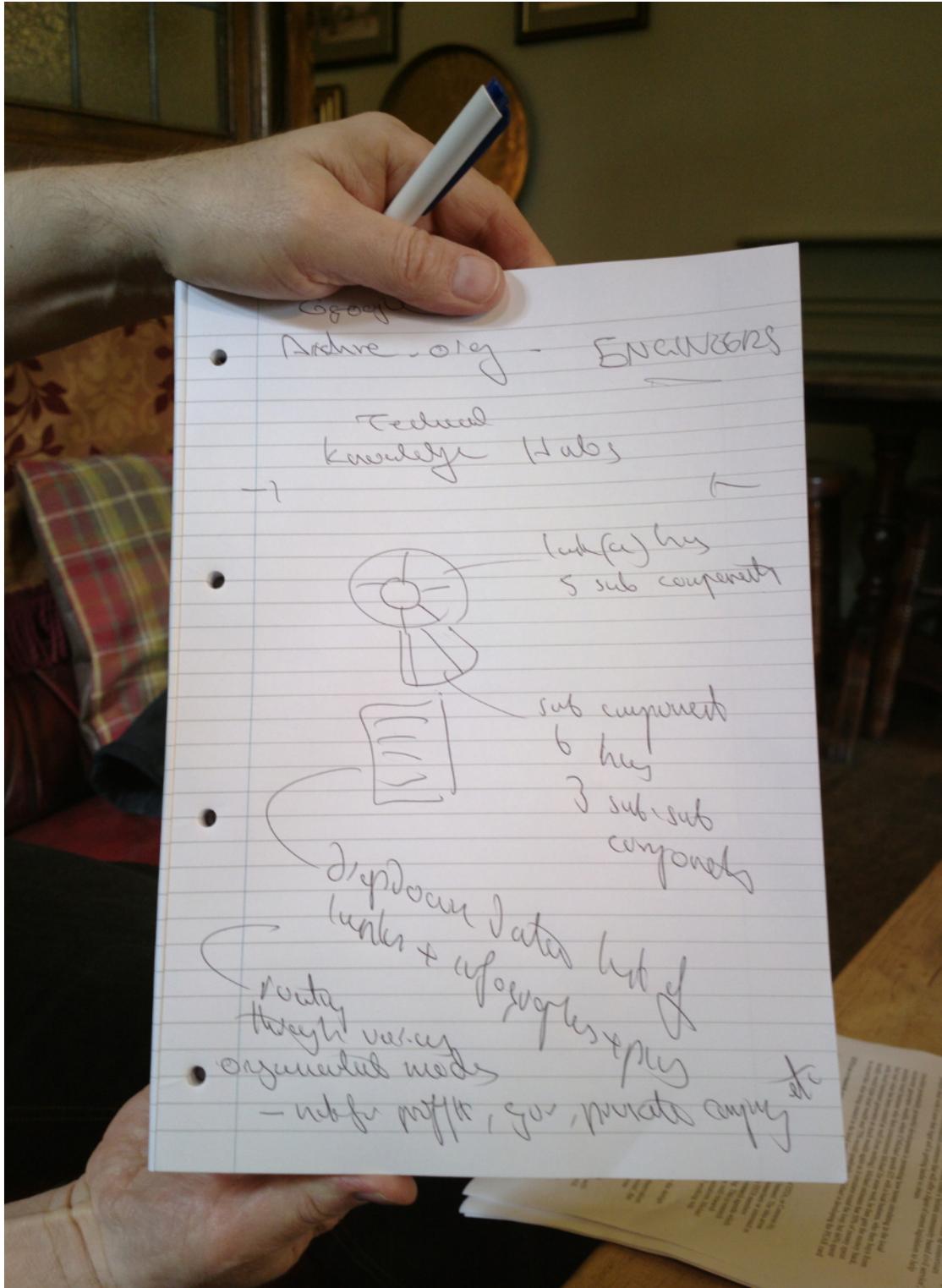


Figure 5.5: The personas Despot Dan and Ambassador Alf



*world that need fixing! Maybe this group will play along*". Michael commented that Fix It Francis 'gets frustrated when we don't play along, when we don't want to be another parallel organisation like the last 7 you joined'. The next was Despot Dan, *"If I play my cards right and keep them close to my chest, I can quietly carve myself a little empire here"*. Michael commented that Dan 'leaves in frustration', finding 'nothing of real value here'. In contrast, Wowed up Wendy is much more positive, *"Wow! I joined ESTA two months ago with my business idea in tow and its all so super-connected that I have been in contact with all the people I need to make my business a great success!"*. Michael commented that this is a persona who can 'make the grade' and is very enthusiastic about ESTA. He then offered another positive persona, Ambassador Alf, *"I have been a member now for two years and ESTA is amazing! I really think I am starting to get what this group is about, and I feel qualified to describe it to other people"*, highlighting that Alf gets what ESTA is about on a deeper level. The personas Despot Dan and Ambassador Alf are shown in Figure 5.5.

At this point, Michael commented that 'this is fun... more', but he didn't 'want members recognising themselves in the caricatures and being offended', the personas need to represent groups of members rather than individuals. The further personas created by Michael were Pitch Perfect Penny, *"My name is Penny and I am PPPenny.... I love giving polished presentations*

*and networking and I just love PowerPoint!*”, then Nervous Ned, *“I didn’t so much jump into freelance as pushed. Redundancy and the only option being shelf-stacking forced my hand. It’s all very nerve-wracking as I don’t feel very comfortable around people. Maybe setting up as a DJ business wasn’t the best idea”*. Michael commented that Nervous Ned represented ‘introverts who struggle to sell themselves in business’, however Ned does reveal a hidden side to his personality in choosing to be a DJ.

Michael then created two more contrasting personas: Reliable Riley, *“Sure I can help you with that. I am very good at multi-tasking and delivering on time. It [is] all good experience”*, and Nauseating Nigel, *“I can’t stand all this whingeing about being poor, starving and dying! These people need to get off their backsides and do an honest day’s work. Like I did when I inherited by father’s fortune. ESTA? Sounds like some communist fifth column for pinkos to me! Now excuse me, I have to pack and get to the airport to join the trade delegation to China”*. Michael commented that Nigel ‘doesn’t recognise his self-contradictory nature’, and then observed that ‘some of these could be useful’ to ‘characterise potential members’.

The narratives of engagement with the founders of 3rd Way Coop and ESTA together with the data from workshops held with each founder were the starting point for establishing desiderata for business model design.

### **5.2.5 Desiderata for business model design**

The author’s narratives of engagement with the founders of 3rd Way Coop and ESTA and workshop data were analysed to reveal desiderata, or design criteria, that can inform the design of a potential narrative form of business model. The categories of desiderata in a business context were established in Section 4.4 as functionality, aesthetics, practicalities, motivation for designing, culture, systems, structure, the people for whom it is intended, performance measures and processes, products and services, operating context and sociopolitical concerns (Nelson and Stolterman, 2012; Gaver and Bowers, 2012; Stanford, 2007). These categories are used to consider the data together with the relevant literature to establish desiderata for business model design.

#### **Desiderata: Functionality**

In the first meeting of the author with Michael Hallam, he connected the Community Interest Company (CIC) at the core of ESTA with the founding micro-business in the open source guild model (Larner, 2013). Mike

Knowles connected the knowledge sharing aspects of the open source guild model with his desire to promote vocational education. Mike also connected 3rd Way Coop to the open source guild model, but emphasised how he saw the difference between a guild and other forms of knowledge community, where a vision to serve a common good drives the guild. In his visualisation, Super Insulation installers could operate within a guild-like structure that promotes peer mentoring and access to a shared body of knowledge.

These aspects of the data can be summarised as desiderata:

- The model should have aspects of how guilds operate in that an individual or small group controls who becomes a member (ESTA).
- The model should enable bringing knowledge and expertise into the organisation which will be held in a body of knowledge (3rd Way).
- The model should promote peer mentoring and enable sharing of experience that can build skills and develop capacity (3rd Way).

### **Desiderata: Aesthetics**

Both founders are deeply spiritual individuals, who take a reflective approach to their lives and work. They both stress the importance of personal development. With Mike Knowles, personal development is through consulting his inner voice, and for Michael Hallam it is about developing a framework that builds on that offered by Carl Rogers (1967). Both founders used a natural metaphor for how organisations could be established. Mike Knowles used DNA as a metaphor for the founder of an organisation, while Michael Hallam also saw organisations as operating to a natural metaphor. In his analogy, individuals can make connections to form an organisation, like fungi which seem separate on the surface but join together underground. In organisational terms, this is where individual organisations can co-create a common infrastructure. This natural metaphor connects with the concept of open source as a fluid boundary, where resources for knowledge collaboration can flow in a dynamic space (Faraj et al., 2011).

These aspects of the data can be summarised as desiderata:

- The model should allow individual organisations to co-create a common infrastructure to act as a larger whole (ESTA).
- The model should enable organisations based on it to inherit the founder's character (3rd Way).

- The model should be designed to allow a small group to break free and propagate (ESTA).

### **Desiderata: Practicalities**

The experience of both founders is of building up a business from small beginnings. During the author's engagement with 3rd Way Coop, the founder Mike Knowles was often under extreme pressure to secure investment and meet deadlines, unable to find the time to recruit people to help. Michael Hallam established the ESTA business networking club alone, making all the decisions about purpose and membership. The perspectives of the two founders with regard to establishing their business relate to the concept of effectuation (Sarasvathy, 2001), where a business founder can secure resources from their stakeholder network rather than through conventional investment finance.

These aspects of the data can be summarised as desiderata:

- The model should enable the founder to develop on a small scale with limited resources (ESTA / 3rd Way) while they get the right team in place (3rd Way).
- The model should enable the founder to not have to work alone to secure resources (3rd Way).
- The organisation should balance looking after the inner needs of members and their personal development with the external tasks that it needs to perform (ESTA).

### **Desiderata: Motivation for designing**

Relationships are particularly important to both founders, both as a means of doing business, for personal development and to inspire change. Both founders recognise the need for economic success, but this is not their primary motivation for going into business. For Mike Knowles, the founder of 3rd Way, social benefit to disadvantaged people was how he did business, from making hi-fi in the 1980s to now making Super Insulation to alleviate energy poverty. Super Insulation will, through its energy saving properties, will also be of significant environmental benefit. 3rd Way could thus be seen as a social business in that it offers social and environmental benefit as well as economic profit (Yunus et al., 2010). In contrast, Michael Hallam, the founder of ESTA, had developed a vision that when a person is acting from their deepest needs and wishes they will be most able to achieve economic

success. Such a perspective emphasises the importance of personal development framed in terms of Carl Roger's seven stages of consciousness (1967).

Both founders expressed the importance of more than economic value, where Elkington (2004) identified the triple bottom line of economic success, social benefit and environmental conservation. However, both founders identified a fourth bottom line. Mike defined the fourth bottom line in terms of values, while Michael defined it in terms of personal development. These conceptualisations of a fourth bottom line link to the literature, where Varey and Storbacka (2011) highlighted where business can contribute to the quality of life and well-being, and Walker (2011) highlights that there could be a fourth bottom line which he framed in terms of personal values and meaning.

These aspects of the data can be summarised as desiderata:

- The organisational model should reflect the founder's motivations of personal development (ESTA), and the desire to make the world a better place and achieve social justice (3rd Way).
- Relationships are particularly important, both as a means of doing business, for personal development and to inspire change (3rd Way / ESTA).
- The model should promote economic success, but not at the expense of social benefit (3rd Way) or personal development (ESTA).

### **Desiderata: Culture**

In ESTA, members are admitted to a network at the founder's discretion based on shared values. In the author's discussions with Michael Hallam, he emphasised the importance of relationships, where dealing with conflict would be a process of deepening relationships. Values were also important to 3rd Way, where Mike Knowles emphasised the importance of Values Based Leadership in developing a team that worked to a shared vision of common good. When working with the author to create personas, Mike identified through the persona of Super Salesman Steve the grin of joy in fulfilling human rather than financial targets by working for 3rd Way Coop.

These aspects of the data can be summarised as desiderata:

- The model should take into account the potential benefits to workers in terms of fulfilling a shared purpose (3rd Way).
- Establishing the organisation is a process of finding a leadership team with the right values (3rd Way).

- The model should be driven by a vision of a common good (3rd Way) and by shared values (3rd Way / ESTA).
- The proposed model should enable members to deal with conflict through deepening relationships (ESTA).

### **Desiderata: Systems**

Mike Knowles referred to the Quaker decision-making process in their meetings, where all viewpoints are taken into account to arrive at a solution which can be agreed by those who are involved. Micheal Hallam also referred to the Quaker decision-making process, emphasising the need to avoid one individual being able to block the whole group, which could be achieved by the group working to create a common narrative. Mike Knowles framed a guild in terms of a knowledge sharing community, where a guild-like model can add to existing open source initiatives. Michael Hallam considered how to create an information commons to help the local community. Considering the local community further, during the period of the author's engagement, Michael was developing ESTA to promote keeping wealth local, in effect creating a localised currency through tracking of spending patterns.

These aspects of the data can be summarised as desiderata:

- The proposed model should allow for consensus decision-making in small groups based on a common narrative (ESTA).
- The proposed model should be able to be implemented using existing open source systems to create a knowledge sharing community (3rd Way) or information commons (ESTA).
- The proposed model should have systems that extend to the local economy (ESTA).

### **Desiderata: Structure**

Michael Hallam established the Ethical Small Traders Association as a business club with a Community Interest Company at its core. Members of the Association are specifically not members of the CIC. In this respect, ESTA is operating like an open source software project, where Weber (2004) frames governance in open source as being based on a particular interpretation of property rights, which he frames in terms of who has the right to redistribute new versions of the software. This right can be asserted by an individual, who takes on the task of distributing a particular version of the software, but their authority to do so needs to be recognised by the community

that surrounds that software project. If the community does not recognise this authority, they will find another leader, and the project “forks” (Weber, 2004). In this respect open source is more like an adhocracy than a democracy (Konieczny, 2010).

Larger open source software projects such as Open Directory, Debian and Wikipedia have evolved small collective decision-making groups (Lejeune, 2010) rather than relying on a single individual, however Debian has also developed a formal management structure with elected officers. The framing of open source governance in the literature relates to the experience of both participating organisations. ESTA is akin to the single founder of an open source project, who has built up their community around the concept of business as personal development. Prospective members of ESTA are admitted at the founder’s sole discretion and once part of the community, they can contribute to the shared experience of developing their business according to ESTA’s shared values.

In contrast, 3rd Way is more like the Debian model, where the founder Mike Knowles is developing a core management team who will draw on the intellectual property devolved from the Joy at Work Foundation. Once this team is in place, and Super Insulation is in production, 3rd Way will then develop a guild-like structure to share experience and knowledge amongst installers. This is a two-level structure, of management team and the guild of workers installing Super Insulation. Michael Hallam originally structured ESTA to have only one level of membership, but later created the levels of Basic and Associate membership.

In discussions with the author, Mike Knowles connected the intellectual property aspects of the open source guild model (Larner, 2013) to the governance dilemma he was experiencing with 3rd Way Coop, where investors wanted a controlling share in the business and IP. Looking at the problem from this perspective Mike decided that the IP could be held in trust and licensed to a commercial business which in turn could seek conventional investment funding.

These aspects of the data can be summarised as desiderata:

- In the proposed model, the founding individual or group would control the criteria for membership (ESTA).
- The proposed model should allow intellectual property of commercial value to be held in trust, with the trust having ownership over who uses this IP and on what terms (3rd Way).
- The model should allow licensing of IP to allow external investment

(3rd Way).

- The model can adopt a guild-like structure to share experience and knowledge amongst members (3rd Way).
- The model should have levels of membership, Basic and Associate (ESTA), or core management and worker guild (3rd Way).

### **Desiderata: People for whom it is intended**

Mike Knowles has been working with Initiatives of Change, an international body who work to promote change in the wider world by change in individuals, and views 3rd Way Coop as a means to bring about the wider aims of Initiatives of Change. During the period of engagement with the author, Michael Hallam increasingly focused on wider environment, seeing ESTA as about making changes in society, starting with creating local wealth through the multiplier effect (NEF, 2002).

This aspect of the data can be summarised as desiderata:

- The proposed model should enable organisations based on it to benefit a wider range of people than the founders and members of the organisation (3rd Way / ESTA).

### **Desiderata: Performance measures and processes**

A key starting point for establishing performance measures is during start-up, where Mike Knowles emphasised that finding the right leadership team and the right stakeholders to work with on the basis of shared values was key to setting up 3rd Way Coop. When the organisation is established, Mike proposed that a guild model could enable peer assessment and mentoring, thus helping to ensure performance standards. The medieval guilds maintained quality standards through apprenticeship and through guild marks, which evolved into trademarks (Merges, 2004).

The author's discussions with Michael Hallam made clear that the purpose of the ESTA network was to enable members to meet their inner personal needs while achieving economic success. Establishing ESTA as a business club enabled Michael to focus on decision-making in groups based on competence rather than rules-based notions of democracy.

These aspects of the data can be summarised as desiderata:

- The model should enable peer assessment of performance and peer mentoring of individuals (3rd Way).

- The model should be guild-like in that it can assure quality standards (3rd Way).
- Working groups within organisations based on the proposed model would be competence-based (ESTA).

### **Desiderata: Products and services**

3rd Way Coop are offering both products (Super Insulation) and services (installing it), ESTA offers a service (a business networking club).

This aspect of the data can be summarised as desiderata:

- The proposed model needs to be applicable to organisations offering either products or services (3rd Way / ESTA).

### **Desiderata: Operating Context**

Both founders see themselves as contributing positively to the local economy. Mike Knowles wishes to benefit the people he employs, while Michael Hallam is working to promote the benefits of local spending to the local economy, where re-circulation of spending can create local wealth.

These aspects of the data can be summarised as desiderata:

- The proposed model should consider benefits to workers within the organisation (3rd Way).
- The model should extend to the organisation's environment, helping to re-circulate money within the local community to generate additional wealth (ESTA).

### **Desiderata: Sociopolitical concerns**

Both Mike Knowles and Michael Hallam discussed with the author their wider goals for 3rd Way and ESTA. Grouzet et al. (2005) developed the work of Schwartz (1992) to identify the human motivations of physical self, intrinsic, extrinsic and self-transcendence. Both founders highlighted the importance of self-transcendence, with Mike Knowles expressing it in terms of how he had become involved with Initiatives of Change, a faith-based group aiming to create a more peaceful world. Creating Super Insulation came out of his focus on energy poverty to contribute to the goal of his wider network. Michael Hallam focuses more on personal self-transcendence, aiming to make ESTA a network that can contribute to the personal development of its members.

These aspects of the data can be summarised as desiderata:

- The proposed model should enable organisations based on it to connect to wider networks that share their values (3rd Way).
- The proposed model should enable organisations based on it to benefit society (ESTA).

These desiderata are used in Section 6.2 of the following Discussion of Findings chapter to develop a power-balanced form of membership organisational model.

The workshops with the founders of 3rd Way and ESTA highlighted that personas could be a helpful technique in working with organisational founders to consider how they engaged with stakeholders. The next section presents the empirical data from Shared Future, which was the third case study organisation in this study.

### **5.3 Stage 2: Personas, scenarios and stories**

This section presents the data from engagement with Shared Future CIC, a consultancy organisation based in the North West of England, which took place from March to July 2016. At this time, Shared Future was developing as a Community Interest Company with a network of associates to offer a range of services that neither it or the associates could deliver alone. However, some associates had expressed confusion about what Shared Future was and what it can offer both to them and to potential funders. Initial discussions with one of Shared Future's directors considered the open source guild model (Larner, 2013) in relation to their business model. Further discussions with other Shared Future directors led to the author facilitating a workshop with directors and other stakeholders in June 2016.

#### **5.3.1 Preparation for the workshop with Shared Future**

In preparation for the workshop with Shared Future, the author first established the values held by the organisation. These values were derived from analysis of organisational documents using NVivo software. These documents included current reports and newsletters and content from Shared Future's website and Twitter feed. The starting point for coding was based on the values and motivations frameworks offered by Schwartz (1992), Ryan and Deci (2000), Nakamura and Csikszentmihalyi (2002) and Hoggett et al.

(2009). Other values were identified as coding progressed. Figure 5.6 shows the results of this coding of values.

This coding shows some clear trends in the values espoused by Shared Future in their internal and external literature. The values that were coded most often were then represented by six initial value-led personas created by the author, where each value is presented in the form of a stakeholder in Shared Future identified from the organisational documents. The six personas were:

Community Claire, *“I like working in a network of people who share my values”*;

Competent Charles, *“I’ve developed my business skills tremendously – but I still don’t know what Shared Future is”*;

Empowered Edward, *“I realised I could make a difference”*;

Enterprising Emily, *“The support from Shared Future enabled me to develop my idea of young people and gardening into reality”*;

Learning Larry, *“Academic papers are all very well, but the real knowledge comes from working with practitioners”*;

Participation Petra, *“I feel I can make a real difference in my neighbourhood”*.

As well as the six value-led personas, the author also created an anti-persona (Pruitt and Adlin, 2010), which represented a value not held by the organisation, which could stimulate reflection:

Obstructive Oricana, *“Could I speak to your HR department, please?”*.

These personas were clearly stereotyped, with their cartoon drawing, brief quotation and alliterative name, each one representing a particular value that is part of their name. These personas were then the starting point for the workshop with Shared Future.

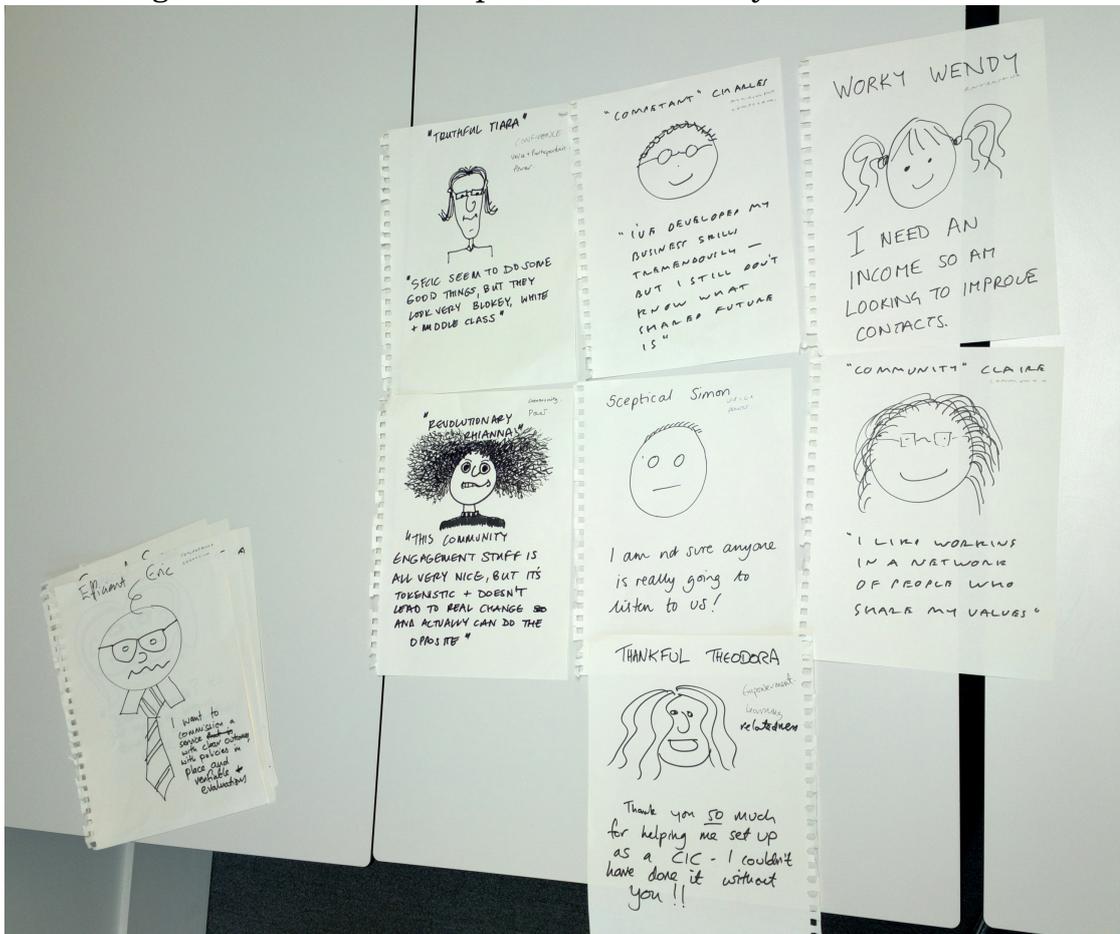
### **5.3.2 Shared Future workshop: Personas and stakeholders**

The workshop with Shared Future was held in June 2016 in Manchester Metropolitan University. The first session considered the value-led personas prepared by the author, and how personas could relate to Shared Future’s stakeholders. In the workshop, with some amusement, participants created

Figure 5.6: Values coding in Shared Future's documents

Values or motivations framework	Value	Number of times coded
Schwartz (1992)	Achievement	9
	Benevolence	3
	Conformity	1
	Hedonism	0
	Power	4
	Security	0
	Self-Direction	2
	Stimulation	1
	Tradition	0
	Universalism	3
	Ryan and Deci (2000)	Autonomy
Competence		17
Relatedness		13
Csikszentmihalyi and Nakamura (2002)	Flow	0
Hoggett et al. (2009)	Honesty	2
	Repatriation	2
	Transparency	0
Other	Authority	2
	Community	33
	Confidence	5
	Effectiveness	12
	Empowerment	20
	Enterprise	22
	Learning	28
	Participation	29
	Resilience	2
	Sharing	15
	Sustainability	10

Figure 5.7: Some of the personas created by Shared Future



many more personas in a similar style. Some of the personas are illustrated in Figure 5.7.

The author then presented the internal and external stakeholders identified during initial analysis of Shared Future's documents, as shown in Figure 5.8.

Participants commented that the neighbours were those of people working within Shared Future seeking advice on how to become involved in their community, while commissioners have the power to put Shared Future out of business by denying contracts. The commissioners need stories of success. The key points that emerged from the following discussion were:

- Participants added the value of accountability, to commissioners and funders;
- Dependency, people approach Shared Future when they are not sure what to do, they are looking for competency, looking for empowerment;
- Bullish Brian has a point, there is an expectation in the charity sector that workers are unpaid;
- Voice, having a voice is fundamental to participation, participants added the value of voice;
- Power, the persona Obstructive Oricana has the power to be disruptive, having a different perception of the organisation.

The discussion then moved on to considering who Shared Future wants to have a relationship with and what their values were. Using the list of values that had been identified beforehand from analysis of documents and shown in Figure 5.6 above, participants then annotated each persona with the values they felt were appropriate. These values are shown in Figure 5.9 and 5.10, together with the name and quotation for each persona. The personas that had values added to them included both those initially created by the author and the ones created by participants in the workshop.

The next part of the workshop with Shared Future considered scenarios of the future with the personas as actors.

### **5.3.3 Shared Future workshop: Personas and boundaries**

In this stage of the workshop with Shared Future, Scenario planning was undertaken using Post-It notes, where each persona was represented by a

Figure 5.8: Stakeholders in Shared Future

Identified by	Type of stakeholder	Stakeholder
Author	Internal	Directors
Author	Internal	Associates
Author	Internal	Staff
Author	External	Partners
Author	External	Grant funders
Author	External	Public sector commissioners
Author	External	Community members
Author	External	Young people
Author	External	Existing local infrastructure organisations
Author	External	Universities
Author	External	Local government
Author	External	National government
Author	External	Social enterprises
Author	External	Prospective associates
Participants	External	Suppliers
Participants	External	Neighbours
Participants	External	Commissioners

Figure 5.9: Personas created by Shared Future with annotated values

Name	Values	Quotation
Action Annie	competence	"Ideas without action are useless"
Bullish Brian	enterprise self-direction	"What's in this for me? Where's the profit? Where's the money?"
Clueless Kevin	empowerment learning power	"I need help with my work but I don't know what help I need"
Commissioning Collin	power	"I don't like change so what's so good about Shared Future?"
Committed Commissioner Kevin	enterprise	"I really want to work with you, but you need to show me how you can help my organisation meet its financial targets"
Community Claire	community	"I like working in a network of people who share my values"
Competent Charles	achievement competence	"I've developed my business skills tremendously - but I'm still don't know what Shared Future is"
Confused Clara	sharing	"I'd like to be more involved but don't know how"
Councillor Cuthbert	power	"I was elected to make decisions, let's get on with it!"
Cynical Susan	enterprise	"Social' enterprise? It's just money in brown envelopes with another name"
Disconnected Dorothy	community learning participation power relatedness	"I came to something organised by 'SFCC'. I stood, spoke in public and got given money... Don't know much but it was terrifying and magnificent... who are Shared Future?"
Efficient Eric	competence effectiveness	"I want to commission a service with clear outcomes, with policies in place and verifiable evaluations"
Empowered Edward	community participation achievement self-direction	"I realised I could make a difference"
Enterprising Emily	achievement enterprise learning relatedness	"The support from Shared Future enabled me to develop my idea of young people and gardening into reality"
Excited Ella	community participation empowerment	"It's so great to talk to everyone and have a chance to make a difference. I've never been involved in anything like this before."

Figure 5.10: Personas created by Shared Future with annotated values (continued)

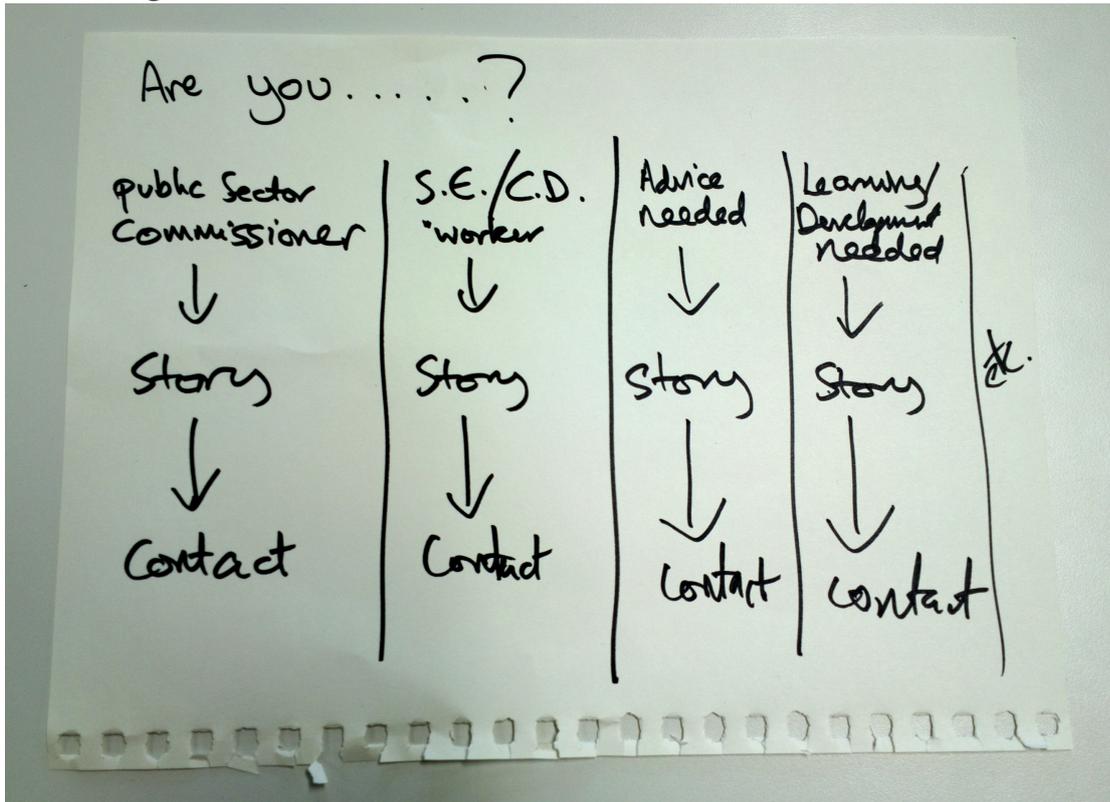
Financial Frank	competence accountability	"I hold us accountable for how we spend our money"
Innovative Imogen	effectiveness enterprise learning relatedness self-direction	"I think of whacky creative ideas and work out how we can do something with them"
Juggling Jim	enterprise	"So much that's good to do... I haven't got time to sort what matters but I'm having a great time trying..."
Learning Larry	learning	"Academic papers are all very well, but the real knowledge comes from working with practitioners"
Managing Molly	achievement	"I make sure we are well organised to deliver what we commit to"
Niggly Nigel	autonomy learning	"This organisation needs a shake-up. I don't trust institutions, good ideas come from banging lots of rocks together"
Not on your Nelly	power	"I'm the competition, I don't want to 'give it all away' to you!!"
Obstructive Oricana	power	"Could I speak to your HR department, please?"
Participation Petra	autonomy achievement enterprise participation	"I feel I can make a real difference in my neighbourhood"
Potential Polly	enterprise	"I want to build my portfolio. How do I work with these guys? I hear they like getting stuff for nothing."
Revolutionary Rhianna	community power	"This community engagement stuff is all very nice, but it's tokenistic and doesn't lead to real change and actually can do the opposite"
Sceptical Sarah	enterprise	"Social enterprises are simply capitalism with a Guardian-friendly facade"
Sceptical Simon	power voice	"I am not sure anyone is really going to listen to us!"
Thankful Theodora	learning relatedness empowerment	"Thank you so much for helping me set up as a CIC - I couldn't have done it without you!"
Truthful Tiara	confidence power participation voice	"SFCIC seem to do some good things, but they look very blokey, white and middle class"
Unsure Ursula	learning participation power	"I like the idea, the atmosphere and the people but I don't know how I can continue"
Worky Wendy	enterprise	"I need an income so am looking to improve contacts"



Figure 5.12: Scenarios of the persona's relationships to the organisation

Persona	Movement
Action Annie	moves from just outside the organisation's boundary to just within the boundary
Bullish Brian	moves from outside the organisation's boundary to within the boundary
Clueless Kevin	now far away from the organisation
Commissioning Colin	stays at the boundary of the organisation
Committed Commissioner Kevin	moves from outside the organisation's boundary to within the boundary
Community Claire	now within the organisation's boundary
Competent Charles	moves from outside the organisation to within it
Confused Clara	moves from outside the organisation's boundary to within the boundary
Councillor Cuthbert	at edge of organisation in the future
Cynical Susan	moves from outside the organisation's boundary to within the boundary
Disconnected Dorothy	stays within the organisation
Efficient Eric	moves from on the organisation's boundary to within the boundary
Empowered Edward	now at centre of the organisation
Enterprising Emily	now within the organisation
Excited Ella	now near the boundary of the organisation
Financial Frank	moves from the boundary of the organisation to its centre
Innovative Imogen	from within the organisation but near the boundary to outside the organisation
Juggling Jim	now at the centre of the organisation
Learning Larry	stays just within the boundary of the organisation
Managing Molly	stays within the organisation
Niggly Nigel	stays at the boundary of the organisation
Not on your Nelly	moves from outside the organisation to within it
Obstructive Oricana	moves from within the organisation but near the boundary to as far as possible away from the organisation
Participation Petra	in the centre of organisation in the future
Potential Polly	moves from outside the organisation to on its boundary
Revolutionary Rhianna	moves from outside the organisation to near its centre
Sceptical Simon	now outside the organisation
Sceptical Sarah	moves from outside the organisation's boundary to within the boundary
Thankful Theodora	moves from just outside the organisation's boundary to within the boundary
Truthful Tiara	moves from just outside the organisation's boundary to within the boundary
Unsure Ursula	moves from just outside the organisation's boundary to within the boundary
Worky Wendy	stays within the boundary of the organisation

Figure 5.13: Shared Future Are You? stakeholder narratives



end, a voting system where each participant could move a persona from one side of the table to another in four “notches” emerged as being most effective. As each persona had been previously annotated with their associated values, this process also revealed the values that participants saw as most significant to Shared Future’s stakeholders. The most significant personas emerged during this process as:

- Bullish Brian;
- Committed Commissioner Kevin;
- Enterprising Emily;
- Niggly Nigel;
- Participation Petra;
- Unsure Ursula.

From the list of personas and values above, this indicates that the most significant values for Shared Future’s stakeholders are:

- enterprise (x4);

- learning (x3);
- participation (x2);
- achievement (x2);
- autonomy (x2);
- power (x1);
- relatedness (x1);
- self-direction (x1).

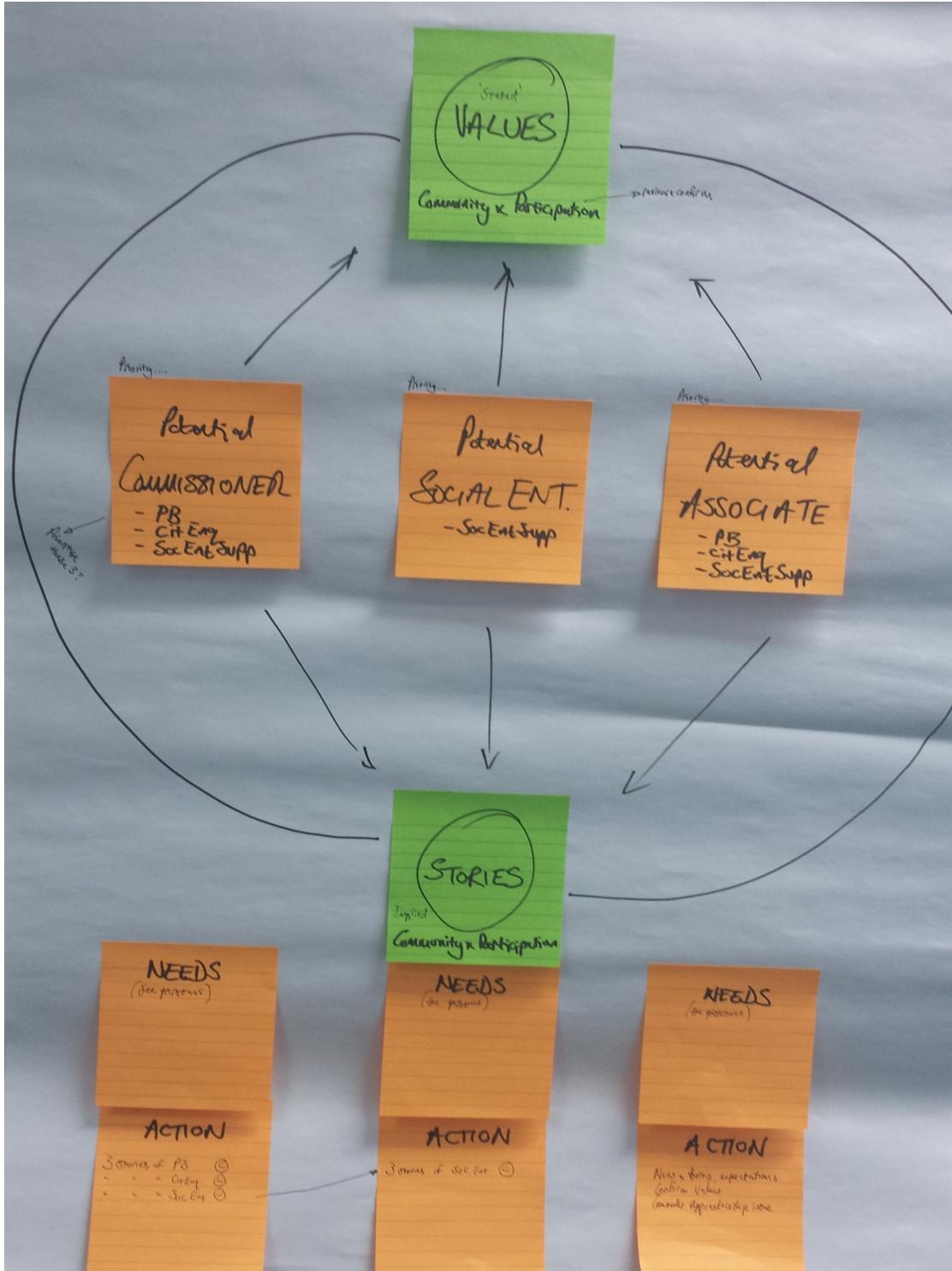
The workshop then moved on to consider a potential organisation design for Shared Future. During this part of the workshop, several participants discussed this issue while one expressed the discussions in the form of an organisational design which had elements of a business model.

### **5.3.5 Shared Future workshop: Potential organisation design**

The author then led some discussion about guild-like structures which have a central core of masters (which could correspond to the CIC directors in Shared Future), journeymen (associates) and apprentices. In Shared Future at present there are no apprentices, they come fully trained from other organisations. Participants seemed intrigued by the concept of masters, but less so when the author suggested that Shared Future had a hard centre of the CIC which is what the commissioners interact with, which is about numbers, budgets, policies, outcomes. This hard centre has a fuzzier boundary which is what stakeholders interact with, this is where the narratives come in.

While this discussion was going on one participant was drawing their interpretation of how Shared Future could work, which is shown in Figure 5.14. In the diagram, values are at the top, then three priorities of commissioners, social enterprises and associates on the next level, then the (implied) stories of community participation, then needs (represented by personas). The lowest level is about actions including creating stories, confirming values and considering the issue of apprenticeship.

Figure 5.14: Shared Future organisational design



### 5.3.6 Shared Future workshop: Reflections

All but one of the workshop participants felt that the personas were a useful technique, offering a chance for reflection. Ranking of the importance of the personas to the organisation was useful to participants, but that this process went on too long. Several participants commented on how using personas led to the idea of stories told by stakeholders. Participants found that personas can draw out aspects of the people creating them, including unconscious aspects. They found that the scenario exercise using the Post-It notes less useful, however. The exploration of guild-like structures was also less successful, with time running out and participants wishing to know more about this form of organisation. One participant felt ‘uncomfortable with the idea of hard boundaries to the organisation these are incompatible with democracy’, implying a more fluid structure with permeable boundaries. The author’s role changed throughout the day where in the scenario exercise, the participants became co-designers, substituting Post-It notes for the actual personas on the diagram of Shared Future. Their involvement as designers of the process continued with re-arranging the tables to rank the personas. This, and adding values to personas was something that emerged during the session, they weren’t planned beforehand.

The author held short semi-structured interviews with three key individuals a few weeks after the workshop, which allowed time for further reflection. The responses reinforced that value-led personas had been a very useful technique, that it ‘gave us quite a few ideas about how we communicate with stakeholders’ also that using personas can also give insight into culture. The personas ‘really made us stop and think’, considering issues from a different perspective, ‘drawing stuff out and focusing us on the matter in hand’. There is a level of anonymity in the personas that was very helpful, enabling participants to express issues that they might not have done otherwise. In its outward face, Shared Future presents as social benefit organisation, but in its internal working they operate more to a private sector model like a solicitor’s practice. The issues are about governance and ownership, or ‘who owns the organisation?’. This ownership issue was apparent in the workshop itself, as one participant created an organisation design that had elements of a business model (shown in Figure 5.14), but they may have been expressing their own perception rather than that of the organisation.

The workshop used personas to articulate first the author’s perception of Shared Future’s stakeholders, then that of the participants. These personas

were then actors in scenarios of how these stakeholders can interact with the organisation. In expressing a possible future, the scenarios contributed to a business model design process. Participants engaged strongly with the workshop, as it explored issues that Shared Future had been trying to deal with for some time. A key issue emerged as how to manage the boundaries of the organisation, which stakeholders should be within its boundary. The concept of boundary judgements was thus helpful in abstracting the findings from this workshop.

### **5.3.7 Shared Future's business model: boundary judgements**

Ulrich and Reynolds (2010, p. 243) claim that critical systems heuristics is a 'framework for reflective professional practice organised around the central tool of boundary critique'. The framework of 12 boundary judgement questions make explicit the boundaries of everyday thinking, in the areas of values and motivations, power structures, knowledge and morals. Ulrich's work builds on that of Churchman (1971) who claimed that a 'systems approach begins when first you see the world through the eyes of another'. Ulrich (2000, p. 260) drawing on the work of Kant (1787) highlights that boundary judgements are 'polemical', where their 'critical force and its rationality do not depend on any positive validity claims', thus any stakeholder is an equal position to assert or refute boundary judgements – but also under an equal obligation to present their own judgement. Applying the boundary judgements in an organisational context leads to (adapted from Ulrich and Reynolds, 2010, p. 244):

#### **Sources of motivation**

1. Beneficiary – who ought to be/is the intended beneficiary of the organisation?
2. Purpose – what ought to be/is the purpose of the organisation?
3. Measure of improvement – what ought to be/is the organisation's measure of success?

#### **Sources of control**

4. Decision maker – who ought to be/is in control of the conditions of success of the organisation?

5. Resources – what conditions of success ought to be/are under the control of the organisation?
6. Decision environment – what conditions of success ought to be/are outside the control of the decision maker?

#### **Sources of knowledge**

7. Expert – who ought to be/is providing relevant knowledge and skills for the organisation?
8. Expertise – what ought to be/are relevant new knowledge and skills for the organisation?
9. Guarantor – what ought to be/are regarded as assurances of successful implementation?

#### **Sources of legitimacy**

10. Witness – who ought to be/is representing the interests of those negatively affected by but not involved with the system?
11. Emancipation – what ought to be/are the opportunities for the interests of those negatively affected to have expression and freedom from the worldview of the system?
12. Worldview – what space ought to be/is available for reconciling differing worldviews regarding the system among those involved and affected?

Ulrich and Reynolds (2010) suggest that the questions be answered in the order 2, 1, 3, 5, 4, 6, 8, 7, 9, 11, 10 and 12. The author drew up a template presenting the questions in this order to apply the boundary judgement framework to the data from the workshop with Shared Future. The findings from applying this template to the data from Shared Future are shown below.

#### **Purpose**

*What is the purpose of the organisation?*

The personas Disconnected Dorothy, Enterprising Emily, Thankful Theodora, Unsure Ursula and Worky Wendy shown in Figures 5.9 and 5.10 represent stakeholders who benefited from Shared Future in either developing a project, gaining income or gaining

contacts. These personas suggest that the current purpose of the organisation is to help freelance individuals gain work.

*What ought to be the purpose of the organisation?*

In the scenario exercise documented in Section 5.3.3, all these personas were shown as either staying within the organisation or moving within it. This movement to within the organisation's boundary indicates that its purpose is to offer a network for these workers, expressed by the persona Community Claire, "I like working in a network of people who share my values".

### **Beneficiary**

*Who is the intended beneficiary of the organisation?*

Workshop participants considered stakeholders in Shared Future, as documented in Figure 5.8. These stakeholders include beneficiaries, who participants saw as being in a position of dependency, they approach Shared Future looking for competency and empowerment.

*Who ought to be the intended beneficiary of the organisation?*

Workshop participants then identified additional stakeholders in Shared Future, including neighbours, which they explained as neighbours of people working within Shared Future seeking advice on how to become involved in their community.

### **Measure of improvement**

*What is the organisation's measure of success?*

Shared Future's current measures of success are indicated by the personas and values ranking exercise documented in Section 5.3.4, where the highest ranked persona, Bullish Brian, has the quote "What's in this for me? Where's the profit? Where's the money?", implying that financial success is currently most important.

*What ought to be the organisation's measure of success?*

During the discussion about personas and boundaries documented in Section 5.3.3, one workshop participant asked, 'where is the Shared Future community?' implying that a measure of success ought to be in terms of how the organisation builds its community.

## Resources

*What conditions of success are under the control of the organisation?*

Figure 5.8 shows the stakeholders in Shared Future, which in turn can indicate what conditions of success are under the organisation's control. Internal stakeholders are directors, associates and staff. Discussions by participants during the process of considering personas and scenarios shown in Section 5.3.3 identified that communication was an issue in building their community. Section 5.3.4 documents how participants identified their major stakeholders as represented by the personas Bullish Brian (wishes to develop a profitable enterprise), Committed Commissioner Kevin (commissioner of government funded services), Enterprising Emily and Participation Petra (beneficiaries who are developing projects for social benefit), Niggly Nigel (associate), and Unsure Ursula (potential beneficiary).

*What conditions of success ought to be under the control of the organisation?*

In the session on personas and scenarios shown in Section 5.3.3, participants considered how to communicate with major stakeholders, where the potential for storytelling became significant. Activities could represent values, which could be communicated through stories. Storytelling could enable the organisation to exert a greater degree of influence, and hence control on major stakeholders who share their values. This influence in turn could help Shared Future to become more successful in working with these stakeholders.

## Decision maker

*Who is in control of the conditions of success of the organisation?*

In the workshop discussion documented in Section 5.3.5, it became clear that the directors in Shared Future CIC were currently in control of the conditions of success, as being the ones responsible for interacting with the commissioners who fund the organisation.

*Who ought to be in control of the conditions of success of the organisation?*

Participants defined the personas Committed Commissioner Kevin, Community Claire, Empowered Edward, Enterprising Emily, Participation Petra and Thankful Theodora in terms of various forms of success. The movement of these personas in the future scenario documented in Figure 5.12 indicates that these personas ought to move to within the organisation's boundary, thus contributing to controlling its success.

### **Decision environment**

*What conditions of success are outside the control of the decision maker?*

At several points during the workshop, participants expressed confusion about what Shared Future was, such as the personas Competent Charles, "...I still don't know what Shared Future is" and Disconnected Dorothy "Don't know much but it was terrifying and magnificent... who are Shared Future?" shown in Figure 5.9.

*What conditions of success ought to be outside the control of the decision maker?*

It thus isn't clear who the decision maker is in Shared Future and hence what ought to be outside their control.

### **Expertise**

*What are relevant new knowledge and skills for the organisation?*

In the list of personas shown in Figures 5.9 and 5.10, the current knowledge and skills within the organisation are in the areas of business, evaluation, developing ideas, creativity, community engagement and gaining income.

*What ought to be relevant new knowledge and skills for the organisation?*

The personas Competent Charles, Enterprising Emily, Learning Larry and Thankful Theodora express how they gain knowledge and skills in the areas of business, developing ideas, working with practitioners and setting up as a Community Interest Company. All these personas are shown in Figure 5.12 as moving within the boundary of the organisation or staying within it, implying a desire to develop these areas of knowledge and skills further.

**Expert**

*Who is providing relevant knowledge and skills for the organisation?*

The diagram shown in Figure 5.14 introduces the potential for apprenticeship, however the discussion shown in Section 5.3.5 made clear that at present, there are no apprentices, associate members of Shared Future are already trained by other organisations.

*Who ought to be providing relevant knowledge and skills for the organisation?*

The discussion suggested that there was potential for existing members of Shared Future to provide relevant knowledge and skills to new members.

**Guarantor**

*What are regarded as assurances of successful implementation?*

The persona Committed Commissioner Kevin shown in Figure 5.9 expresses successful implementation in terms of meeting financial targets. Financial Frank in Figure 5.10 also focuses on finances, “I hold us accountable for how we spend our money”.

*What ought to be regarded as assurances of successful implementation?*

Figure 5.12 shows Committed Commissioner Kevin moving to within the organisation’s boundary from outside it, indicating that meeting financial targets will become more central to the organisation in the future. Financial Frank also moves towards the centre of the organisation from its boundary, again indicating the growing importance of finances to Shared Future.

**Emancipation**

*What are the opportunities for the interests of those negatively affected to have expression and freedom from the worldview of the system?*

The persona Sceptical Simon as shown in Figure 5.10 seems to express being negatively affected, “I am not sure anyone is really going to listen to us!”.

*What ought to be the opportunities for the interests of those negatively affected to have expression and freedom from the worldview of the system?*

In Figure 5.12, the persona Sceptical Simon is shown as now outside the organisation, implying that those who are negatively affected won't have an opportunity to express their views within Shared Future.

### **Witness**

*Who is representing the interests of those negatively affected by, but not involved, with the system?*

The persona Revolutionary Rhianna in Figure 5.10 would appear to be expressing a viewpoint of someone in the community who is negatively experiencing Shared Future's community engagement work.

*Who ought to be representing the interests of those negatively affected by, but not involved, with the system?*

Revolutionary Rhianna is shown as moving from outside the organisation to near its centre in Figure Figure 5.12, implying that individuals who are negatively experiencing Shared Future's work will be increasingly represented in the organisation's work in the future.

### **Worldview**

*What space is available for reconciling differing worldviews regarding the system among those involved and affected?*

During reflections on the workshop documented in Section 5.3.6, one participant felt 'uncomfortable with the idea of hard boundaries to the organisation these are incompatible with democracy', implying that Shared Future could adopt a more fluid structure with permeable boundaries that could reconcile differing worldviews.

*What space ought to be available for reconciling differing worldviews regarding the system among those involved and affected?*

These more permeable boundaries imply that Shared Future could offer a space to reconcile differing worldviews. The discussion in

Section 5.3.3 considered how good stories could help build a community based on shared values, where Shared Future could be a focus for a range of activity.

This workshop indicated clearly that personas can be a powerful tool for reflection on stakeholders, culture and practice in an organisational context. More significantly for this study on narrative forms of open source business model, narratives emerged as being significant for not only how Shared Future communicated with its stakeholders, but also as part of its business model. Boundaries emerged as significant in the workshop, and were further explored using boundary judgements (Urlich, 2000; Urlich and Reynolds, 2010) as a framework. This analysis informs the fluid permeable business model design shown in Section 6.3 of the following Discussion of Findings chapter.

The importance of narratives that emerged from engagement with Shared Future inspired the third stage of this study, which returned to the ethnographic data from 3rd Way Coop and ESTA. In this stage, the narrative form of open source business model offered in Section 3.8.3 of the Literature Review is used as a framework, first for initial analysis of the data from each organisation, then to create an annotated portfolio of the ethnographic data.

## **5.4 Stage 3: An annotated portfolio of data**

This section presents analysis of the ethnographic data from the author's engagement with the founders of 3rd Way Coop and ESTA. The data included notes from the author's meetings with each founder and with other stakeholders, email correspondence and organisational documents. The narrative form of open source business model developed in the Literature Review chapter was used to extract the data that was relevant to this study. The model was used to create a framework by identifying keywords, which were then used to analyse the data from 3rd Way and ESTA using NVivo software.

### **5.4.1 Initial analysis of 3rd Way and ESTA data**

The narrative form of open source business model shown in Section 3.8.3 in the Literature Review is the basis of a framework for analysis of the data from the author's engagement with the founders of 3rd Way Coop and ESTA. This framework was developed by extracting keywords from the narrative form of open source business model offered in Section 3.8.3:

1. *Purposeful intent*: beliefs, conflict, cultural values, entrepreneur, founder, goals, individual limitations, intent, narrative, personal values, purpose, scope, stakeholders, values.
2. *Enacted by human or other actors*: activities, community, creativity, fluid space, focal organisation, group members, network, open source, scale, software, voluntary participation, writing.
3. *Particular incidents or events*: accountability, experience, knowledge, learning, legitimacy, market, opportunities, self-belief, sense-making, sense-giving, stories, structure, vision.
4. *Causal sequence*: analysis, decision-making, emotionally significant, ideation, identification of needs, implementation, process, prototyping, software architect, strategic choices, sustainability.
5. *Reflect reality and create it*: boundary judgement, contributors, costs, customers, environment, exploration, fiction, financial value, governance, peer review, profits, property rights, revenue, shared meaning, shared understanding, software code, suppliers, sustainable returns, value proposition.
6. *Context*: boundary object, competencies, competitive advantage, context, employees, expectations, investors, licence, partners, relationships, resources, system architect, transactions.
7. *Specific point of view*: desired future, identity, imagination, information, life course, shared understanding, value creation, value capture.
8. *New point of view*: inner lives, meaning, motivations, leadership, participants, personal development, potential future, power, practice, transformation.
9. *Become institutionalised*: assemblages of institutions, boundary spanning, collaboration, focal firm, institutionalised, intellectual property, legal documents, norms and beliefs, organic structure, relationship building, shared narrative, stakeholder network, trial and error.

This framework was then used to analyse the data from 3rd Way and ESTA using NVivo software. This ethnographic data took the form of:

- Notes from meetings with each founders and other stakeholders. These were edited as needed to remove confidential information and names of anyone except the founders.

- Photographs of drawings, ideas and other material from the meetings that could be relevant.
- Email correspondence with each founder. These were again edited as needed to remove confidential information and the names of anyone except the founders.
- Organisational documents, including each founder's ideas for how their organisation's structure or business model could develop in the future.
- Other documents that were referred to by founders and which influenced their thinking.

In selecting the data for analysis, priority was given to the data that was generated directly by each organisational founder. This included organisational documents, emails that they sent and photographs of ideas or diagrams that they produced in meetings. In this study, NVivo was used primarily as an organising tool to deal with the large amount of data generated by the long-term engagement with each founder. The analysis using the NVivo software enabled aspects of the data that were relevant to a narrative form of open source business model to be coded using the keywords presented above. The data was organised as follows:

1. Meeting notes made by the author and verified with the founder after each meeting (with any amendments made by them) were organised into a single text file for each organisation in chronological order. Any notes that were not relevant or which would breach confidentiality was removed. Other documents referred to in the meeting, or any photographs taken during the meeting are listed with the notes for each meeting by their filenames.
2. Email correspondence from each founder was organised into a single text file for each organisation in chronological order. Irrelevant or inappropriate emails were removed (e.g. arranging meetings or similar). Greetings, details of arranging meetings etc. were also removed from the emails for clarity. Other documents referred to in the emails were listed with the email text by their filenames.

This organisation of data before analysis enabled the NVivo software to be used effectively to uncover and structure the data that was most relevant to the research area. The meeting notes and email correspondence were coded directly, and other documents were coded at their filename. Preparing the

data in this way enabled the analysis to focus on data either directly from each founder or generated through the author's engagement with them, while also taking into account other key data, including organisational designs created by participants.

The coded data was then exported from NVivo in the form of a report under each narrative heading as text, together with diagrams and photographs as appropriate. These reports are shown in Appendix A (3rd Way Coop) and Appendix B (ESTA). In contrast to the first stage in this study, no attempt is made to create a coherent narrative from the data, this allows for defamiliarisation (Bell et al., 2005; Alvesson and Skölderberg, 2009; Le Dantec et al., 2009), or the possibility of a fresh perspective on data that the author was very familiar with. The case study data in the Appendices was then analysed as an annotated portfolio.

### 5.4.2 Ethnographic data as an annotated portfolio

To create an annotated portfolio, the ethnographic data from each case organisation in Appendices A and B is examined under each heading of the narrative form of open source business model offered in Section 3.8.3 of the Literature Review, aided by the initial analysis using this model. The text is annotated as a portfolio in a similar manner to that adopted by Gaver and Bowers (2012), aiming to convey its design aspects as concisely as possible. In the portfolio presented in the following pages, the nodes from the NVivo analysis are shown, then the annotations, this allows each annotation to be traced back to the data without repeating it.

#### Purposeful intent

*Nodes \ Purposeful intent \ conflict*

Personas can identify individuals who might end up in conflict (ESTA).  
Self-reflection can help frame conflict as an opportunity for personal growth (ESTA).

*Nodes \ Purposeful intent \ cultural values*

Trust key to bringing teams together but takes time (3rd Way).

*Nodes \ Purposeful intent \ founder*

Valuable patents owned by founder (3rd Way).  
Personal transformation leads to societal transformation (3rd Way).  
Established firm to help people realise their potential (3rd Way).  
Values Based Leadership (3rd Way).

*Nodes\\Purposeful intent\\individual limitations*

Extreme demands on founder's time to get over the "valley of death" (3rd Way).

Isolation of founder (3rd Way).

Need to gain finance (3rd Way).

Others can be a source of support (3rd Way).

Preferred working style Directive and Concerned (3rd Way).

Founder not always able to respond to emails (ESTA).

*Nodes\\Purposeful intent\\narrative*

Narratives can communicate what a business can offer (ESTA).

Groups can create a common narrative (ESTA).

Personas can communicate a psychological view (ESTA).

*Nodes\\Purposeful intent\\stakeholders*

Power is accountable to those whom it affects (3rd Way).

Ethical leadership helps build the foundations for sustainable prosperity (3rd Way).

*Nodes\\Purposeful intent\\values*

The Open Source Guild is an example of a values-based structure (3rd Way).

Personas can express values (3rd Way).

Guild structure can promote values, also mentoring, apprenticeship and quality standards (3rd Way).

Delegate responsibility to workers (3rd Way).

Values are key to establishing a consortium (ESTA).

Rules-based membership organisations can be manipulated by individuals (ESTA).

Founder's role is to guard the values (ESTA).

**Enacted by human or other actors***Nodes\\Enacted by human or other actors\\community*

Sharing of experience can lead to accumulation of it as a resource (3rd Way).

Reflection is important in an organisation (3rd Way).

Importance of local money (ESTA).

*Nodes\\Enacted by human or other actors\\fluid space*

Guild master is a facilitator (ESTA).

*Nodes\\Enacted by human or other actors\focal organisation*

Thinking, feeling and will come together to create self-reflection (ESTA).

Organisational structure can support inner reality (4th bottom line) (ESTA).

Systems approach to solving emerging problems (ESTA).

Can invert Maslow's hierarchy of needs, find resources to achieve vision (ESTA).

The first and fourth bottom lines complement each other (ESTA).

*Nodes\\Enacted by human or other actors\group*

Members can create groups independently of the founder (ESTA).

*Nodes\\Enacted by human or other actors\members*

Guild structure can create a body of knowledge (3rd Way).

Commercial social networking sites can help members to communicate (ESTA).

Distributed networks could be a better fit (ESTA).

Membership can be on two levels (ESTA).

Steering group defines the boundary (ESTA).

*Nodes\\Enacted by human or other actors\open source*

Open source can facilitate an online resource centre (3rd Way).

Changing world-views and taken-for-granted assumptions is difficult (3rd Way).

A Legal Liability Partnership could be a useful legal structure for workers on the same level (ESTA).

A guild could take the form of a story (ESTA).

The founder is the guardian of ideas (ESTA).

*Nodes\\Enacted by human or other actors\scale*

Guild models can link to others such as franchising to enable scale (3rd Way).

Profits will go to a trust (3rd Way).

Scale can be by replicating principles (ESTA).

The organisation can consider how it participates in the local economy (ESTA).

Franchising needs to be to people who "get it" (ESTA).

*Nodes\\Enacted by human or other actors\\software*

Software can enable skills and capacity development in a guild model (3rd Way).

Open Source Enterprise Resource Planning software could enable franchising (3rd Way).

Software can enable peer to peer mentoring including remotely (3rd Way).

Not everyone wishes to interact via software (ESTA).

**Particular incidents or events***Nodes\\Particular incidents or events\\accountability*

A trust can act as an auditor, protecting the brand and majority interests (3rd Way).

Membership organisations can have two tiers of membership, where access to the second tier is through an audit process (ESTA).

*Nodes\\Particular incidents or events\\knowledge*

A platform can help to both share knowledge and build unity (3rd Way).

Apprenticeship can work face-to-face, backed up by internet knowledge sharing (3rd Way).

Groups can develop their own work based on a particular expertise (3rd Way).

A platform can develop as a knowledge exchange project (ESTA).

Small organisations can form consortia and bid for larger local government contracts (ESTA).

*Nodes\\Particular incidents or events\\learning*

Responsible franchising includes vocational education (3rd Way).

Vocational education can take place at a distance via the internet (3rd Way).

Peer to peer mentoring can support action learning (3rd Way).

Intellectual property can be held in a trust and licensed out (3rd Way).

Learning can take place in a spiral of personal development (ESTA).

*Nodes\\Particular incidents or events\\legitimacy*

A guild model can enable vocational skills development (3rd Way).

*Nodes\\Particular incidents or events\\market*

Every meeting is an opportunity to trade (ESTA).

*Nodes\\Particular incidents or events\stories*

Stories can lead from the past to the present, to a desired future (3rd Way).

Leadership is about holding the story on behalf of followers (3rd Way).

Stories of personal development can form a commons (ESTA).

*Nodes\\Particular incidents or events\structure*

Patents need to be held in trust (3rd Way).

The trust can remove directors of subsidiary companies (3rd Way).

Income can be from royalties on patents (3rd Way).

Subsidiaries can be franchised to the trust (3rd Way).

Investors can be minority shareholders (3rd Way).

Peer mentoring is key to shared learning (3rd Way).

Shared values can enable things to happen with minimal structure (3rd Way).

Keeping money local can help to satisfy economic needs (ESTA).

A network can help build a collaborative community (ESTA).

A network can offer a market place, brokering skills and capacities against needs (ESTA).

Open source can enable sharing of best practice (ESTA).

A structure of “inner remembering” means people can’t manipulate it (ESTA).

A legal structure can be subverted or taken over (ESTA).

A Limited Liability Partnership (LLP) could be a possible formal structure (ESTA).

*Nodes\\Particular incidents or events\vision*

Not everyone can relate to the vision, they need other incentives to participate (3rd Way).

## **Causal sequence**

*Nodes\\Causal sequence\decision-making*

The Quaker style of meetings is where all viewpoints are taken into account to arrive at a solution which can be agreed by all present (3rd Way).

*Nodes\\Causal sequence\identification of needs*

An information database enables brokering between needs and those who can satisfy those needs (ESTA). Public services should be local, focusing on value (ESTA).

*Nodes\Causal sequence\process*

An organisation can be seen as a dynamic organising process rather than a thing (ESTA).

*Nodes\Causal sequence\software architect*

A single “benevolent dictator” can admit members at their discretion, based on shared values (ESTA).

*Nodes\Causal sequence\sustainability*

The open source guild model can promote vocational education (3rd Way).

Sustainability is about both inner change and external resource management (ESTA).

Organisations can contribute to the local multiplier effect through publicising local spending (ESTA).

Organisations can contribute to promoting personal meaning (ESTA).

**Reflect reality and create it**

*Nodes\Reflect reality and create it\financial value*

Ensure that information cannot be taken and used to promote self-interest (3rd Way).

Beneficiaries of the trust uphold its wider vision (3rd Way).

Local trading loops can increase local wealth (ESTA).

*Nodes\Reflect reality and create it\governance*

The trust owns the social enterprise and can appoint and remove directors (3rd Way).

The fourth bottom line is framed in terms of learning and personal development (ESTA).

A key purpose of an organisation is to increase its market size (ESTA).

*Nodes\Reflect reality and create it\peer review*

Peer to peer mentoring is the key to the success of 95% of entrepreneurs (3rd Way).

Peer mentoring could enable workers to gain skills (3rd Way).

An organisation can operate through peer mentoring alone (3rd Way).

A guild mark can show that there are shared standards (3rd Way).

Technology can allow co-design and peer review (ESTA).

#### *Nodes\\Reflect reality and create it\\property rights*

A legal entity is needed to hold patents and realise their full potential (3rd Way).

#### *Nodes\\Reflect reality and create it\\revenue*

Community Shares could be useful to establish an enterprise rather than conventional finance (ESTA).

Membership fees can help fund the founding business (ESTA).

### **Context**

#### *Nodes\\Context\\competencies*

There needs to be the capability to remove board members (3rd Way).

Decision-making in groups needs to be focused on competence (ESTA).

Attention needs to be given to inner personal needs as well as external tasks (ESTA).

Emotional engagement as well as skills and experience is key to building consortia (ESTA).

#### *Nodes\\Context\\investors*

Patents need to be protected from exploitation (3rd Way).

Investors need to share the values of the organisation they are investing in (3rd Way).

#### *Nodes\\Context\\licence*

Core intellectual property of high value must be protected by putting them in trust which can licence it out (3rd Way).

#### *Nodes\\Context\\relationships*

Relationships are key to realising the vision and objectives (3rd Way).

**Specific point of view***Nodes\\Specific point of view\\desired future*

People live their values in both public and private life (3rd Way).

A person's past shapes their values and the direction from which they approach the future (ESTA).

Personas can be a tool to visualise and co-create a potential future (ESTA).

*Nodes\\Specific point of view\\information*

An information commons can contribute to building a local economy (ESTA).

*Nodes\\Specific point of view\\value capture*

Tracking spending locally can raise awareness of the potential for contributing to the local economy (ESTA).

**New point of view***Nodes\\New point of view\\inner lives*

Vision is not enough, personal development is also needed (ESTA).

Personas can enable externalisation of aspects of a person's life and potential (ESTA).

*Nodes\\New point of view\\leadership*

Leadership should be based on principles and values (3rd Way).

Leadership is about personal change (3rd Way).

Leadership can be through storytelling (3rd Way).

Organisational structure could promote a particular style of leadership (3rd Way).

An influenceable benevolent dictator style of leadership can be effective (ESTA).

*Nodes\\New point of view\\motivations*

The motivations of stakeholders can influence governance (3rd Way).

*Nodes\\New point of view\\personal development*

Work can offer personal fulfilment as well as economic reward (3rd Way).

Personal development can take place to the point of self-reflection and embracing change (ESTA).

*Nodes\New point of view\potential future*

Change in individuals and the structure of society go together and both are needed (3rd Way).

Future forms of organisation can include elements co-created by those that have the relevant expertise (ESTA).

Local money can loop between guilds and the wider economy (ESTA).

*Nodes\New point of view\power*

Invisibly joined individual organisations can gain power by acting as one organisation (ESTA).

*Nodes\New point of view\transformation*

Dealing with conflict can be through a process of personal development leading to transformation (ESTA).

## **Become institutionalised**

*Nodes\Become institutionalised\assemblages of institutions*

Individual organisations can co-create a common infrastructure (ESTA).

*Nodes\Become institutionalised\collaboration*

It is difficult to coordinate between different activities (3rd Way).

Collaboration could include making parts locally (3rd Way).

A network of organisations can function collectively for mutual benefit (ESTA).

Organisations within a consortium can bid collectively for larger contracts (ESTA).

An organisation can refer customers to other members of the network (ESTA).

The internet enables a collaborative commons (ESTA).

*Nodes\Become institutionalised\intellectual property*

Patents of a high commercial value should be placed in a trust (3rd Way).

*Nodes\Become institutionalised\organic structure*

Promoting shared values leads to individuals self selecting out (3rd Way).

If people come together based on shared values, a “nucleus” develops (3rd Way).

The organisation’s DNA is the founder’s character (3rd Way).

Maintaining a minimal organisational structure prevents resources being diverted to maintaining the structure (ESTA).

An organisation can be seen as a form of life with permeable boundaries (ESTA).

*Nodes\Become institutionalised\relationship building*

Software can enable making connections between individuals who might not otherwise meet (ESTA).

*Nodes\Become institutionalised\shared narrative*

Consortia can be created though a shared narrative that can identify skills gaps (ESTA).

Every meeting is an opportunity to trade (ESTA).

*Nodes\Particular incidents or events\stories*

Stories can lead from the past to the present, to a desired future (3rd Way).

Leadership is about holding the story on behalf of followers (3rd Way).

Stories of personal development can form a commons (ESTA).

*Nodes\Particular incidents or events\structure*

Patents need to be held in trust (3rd Way).

The trust can remove directors of subsidiary companies (3rd Way).

Income can be from royalties on patents (3rd Way).

Subsidiaries can be franchised to the trust (3rd Way).

Investors can be minority shareholders (3rd Way).

Peer mentoring is key to shared learning (3rd Way).

Shared values can enable things to happen with minimal structure (3rd Way).

Keeping money local can help to satisfy economic needs (ESTA).

A network can help build a collaborative community (ESTA).

A network can offer a market place, brokering skills and capacities against needs (ESTA).

Open source can enable sharing of best practice (ESTA).

A structure of “inner remembering” means people can’t manipulate it (ESTA).

A legal structure can be subverted or taken over (ESTA).

A Limited Liability Partnership (LLP) could be a possible formal structure (ESTA).

#### *Nodes\\Particular incidents or events\\vision*

Not everyone can relate to the vision, they need other incentives to participate (3rd Way).

### **Causal sequence**

#### *Nodes\\Causal sequence\\decision-making*

The Quaker style of meetings is where all viewpoints are taken into account to arrive at a solution which can be agreed by all present (3rd Way).

#### *Nodes\\Causal sequence\\identification of needs*

An information database enables brokering between needs and those who can satisfy those needs (ESTA). Public services should be local, focusing on value (ESTA).

#### *Nodes\\Causal sequence\\process*

An organisation can be seen as a dynamic organising process rather than a thing (ESTA).

#### *Nodes\\Causal sequence\\software architect*

A single “benevolent dictator” can admit members at their discretion, based on shared values (ESTA).

#### *Nodes\\Causal sequence\\sustainability*

The open source guild model can promote vocational education (3rd Way).

Sustainability is about both inner change and external resource management (ESTA).

Organisations can contribute to the local multiplier effect through publicising local spending (ESTA).

Organisations can contribute to promoting personal meaning (ESTA).

**Reflect reality and create it***Nodes\Reflect reality and create it\financial value*

Ensure that information cannot be taken and used to promote self-interest (3rd Way).

Beneficiaries of the trust uphold its wider vision (3rd Way).

Local trading loops can increase local wealth (ESTA).

*Nodes\Reflect reality and create it\governance*

The trust owns the social enterprise and can appoint and remove directors (3rd Way).

The fourth bottom line is framed in terms of learning and personal development (ESTA).

A key purpose of an organisation is to increase its market size (ESTA).

*Nodes\Reflect reality and create it\peer review*

Peer to peer mentoring is the key to the success of 95% of entrepreneurs (3rd Way).

Peer mentoring could enable workers to gain skills (3rd Way).

An organisation can operate through peer mentoring alone (3rd Way).

A guild mark can show that there are shared standards (3rd Way).

Technology can allow co-design and peer review (ESTA).

*Nodes\Reflect reality and create it\property rights*

A legal entity is needed to hold patents and realise their full potential (3rd Way).

*Nodes\Reflect reality and create it\revenue*

Community Shares could be useful to establish an enterprise rather than conventional finance (ESTA).

Membership fees can help fund the founding business (ESTA).

**Context***Nodes\Context\competencies*

There needs to be the capability to remove board members (3rd Way).

Decision-making in groups needs to be focused on competence (ESTA).

Attention needs to be given to inner personal needs as well as external tasks (ESTA).

Emotional engagement as well as skills and experience is key to building consortia (ESTA).

*Nodes\\Context\\investors*

Patents need to be protected from exploitation (3rd Way).

Investors need to share the values of the organisation they are investing in (3rd Way).

*Nodes\\Context\\licence*

Core intellectual property of high value must be protected by putting them in trust which can licence it out (3rd Way).

*Nodes\\Context\\relationships*

Relationships are key to realising the vision and objectives (3rd Way).

**Specific point of view***Nodes\\Specific point of view\\desired future*

People live their values in both public and private life (3rd Way).

A person's past shapes their values and the direction from which they approach the future (ESTA).

Personas can be a tool to visualise and co-create a potential future (ESTA).

*Nodes\\Specific point of view\\information*

An information commons can contribute to building a local economy (ESTA).

*Nodes\\Specific point of view\\value capture*

Tracking spending locally can raise awareness of the potential for contributing to the local economy (ESTA).

**New point of view***Nodes\\New point of view\\inner lives*

Vision is not enough, personal development is also needed (ESTA).

Personas can enable externalisation of aspects of a person's life and potential (ESTA).

*Nodes\\New point of view\\leadership*

Leadership should be based on principles and values (3rd Way).

Leadership is about personal change (3rd Way).

Leadership can be through storytelling (3rd Way).

Organisational structure could promote a particular style of leadership (3rd Way).

An influenceable benevolent dictator style of leadership can be effective (ESTA).

*Nodes\New point of view\motivations*

The motivations of stakeholders can influence governance (3rd Way).

*Nodes\New point of view\personal development*

Work can offer personal fulfilment as well as economic reward (3rd Way).

Personal development can take place to the point of self-reflection and embracing change (ESTA).

*Nodes\New point of view\potential future*

Change in individuals and the structure of society go together and both are needed (3rd Way).

Future forms of organisation can include elements co-created by those that have the relevant expertise (ESTA).

Local money can loop between guilds and the wider economy (ESTA).

*Nodes\New point of view\power*

Invisibly joined individual organisations can gain power by acting as one organisation (ESTA).

*Nodes\New point of view\transformation*

Dealing with conflict can be through a process of personal development leading to transformation (ESTA).

**Become institutionalised**

*Nodes\Become institutionalised\assemblages of institutions*

Individual organisations can co-create a common infrastructure (ESTA).

*Nodes\Become institutionalised\collaboration*

It is difficult to coordinate between different activities (3rd Way).

Collaboration could include making parts locally (3rd Way).

A network of organisations can function collectively for mutual benefit (ESTA).

Organisations within a consortium can bid collectively for larger contracts (ESTA).

An organisation can refer customers to other members of the network (ESTA).

The internet enables a collaborative commons (ESTA).

*Nodes\Become institutionalised\intellectual property*

Patents of a high commercial value should be placed in a trust (3rd Way).

*Nodes\Become institutionalised\organic structure*

Promoting shared values leads to individuals self selecting out (3rd Way).

If people come together based on shared values, a “nucleus” develops (3rd Way).

The organisation’s DNA is the founder’s character (3rd Way).

Maintaining a minimal organisational structure prevents resources being diverted to maintaining the structure (ESTA).

An organisation can be seen as a form of life with permeable boundaries (ESTA).

*Nodes\Become institutionalised\relationship building*

Software can enable making connections between individuals who might not otherwise meet (ESTA).

*Nodes\Become institutionalised\shared narrative*

Consortia can be created through a shared narrative that can identify skills gaps (ESTA).

This annotated portfolio is presented as a narrative form of business model in Section 6.4 of the following Discussion of Findings chapter.

## 5.5 Conclusion to the chapter

This chapter has presented the empirical data that underpins this study, which was gathered in three stages.

In Stage 1, the data from the author's engagement with the founders of 3rd Way Coop and ESTA was summarised in a 3,000 word narrative based on the author's immersion in their work. The main themes in the narrative were then expressed as personas in preparation for a workshop with each founder in March 2016. In the workshops, the narrative and personas were then the focus for engagement with each founder, which generated further personas and ideas for how their business could engage with its stakeholders. The data shown in this chapter is excerpts from the narratives, the personas used in each workshop and notes from discussions with each founder in the workshops.

Stage 2 of the empirical data is from engagement with Shared Future, the third case study organisation in this study. Analysis of organisational documents using NVivo software established the values held by the organisation. These values were then the basis for the author to create initial value-led personas, which were the starting point for a workshop with Shared Future in June 2016. The workshop first considered the values held by the organisation, where participants added their own values to those presented by the author. Participants then considered the personas offered by the author and created many more in a similar format, then considered these personas in scenarios of how they could interact with the organisation's boundaries in the future. The workshop then moved onto considering a potential organisation design, which included aspects of a business model. Analysis of the workshop data using boundary judgements as a framework helped reveal Shared Future's business model.

Stage 3 of the empirical data in this chapter is the data from the author's engagement with the founders of 3rd Way Coop and ESTA. The data included meeting notes, email correspondence and organisational documents. This data was too large to include in its entirety, so the relevant aspects were extracted using NVivo text analysis software, using the narrative form of open source business model developed in Section 3.8.3 as a framework. The relevant data is shown in Appendices A and B and analysed as an annotated portfolio of business model designs in this chapter. The next Discussion of Findings chapter offers further analysis and discussions of the findings from the data from all three stages, with reference to the relevant literature.



# Chapter 6

## Discussion of Findings

### 6.1 Introduction to the chapter

In this chapter, the data presented in the Empirical Data chapter is discussed in relation to the theoretical context presented in the Literature Review to establish how the research question RQ2, “What is the balance of power between the firm and workers in firms that have adopted a narrative form of open source business model?” has been answered.

Section 6.2 uses the desiderata, or design criteria, from the workshops with 3rd Way Coop and ESTA to suggest a natural metaphor for a power-balanced form of membership organisation. In this model, the balance of power is between the founding group and their membership network, who can form a new founding group.

Section 6.3 uses the narrative form of open source business model developed in the Literature Review as a framework to establish Shared Future’s relationships with its stakeholders and hence inform the design of a fluid permeable business model. This business model had some degree of power-balance between the founding organisation and its network of associates.

Section 6.4 examines the annotated portfolio of the ethnographic data from 3rd Way Coop and ESTA, using the narrative form of open source business model as a framework to reveal their business model designs. These business models show that 3rd Way Coop has more of a centralised balance of power towards the founding trust, while ESTA operates as a power-balanced membership network.

The chapter then presents the empirical contribution, contribution to the literature and methodological contribution made by this study in Sections 6.5, 6.6 and 6.7.

## **6.2 A power-balanced membership model**

This first stage in exploring the potential for narrative forms of open source business model draws on analysis of data from the organisational narratives and workshops with the founders from Section 5.2. Engagement with the founders of 3rd Way Coop and ESTA started with their interest in the open source guild model (Larner, 2013), which is the closest existing model to the narrative form of open source business model developed in Section 3.8.3. This engagement was summarised in a narrative for each organisation, excerpts from this narrative are shown in Sections 5.2.1 and 5.2.3. These narratives and personas based on them were then the starting point for a workshop with each founder, shown in Sections 5.2.2 and 5.2.4. The narratives and data from the workshops held with each founder were then used by the author to establish desiderata, or design criteria (Nelson and Stolterman, 2012) for business model design, shown in Section 5.2.5. These desiderata are used below in the design of a natural metaphor of membership organisation that has a balance of power between the founding group and its members.

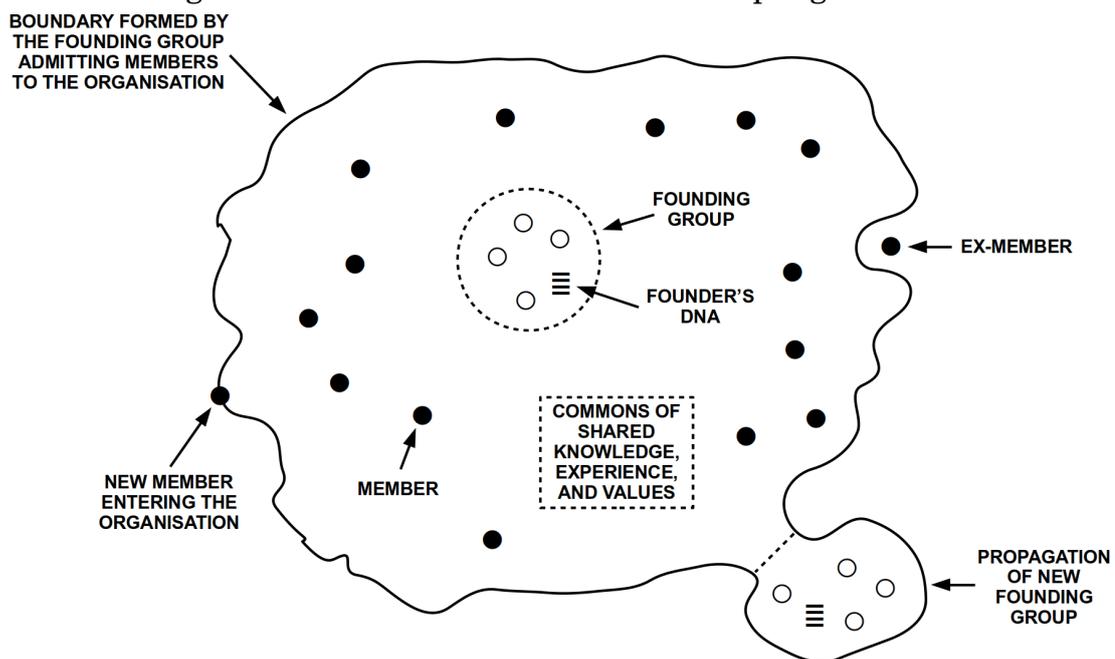
### **6.2.1 A natural metaphor of membership organisation**

The author's design process from the desiderata started with a natural metaphor of membership organisation, where a fluid boundary (Faraj et al., 2011) allows members to be included or excluded simply by re-flowing the boundary. In this model, an individual or small group controls who is a member. This founding group forms the organisation's nucleus, carrying the DNA of the founder's vision and values, carried as a common narrative. In this model, the founder's values and desires for the future, communicated through a narrative, inspires others to join the founder.

In this design, other interested individuals or organisations become members by allowing them access to the body of shared knowledge, experience and values co-created by founders and members. The criteria for admission are that prospective members agree to uphold the founder's narrative, or the cultural norms and values driving the organisation. The diagram shows a new member crossing the boundary of the organisation, also a member being excluded by the boundary re-forming to leave them outside the network. This view of an organisation as fluid boundary is inspired by ESTA's experience of potential members simply drifting away, finding that they couldn't connect with ESTA's narrative.

If the member network grows too big for the founding group to maintain,

Figure 6.1: Natural model of membership organisation



it can naturally propagate by a new founding group breaking away, taking the narrative with them as their DNA. Steiner (1972) suggests that a group should be of no more than four individuals, reinforced by the findings of Fay et al. (2000) which suggest that a group size of five individuals or less is needed to maintain a dialogue mode of interaction. A group of up to five individuals will thus be appropriate for the founding group. The model is shown in Figure 6.1.

Although this design has an appealing simplicity, and is based on an appealing metaphor, it doesn't encompass all the factors emerging from the desiderata. In particular, it doesn't consider the organisation's environment or explain how the founding group forms. The next steps in the development of this design consider these factors.

### 6.2.2 The natural membership organisation's environment

Figure 6.2 shows how the next step in this organisational design process can consider how the natural metaphor of membership organisation interacts with its environment. This development is inspired by how ESTA operates to promote the local economy. Within the network, members can interact to trade and offer mutual support as well as trading with other businesses in the local economy. This trade can then contribute to the local multiplier effect identified by the New Economics Foundation (NEF, 2002) and developed

Figure 6.2: Natural model of membership organisation in its environment

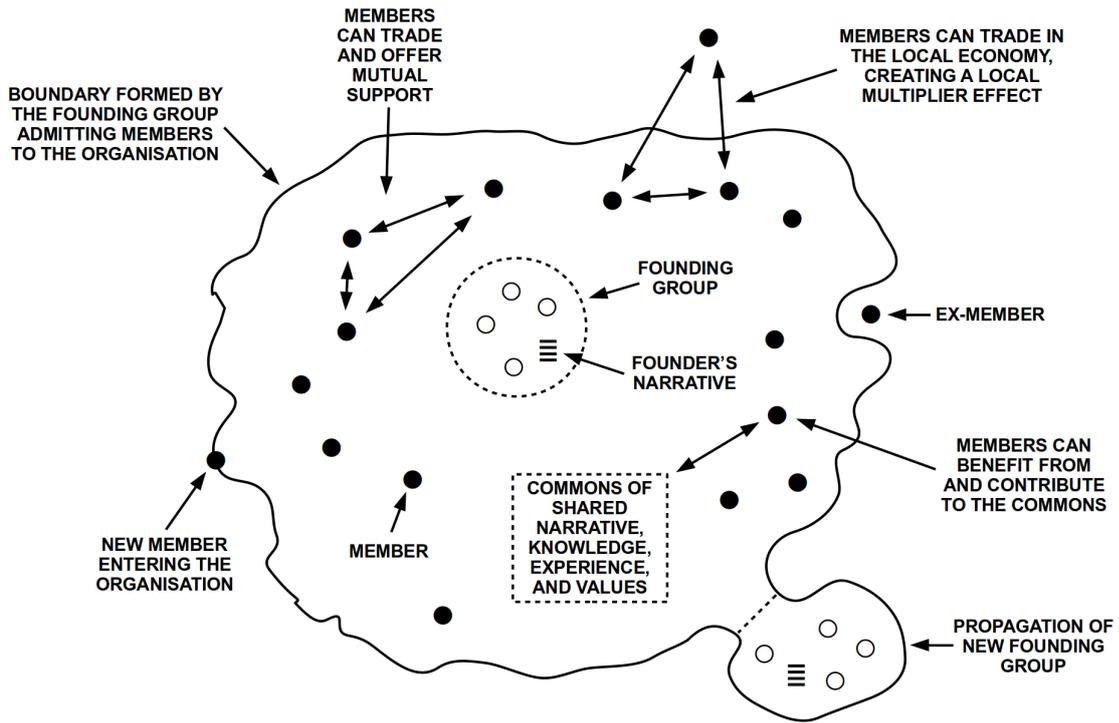
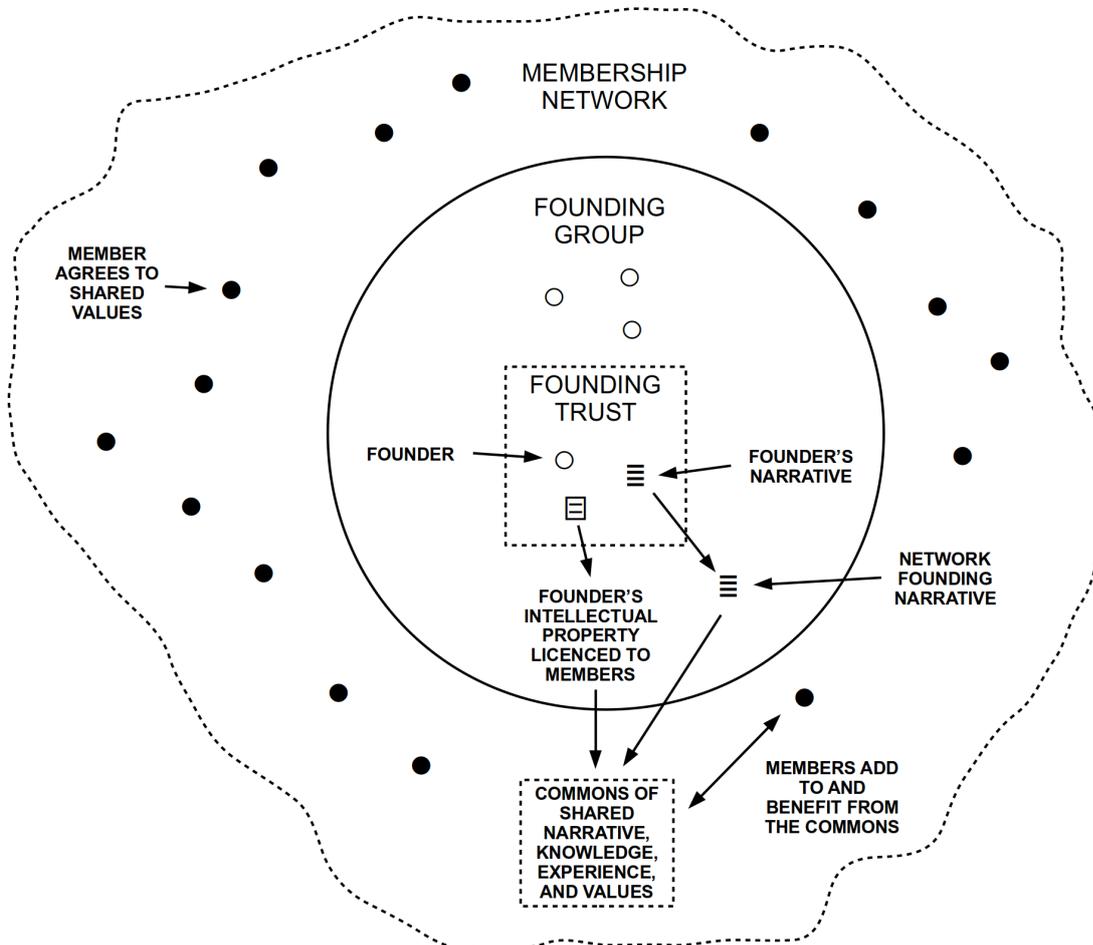


Figure 6.3: Natural model of membership organisation founding group



further by ESTA as the Food Loop Game (which later became the Money Loop System). Prospective members can access but not contribute to the commons, as with open source, enabling them to learn about the values and narratives driving the organisation. One potential problem with this model is that non-members could use the information in the commons to their advantage without being part of the network. This issue could be overcome by developing the organisational design to protect key intellectual property by holding it in a trust.

### **6.2.3 The natural membership organisation's founding group**

The diagram shown in Figure 6.3 shows the founding group in more detail. The design addresses the need identified by 3rd Way to protect intellectual property which could be of commercial value. In this model, the founder places their intellectual property in a trust, which protects it from exploitation. The founder can then work with other interested individuals to create the founding group, inspired by the founder's narrative. An alternative process could be that the founder creates the founding group, then together they develop the intellectual property. The founding trust can licence the intellectual property at its discretion to the founding group and to the network as a whole. The network interacts with the outside world as shown in Figure 6.2, this interaction is omitted from the diagram in Figure 6.3 for clarity. This natural metaphor of membership organisation design could be implemented using current UK legal structures. The founding trust can take a foundation legal form, which could take the form of a Company Limited by Guarantee in the UK. The founder or founding group could be the directors of this trust. The founding group could take the legal form of a Legal Liability Partnership. Network members can gain access to the commons of knowledge held within the network and can contribute to it at the discretion of the founding group.

### **6.2.4 A power-balanced natural form of membership organisation**

The natural form of membership organisation that has been developed in this section has a balance of power between the founding group and membership network, where a group of members can break away, as shown in Figure 6.1. In this model, the founding group defines the boundaries of the

network, exerting invisible power relations as in open source projects, where the software architect defines the boundaries of the project through the code that they accept (Weber, 2004). In this model, the breakaway group exerts their discursive power by taking the founding narrative and forming a new network.

Stage 1 of this study thus partly answers the research question RQ2, “What is the balance of power between the firm and workers in firms that have adopted a narrative form of open source business model?”, in that analysis of the data from this stage informed the design of a power-balanced form of membership organisation. In this model, the balance of power is between the founding group and their membership network, who can form a new founding group. This design is not a business model, but can be the starting point for developing one. The next stage of empirical data gathering led to a narrative form of business model that had some degree of power-balance between the founding organisation and its network of associates.

### **6.3 A fluid permeable business model**

This section examines the analysis of data in Section 5.3 from engagement with Shared Future, particularly the day workshop that the author facilitated with the organisation in June 2016. Shared Future CIC is a loose association of consultants with a Community Interest Company at its core. The directors of the company are responsible for gaining contracts from local government commissioners to carry out community engagement projects. Project work is largely subcontracted to associate consultants, enabling the organisation to take on larger projects than could be undertaken by the directors alone. Boundary judgements (Ulrich, 2000; Ulrich and Reynolds, 2010) were used in Section 5.3.7 to explore Shared Future’s relationship with their stakeholders and business model. Applying boundary judgements has highlighted where Shared Future’s business model can build on the natural model of organisation offered in Section 6.2, but also some contradictions in how workshop participants viewed the organisation. These contradictions can be examined using the narrative form of open source business model as a framework.

#### **6.3.1 A narrative form of fluid business model**

The narrative form of open source business model developed in Section 3.8.3 of the Literature Review is used as a framework to clarify Shared Future’s

business model.

### **Purposeful intent**

Shared Future have established a Community Interest Company that has five directors and no wider membership, thus founded by a group of individuals (Ahokangas and Myllykoski, 2014). Its purpose is to secure large contracts with local government commissioners, negotiated by the directors. These contracts are delivered through a network of associates, who offer a range of skills and expertise. These associates are mainly individuals, so this arrangement overcomes the time and scope limitations of individual associate entrepreneurs as identified by Morris et al. (2005), as they can contribute to larger projects via Shared Future than they could alone. In the workshop, participants discussed how stories on their website about activities could be a mechanism for communicating with various stakeholders, based on shared values. These stories to communicate values and activities can form a narrative that expresses Shared Future's intent in a similar way to the founder of an open source project (Hars and Ou, 2002). In terms of purposeful intent, Shared Future would seem to be a good fit with the narrative form of open source business model.

### **Enacted by human or other actors**

Shared Future have adopted a structure of a central group of directors and a network of associates. In this respect, Shared Future has the potential for a single person or a small group to express the conceptual integrity proposed by Brooks (2010), where a narrative can inspire voluntary participation without resorting to command and control systems (Weber, 2004). However, at the time the workshop was held, this conceptual integrity didn't seem to be expressed by participants. The personas Competent Charles, "I've developed my business skills tremendously – but I still don't know what Shared Future is", and Disconnected Dorothy, "I came to something organised by 'SFCIC'. I stood, spoke in public and got given money... Don't know much but it was terrifying and magnificent... who are Shared Future?" express a lack of conceptual integrity. However, despite this lack, Shared Future is creating a fluid space (Faraj et al., 2011), where they see a range of stakeholders entering this space, including commissioners, associates, beneficiaries and others affected by the organisation. In this fluid space, Shared Future CIC is a material object (Sibierska, 2017), which acts as a focal organisation in capturing value from contracts with commissioners for both the CIC and its

network of associates.

### **Particular incidents or events**

The narrative form of open source business model enables an entrepreneur to communicate their vision and self-belief (Downing, 2005) to a community. Shared Future would appear to have two main communities that they have successfully communicated their vision to: local government commissioners and their network of associates. The network of associates enables Shared Future CIC to undertake larger commissions than the group of directors could alone. In this respect Shared Future are operating to the narrative form of open source business model, in that they can access a greater range of opportunities within the market place than either the CIC or their associates alone.

### **Causal sequence**

Shared Future are operating in a similar way to an open source software architect in establishing a new open source software project, by identifying an opportunity to fulfil a need expressed by local government commissioners, then recruiting a community of associates for that project. In this respect, they are operating to the narrative form of open source business model, but it is not clear what part narratives play in this process. The discussion about activities and stories in Section 5.3.3 and the use of stories in Figure 5.13 indicates that participants are starting to consider how narratives can help identify and fulfil needs within Shared Future's business model.

### **Reflect reality and create it**

In the narrative form of open source business model, a focal organisation can capture value from their stakeholder network for the benefit of both the organisation and its network, particularly financial value (Al-debei and Avison, 2010), which can be converted into profit (Teece, 2010). In the case of Shared Future, the focal organisation can capture value from commissioners to enable both Shared Future and its network of associates to make a profit. Another aspect of the narrative form of open source business model is that the network can choose a new focal organisation, in the process making a boundary judgement (Urlich, 2000). However, it would be difficult for the network of associates in Shared Future to find a new focal organisation to undertake the same work, as it is Shared Future CIC that has the relationship with commissioners. Shared Future can benefit from the reduced

governance costs that are characteristic of the narrative form of open source business model, as their network of associates are self-governing.

### **Context**

Shared Future are operating as a narrative form of open source business model in that their business model becomes part of that of their network of associates, as identified by Mason and Spring (2011). In this respect, Shared Future CIC is acting as a system architect (Kornberger, 2017), negotiating relationships with commissioners as customers and network members as suppliers. Their role as system architect enables Shared Future CIC to gain resources and competencies (Kornberger, 2017) from their network of associates.

### **Specific point of view**

A narrative form of open source business model can enable a shared understanding (Doganova and Eyquem-Renault, 2009) between the founder and stakeholders. In the case of Shared Future, at the time of the workshop, they were starting to consider what this shared understanding might look like, as shown in Figure 5.14. However, their name, Shared Future, implies a jointly created future, which could be through narratives.

### **New point of view**

The proposed stories about values and activities in Shared Future documented in Section 5.3.3 are an example of story-telling that can contribute to establishing the legitimacy of a potential future (Garud et al., 2014). As with open source (Krishnamurthy, 2006; Bitzer et al., 2007; Bach and Twidale, 2010), individuals could be inspired to participate in organisations that operate to a narrative form of open source business model. The personas created in the workshop by participants indicate a mixture of motivations, including intrinsic motivations. For example, Excited Ella, “It’s so great to talk to everyone and have a chance to make a difference. I’ve never been involved in anything like this before.” is more about intrinsic motivations, however, Bullish Brian, “What’s in this for me? Where’s the profit? Where’s the money?”, indicates a more extrinsic form of motivation. Another aspect of open source that is also part of the narrative form of open source business model is the idea that open source is about gaining power by giving it away (Bergquist and Ljungberg, 2001). In the exercise with personas and scenar-

ios documented in Figure 5.12, although many stakeholders were brought into Shared Future, the power to do rested with Shared Future CIC.

### **Become institutionalised**

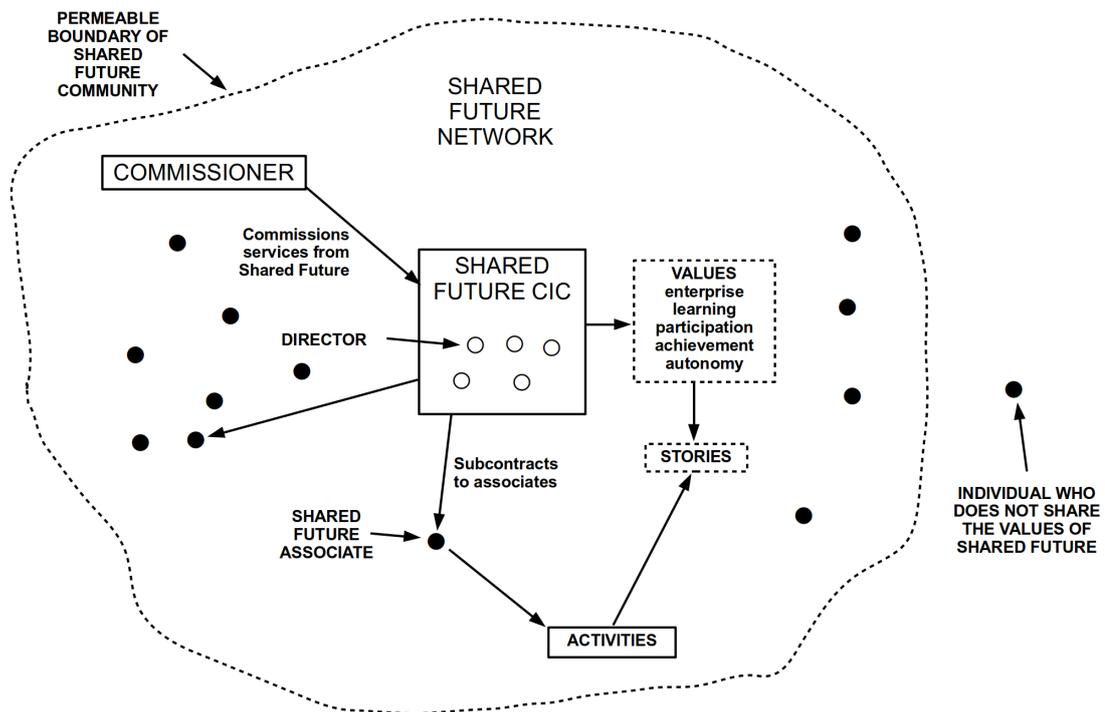
In Shared Future, the CIC acts as the responsible body, offering a hard frame of formal accountability and legal documents (Bate et al., 2000). Surrounding this hard frame of Shared Future CIC is more of an organic structure (Vargo and Lusch, 2016), a network of associates who share loosely defined values. These values are expressed by the persona Community Claire, “I like working in a network of people who share my values”. These associates can also be beneficiaries, gaining competency and empowerment from association with Shared Future’s network. In the workshop, one participant expressed that they felt ‘uncomfortable with the idea of hard boundaries to the organisation these are incompatible with democracy’, reinforcing the idea of a more permeable boundary. However, as it is currently constituted, the Shared Future network does not have democratic structure, membership is at the discretion of Shared Future CIC.

### **6.3.2 Design of a fluid permeable business model**

Shared Future’s business model design has some similarities to the natural form of membership organisation explored in Section 6.2, where in this model, Shared Future CIC is commissioned to provide public services, which it does through its network of associates. This network also includes other stakeholders, particularly commissioners, to form the Shared Future community. Shared Future CIC is responsible for the values held by this community, and excludes those who do not hold those values. Shared Future’s business model is shown as a fluid permeable business model design in Figure 6.4.

This design manifests many aspects of the narrative form of open source business model offered in Section 3.8.3, particularly in terms of purposeful intent, enacted by human or other actors, particular incidents or events, causal sequence, context and specific point of view. However, while Shared Future has the power to bring in new associates, these associates do not have the power to choose a new organisation, as the commissioned work was through Shared Future CIC. In this respect, Shared Future does not have a power-balanced networked business model. In the longer term, however, their network of associates could form a new focal organisation and compete for this work from commissioners, so gaining power in the longer term. The

Figure 6.4: Shared Future's business model design



next section returns to the case study data from 3rd Way Coop and ESTA, using annotated portfolio techniques to reveal their latent business model designs.

## 6.4 A narrative form of open source business model

The author's long-term engagement with the founders of 3rd Way Coop and ESTA was as a member of their network, sharing in the desired future of each founder, where ethnographic data from this engagement documents how each founder worked towards fulfilling that future. Annotated portfolio techniques can bring out latent business model designs in this data. In this section, the ethnographic data from Appendices A and B is viewed as a portfolio of designs, where previous theory (Zimmerman and Forlizzi, 2008), in this case the narrative form of open source business model developed in the Literature Review, informs portfolio creation. There are three steps in the process of bringing out these latent designs:

1. The first step was to use the narrative form of open source business model in Section 3.8.3 as a framework to extract case study data from Appendices A and B that was relevant to the research area. This anno-

tated portfolio is shown in Section 5.4 in the Empirical Data chapter.

2. The second step is to abstract the business model designs for 3rd Way Coop and ESTA from the portfolio, these are shown in this section.
3. The third step is to abstract a more generalisable form of business model from the case study business model designs, this is shown in Section 6.5 as the empirical contribution of this study.

To consider the annotated portfolio analysis in Section 5.4 as a business model, it is again framed in terms of the narrative form of open source business model offered in Section 3.8.3, as a further process of abstraction. The implications from 3rd Way Coop and ESTA's experience for business model design are:

### **Purposeful intent**

Both 3rd Way Coop and ESTA created publicity material to convey their values to stakeholders in a narrative (Polkinghorne, 1991). Both 3rd Way Coop and ESTA were established by a single founder, who encountered the personal time and scope limitations identified by Morris et al. (2005) during the period of the author's engagement. In the case of 3rd Way, finding staff or investors who shared the founder's values proved very difficult, with conflict between them and the founder. ESTA took a different approach, avoiding the rules-based form of membership organisation that can be manipulated by individuals. Instead ESTA takes the form of an association where the founder selects its members based on how they can fulfil its values. In this respect, the founder is answering Simon's question, 'how to build a reliable system from unreliable parts' (1969, p. 19), in this case choosing the parts (members) that can contribute to the fulfilling of the founder's vision. In defining the boundary of the association by the choice of members, ESTA's founder creates the boundary of the association, exerting invisible power relations in the process (Weber, 2004).

### **Enacted by human or other actors**

Each founder had a clear vision for their organisation, in the case of 3rd Way Coop it is to alleviate energy poverty, in the case of ESTA to create a business support network that focuses on personal development. In this respect, they had conceptual integrity (Brooks, 2010), in how they expressed their vision. Both founders had the problem of how to share that vision and work with stakeholders without diluting it. Mike Knowles, the founder of 3rd Way

Coop, created a Trust as sole director to safeguard the patents for Super Insulation and to have control over the companies that would manufacture it. Michael Hallam, the founder of ESTA, took a different approach. He promoted ESTA as a business club, offering a narrative of how personal development could promote economic success. Once within the network, members can create groups independently of the founder, creating a fluid space (Faraj et al., 2011).

### **Particular incidents or events**

Each founder wished to create a community rooted in their knowledge and experience (Ahokangas and Myllykoski, 2014). In the case of 3rd Way Coop the community is around creating and installing Super Insulation, and in the case of ESTA the community is around personal development in a business context. In both cases, the community around the focal organisation enables exploring a larger market (Doganova and Eyquem-Renault, 2009).

### **Causal sequence**

An issue identified by both founders is how to involve others in developing their organisation without diluting their vision. Both mentioned the Quaker style of meetings, where all viewpoints are taken into account in seeking to achieve true consensus in decision-making by taking all viewpoints into account (Velayutham, 2013). This Quaker style of decision-making could help deal with individual limitations by the founder recruiting a founding group with a shared founding narrative. This founding group, which can take a legal form to protect intellectual property, then recruits a wider stakeholder community.

### **Reflect reality and create it**

The founding group can capture value from their wider stakeholder community for the benefit of both the organisation and its network, particularly financial value (Al-debei and Avison, 2010), which then contributes to profits (Teece, 2010). In the case of 3rd Way Coop, the founding trust can capture value from its network of Super Insulation installers through licensing fees. In the case of ESTA, the founding Community Interest Company can capture value from its membership network through fees and working jointly with them.

**Context**

Both founders have adopted a form of business model that through being shared with stakeholders can become part of their business model, as identified by Mason and Spring (2011). 3rd Way proposes to coordinate a network of installers of Super Insulation, where their business model will incorporate being a licensee. ESTA coordinates a network of business members, where their business model will incorporate being able to work with other members in consortia within the network. In both cases, the founder can gain competitive advantage from sourcing resources and competencies (Kornberger, 2017) from their member network.

**Specific point of view**

Both founders emphasised the importance of values. In the case of 3rd Way, values were key to how a person lives their life in both public and private, including in business. In the case of ESTA, a person's past shapes their values and how they approach the future, this is where narratives can help both make sense of the past (Foss, 2004) and create a desired future in an organisational context (O'Connor, 2004; Komporozos-Athanasidou and Fotaki, 2015). As the founder builds a business to help bring about their desired future, their narrative can express how the business will create and capture value for both the founder and their stakeholders. The experience of ESTA shows how a networked form of business can extend to creating a desired future for the local economy.

**New point of view**

Both founders were clear on the importance of leadership, where leadership as storytelling can help establish the legitimacy of the potential future offered by the entrepreneur (Garud et al., 2014). In both cases, the potential future was one that could inspire participation from intrinsic motivations, including personal development (Aksulu and Wade, 2010). In the case of 3rd Way, they offer a future in which work can offer personal fulfilment as well as economic reward, and in the case of ESTA that personal development contributes to economic success. Both founders are seeking to transform how they do business, in the case of 3rd Way it is about how to use intellectual property of high commercial value to benefit society. In the case of ESTA the transformation is how to create a member network focused on personal development as key to economic success. In both cases, narratives can contribute to this transformation in terms of sense-making (Downing,

2005). Working with a community of stakeholders through an open source-like process could enable a transformation through practice (Ahokangas and Myllykoski, 2014). The founder can operate as a benevolent dictator with regard to this community, as in an open source project (Weber, 2004).

### **Become institutionalised**

Both founders adopted a legal form as the core of their business which enabled them to protect key intellectual property. In the case of 3rd Way, the patents for Super Insulation are protected through a trust, initially with the founder in control, then a group of trustees. The ultimate beneficiary of this trust is Initiatives of Change. Placing the patents in trust deals with the problem of investment that Mike Knowles had identified, as ethical investors can invest in the trust. Commercial investors can invest in subsidiary manufacturing firms that make Super Insulation under licence from the trust. The installer guild network is where 3rd Way's model corresponds more closely to the narrative form of business model developed in the Literature Review. In the guild network, Super Insulation installers draw on a commons of knowledge, skills and experience, creating an organic social structure (Vargo and Lusch, 2016). The guild network also enables peer mentoring of installers. The business model adopted by 3rd Way Coop is shown in Figure 6.5. Considering this model in terms of the power-balance between workers and the focal firm, in 3rd Way Coop, the balance of power is held by the Founding Trust which licences intellectual property to manufacturing firms. However, the installer guild network in developing their commons of shared knowledge and experience could exert considerable power in how they interact with the Trust and with housebuilding firms.

In the case of ESTA, the name of the association is registered as Community Interest Company, which prevents others from appropriating the name. In this respect, ESTA operates like an open source project, where a name or trademark, such as Linux, enables the software architect to protect the boundary of the project. Surrounding this hard frame (Bate et al., 2000) of a formal institution is an organic social structure (Vargo and Lusch, 2016), based on shared values. In ESTA, the business association has no legal existence and is purely an organic structure, where the founder decides who is a member. The members of the association are specifically not members of the CIC, and have no direct influence on it. Each ESTA member is a micro-business, therefore the association can be viewed as an assemblage of institutions (Wieland et al., 2017), including consortia within the association.

Figure 6.5: 3rd Way Coop's business model design

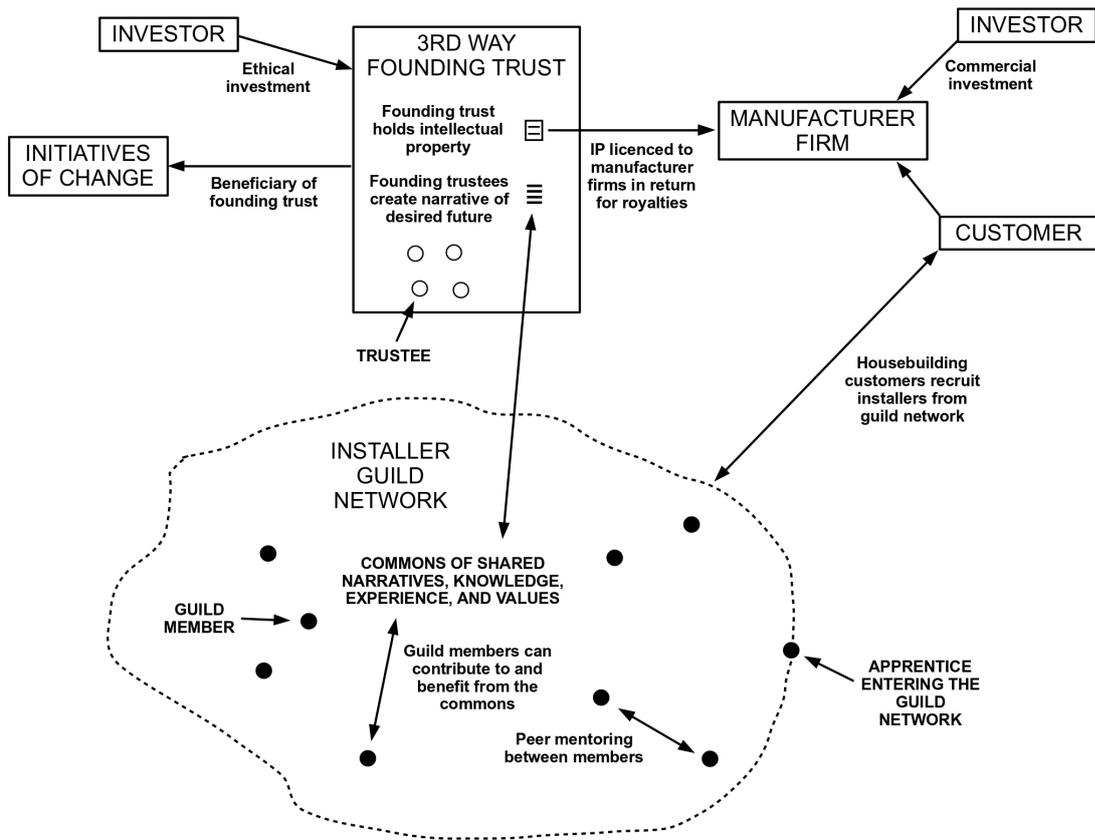
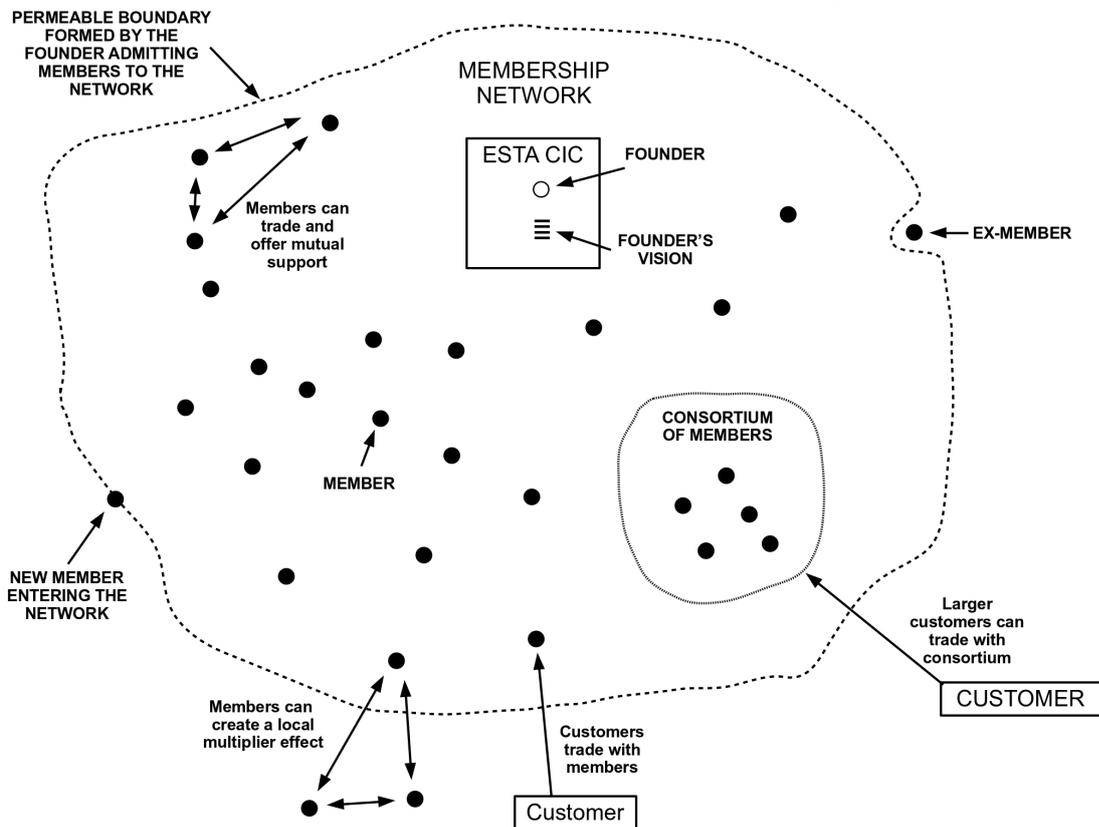


Figure 6.6: ESTA's business model design



As a whole, ESTA could be viewed as a networked form of business model (Kornberger, 2017) that functions as a boundary object (Jensen, 2013). By having a minimal core organisational structure, the founder of ESTA can minimise governance costs (Santos and Eisenhardt, 2005). ESTA's business model is shown in Figure 6.6. The minimal structure of ESTA's membership network with its permeable boundary is a power-balanced structure, in that members can form independent consortia which could leave the network if they disagree with the founder's vision. However, leaving the network would mean losing the advantages of working to a common vision as part of ESTA.

These specific business models for 3rd Way Coop and ESTA are then the basis for a more generalisable narrative form of open source business model that is shown as the empirical contribution of this study in the next section.

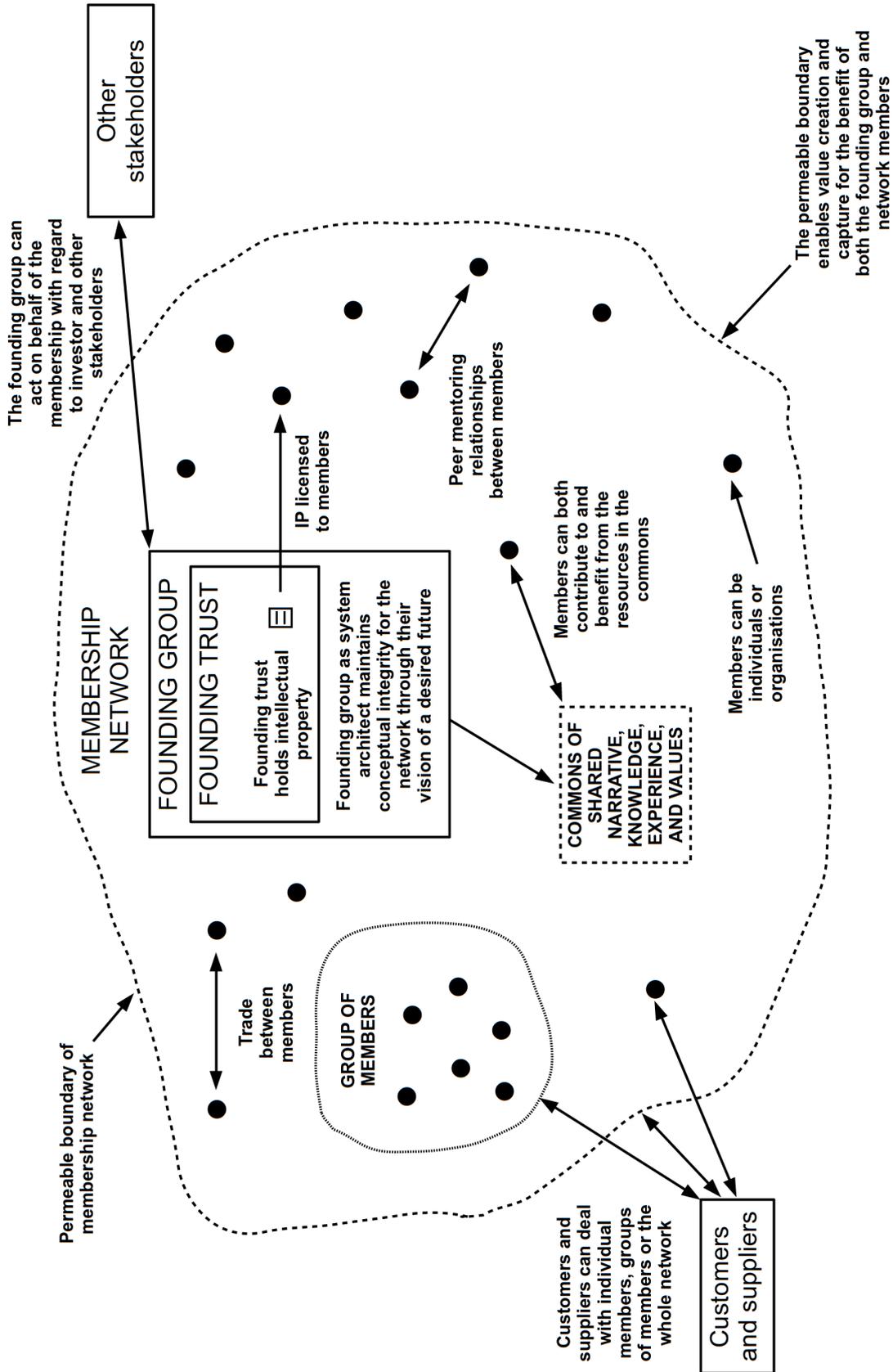
## 6.5 Empirical contribution

The empirical contribution made by this study is the narrative form of open source business model shown in Figure 6.7, which builds on not only the experience of 3rd Way, ESTA and Shared Future, but also on the literature reviewed in Chapter 3. In this model, the founder recruits one or more individuals who share their values to form a founding group. The founding group then forms a founding trust, which holds core intellectual property. An alternative method for the founding group to form is where the founding individual creates a trust to hold the intellectual property and licences it, first to the founding group then to the membership network, which draws on the experience of 3rd Way Coop in protecting IP of commercial value for social benefit.

The founding narrative of a desired future then attracts prospective members, who gain the right to use the founding IP and to access the commons of knowledge and experience. Members can trade with other members based on shared values, which can include forming consortia to enable meeting the needs of larger customers. Although not shown in the diagram, the network could promote a "money loop" to promote local trading and local wealth, as with ESTA.

The business model designs that have been explored in this chapter draw on analysis of data from the author's engagement with the three case study organisations. They offer evidence that can answer the research question RQ2, "What is the balance of power between the firm and workers in firms that have adopted a narrative form of open source business model?". The organic metaphor of organisation proposed by ESTA, 3rd Way's member-

Figure 6.7: The narrative form of open source business model



ship guild of insulation installers and Shared Future's stakeholder stories strongly link with elements of the narrative form of business model offered in the Literature Review.

The narrative form of open source business model developed during this study has elements in common with other organisational and business model forms that attempt to overcome power issues in networked organisations. Its founding trust to protect intellectual property has a similar role to the Intellectual Commons in the FairShares model offered by Ridley-Duff et al. (2013), however in the FairShares model, members licence their IP to the cooperative, which operates like a worker-led coop but with additional stakeholder members. The Commons Equity Society (2019) is a mutual network of organisations, in which surplus is retained for the benefit of workers and for the network, but appears to lack the central driving vision of the proposed model in this study. Another mutual network is the Art of Hosting, which is a networked form of organisation that 'has no formal, legal structure, no appointed leader, no accreditation program and no controlling body', instead an 'international group of stewards holds the deeper practice pattern and assures the quality of the trainings and the integrity of the global network' (2019), thus appearing to operate as a narrative form of organisation, but not as a business model.

The narrative form of open source business model can potentially offer a power-balanced structure and promote what Brooks (2010) in a software design context described as conceptual integrity, or the overall vision of a design project. This is where the contribution to the academic literature made by this study lies.

## **6.6 Contribution to the literature**

The balance of power in the narrative form of open source business model developed in this study leads to the contribution made by this study, which is to extend the notion of conceptual integrity from software design to business models. Conceptual integrity was first mentioned in the book *Research Directions in Software Engineering*, edited by Peter Wegner in 1978. The book is no longer available, but a paper by Wegner (1978, p. 247) summarises conceptual integrity as being a 'key ingredient in the management of software complexity'. Fredrick Brooks (2010), proposed that any creative work is the product of one or at most a few individuals, where the challenge in software production is how to maintain conceptual integrity while scaling up the project. One way of dealing with the problem of conceptual integrity

is command and control, where an individual or small group as the system architect delegates their creative vision to a larger group of developers. This delegation has enabled larger software projects to take place, but such a process does not fully realise the creativity of the larger group of developers.

In contrast to the command and control system of producing software, open source is where the system architect coordinates the contributions of a large and distributed group of software developers at their discretion. If the group of developers are unhappy with the system architect, they can “fork” the project and find a new architect, thus maintaining conceptual integrity together with a balance of power, without resorting to such mechanisms as representative democracy. The narrative form of open source business model developed in this study potentially extends the notion of conceptual integrity to business models.

Literature searches in the ABI/Inform Complete academic database and Google Scholar in May 2019 revealed that there was little mention of conceptual integrity in the entrepreneurship or management literature. A book by Page West et al. (2009) about entrepreneurship education claimed that the ‘technology mentor program has been highly effective in providing entrepreneurship students with valuable scientific and technological input during the process of validating the conceptual integrity and practical utility of emerging scientific and technological concepts’ (p. 199), but this is the only mention of conceptual integrity. Apart from in this book, the only mention of conceptual integrity in relation to entrepreneurship or management uncovered by the literature searches is a paper which compares and contrasts the role of a software architect with that of an entrepreneur (Faily and Fléchais, 2010). However, Faily and Fléchais, while mentioning conceptual integrity, do so in the context of the role of a software architect who ‘may act as a mediator between the different sub-system architects and project managers; the resulting architecture is a pragmatic realisation of a system’s goals, and an appeal to conceptual integrity’ (2010, p. 76) rather than entrepreneurship.

As well as the contribution to literature, this study also makes a methodological contribution, by extending the application of annotated portfolios from human-computer interaction to the study of business models.

## **6.7 Methodological contribution**

This study has adopted a design approach to study narrative forms of business model, where the author offered a design provocation (Bardzell and Bardzell, 2013) in initial meetings with case study organisations. The provo-

cation was the open source guild model (Larner, 2013), which acted as a boundary object (Star and Griesemer, 1989).

Although the study was in three stages, the third stage is where the methodological contribution lies. Annotated portfolios were introduced in the context of human-computer interaction by Gaver (2012), then developed further by Gaver and Bowers (2012) and Bowers (2012) as a means of making visible the design aspects of a particular artefact. The methodological contribution in this study is to extend the use of annotated portfolios from human-computer interaction to a management context. This contribution was verified through literature searches made in May 2019, in the ABI/Inform Complete academic database and through Google Scholar, neither of which found any previous application of annotated portfolios in a management or entrepreneurship context.

The application of annotated portfolio techniques in this study followed the form of design research proposed by Zimmerman and Forlizzi (2008), where an artefact is created as representing a theory that itself represents a desired state. In this study the theory was the narrative form of open source business model proposed in Section 3.8.3 of the Literature Review, and the desired state to offer an alternative business model for the platform economy. Annotating ethnographic data as a portfolio of designs could be helpful in working with groups who are difficult to engage with, such as the entrepreneurs who participated in this study.

## **6.8 Conclusion to the chapter**

This chapter has examined the empirical data in Chapter 5 in relation to the literature reviewed in Chapter 3 to establish the contributions that have been made by this study.

The empirical contribution is the narrative form of open source business model, which can offer a mechanism for an entrepreneur to build a business, first through creating a founding group, then a wider membership network. As a business model, the founding group sets the boundary of the membership network and captures value from that network for the benefit of the membership network as well the founding group. This model has its limitations, however, in that it may not be as effective if the founder wishes to create an organisation for purely economic gain, or who do not wish to engage with a membership network.

The methodological contribution of this study is to extend annotated portfolios from their use in human-computer interaction to an entrepreneur-

ship and management context. Annotated portfolio techniques were used to frame the ethnographic data gathered in this study as a business model design process. This method could be useful in making sense of large amounts of ethnographic data by annotating it as a portfolio of designs. By taking a design approach, this process can potentially achieve useful results without generating vast amounts of text, which is often a problem with ethnographic or qualitative studies. Annotated portfolios could also be applicable to entrepreneurship research, where an entrepreneur's narrative of their past, present and desired future can be analysed to reveal the business model that could best help them realise their ambitions.

The contribution to literature made by this study is highlight how a narrative form of open source business model can promote conceptual integrity through maintaining a balance of power between the focal firm and their membership network. Conceptual integrity refers to the overall vision of a software design project, which in successful projects is held by one or at most a small group of individuals. It is an idea that not been mentioned in the academic literature in relation to entrepreneurship, management or business models. Conceptual integrity helps explain the success of open source, and could also explain why attempts to promote worker power in the platform economy such as platform cooperatives have not become mainstream. The narrative form of open source business model could thus offer an alternative to platform cooperatives and other models that aim to enable worker power in the platform economy. The application of conceptual integrity to entrepreneurship and business models is the basis for the theoretical contribution, which is presented in the next Overall Findings and Main Conclusions chapter.

# Chapter 7

## Overall Findings and Main Conclusions

### 7.1 Introduction to the chapter

The key concepts that have been examined in this study are narratives, open source, entrepreneurship and business models. As a new interdisciplinary area of research at the intersection of these concepts, the research questions driving the study have been exploratory, and have evolved during it. The initial exploratory research question RQ1 framed in the Rationale chapter was:

“How can open source inspire narrative forms of business model?”.

The Literature Review chapter explored the literature on narratives, open source, entrepreneurship and business models to answer RQ1 and propose a more specific research question RQ2:

“What is the balance of power between the firm and workers in firms that have adopted a narrative form of open source business model?”.

The Methodology chapter proposed a design methodology to address RQ2, using persona and scenario techniques with three case study organisations together with gathering ethnographic data from two of them.

The research questions were answered in this study through an integrative literature review and through empirical work with three case study organisations. The Literature Review addresses RQ1, synthesising the relevant literature on narratives, open source and business models to propose a narrative form of open source business model. The nearest form of business model in the literature is the open source guild model (Larner, 2013;

Pearce, 2014; Larner et al., 2017), but this is not framed as a narrative form of business model. This model was a starting point for the empirical work documented in this study.

Empirical work aimed to address RQ2 through taking a design approach within a social constructionist paradigm in engaging with the three case study organisations: 3rd Way Coop, ESTA and Shared Future CIC. Design workshops with these organisations in 2016 used the techniques of personas and scenarios, leading to a number of potential organisational and business model designs. These designs linked to the narrative form of open source business model proposed in the Literature Review to address RQ2, in that they demonstrated aspects of how there could be a balance of power between a focal firm and their membership network. In this form of business model, the entrepreneur can create a small focal firm that has a wider membership who share the entrepreneur’s vision. The focal firm can then capture value generated by the membership for the benefit of both the membership and the firm.

The business model designs were refined through further analysis of the empirical data. The author’s long-term engagement with the founders of 3rd Way Coop and ESTA from late 2013 to 2016 yielded a wealth of ethnographic data that was considered as a portfolio of latent designs, which can be revealed by annotation. These business model designs, when considered in relation to the literature, led to the contributions that are made by this study. The empirical contribution, contribution to literature and methodological contribution were discussed in the previous chapter, but this study can also make a contribution to theory, to policy development and to practice within the platform economy.

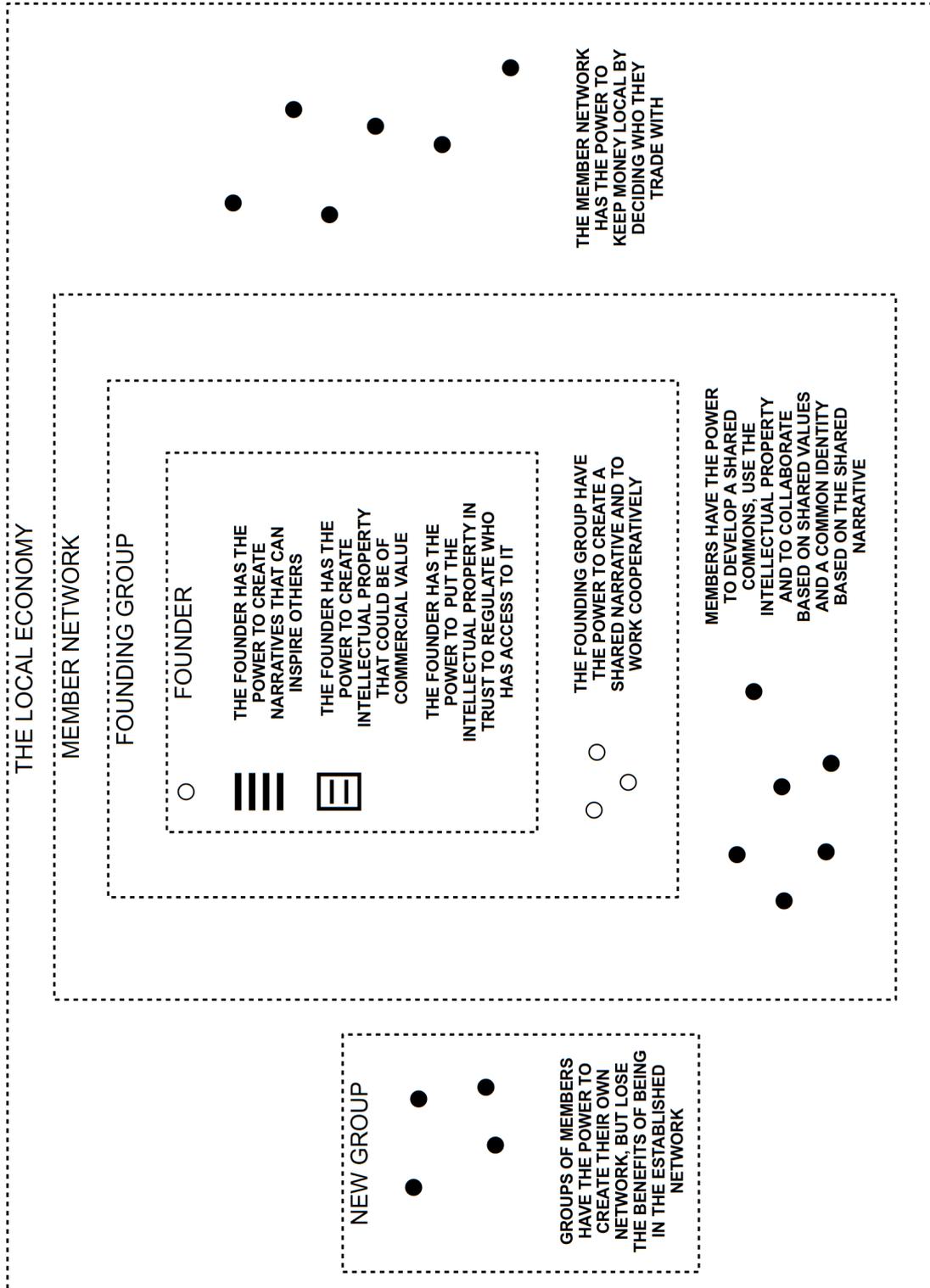
## **7.2 Contribution to theory**

### **7.2.1 A power-balanced business model**

Power in organisations can be framed in terms of discourse, which draws the boundaries of what is possible (Gaventa and Cornwall, 2000; Foucault, 1976, 1977). These boundaries can then create a “sedimented” taken-for-granted social reality (Berger and Luckmann, 1967) through language (Holzscheiter, 2005) that can create shared meanings (Alvesson and Skölderberg, 2009). These shared meanings can create a balance of power in a narrative form of business model.

The diagram shown in Figure 7.1 explores power relations in the narra-

Figure 7.1: Power relations in the narrative form of open source business model



tive form of open source business model, where the founder's 'social fiction' (Bourdieu, 1989, p. 24), gives way to the founding group's shared narrative in defining the boundary of the organisation. Formation of this founding group could dilute the founder's power, in this respect the model operates as in an open source project. Weber (2004, p. 260) identifies that power in open source 'at least to start, belongs to the person who generates the idea and articulates the core values behind the project', but 'as the community takes shape, its very openness moves power away from the leader and toward the followers'. The founder can retain some power by putting intellectual property in trust, adopting a legal document to do so, an example of the developing network conforming to the rules and structures that are part of everyday life (Gramsci, 1971). At this point, as well as their initial narrative of a potential future that they can communicate to followers, the founder has then created another narrative, a legal document with attached symbolic functions (Searle, 1998) that gives the enterprise legitimacy and independence in wider society.

In such a loose structure, what keeps members within the network is being able to access the licensed intellectual property and the opportunities they gain to benefit from and contribute to the commons. However, groups of members can create their own network. In open source software, this is known as "forking", but it rarely happens in practice, as the benefits of remaining within the existing software project outweigh the benefits of leaving with the source code and setting up a new one (Weber, 2004), an example of institutionalisation through habitus (Bourdieu, 1989). The narrative form of open source business model is thus an example of a 'power-balanced structure' (Moore, 2005, p. 673), where the founders have the power to admit or exclude members at their discretion, but members can take the shared narrative (corresponding to the source code in open source) and set up their own network. This balance of power could potentially enable a membership organisation to operate without the traditional forms of representative democracy generally found in such organisations.

Considering the case study organisations, ESTA operates with a loose virtual structure, where members benefit from being able to work under a shared identity to collectively create and share value. In ESTA, power is balanced between the founding core and members, who can form their own networks which could break away. In Shared Future, power is balanced more towards the core Community Interest Company, which secures work from larger customers on behalf of their associate network. The example of 3rd Way Coop indicates that when the intellectual property is of high

commercial value, the balance of power can shift towards their founding trust. However, 3rd Way installer guild members could also work with other firms, shifting the balance of power back towards the membership.

This delicate and continually evolving balance of power in the narrative form of open source business model relies on the conceptual integrity of its founding vision to hold it together. Conceptual integrity is where the second theoretical contribution lies.

### **7.2.2 Conceptual integrity in a membership network**

In the context of software design, Brooks (1987, 2010) highlights the importance of conceptual integrity, where one, two or at most a few individuals hold the unity of the design. Adding more members to a design team can be problematical, where attempts to create a peer to peer collaborative environment end up with design by committee (Brooks, 2010). Brooks highlights that the ‘most important single way to ensure conceptual integrity in a team design is to empower a single system architect’ who ‘must have a clear vision of and for the system and must really care about its conceptual integrity’ (2010, p. 71). The system architect thus reduces the cognitive load of members of the team (Simon, 1969) by creating a habitus (Bourdieu, 1989).

In open source, the software architect as system architect holds the vision for the design and invites others to contribute to it, in a process of ‘voluntary participation and voluntary selection of tasks’ with ‘no consciously organized or enforced division of labor’ (Weber, 2004, p. 62). This voluntary participation enables the software architect to maintain overall conceptual integrity while contributors participate as they wish, maximising their creative contribution. Open source has been proposed as a mechanism to enable creativity in large groups which could extend beyond software production (Weber, 2004), where maintaining conceptual integrity is key to holding the overall vision.

Open source has already informed business models (Shah, 2006; O’Mahony, 2007; Dahlander and Magnusson, 2008; Aksulu and Wade, 2010), however these business models have focused on the firm using an open source community for innovation while maintaining proprietary ownership and control. Euchner (2013) proposes open governance, which is a more radical restructuring of the firm. The notion of conceptual integrity is helpful in highlighting the dangers of open governance, in that the firm could lose their conceptual integrity by being too open. The narrative form of open

source business model that has been developed during this study can potentially balance conceptual integrity at the firm's core, with value creation and value capture within its membership network.

In the narrative form of open source business model, the entrepreneur operates as a system architect in maintaining the vision for the membership network. This model can thus add to the 12 components of a business model identified in Section 3.7.5:

13. *Conceptual integrity*: vision; system architect.

A membership network operating to the narrative form of open source business model could be coordinated by a digital platform, where the contribution to policy development made by this study lies.

### 7.3 Contribution to policy development

There are a number of perspectives on the platform economy, one is that it is an example of disruptive innovation (Mulgan and Leadbeater, 2013), where entire industries can be replaced by a software system. Other writers see the platform economy as a continuation of the Industrial Revolution, where technology enabled centralisation of the means of production (Fuchs, 2014), characterised by extractive rather than generative ownership of firms (Bauwens and Niaros, 2017). Both views of the trend towards the platform economy have been a concern for policy makers, affecting not only working conditions and employment rights but also having implications for wider issues in society such as welfare systems (Drahokoupil and Piasna, 2017). Mechanisms to deal with these issues have included regulation (Kenney and Zysman, 2016; Fabo et al., 2017; Graham and Woodcock, 2018), and developing alternative worker-led business models, particularly platform cooperatives (Scholz, 2017; Martin et al., 2017; Vandaele, 2018).

In the corporate platform economy, employers hold the balance of power (Irani and Siberman, 2013; Kingsley et al., 2015), through information asymmetry (Lanier, 2014), to determine how workers interact with the platform (Smith and Leberstein, 2015). However, the findings of this study highlight the potential importance of conceptual integrity in the success of a firm's business model, where the information asymmetry identified as a problem in terms how platform firms interact with their workers could also contribute to their conceptual integrity, as the firm alone holds the vision for how it will operate.

The business model developed in this study is one that could maintain the conceptual integrity of successful platform firms, in a way that is balanced with the power of member workers to also benefit, offering an alternative to current platform cooperative models. As a power-balanced structure, the narrative form of open source business model could help address some of the societal issues identified by Kenney and Zysman (2016), particularly inequality of workers in the platform economy. The narrative form of open source business model can thus make a contribution to practice in the platform economy.

## 7.4 Contribution to practice

Current practice within the platform economy is where corporations mediate between freelance workers and sources of work. Some writers (e.g. Fuchs, 2014) have highlighted the renewed relevance of Marx in the digital economy, where a new form of proletariat is created by these global networked companies. Platform cooperatives have been advocated as enabling ‘a more equitable distribution of the value created within the sharing economy’ but at present ‘there are few examples of such models operating and being sustained at scale’ and the academic literature has ‘yet to address novel forms of platform governance (democratic or otherwise) emerging within the sharing economy’ (Martin et al., 2017, p. 1396).

Cooperatives, platform or otherwise, operate as membership owned organisations which limit the power of leaders by election or by consensus decision-making by the membership (Spear, 2004). However, this study has identified the potential importance of conceptual integrity to successful business models as well as to software design. Election of leaders or consensus decision-making in a large membership could reduce conceptual integrity as founders are replaced with new elected leaders. In this respect, cooperatives, particularly those operating via a software platform, may not be able to achieve the conceptual integrity of a corporate platform firm.

The narrative form of open source business model developed during this study offers an alternative governance mechanism to platform cooperative models. In the process of creating a narrative form of business model, the focal firm maintains conceptual integrity while capturing value created by its wider member network for the benefit of both firm and membership. It is this value capture for the benefit of the membership that is a key benefit of this form of business model to workers. However, organisations based on this model will not be owned by their membership so may not be seen

as true cooperatives, despite the balance of power between the focal firm and their wider membership. The narrative form of business model could instead be seen as a form of federation (Johnstad, 1997) where the founding group can operate as a cooperative together with groups of members within a common vision. This model highlights that the role of the founding group is to maintain the conceptual integrity of the network, the common vision that unites it.

While offering a novel form of governance for firms operating in the platform economy, this study does have a number of limitations.

## **7.5 Limitations of the study**

### **7.5.1 Limitations of the methodology**

Each stage of this study has its own methodological limitations. In the first stage, the author made sense of the ethnographic data from 3rd Way and ESTA by creating narratives of engagement with each case study founder. Although this narrative creation made the volume of case study data manageable, it has the danger of researcher bias, as well as being time-consuming and difficult for other researchers to validate or replicate. However, the reflective process, aided by the use of personas in workshops with each founder, has still yielded useful findings, which are discussed in Section 6.2.

The second stage of this study took a more rigorous approach in the shorter term engagement with Shared Future. In this stage, analysis of organisational documents using NVivo text analysis software to establish Shared Future's values and stakeholders enabled the author to lead a day workshop with members of the organisation. The workshop was successful, and helped to clarify what business model Shared Future had adopted, which is shown in Section 6.3. However, the limited time of engagement with the organisation and their subsequent time constraints meant that the issues raised, in particular "who owns Shared Future", couldn't be explored in depth.

The third stage of this study returned to the case study data from 3rd Way Coop and ESTA, again using NVivo text analysis software with the narrative form of open source business model as a framework. This analysis has the limitations of being undertaken by the author, using a framework created by the author, so again will be subject to researcher bias. However, in this stage, the choices made by the author are documented in the Empirical Data chapter, so the reasoning adopted in the analysis can be followed

by the reader. A design process goes through a number of iterations as the design develops, in this project the iterative process was in the author's engagement with the case study organisations, as shown in Appendices A and B. However, it would benefit from a further process of iteration, where the researcher's interpretations were fed back to participants, which was not possible in the present study due to time limitations. The findings from this stage are discussed in Section 6.4.

### 7.5.2 Limitations of the findings

The limitations of the findings can be assessed in terms of the criteria of quality, validity, generalisability and reliability outlined in Section 4.7.

Considering validity (Robson, 2002), this study can offer construct validity in that the methods used reflect the intentions of the study and the research question. In particular, the use of narrative techniques, including personas and scenarios, reflects the research area of narrative forms of business model.

Internal validity is affected by the fact that long-term engagement with the founders of 3rd Way Coop and ESTA started with the open source guild model offered by the author. Both founders incorporated aspects of this model into their business model, however they used the model differently. 3rd Way saw the open source guild model as a mechanism to enable vocational education for their installer network, while ESTA found it a close fit with their membership model.

In terms of generalisability of findings, the narrative form of open source business model developed in this study could be helpful to entrepreneurs who wish to work with a community of stakeholders who share their vision. The potentially most generalisable finding from this study is the insight into how the notion of conceptual integrity (Brooks, 1987, 2010) could be applicable beyond the domain of software design.

## 7.6 Implications for further research

The contribution that conceptual integrity can make to successful business models could be investigated further, at both theoretical and empirical levels, where the relationship between variables may be causal, allowing the research question to be framed as a hypothesis.

*Research proposition:* That conceptual integrity in a business model is linked with the success of businesses based on that model.

*Independent or causal variable:* Degree of conceptual integrity.

*Dependent or outcome variable:* Business model success.

*Hypothesis:* A business model that exhibits a greater degree of conceptual integrity will be more successful than one that does not.

*Null hypothesis:* The degree of conceptual integrity in a business model does not correlate to business success.

*Research question:* “Is conceptual integrity a casual factor in successful business models?”.

*How it can be examined:* Through qualitative and quantitative empirical research studies.

This hypothesis can be tested through evaluation of how successful businesses operate to determine both their business model and their degree of conceptual integrity. Data collection methods can include structured questionnaires and analysis of organisational documents, as well as design workshops where the proposed model is explored together with other business models. Research into the notion of conceptual integrity and its role in business success could help entrepreneurs design an appropriate business model through simplifying the real-world situation – an example of bounded rationality (Simon, 1972).

Another potential area of research is in the area of participatory design processes, where the emphasis is on gaining contributions from all stakeholders, driven by ‘a vision of what ought to be’ (Park, 1999, p. 148). Participatory design methods are founded on an epistemological position of critical theory, which aims to empower those who are disadvantaged in society (Davies, 2008; Crabtree et al., 2009; Bardzell et al., 2012). The arguments for participatory methods are set out particularly clearly by Cairns (2017), who calls for “collaborative realisation” in design. However, there is a danger that, in trying to achieve this collaboration, the conceptual integrity of the design could be lost. As in the business model that is explored in this study, the findings suggest that participatory design processes need to maintain the conceptual integrity or vision for the design. Further research could explore the implications of how to balance stakeholder involvement with conceptual integrity in applying participatory methods.

## 7.7 Conclusion

This study has explored an interdisciplinary area of research at the intersection of narratives, open source, entrepreneurship and business models in the context of the digital platform economy. As well as an empirical contribution in the narrative form of open source business model, and a methodological contribution in applying the technique of annotated portfolios to entrepreneurship, this study makes a contribution to theory.

The contribution to theory made by this study is the application of the notion of conceptual integrity, as developed by Fredrick Brooks (2010) in his book *The design of design: Essays from a computer scientist*, to the domain of business models. In open source software development, the role of the system architect is key in holding the vision for the project that contributors voluntarily participate in. In playing this role, the system architect reduces cognitive load on individuals (Simon, 1969) through habitus (Bourdieu, 1989). In the business model that has been developed in this study, the focal firm holds the role of system architect, maintaining the vision for their membership network.

The model could be called the Open Source Platform Federation, where the founder maintains conceptual integrity as in open source, while the membership network can operate as a federation of individual members and groups of members towards a shared vision. This business model could be helpful to policy makers in the platform economy, as it offers an alternative to platform cooperatives and other models that aim to secure greater worker power. Entrepreneurs could also find this model helpful, as it can enable them to build their business through a membership network in which members share their vision and can also benefit from being part of the network.

The research question “Is conceptual integrity a casual factor in successful business models?” can inform future empirical work, where the dependent variable is business model success and the independent variable is conceptual integrity, testing the hypothesis that a business model that exhibits a greater degree of conceptual integrity will be more successful than one that does not. As well as contributing to further study in the areas of business models and organisation studies, this research question could inform research in the area of management science. Management science is concerned with the use of generally mathematical techniques and models to inform management decisions. The degree to which a firm has conceptual integrity can be quantified, as can the success of their business model, enabling better informed decisions.



# Chapter 8

## References

Ahokangas, P., and Myllykoski J. (2014). The practice of creating and transforming a business model. *Journal of Business Models*, 2(1), 6-18.

Aksulu, A., and Wade, M. (2010). A Comprehensive Review and Synthesis of Open Source Research. *Journal of the Association for Information Systems*, 11(11), 576-656.

Al-Debei, M. M., and Avison, D. (2010). Developing a unified framework of the business model concept. *European Journal of Information Systems*, 19(3), 359-376.

Albors, J., Ramos, J. C., and Hervás, J. L. (2008). New learning network paradigms: Communities of objectives, crowdsourcing, wikis and open source. *International Journal of Information Management*, 28(3), 194-202.

Aldrich, H., and Ruef, M. (2006). *Organizations Evolving (Second Edition)*. London: Sage

Allen, R. C. (1983). Collective invention. *Journal of Economic Behavior & Organization*, 4(1), 1-24.

Alvesson, M., and Deetz, S. (2000). *Doing Critical Management Research*. London: Sage.

Alvesson, M., and Skölderberg, K. (2009). *Reflexive Methodology (Second Edition)*. London: Sage.

Amazon Mechanical Turk (2019). *Amazon Mechanical Turk*.

<https://www.mturk.com/> accessed 7 April 2019.

Amit, R., and Zott, C. (2001). Value creation in e-business. *Strategic Management Journal*, 22(6-7), 493-520.

Anzilotti, E. (2018). Worker-owned co-ops are coming for the digital gig economy. *Fast Company* 05.31.18.

<https://www.fastcompany.com/40575728/worker-owned-co-ops-are-coming-for-the-digital-gig-economy> accessed 7 April 2019.

Araujo, L., and Easton, G. (2012). Temporality in business networks: The role of narratives and management technologies. *Industrial Marketing Management*, 41(2), 312-318.

Art of Hosting (2019). *What is the Art of Hosting Conversations that Matter?* <http://www.artofhosting.org/what-is-aoh/> accessed 7 April 2019.

Arthur, W. B. (2009). *The Nature of Technology: What it is and how it evolves*. New York: Free Press.

Bach, P., and Twidale, M. (2010). Social Participation in Open Source: What it Means for Designers. *Interactions*, 17(3), 70-74.

Bagozzi, R. P., and Dholakia, U. (2006). Open Source Software User Communities: A Study of Participation in Linux User Groups. *Management Science*, 52(7), 1099-1115.

Baldwin, C. Y. (2012). *Organization Design for Distributed Innovation*. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2055814](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2055814) accessed 7 April 2019.

Baldwin, C. Y., and Woodard, C. J. (2009). The architecture of platforms: A unified view platforms, markets and innovation. In Annabelle Gawer (Ed.), *Platforms, Markets and Innovation*, 19-44. Cheltenham: Edward Elgar.

Bardzell, J., and Bardzell, S. (2013). What is “critical” about critical design? In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '13)*, 3297-3306. New York: ACM.

- Bardzell, S., Bardzell, J., Forlizzi, J., Zimmerman, J., and Antanitis, J. (2012). Critical design and critical theory: the challenge of designing for provocation. In *Proceedings of the Designing Interactive Systems Conference (DIS '12)*, 288-297. New York: ACM.
- Bartel, C. A., Garud, R., and Bartel, C. A. (2009). The Role of Narratives in Sustaining Organizational Innovation. *Organization Science*, 20(1), 107-117.
- Bate, P., Khan, R., and Pyle, A. J. (2000). Culturally sensitive structuring: An action research-based approach to organization development and design. *Public Administration Quarterly*, 23(4), 445-470.
- Baumeister, R. F. (2013). Writing a literature review. In Prinstein, M.J. (Ed.), *The Portable Mentor*, 119-132. Springer: New York.
- Bauwens, M., and Niaros, V. (2017). *The emergence of peer production: challenges and opportunities for labour and unions*. <http://www.etui.org/Publications2/Policy-Briefs/European-Economic-Employment-and-Social-Policy/Collective-labour-law-under-attack-how-anti-crisis-measures-dismantle-workers-collective-rights> accessed 7 April 2019.
- Bell, G., Blythe, M., and Sengers, P. (2005). Making by making strange: Defamiliarization and the design of domestic technologies. *ACM Transactions on Computer-Human Interaction*, 12(2), 149-173.
- Bellman, R., Clark, C. E., Malcolm, D. G., Craft, C. J., and Ricciardi, F. M. (1957). On the Construction of a Multi-Stage, Multi-Person Business Game. *Operations Research*, 5(4), 469-503.
- Benkler, Y. (2002). Coase's Penguin, or, Linux and "The Nature of the Firm.". *Yale Law Journal*, 112(3), 369-446.
- Benkler, Y., and Nissenbaum, H. (2006). Commons-based Peer Production and Virtue. *The Journal of Political Philosophy*: 14(4), 394-419.
- Benyayer, L. D., and Kupp, M. (2017). Responding to open business models. *Journal of Business Strategy*, 38(2), 33-40.

Berger, P. L., and Luckmann, T. (1967). *The Social Construction of Reality: A Treatise on the Sociology of Knowledge*. Garden City: Doubleday.

Bergquist, M., and Ljungberg, J. (2001). Relationships in open source communities. *Information Systems Journal*, (11), 305-320.

Berry, D. M. (2014). *Critical Theory and the Digital*. New York: Bloomsbury.

Bhaskar, R. (1998). Societies. In Margaret, A., Bhaskar, R., Collier, A., Lawson, T., and Norrie, A. (Eds.), *Critical Realism: Essential Readings*, 206-257. London: Routledge.

Bitzer, J., Schrettl, W., and Schröder, P. J. H. (2007). Intrinsic motivation in open source software development. *Journal of Comparative Economics*, 35(1), 160-169.

Blythe, M. A., and Wright, P. C. (2006). Pastiche scenarios: Fiction as a resource for user centred design. *Interacting with Computers*, 18(5), 1139-1164.

Bobrow, D. G., and Whalen, J. (2002). Sharing in Practice: The Eureka Story. *Reflections*, 4(2), 47-59.

Bødker, S., Christiansen, E., Nyvang, T., and Zander, P.-O. (2012). Personas, people and participation – challenges from the trenches of local government. In *PDC '12 Proceedings of the 12th Participatory Design Conference 2012*, 91-100. New York: ACM.

Boje, D. M. (1991). The Storytelling Organization: A Study of Story Performance in an Office. *Administrative Science Quarterly*, 36(1), 106-126.

Boje, D. M. (2001). *Narrative Methods for Organizational & Communication Research*. London: Sage.

Boland, R. J., Collopy, F., Lyytinen, K., and Yoo, Y. (2008). Managing as designing: Lessons for organization leaders from the design practice of Frank O. Gehry. *Design Issues*, 24(1), 10-25.

- Bonaccorsi, A., and Rossi, C. (2003). Why Open Source software can succeed. *Research Policy*, 32(7), 1243-1258.
- Botsman, R., and Rogers, R. (2010). *What's Mine is Yours: How Collaborative Consumption is Changing the Way We Live*. London: Collins.
- Bourdieu, P. (1989). Social space and symbolic power. *Sociological Theory*, 7(1), 14-25.
- Boutaiba, S. (2004). A moment in time. In Hjorth, D., and Steyaert, C. (Eds.), *Narrative and Discursive Approaches in Entrepreneurship*, 22-56. Cheltenham: Edward Elgar.
- Bowen, S. (2007). Crazy ideas or creative probes?: Presenting critical artefacts to stakeholders to develop innovative product ideas. In *Proceedings of EAD07: Dancing with Disorder: Design, Discourse and Disaster*.
- Bowers, J. (2012). The Logic of Annotated Portfolios: Communicating the Value of Research Through Design. In *Proceedings of the Designing Interactive Systems Conference (DIS 2012)*, 68-77. New York: ACM.
- Brabham, D. C. (2008). Crowdsourcing as a Model for Problem Solving: An Introduction and Cases. *Convergence: The International Journal of Research into New Media Technologies*, 14(1), 75-90.
- Bradley, G. (2014). Social Informatics and Ethics Towards the Good Information and Communication Society. In Fuchs, C., and Sandoval, M. (Eds.), *Critique, Social media and the Information Society*, 92-105. New York: Routledge.
- Brey, P. (2008). The Technological Construction of Social Power, *Social Epistemology*, 22(1), 71-95.
- Brooks, F. P. (1987). No Silver Bullet. *Computer*, 20(4), 10-19.
- Brooks, F. P. (2010). *The design of design: Essays from a computer scientist*. Boston: Pearson Education.

- Brown, T. (2008). Design thinking. *Harvard Business Review*, 86(6), 84-92.
- Bruner, J. (1991). The Narrative Construction of Reality. *Critical Inquiry*, 18(1), 1-21.
- Buchanan, J. M. (1965). An Economic Theory of Clubs, *Economica*, 32(125), 1-14.
- Buchanan, R. (1992). Wicked problems in design thinking. *Design Issues*, 8(2), 5-21.
- Buchanan, R. (1999). Design research and the new learning. *Design Issues*, 17(4), 3-23.
- Buckler, S. A., and Zien, K. A. (1996). The spirituality of innovation: learning from stories. *Journal of Product Innovation Management*, 13(5), 391-405.
- Burke, K. (1945). *A Grammar of Motives*. New York: Prentice-Hall.
- Burke, K. (1969). *A Grammar of Motives*. Berkley: University of California Press.
- Cairns, G. (2017). Can Design Inform Effective Social Innovation? *The Design Journal*, 20(6), 725-734.
- Calo, R., and Rosenblat, A. (2017). The Taking economy: Uber, Information, and Power. *Columbia Law Review*, 117, 1623-1690.
- Carroll, J. M. (2000). Five reasons for scenario-based design. *Interacting with Computers*, 13(1), 43-60.
- Cassell, C., and Johnson, P. (2006). Action research: Explaining the diversity. *Human Relations*, 59(6), 783-814.
- Castells, M. (2011). Network Theory: A Network Theory of Power. *International Journal of Communication*, 5, 773-787.

- Chang, V., Mills, H., and Newhouse, S. (2007). From Open Source to long-term sustainability: Review of Business Models and Case studies. In *All Hands Meeting 2007, OMII-UK Workshop*, 1-8.
- Chapman, C. N., and Milham, R. P. (2006). The personas' new clothes: methodological and practical arguments against a popular method. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 50(5), 634-636. Los Angeles: Sage.
- Checkland, P., and Holwell, S. (1998). Action Research: Its Nature and Validity. *Systemic Practice and Action Research*, 11(1), 9-21.
- Chell, E. (2007). Social Enterprise and Entrepreneurship: Towards a Convergent Theory of the Entrepreneurial Process. *International Small Business Journal*, 25(1), 5-26.
- Chesbrough, H. W. (2006). *Open innovation: The new imperative for creating and profiting from technology*. Boston: Harvard Business Press.
- Chesbrough, H. (2010). Business Model Innovation: Opportunities and Barriers. *Long Range Planning*, 43(2-3), 354-363.
- Chesbrough, H. (2017). The future of open innovation. *Research-Technology Management*, 60(1), 35-38.
- Chesbrough, H., and Appleyard, M. (2007). Open innovation and strategy. *California Management Review*, 50(1), 57-77.
- Chesbrough, H., and Crowther, A. K. (2006). Beyond high tech: early adopters of open innovation in other industries. *R and D Management*, 36(3), 229-236.
- Chesbrough, H., and Rosenbloom, R. S. (2002). The role of the business model in capturing value from innovation. *Industrial and Corporate Change*, 11(3), 529-555.
- Chopra, S., and Dexter, S. (2007). *Decoding liberation: A Philosophical investigation of free software*. New York: Routledge.

Churchman, C. W. (1971). *The Design of Inquiring Systems: Basic Concepts of Systems and Organizations*. New York: Basic Books.

Clarke, J., and Holt, R. (2010). The mature entrepreneur: A narrative approach to entrepreneurial goals. *Journal of Management Inquiry*, 19(1), 69-83.

Coase, R. H. (1937). The Nature of the Firm. *Economica*, 386-405.

Cole, R., Puro, S., Rossi, M., and Sein, M. (2005). Being proactive: where action research meets design research. *International Conference on Information Systems 2005*, Proceedings Paper 27.

Commons Equity Society (2019) *The Commons*.  
<https://www.commonssociety.org/> accessed 7 April 2019.

Cooper, H. M. (1984). *The integrative research review: A systematic approach*. Beverly Hills: Sage.

Cooper, A., (1999). *The inmates are running the asylum*. Indianapolis: Morgan Kaufmann.

Cornforth, C. (1983). Some Factors Affecting the Success or Failure of Worker Co-operatives: A Review of Empirical Research in the United Kingdom. *Economic and Industrial Democracy*, 4(3), 163-190.

Corsaro, D. (2018). Crossing the boundary between physical and digital: the role of boundary objects. *IMP Journal*, 12(2), 216-236.

Cowan, C., and Todorovic, N. (2000). Spiral Dynamics: the layers of human values in strategy. *Strategy and Leadership*, 20(1), 4-11.

Coyne, R. (2005). Wicked Problems Revisited. *Design Studies*, 26(1), 5-17.

Crabtree, A., Rodden, T., Tolmie, P., and Button, G. (2009). Ethnography considered harmful. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '09)*, 879-888. New York: ACM.

Creswell, J. W. (2007). *Qualitative Inquiry & Research design: Choosing Among Five Approaches*. Thousand Oaks: Sage.

Cross, N., Dorst, K., and Roozenburg, N. (Eds.). (1992). In *Research in Design Thinking: Proceedings of a Workshop Meeting Held at the Faculty of Industrial Design Engineering*, Delft University of Technology, May 29-31, 1991. Delft University Press.

Czarniawska, B. (1998). *A Narrative Approach to Organization Studies*. Thousand Oaks: Sage.

Dahlander, L., and Magnusson, M. (2008). How do Firms Make Use of Open Source Communities? *Long Range Planning*, 41(6), 629-649.

Le Dantec, C., Poole, E., and Wyche, S. (2009). Values as lived experience: evolving value sensitive design in support of value discovery. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '09)*, 1141-1150. New York: ACM.

DaSilva, C. M., and Trkman, P. (2014). Business Model: What It Is and What It Is Not. *Long Range Planning*, 47(6), 379-389.

Davies, C. A. (2008). *Reflexive Ethnography (2nd Edition)*. Abingdon: Routledge.

Deakin, S. (2006). *The Return of the Guild?: Network Relations in Historical Perspective*. Working paper No. 322, Centre for Business Research, University of Cambridge.  
<https://pdfs.semanticscholar.org/df3/05fb135a1504148a28e81564f1999dcc6f27.pdf> accessed 7 April 2019.

Delgado, A. (2013). DIYbio: Making things and making futures. *Futures*, 48, 65-73.

Denney, A. S., and Tewksbury, R. (2013). How to write a literature review. *Journal of Criminal Justice Education*, 24(2), 218-234.

Denning, S. (2006). Effective storytelling: Strategic business narrative techniques. *Strategy and Leadership*, 34(1), 42-48.

Devins, D., and Gold, J. (2002). Social constructionism: a theoretical framework to underpin support for the development of managers in SMEs? *Journal of Small Business and Enterprise Development*, 9(2), 111-119.

DiBona C., Ockman S., and Stone M. (1999). *Open Sources: Voices from the Open Source Revolution*. Sebastopol: O'Reilly and Associates.

van Dijk, T. A. (2016). Critical Discourse Studies: A Sociocognitive Approach in Wodak, R., and Meyer, M. (Eds.), *Methods of Critical Discourse Studies (3rd Edition)*, 62-85. London: Sage.

Doganova, L., and Eyquem-Renault, M. (2009). What do business models do?: Innovation devices in technology entrepreneurship. *Research Policy*, 38(10), 1559-1570.

Dorst, K., and Cross, N. (2001). Creativity in the design process: co-evolution of problem-solution. *Design Studies*, 22(5), 425-437.

Downing, S. (2005). The Social Construction of Entrepreneurship: Narrative and Dramatic Processes in the Coproduction of Organizations and Identities. *Entrepreneurship Theory and Practice*, 29(2), 185-204.

Drahokoupil, J., and Fabo, B. (2016). *The platform economy and the disruption of the employment relationship*. ETUI Policy Brief N° 5/2016.

Drahokoupil, J., and Piasna, A. (2017). Work in the Platform Economy: Beyond Lower Transaction Costs. *Intereconomics*, 52(6), 335-340.

Dunne, A., and Raby, F. (2001). *Design noir: The secret life of electronic objects*. Springer Science & Business Media.

Dunne, A., and Raby, F. (2013). *Speculative everything: Design, fiction, and social dreaming*. London: MIT Press.

Easterbrook, S., Singer, J., Storey, M., and Damian, D. (2008). Selecting Empirical Methods for Software Engineering Research. In Shull, F., Singer, J., and Sjøberg, D. I. K. (Eds.), *Guide to Advanced Empirical Software Engineering*, 285-311. London: Springer.

- Elkington, J. (2004). Enter the triple bottom line. In Henriques, A., and Richardson, J. (Eds.), *The Triple Bottom Line: Does it All Add Up?*, 1-16. London: Earthscan.
- Ellis, J., and Kiely, J. (2000). Action inquiry strategies: taking stock and moving forward. *Journal of Applied Management Studies*, 9(1), 83-94.
- Ettlinger, N. (2014). The openness paradigm. *New Left Review*, 89 (Sept-Oct 2014), 89-100.
- Etzioni, A. (1959). Authority Structure and Organizational Effectiveness. *Administrative Science Quarterly*, 4(1), 43-67.
- Euchner, J. (2013). The Uses and Risks of Open Innovation. *Research-Technology Management*, 56(3), 49-54.
- Fabo, B., Karanovic, J., and Dukova, K. (2017). In search of an adequate European policy response to the platform economy. *Transfer*, 23(2), 163-175.
- Faily, S., and Fléchais, I. (2010). To Boldly Go Where Invention Isn't Secure: Applying Security Entrepreneurship to Secure Systems Design. In *Proceedings of the 2010 New Security Paradigms Workshop*, 73-84. New York: ACM.
- Fairclough, N. (2016). A dialectical-relational approach to critical discourse analysis in social research. In Wodak, R., and Meyer, M. (Eds.), *Critical Discourse Studies: History, Agenda, Theory and Methodology*, 86-108. London: Sage.
- Fairhurst, G. T., and Putnam, L. (2004). Organizations as Discursive. *Communication Theory*, 14(1), 5-26.
- Faraj, S., Jarvenpaa, S. L., and Majchrzak, A. (2011). Knowledge Collaboration in Online Communities. *Organization Science*, 22(5), 1224-1239.
- Fay, N., Garrod, S., and Carletta, J. (2000). Group Discussion as Interactive Dialogue or as Serial Monologue: The Influence of Group Size. *Psychological Science*, 11(6), 481-486.

- Feldman, M., Sköldbberg, K., Brown, R. and Horner, D. (2004). Making sense of stories: a rhetorical approach to narrative analysis. *Journal of Public Administration Research and Theory* (14)2, 147-170.
- Fielt, E. (2013). Conceptualising Business Models: Definitions, Frameworks and Classifications. *Journal of Business Models*, 1(1), 85-105.
- Fletcher, D. (2003). Framing organizational emergence: discourse, identity and relationship. In Steyaert, C., and Hjorth, D. (Eds.), *New Movements in Entrepreneurship*, 125-142. Cheltenham: Edward Elgar.
- Flory, M., and Iglesias, O. (2010). Once upon a time: The role of rhetoric and narratives in management research and practice. *Journal of Organizational Change Management*, 23(2), 113-119.
- Floyd, I. R., Cameron Jones, M., and Twidale, M. B. (2008). Resolving incommensurable debates: a preliminary identification of persona kinds, attributes, and characteristics. *Artifact*, 2(1), 12-26.
- FoRK Archive (1996). *Caldera Announces Open Source for DOS*. <http://www.xent.com/FoRK-archive/fall96/0269.html> accessed 7 April 2019.
- Foss, L. (2004). 'Going against the grain...' Construction of entrepreneurial identity through narrative. In Hjorth, D., and Steyaert, C. (Eds.), *Narrative and Discursive Approaches in Entrepreneurship*, 80-104. Cheltenham: Edward Elgar.
- Foucault, M. (1976). The Meshes of Power. In Crampton, J., and Elden, S., (Eds.), *Space, Knowledge and Power*, 153-162. Aldershot: Ashgate.
- Foucault, M. (1977). *Discipline and Punish: The Birth of the Clinic*. Allen Lane: London.
- Foucault, M. (1980). *Power/knowledge: Selected interviews and other writings, 1972-1977*. New York: Pantheon.
- Frankfurt Paper (2016). *Frankfurt Paper on Platform-Based Work*. [https://media.arbeiterkammer.at/wien/PDF/studien/digitalerwandel/Frankfurt\\_Paper\\_on\\_Platform-Based\\_Work\\_-\\_EN.pdf](https://media.arbeiterkammer.at/wien/PDF/studien/digitalerwandel/Frankfurt_Paper_on_Platform-Based_Work_-_EN.pdf) accessed 29 September 2017.

- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman Publishing.
- Freeman, R. E. (1994). The politics of stakeholder theory: Some future directions. *Business Ethics Quarterly*, 4, 409-421.
- Fuad-Luke, A. (2009). *Design activism: beautiful strangeness for a sustainable world*. Abingdon: Routledge.
- Fuchs, C. (2014). Critique of the Political Economy of Informational Capitalism and Social Media, in Fuchs, C., and Sandoval, M. (Eds.), *Critique, Social Media and the Information Society*, 51-65. New York: Routledge.
- Gabriel, Y. (2000). *Storytelling in organizations: Facts, fictions, and fantasies*. Oxford: Oxford University Press.
- Gabriel, Y. 2004. The narrative veil: Truth and untruths in storytelling. In Gabriel, Y. (Ed.), *Myths, Stories and Organizations: Premodern narratives for our times*, 17-31. Oxford: Oxford University Press.
- Garud, R., Schildt, H. A., and Lant, T. K. (2014). Entrepreneurial Storytelling, Future Expectations, and the Paradox of Legitimacy. *Organization Science*, 25(5), 1479-1492.
- Gaventa, J. (2006). Finding the Spaces for Changes: A Power Analysis. *IDS Bulletin*, 37(6), 23-33.
- Gaventa, J., and Cornwall, A. (2000). Power and Knowledge. In Reason P., and Bradbury H. (Eds.), *Handbook of Action Research: Participative Inquiry and Practice*, 199-210. London: Sage.
- Gaver, W. (2012). What should we expect from research through design? In *Proceedings of the 2012 SIGCHI Annual Conference on Human Factors in Computing Systems (CHI '12)*, 937-946. New York: ACM.
- Gaver, B., and Bowers, J. (2012). Annotated Portfolios. *Interactions*, 19(4), 40-49.

George, G., and Bock, A. J. (2011). The Business Model in Practice and its Implications for Entrepreneurship Research. *Entrepreneurship Theory and Practice*, 35(1), 83-111.

Gergen, K. J. (2014). From Mirroring to World-Making: Research as Future Forming. *Journal for the Theory of Social Behaviour*, 45(3), 287-310.

Gherardi, S. (2016). To start practice theorizing anew: The contribution of the concepts of agencement and formativeness. *Organization*, 23(5), 680-698.

Gherardi, S., Cozza M., and Poggio, B. (2018). Organizational members as storywriters: on organizing practices of reflexivity. *The Learning Organization*, 25(1), 51-62.

Ghosh, R. A. (2005). Cooking pot markets: an economic model for the trade in free goods and services on the Internet (originally published in March 1998). *First Monday* December 2005.  
<http://journals.uic.edu/ojs/index.php/fm/article/view/1516> accessed 7 April 2019.

Giddens, A. (1976). *New Rules of Sociological Method*. London: Hutchinson.

Giddens, A. (1979). *Central Problems in Social Theory: Action, Structure, and Contradiction in Social Analysis*. Berkeley: University of California Press.

Giddens, A. (1984). *The Constitution of Society: Outline of the Theory of Structuration*. Berkeley: University of California Press.

Giddens, A. (1991). *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Stanford: Stanford University Press.

Golden-Biddle, K., and Locke, K. (1993). Appealing Work: An Investigation of How Ethnographic Texts Convince. *Organization Science*, 4(4), 595-616.

Graham, M., and Woodcock, J. (2018). Towards a fairer platform economy: introducing the Fairwork Foundation. *Alternate Routes*, 29, 242-253.

Gramsci, A. (1971). *Selections from the Prison Notebooks*. New York: International Publishers.

Gray, R. (2009). *Doing Research in the Real World (Second Edition)*. London: Sage.

De Groen, P. W., Maselli, I., and Fabo, B. (2016). *The digital market for local services: a one-night stand for workers? An example from the on-demand economy*. CEPS Special Report 133, Centre for European Policy Studies, Brussels <https://www.ceps.eu/publications/digital-market-local-services-one-night-stand-workers-example-demand-economy> accessed 5 February 2019.

Grouzet, F. M. E., Kasser, T., Ahuvia, A., Dols, J. M. F., Kim, Y., Lau, Ryan, R. M., Saunders, S., Schmuck, P., and Sheldon, K. M. (2005). The Structure of Goal Contents Across 15 Cultures. *Journal of Personality and Social Psychology*, 89(5), 800-816.

Grudin, J., and Pruitt, J. (2002). Personas, participatory design and product development: An infrastructure for engagement. In *Proceedings of the 7th Biennial Participatory Design Conference (PDC 2002)*, 144-152.

Guba, E., and Lincoln, Y. S. (1994). Competing Paradigms in Qualitative Research, in Guba, E., and Lincoln, Y. S. (Eds.), *Handbook of Qualitative Research*, 105-111. Thousand Oaks: Sage.

Hacking, I. (1999). *The Social Construction of What?* Cambridge, MA: Harvard University Press.

Hagel, J., and Singer, M. (1999). Unbundling the Corporation. *Harvard Business Review*, April 1999, 133-141.

Hardin, G. (1968). The Tragedy of the Commons. *Science*, 162, 1243-1248.

Hargrave, T., and Van de Ven, A. (2006). A Collective Action Model of Institutional Innovation. *Academy of Management Review*, 31(4), 864-888.

Hars, A., and Ou, S. (2002). Working for Free? Motivations of Participating in Open Source Projects. *International Journal of Electronic Commerce*, 6(3), 25-39.

Hawkins, M. A., and Saleem, F. Z. (2012). The omnipresent personal narrative: Story formulation and the interplay among narratives. *Journal of Organizational Change Management*, 25(2), 204-219.

Hedlund-de Witt, A., De Boer, J., and Boersema, J. J. (2014). Exploring inner and outer worlds: A quantitative study of worldviews, environmental attitudes, and sustainable lifestyles. *Journal of Environmental Psychology*, 37, 40-54.

Heron, J. (1996). *Co-operative inquiry: Research into the Human Condition*. London: Sage.

Von Hippel, E., and Von Krogh, G. (2003). Open Source Software and the “Private-Collective” Innovation Model: Issues for Organization Science. *Organization Science*, 14(2), 209-223.

Hofkirchner, W. (2007). A Critical Social Systems View of the Internet. *Philosophy of the Social Sciences*, 37(4), 471-500.

Hoggett, P., Mayo, M., and Miller, C. (2008). *The dilemmas of development work: Ethical challenges in regeneration*. Bristol: Policy Press.

Holzscheiter, A. (2005). Discourse as capability: non-state actors’ capital in global governance. *Millennium*, 33(3), 723-746.

Hossain, M., and Anees-ur-Rehman, M. (2016). Open innovation: an analysis of twelve years of research. *Strategic Outsourcing*, 9(1), 22-37.

Howe, J. (2006). The Rise of Crowdsourcing. *Wired*, June 2006.

iLabour Project (2019). *The iLabour Project*. <http://ilabour.oii.ox.ac.uk/> accessed 7 April 2019.

InnoCentive (2019). *Diverse Perspectives and Effective Problem Solving*. <https://www.innocentive.com/offering-overview/> accessed 7 April 2019.

Irani, L. C., and Silberman, M. S. (2013). Turkopticon: Interrupting Worker Invisibility in Amazon Mechanical Turk. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '13)*, 611-620. New York: ACM.

- Jäger, S., and Maier, F. (2016). Analysing discourses and dispositives: A Foucauldian Approach to Theory and Methodology. In Wodak, R., and Meyer, M. (Eds.), *Critical Discourse Studies: History, Agenda, Theory and Methodology*, 109-136. London: Sage.
- Järvi, K., and Pellinen, A. (2011). Using Value Co-creation to Redefine Business Models. *Open Source Business Resource*, March 2011.
- Jensen, A. B. (2013). Do we need one business model definition? *Journal of Business Models*, 1(1), 61-84.
- JISC (2006). *Open Source Software*.  
<https://www.webarchive.org.uk/wayback/archive/20140615233219/http://www.jisc.ac.uk/media/documents/publications/osswatchbp.pdf>  
accessed 7 April 2019.
- Johnstad, T. (1997). Co-operatives and Federations. *Journal of Co-operative Studies*, 30(89), 48-60.
- Källhammer, E., and Wikberg-Nilsson, Å. (2012). *Gendered innovative design: Critical reflections stimulated by personas*. VINNOVA Rapport, ISSN 1650-3104; 2012:08, 328-350. Stockholm: Vinnova.
- Kant, I. (1787). *Critique of Pure Reason (2nd edition)*, translated by N.K. Smith, 1965. New York: St. Martin's Press.
- Katz, J., and Gartner, W. B. (1988). Properties of Emerging Organizations. *Academy of Management Review*, 13(3), 429-441.
- Kazman, R., and Chen, H. (2009). The Metropolis Model: a New Logic for Development of Crowdsourced Systems. *Communications of the ACM*, 52(7), 76-84.
- Kenney, M., and Zysman, J. (2016). The Rise of the Platform Economy. *Issues in Science and Technology*, 32(3), 61-69.
- Kingsley, S. C., Gray, M. L., and Suri, S. (2015). Accounting for Market Frictions and Power Asymmetries in Online Labor Markets. *Policy and Internet*, 7(4), 383-400.

Klang, D., Wallnöfer, M., and Hacklin, F. (2014). The business model paradox: A systematic review and exploration of antecedents. *International Journal of Management Reviews*, 16(4), 454-478.

Komporozos-Athanasidou, A., and Fotaki, M. (2015). A Theory of Imagination for Organization Studies Using the Work of Cornelius Castoriadis. *Organization Studies*, 36(3), 321-342.

Konieczny, P. (2009). Governance, Organization, and Democracy on the Internet: The Iron Law and the Evolution of Wikipedia. *Sociological Forum*, 24(1), 162-192.

Konieczny, P. (2010). Adhocratic Governance in the Internet Age: A Case of Wikipedia. *Journal of Information Technology and Politics*, 7(4), 263-283.

Kornberger, M. (2017). The visible hand and the crowd: Analyzing organization design in distributed innovation systems. *Strategic Organization*, 15(2), 174-193.

Krauss, S. (2005). Research Paradigms and Meaning Making: A Primer. *The Qualitative Report*, 10(4), 758-770.

Krishnamurthy, S. (2006). On the Intrinsic and Extrinsic Motivation of Free/Libre/Open Source (FLOSS) Developers. *Knowledge, Technology and Policy*, 18(4), 17-39.

von Krogh, G., Haefliger, S., Spaeth, S., and Wallin, M. (2012). Carrots and rainbows: Motivation and social practice in open source software development. *MIS Quarterly*, 36(2), 649-676.

Kronqvist, J., and Salmi, A. (2011). Co-Designing (with) Organizations – Human-Centeredness, Participation and Embodiment in Organizational Development. In *Proceedings of the 2011 Conference on Designing Pleasurable Products and Interfaces*, 37-45. New York: ACM.

Kurtz, C., and Snowden, D. (2003). The new dynamics of strategy: Sense-making in a complex and complicated world. *IBM Systems Journal*, 42(3), 462-483.

Lanier, J. (2014). *Who Owns the Future?* London: Penguin.

Larner, J. (2013). Open source guilds: enabling micro businesses to create a sustainable community of practice? In *Proceedings of the November 2013 Digital Economy Conference*, Salford, UK.

Larner, J., and Mason, C. (2014). Beyond box-ticking: A study of stakeholder involvement in social enterprise governance. *Corporate Governance: The international journal of business in society*, 14(2), 181-196.

Larner, J., Cheverst, K., MacDonald, M., Hoile, C., and Soutar, A. (2017). The open source guild: creating more sustainable enterprise? *Journal of Management Development*, 36(1), 71-80.

Lave, J., and Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.

Lavori, P. W., and Dawson, R. (1998). Developing and Comparing Treatment Strategies: An Annotated Portfolio of Designs. *Psychopharmacology Bulletin*, 34(1), 13-18.

Law, J., and Urry, J. (2004). Enacting the Social. *Economy and Society*, 33(3), 390-410.

LeCompte, M., and Goetz, J. (1982). Problems of reliability and validity in ethnographic research. *Review of Educational Research*, 52(1), 31-60.

Lee, G., and Cole, R. (2003). From a Firm-Based to a Community-Based Model of Knowledge Creation: The Case of the Linux Kernel Development. *Organization Science*, 14(6), 633-649.

Lejeune, C. (2010). Collaborative Search and Communities of Interest: Trends in Knowledge Sharing and Assessment. In Francq, P. (Ed.), *Collaborative search and communities of interest: trends in knowledge sharing and assessment*, 10-20. Hershey: Information Science Reference.

Lewin, K. (1947). Frontiers in Group Dynamics. *Human Relations*, 1(2), 143-153.

Light, A., and Akama, Y. (2012). The Human Touch: Participatory practice and the role of facilitation in designing with communities. In *Proceedings of the 12th Participatory Design Conference (PDC '12)*, 61-70. New York: ACM.

Low, C. (2006). A framework for the governance of social enterprise. *International Journal of Social Economics*, 33(5/6), 376-385.

Löwgren, J. (2013). Annotated Portfolios and Other Forms of Intermediate-Level Knowledge. *Interactions*, January + February 2013, 30-34.

Lukes, S. (1974) *Power: A Radical View*. London: Macmillan.

Margetta, J. (2002). Why Business Models Matter. *Harvard Business Review*, May 2002, 86-92.

Markus, M. L. (2007). The governance of free/open source software projects: Monolithic, multidimensional, or configurational? *Journal of Management and Governance*, 11(2), 151-163.

Marsden, N., and Haag, M. (2016). Stereotypes and Politics: Reflections on Personas. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '16)*, 4017-4031. New York: ACM.

Martin, C. J., Upham, P., and Klapper, R. (2017). Democratising platform governance in the sharing economy: An analytical framework and initial empirical insights. *Journal of Cleaner Production*, 166, 1395-1406

Mason, K., and Spring, M. (2011). The sites and practices of business models. *Industrial Marketing Management*, 40: 1032-1041.

McKenzie, B. (2011). Study of Oral Narrative Provides Preliminary Evidence of Entrepreneurs' Use of Story Telling. *Journal of Management Policy and Practice*, 12(2), 134-141.

Merges, R. P. (1996). Property Rights Theory and the Commons: The Case of Scientific Research. *Social Philosophy and Policy*, 13(2), 145-167.

- Merges, R. P. (2004). *From medieval guilds to open source software: Informal norms, appropriability institutions, and innovation*. [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=661543](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=661543) accessed 7 April 2019.
- Miaskiewicz, T., and Kozar, K. A. (2011). Personas and user-centered design: How can personas benefit product design processes? *Design Studies*, 32(5), 417-430.
- Mitchell, R. K., and Wood, D. J. (1997). Towards A Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts. *Academy of Management Review*, 22(4), 853-886.
- Mokyr, J. (2004). *The Gifts of Athena: Historical Origins of the Knowledge Economy*. Princeton: Princeton University Press.
- De Moor, T. (2008). The Silent Revolution: A New Perspective on the Emergence of Commons, Guilds, and Other Forms of Corporate Collective Action in Western Europe. *International Review of Social History*, 53(S16), 179-212.
- Moore, G. (2005). Corporate Character: Modern Virtue Ethics and the Virtuous Corporation. *Business Ethics Quarterly*, 15(4), 659-685.
- Morris, M., Schindehutte, M., Walton, J., and Allen, J. (2005). The Ethical Context of Entrepreneurship: Proposing and Testing a Developmental Framework. *Journal of Business Ethics*, 40, 331-361.
- Mulgan, G., and Leadbeater C. (2013). *Systems Innovation Discussion Paper*. London: Nesta.
- Nakamura, J., and Csikszentmihalyi, M. (2002). The Concept of Flow. In Snyder, C. R., and Lopez, S. J. (Eds.), *Handbook of Positive Psychology*, 89-105. New York: Oxford University Press.
- NEF (2002). *The Money Trail*. London: New Economics Foundation.
- Nelson, H. G., and Stolterman, E. (2012). *The Design Way (Second Edition)*. London: MIT Press.

- Nenonen, S., and Storbacka, K. (2010). Business model design: conceptualizing networked value co-creation. *International Journal of Quality and Service Sciences*, 2(1), 43-59.
- Nielsen, L. (2012). Acting as Someone Like Me – Personas in Participatory Innovation. In *Proceedings of the 12th Participatory Design Conference (PDC '12)*. New York: ACM.
- Nolan, T., Brizland, R., and Macaulay, L. (2007). Individual trust and development of online business communities. *Information Technology and People*, 20(1), 53-71.
- Norman, D. (2004). *Ad-Hoc Personas & Empathetic Focus*. [http://www.jnd.org/dn.mss/personas\\_empath.html](http://www.jnd.org/dn.mss/personas_empath.html) accessed 23 August 2016.
- Nowak, P. (2015). The past and future of trade unionism. *Employee Relations*, 37(6), 683-691.
- O'Connor, E., 1997. Telling decisions: the role of narrative in organizational decision making. In Shapira, Z. (Ed.) *Organizational Decision Making*, 304-323. New York: Cambridge University Press.
- O'Connor, E. (2004). Storytelling to be real: narrative, legitimacy building and venturing. In Hjorth, D., and Steyaert, C. (Eds.), *Narrative and Discursive Approaches in Entrepreneurship*, 105-124. Cheltenham: Edward Elgar.
- O'Mahony, S. (2003). Guarding the commons: how community managed software projects protect their work. *Research Policy*, 32(7), 1179-1198.
- O'Mahony, S. (2007). The governance of open source initiatives: what does it mean to be community managed? *Journal of Management and Governance*, 11(2), 139-150.
- O'Mahony, S., and Bechky, B. A. (2008). Boundary Organizations: Enabling Collaboration among Unexpected Allies. *Administrative Science Quarterly*, 53(3), 422-459.

- O'Mahony, S., and Ferraro, F. (2007). The emergence of governance in an open source community. *Academy of Management Journal*, 50(5), 1079-1106.
- OECD (2017). *Employment Outlook 2017*. Paris: Organisation for Economic Co-operation and Development.
- Osterwalder, A., and Pigneur, Y. (2010). *Business Model Generation*. Hoboken: Wiley.
- Osterwalder A., Pigneur Y., and Tucci C. L. (2005). Clarifying business models: Origins, present, and future of the concept. *Communications of the Association for Information Systems (AIS)*, 15, 1-40.
- Ostrom, E. (2000). Collective Action and the Evolution of Social Norms. *The Journal of Economic Perspectives*, 14(3), 137-158.
- OuiShare (2019). *Our DNA*. <https://www.ouishare.net/our-dna> accessed 7 April 2019.
- Owen, H. (2008). *Open Space Technology: A User's Guide*. San Francisco: Berrett-Koehler Publishers.
- Page West, G., Gatewood, E. J., and Shaver, K. G. (2009). *Handbook of University-wide Entrepreneurship Education*. Cheltenham: Edward Elgar.
- Park, P. (1999). People, Knowledge and Change in Participatory Research. *Management Learning*, 30(2), 141-157.
- Patton, M. (2002). *Qualitative Research and Evaluation Methods (3rd edition)*. Thousand Oaks: Sage Publications.
- Pearce, J. (2014). How Medieval-Style Guilds Will Remake the Tech Behind Facebook and Google. *Wired*, September 2014.
- Pellicciaro, J. P. (2014). *Community-centered Governance Design: Codesigning Food Systems Work Across Institutional Boundaries*. Carnegie Mellon University Research Showcase @ CMU Theses. Paper 69.

- Pentland, B. T. (1999). Building Process Theory with Narrative: From Description to Explanation. *Academy of Management Review*, 24(4), 711-724.
- Perens, B. (2005). The emerging economic paradigm of Open Source. *First Monday Special Issue #2: Open Source*, October 2005.  
<https://firstmonday.org/ojs/index.php/fm/article/view/1470/1385> accessed 7 April 2019.
- Perkmann, M., and Spicer, A. (2010). What are business models? Developing a theory of performative representations. *Research in the Sociology of Organization*, 29, 265-275.
- Peterson, C. (2018). *How I coined the term 'open source'*.  
<https://opensource.com/article/18/2/coining-term-open-source-software> accessed 7 April 2019.
- Philbin, S. P. (2014). in Search of New Organizational Forms – the Case for Open Innovation and Crowdsourcing. In *Proceedings of the International Annual Conference of the American Society for Engineering Management*, 1-12.
- Platform Co-op (2019). *About*. <https://platform.coop/about>
- Polkinghorne, D. E. (1988). *Narrative Knowing and the Human Sciences*. New York: State University of New York Press.
- Polkinghorne, D. E. (1991). Narrative and Self-Concept. *Journal of Narrative and Life History*, 1(2), 135-153.
- Porter, M. E. (2001) Strategy and the Internet. *Harvard Business Review*, 79(2), 63-78.
- Pruitt, J., and Adlin, T. (2010). *The persona lifecycle: keeping people in mind throughout product design*. San Francisco: Morgan Kaufmann.
- Rajala, R., Westerlund, M., and Möller, K. (2012). Strategic flexibility in open innovation – designing business models for open source software. *European Journal of Marketing*, 46(10), 1368-1388.

Ricoeur, P. (1979) The function of fiction in shaping reality. *Man and World*, 12(2), 123-141.

Ridley-Duff, R., Southcombe, C., and Dickins, N. (2013). *FairShares Model*. Sheffield: FairShares Association.

Rittel, H. W., and Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4(2), 155-169.

Robson, C. (2002). *Real World Research – A Resource for Social Scientists and Practitioner-Researchers*. Chichester: Wiley.

Rogers, C. R. (1967). *Person to person: The problem of being human: A new trend in psychology*. Boulder, Colorado: Real People Press.

Ropo, A., and Höykinpuro, R. (2017). Narrating organizational spaces. *Journal of Organizational Change Management*, 30(3), 357-366.

Ryan, M. L. (2007). Toward a definition of narrative. In Herman, D. (Ed.), *The Cambridge Companion to Narrative*, 22-35. Cambridge: Cambridge University Press.

Ryan, M. L. (2012). Narration in various media. In Hühn, P., Pier, J., Schmid, W., and Schönert, J. (Eds.) *The Living Handbook of Narratology*. Hamburg: Hamburg University. <http://www.lhn.uni-hamburg.de> accessed 7 April 2019.

Ryan, R., and Deci, E. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25(1), 54-67.

Santos, F. M., and Eisenhardt, K. M. (2005). Organizational Boundaries and Theories of Organization. *Organization Science*, 16(5), 491-508.

Sarasvathy, S. (2001). Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency. *Academy of Management Review*, 26(2), 243-263.

- Savage, P., Cornelissen, J. P., and Franck, H. (2018). Fiction and Organization Studies. *Organization Studies*, 39(7), 975-994.
- Scholz, T. (2016). *Platform cooperativism. Challenging the corporate sharing economy*. New York: Rosa Luxemburg Foundation.
- Scholz, T. (2017). *Uberworked and Underpaid: How workers are disrupting the digital economy*. Cambridge: Polity Press.
- Schutz, A. (1953). Common-sense and scientific interpretation of human action. *Philosophy and Phenomenological Research*, 14(1), 1-38.
- Schwartz, S. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25, 1-65.
- Searle, J. R. (1998). *Mind, Language and Society: Philosophy in the Real World*. New York: Basic Books.
- Sengers, P., Boehner, K., David, S., and Kaye, J. (2005). Reflective Design. In *Proceedings of the 4th Decennial Conference on Critical Computing: Between Sense and Sensibility*, 49-58. New York: ACM.
- Shafer, S. M., Smith, H. J., and Linder, J. C. (2005). The power of business models. *Business Horizons*, 48(3), 199-207.
- Shah, S. (2006). Motivation, Governance, and the Viability of Hybrid Forms in Open Source Software Development. *Management Science*, 52(7), 1000-1014.
- Sibierska, M. (2017). Storytelling without telling: The non-linguistic nature of narratives from evolutionary and narratological perspectives. *Language and Communication*, 54, 47-55.
- Silverman, D. (2007). *A Very Short, Fairly Interesting and Reasonably Cheap Book about Qualitative Research*. London: Sage.
- Simon, H. A. (1969). *The Sciences of the Artificial*. Cambridge, MA: MIT Press.

- Simon, H. A. (1972). Theories of bounded rationality. *Decision and Organization*, 1(1), 161-176.
- Smith, C. H. (2015). *A Radically Beneficial World: Automation, Technology and Creating Jobs for All: The Future Belongs to Work That Is Meaningful*. Available at <https://www.oftwominds.com/CHS-books.html> accessed 7 April 2019.
- Smith R., and Anderson A. (2004). The devil is in the e-tale: forms and structures in the entrepreneurial narratives. In Hjorth, D., and Steyaert, C. (Eds.), *Narrative and Discursive Approaches in Entrepreneurship*, 125-143. Cheltenham: Edward Elgar.
- Smith, R., and Leberstein, S. (2015). *Rights on Demand: Ensuring Workplace Standards and Worker Security in the On-Demand Economy*. New York: National Employment Law Project.
- Solouki, Z. (2017). The road not taken: narratives of action and organizational change. *Journal of Organizational Change Management*, 30(3), 334-343.
- Spear, R. (2004). Governance in Democratic Member-Based Organisations. *Annals of Public and Cooperative Economics*, 75(1), 33-59.
- Spear, R., Cornforth, C., and Aiken, M. (2009). The governance challenges of social enterprises: Evidence from a UK Empirical Study. *Annals of Public and Cooperative Economics*, 80(2), 247-273.
- Spieth, P., and Schneider, S. (2016). Business model innovativeness: designing a formative measure for business model innovation. *Journal of Business Economics*, 86(6), 671-696.
- Srnicek, N. (2016). *Platform Capitalism*. Cambridge: Polity Press.
- Stanford, N. (2007). *Guide to Organisation Design: Creating High-performing and Adaptable Enterprises*. London: Profile Books.

- Star, S. L., and Griesemer, J. R. (1989). Institutional Ecology, “Translations” and Boundary Objects: Amateurs and Professionals in Berkeley’s Museum of Vertebrate Zoology, 1907-39. *Social Studies of Science*, 19(3), 387-420.
- Steiner, I. (1972). *Group Process and Productivity*. New York: Academic Press.
- Steyaert C. (2004). The prosaics of entrepreneurship. In Hjorth, D., and Steyaert, C. (Eds.), *Narrative and Discursive Approaches in Entrepreneurship*, 8-21. Cheltenham: Edward Elgar.
- Stokes, K., Clarence, E., Anderson, L., and Rinne, A. (2014). *Making Sense of the UK Collaborative Economy*. London: Nesta.
- Stringer, E. T. (2007). *Action Research 3rd Edition*. Thousand Oaks: Sage.
- Tapscott, D., Lowy, A., and Ticoll, D. (2000). *Digital Capital: Harnessing the Power of Business Webs*. Boston, MA: Harvard Business School Press.
- Taylor, M., Marsh, G., Nicol, D., and Broadbent, P. (2017). *Good Work: The Taylor Review of Modern Working Practices*. London: BEIS.
- Teece, D. J. (2010). Business Models, Business Strategy and Innovation. *Long Range Planning*, 43(2-3), 172-194.
- Timmers, P. (1998). Business Models for Electronic Markets. *Electronic Markets*, 8(2), 3-8.
- Torbert, W. R., and Taylor, S. S. (2008). Action inquiry: Interweaving multiple qualities of attention for timely action. In Reason, P., and Bradbury, H. (Eds.), *The SAGE Handbook of Action Research: Participative Inquiry and Practice*, 239-251. London: Sage.
- Torraco, R. J. (2005). Writing Integrative Literature Reviews: Guidelines and Examples. *Human Resource Development Review*, 4(3), 356-367.
- Trochim, W. (2000). *The Research Methods Knowledge Base, 2nd Edition*. Cincinnati: Atomic Dog Publishing.

- Tsoukas, H. (1996). The firm as a Distributed Knowledge System: A Constructionist Approach. *Strategic Management Journal*, 17(S2), 11-25.
- Turner, P., and Turner, S. (2011). Is stereotyping inevitable when designing with personas? *Design Studies*, 32(1), 30-44.
- Ulhøi, J. P. (2004). Open source development: a hybrid in innovation and management theory. *Management Decision*, 42(9), 1095-1114.
- Ulrich, W. (2000). Reflective Practice in the Civil Society: the contribution of critical systems thinking. *Reflective Practice*, 1(2), 247-268.
- Ulrich, W., and Reynolds, M. (2010). Critical Systems Heuristics. In Reynolds, M., and Holwell, S. (Eds.) *Systems Approaches to Managing Change: A Practical Guide*, 243-292. London: Springer.
- Vandaele., K. (2018). *Will trade unions survive in the platform economy?* Working Paper 2018.05. Brussels: European Trade Union Institute.
- Varey, R., and Storbacka, K. (2011). Business model design for sustainable society: Therapy for the consumerist mindset. In *Proceedings Australia and New Zealand Marketing Academy Conference 2011 (ANZMAC)*.
- Vargo, S. L., and Lusch, R. F. (2016). Institutions and axioms: an extension and update of service-dominant logic. *Journal of the Academy of Marketing Science*, 44(1), 5-23.
- Velayutham, S. (2013). Governance without boards: the Quakers. *Corporate Governance: The international journal of business in society*, 13(3), 223-235.
- Vlachokyriakos, V., Crivellaro C., Wright, P., Krüger, A., Schöning J., Jones, M., Lawson, S., Karamagioli, E., Staiou, E., Gouscos, D., Thorpe, R., and Oliver, P. (2017). HCI, Solidarity Movements and the Solidarity Economy. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI 2017)*, 3126-3137. New York: ACM.
- Walker, S. (2011). *The Spirit of Design*. Abingdon: Earthscan.

- Watson, R. T., Boudreau, M.-C., York, P. T., Greiner, M. E., and Wynn, D. (2008). The Business of Open Source. *Communications of the ACM*, 51(4), 41-46.
- Weber, S. (2004). *The Success of Open Source*. Harvard: Harvard University Press.
- Wegner, P. (1978). Research Directions in Software Technology. In *Proceedings of the 3rd International Conference on Software Engineering*, 243-259. Piscataway: IEEE Press.
- Wenger, E. (2000). Communities of Practice and Social Learning Systems. *Organization*, 7(2), 225-346.
- Weick, K. E. (1979). *The Social Psychology of Organizing*. Reading, MA: Addison-Wesley.
- Weick, K. E. (1995). *Sensemaking in Organizations*. Thousand Oaks: Sage.
- Weick, K. E., Sutcliffe, K. M., and Obstfeld, D. (2005). Organizing and the Process of Sensemaking. *Organization Science*, 16(4), 409-421.
- Whiting, M. E., Gamage, D., Gaikwad, S. S., Gilbee, A., Goyal, S. Ballav, A., Majeti D. et al. (2017). Crowd guilds: Worker-led Reputation and Feedback on Crowdsourcing Platforms. In *Proceedings of the ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW '17)*, 1902-1913. New York: ACM.
- Wieland, H., Hartmann, N. N., and Vargo, S. L. (2017). Business models as service strategy. *Journal of the Academy of Marketing Science*, 45(6), 925-943.
- Wirtz, B. W., and Daiser, P. (2018). Business Model Innovation Processes: A Systematic Literature Review. *Journal of Business Models*, 6(1), 40-58.
- Wirtz, B. W., Pistoia, A., Ullrich, S., and Göttel, V. (2016). Business Models: Origin, Development and Future Research Perspectives. *Long Range Planning*, 49(1), 36-54.

- Wolf, T. V., Rode, J. A, Sussman, J., and Kellogg, W. A. (2006). Dispelling “design” as the black art of CHI. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '06)*, 521-530. New York: ACM.
- Yancy, K. (1992) *Portfolios in the Writing Classroom: An Introduction*. Urbana: National Council of Teachers.
- Yin, R. (2009). *Case Study Research: Design and Methods (Fourth Edition)*. Thousand Oaks: Sage Publications.
- Yunus, M., Moingeon, B., and Lehmann-Ortega, L. (2010). Building Social Business Models: Lessons from the Grameen Experience. *Long Range Planning*, 43(2-3), 308-325.
- Zimmerman, J., Forlizzi, J., and Evenson, S. (2007). Research Through Design as a Method for Interaction Design Research in HCI. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '07)*, 493-501. New York: ACM.
- Zimmerman, J., and Forlizzi, J. (2008). The Role of Design Artifacts in Design Theory Construction. *Artifact*, 2(1), 41-45.
- Zott, C., and Amit, R. (2010). Business model design: an activity system perspective. *Long Range Planning*, 43(2-3), 216-226.
- Zott, C., Amit, R., and Massa, L. (2011). The Business Model: Recent Developments and Future Research. *Journal of Management*, 37(4), 1019-1042.



# Appendix A

## Initial Analysis Appendix: 3rd Way Coop

In this data, meeting notes are from the author and verified by the founder and email correspondence is from the founder. Figures are either created by the founder or are something of interest to them, where the caption for each figure indicates its source. In the case of long documents, the relevant parts are extracted as one or more images as appropriate. The data is not presented in narrative order, text under each heading could be from a number of different meetings or correspondence at different times. Any spelling or grammatical errors are in the original documents and are not corrected here.

### A.1 Nodes\\Purposeful intent

#### A.1.1 Nodes\\Purposeful intent\\cultural values

##### Files\\3rd Way email correspondence

Quakers and others in faith groups can be very cautious which easily can give the impression that they do not trust you – and probably they don't. The official stance appears to be one of watching from a distance to observe behaviours and outputs. "You know a tree by its fruits" This in itself creates a barrier and delay to bringing teams together to effectively deliver solutions to people who desperately need them.

## **A.1.2 Nodes\\Purposeful intent\founder**

### **Files\\3rd Way email correspondence**

I have networked with engineers etc for many years to overcome technical barriers preventing substantial progress to deliver UN Millennium Devt Goals/alleviation of poverty.

### **Files\\3rd Way meeting notes**

See Figure A.1: Publicity for 3rd Way's Super Insulation product.

### **Files\\3rd Way meeting notes**

Mike is an experienced engineer and businessman, including establishing Alphason Designs in the 1980s which produced a world-class hi-fi tone arm, other hi-fi equipment and specialist furniture. He then developed and orchestrated a growing international network of expertise who want to see people work their way out of poverty. This has led to an extensive portfolio of technologies mainly in sustainable energy leading him to establish 3rd Way Commonwealth in 2010 to focus on the first of these ie 3rd Way Super Insulation and take forward. Mike has now developed Super Insulation which has the potential to insulate UK homes to passive house standards. 30,000 homes across Europe have been insulated to these standards and are reported as generally experiencing a 90% heating energy cost saving. As such 3rd Way Commonwealth could lift the inhabitants out of fuel poverty. At the moment, he owns 100% of 3rd Way Commonwealth Ltd who will own several potentially valuable patents pending on Super Insulation. He wants to develop this technology for social good through 3rd Way Commonwealth rather than for private profit, with organisations that encourage, develop and support Values Based Leadership such as Initiatives of Change being the ultimate beneficiaries. IofC is an international body that was established over 80 years ago, working to promote personal transformation leading to lasting change in society. Mike has been associated with IofC for 18 years, being involved in their work to forgive Third World debt.

Mike's first company Alphason came out of the need to work independently to enable fostering a child in Tanzania, it became a social enterprise, providing employment in Wigan which was not an affluent area, some people had not been employed since leaving school. Then the company diversified into Hi-Fi furniture which could be made by unskilled workers. Mike tried to employ people recovering from mental illness but they were not ready to

Figure A.1: Publicity for 3rd Way's Super Insulation product

**3rd Way**

**3rd Way Super Insulation – Affordable Passive Haus Comfort for Everyone**

There are no economically viable solutions to insulate properties with solid walls

Except **3rd Way Super Insulation**

**Super Insulation** provides 4x better insulation than current market leaders.

It makes sense to be energy efficient, especially when energy costs are expected to double by 2015-17. 45% of heat is lost through solid walls, 30% through cavity walls.

50mm of **Super Insulation** is equivalent to over 200mm for urethane foam to provide U values of 0.1 That is Passive Haus or Code 6 standards for new builds, refurbes or renovations. This may be used as a thin, unobtrusive internal or external cladding for external walls. A 1930's dwelling with solid walls may now be retrofitted quickly and economically to provide better insulation than a new build until now considered almost impossible to treat economically.

The cost is similar to the equivalent thickness of foam to achieve the same insulation values.

**Thermal Resistance mK/W**

**REQUIRED THICKNESS FOR SAME INSULATION**

Material	Thermal Resistance (mK/W)	Required Thickness (mm)
3rd Way Super Insulation	350.0	50
Foam	~70	~100
Urethane Foam	~60	100
Air	~50	143
Loose Insulation	~40	~143
Expanded Polystyrene	~30	~190
Foam	~20	~190
Fiber Glass	~15	~190
Mineral Wool	~10	~190
Straw Insulation	~5	190

3rd Way Commonwealth Ltd; Unit 3, Co-op Yard; Station Road; Adlington; Lancashire; PR7 4LA

+44(0) 1257 474288 [www.dsq.eu.com](http://www.dsq.eu.com) [getintouch@dsq.eu.com](mailto:getintouch@dsq.eu.com) UK Co Reg 07379189 Reg'd Name: 3rd Way Commonwealth Ltd

C:\documents and settings\mike\desktop\1 dsq\engineering\projects\1087 insulating panels\marketing resources\super\_insulation\_sst\_130511\_mk.docx 1 of 2

return to work. But did employ post-50 people, also offered a social side to the business. Mike has lots of personal stories of how people got on with each other and developed their own personal interests. ‘lovely to see people realise their potential’. Alphason has always been about ‘family values at work’.

### **A.1.3 Nodes\\Purposeful intent\\individual limitations**

#### **Files\\3rd Way email correspondence**

Please accept my sincere apologies for not being in contact. As we take this forward the demand on my time is unprecedented.

Life is extremely hectic still. Not enough minutes in a day. I even worked 4 hours on Christmas Day. We are late getting product out and I must focus on doing so and generating sales ASAP. We must generate income ASAP which will enable us to negotiate additional finance.

The human factor in innovation is 100x more important and more difficult than the technical innovation. Possibly 20 years networking within the IofC community has been the main contributor to help me develop my awareness and understanding of this – “building bridges across the world’s divides”. As we now prepare to take the 3rd Way initiative forward I hope I can apply some of the knowledge gained into skills.

IofC is an international community. In my experience we meet and talk but that is the limit. The idea is to take what we learn back to our own corner of the world and continue in our efforts to make a difference. I have been surprised at the psychological support knowing I am not the only one, hearing the experiences/stories of others – a source of encouragement and support. However, there are serious gaps in the support required by people working to make a difference. You are left isolated to put all on the line and get on with it. All the talk takes your very limited time and is just something else that prevents you from getting across the “valley of death” and hence potentially contributes to factors that leads to “death”.

My time is under extreme, inhuman and intolerable pressure. Yet the potential benefits for the UK and the world are remarkable. I find it difficult to get my head around that.

Everyone I speak with appears to want to see case studies and product reliably going out of the door. The lack of real support has left me feeling very isolated - quite the opposite to “Open Source Guilds” and “shared effort to alleviate poverty”. I feel that to a large extent this is understandable and we are possibly a long way from being able to practically get involved with

Figure A.2: The Glowinkowski Model of Behaviour adopted by Mike Knowles

	A	B	C	D
1				
2				
3	Directive & Concerned			Collaborative, business like and assertive
4			0%	Enthalpy - capacity for useful work, to contribute
5	Passive & Concerned			Sociable, overly optimistic and talkative
6				
7	Directive and Indifferent			Domineering, like to control situations, tend to be insensitive to others
8			0%	Entropy - incapacity to contribute
9	Passive & Indifferent			Cautious, unassertive and secretive
10				
11		0%		
12				
13				

Open Source Guilds.

I need at least 4 weeks locked away in the workshop to complete the machines. I am lucky if I get one week per month doing this. There are too many other issues taking my time.

### Files\\3rd Way email correspondence

See Figure A.2: The Glowinkowski Model of Behaviour adopted by Mike Knowles.

### A.1.4 Nodes\\Purposeful intent\\purpose

#### Files\\3rd Way email correspondence

See Figure A.3: Excerpt from a Quaker and Business meeting about the purpose of business.

### A.1.5 Nodes\\Purposeful intent\\stakeholders

#### Files\\3rd Way email correspondence

See Figure A.4: The Caux Round Table Principles for Responsible Business.

#### Files\\3rd Way meeting notes

Stakeholders are not yet associated with the organisation as it is not formed, as it forms they become involved, as natural partnerships develop.

Figure A.3: Excerpt from a Quaker and Business meeting about the purpose of business

 Quakers and Business Group

Promoting Quaker values in Business and the Workplace

Minute of the Quaker Business Conference 2015 - What is the purpose of business? <http://gandb.org/qbc15>

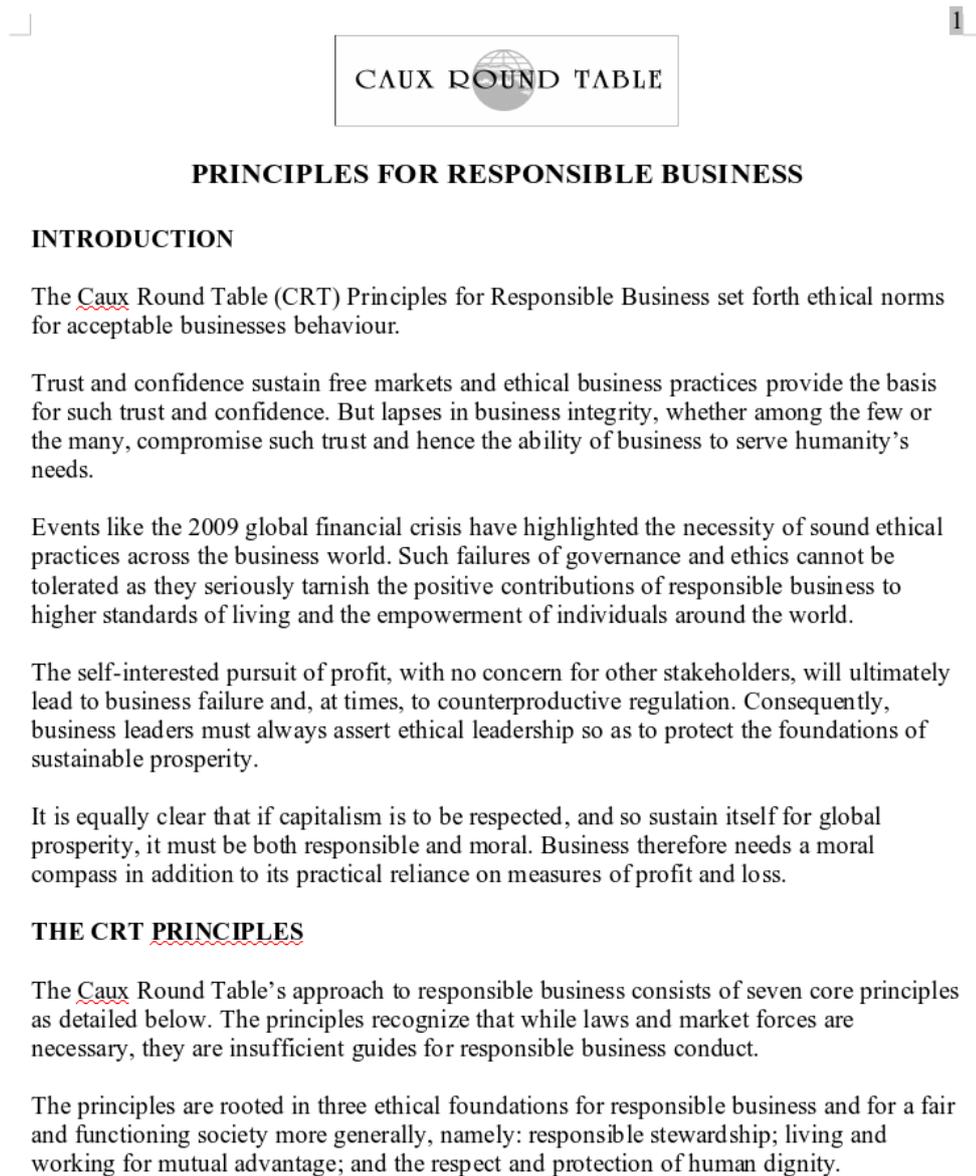
Friends House, London, 4th November 2015.



On Wednesday 4th November 2015 over 90 friends, including 17 students from Quaker schools, gathered at Friends House to consider what is the purpose of business. This was the 11th annual conference of the Quakers and Business Group. The conference began with meeting for worship.

Tim Phillips, Elder of Q&B, opened the conference with the quotes "The business of business is peace" and "Power is accountable to those whom it affects". He highlighted that while Q&B is focused on the practicality not the theory and theology of business, Quakers recognise that these lie at the root of our practice. He also mentioned his experience in the boardroom as often reflecting the focus on financial return for shareholders rather than the interests of all stakeholders.

Figure A.4: The Caux Round Table Principles for Responsible Business



## A.1.6 Nodes\\Purposeful intent\\values

### Files\\3rd Way meeting notes

What makes the structure work is the glue values that holds people together, the OSG is a values-led structure that enables these natural groups to come together.

Values Based Leadership is key to ensuring that the enterprise and Trust operate for social benefit rather than private profit.

Value-led personas could help in the formation of teams, identify the values of the organisation then express them through personas who represent the desired team members. A persona can only be an outline, a real person could be very different, but it should be possible to recognise the outline of their values and attitudes from the persona. Personas can then be used in scenarios of future development.

Mike realised the importance of shared values, but this was in the voluntary sector, where people are 'led by the heart'.

Mike is now recruiting new staff to cope with the demand, acting as a 'benevolent dictator' when it comes to values. Behind the product, which in itself is of great social value, is a way of working where benevolent values come first.

- The quadruple bottom line makes values explicit, linking with Values Based Leadership, which is itself based on the Myer-Briggs scale. The most effective leadership could be characterised as "head and heart" .

Benefits of being a guild member include realising their values together, also mentoring apprenticeship, access to quality standards.

- Part of the success of the original Quaker enterprises was that their structure embedded values (in the same way that the Open Source Guild aims to). They have a good slogan: "Creating value through values" .

- Considering the quadruple Bottom Line [text removed] this emphasises values as being the foundation that the more conventional economic, social and environmental triple bottom line can build on.

Lean production developed from the Toyota Production System, focused on delegating responsibility to the production line workers. It could link to the guild model in terms of 'living values out' and 'developing the ability to do so'. This living values is a continuous process of development for the organisation.

## **A.2 Nodes\\Enacted by human or other actors**

### **A.2.1 Nodes\\Enacted by human or other actors\\community**

#### **Files\\3rd Way email correspondence**

Initiatives of Change [www.IofC.org](http://www.IofC.org) are one of the leading international communities working in this field with 80 years track record. This is very much a “counselling” community where we can come together, share experiences and encourage/strengthen each other.

I have been associated with this community for over 18 years and in many respects 3rdf Way is an unofficial “spin out” as the thinking has been encouraged and developed by relating with this international community. The resources accumulated in the form of books, training programs, experience is remarkable.

#### **Files\\3rd Way meeting notes**

Any organisation is about ‘fellowship and community’, where there is ‘fellowship with inner voices and with community’, and ‘reflection as a team’. In the spiral of learning, responsibilities grow with ability and capabilities.

### **A.2.2 Nodes\\Enacted by human or other actors\\members**

#### **Files\\3rd Way meeting notes**

- 3rd Way Commonwealth then recruits members, including many small social enterprises that can be formed to grant licenses/franchises and support Guilds in other regions/sectors, market and install Super Insulation in areas where it will help alleviate fuel poverty. Installer/Energy Assessor Members will work within a guild structure that will enable them to share experience and create a body of knowledge that will benefit existing and new members.

See benefits from point of view of apprentice, journeyman and master, also to suppliers, customers, people employed by members of the guild.

### **A.2.3 Nodes\\Enacted by human or other actors\\open source**

#### **Files\\3rd Way email correspondence**

I hope this could be a part of a future internet enabled International Academy for Sustainable Development to serve and build the Common Good including vehicles such as Open Source Guilds etc

What I like about open source is that we have a number of universities who run design projects that could develop designs for cost effective solar irrigation pumps and many more practical solutions for people working their way out of poverty. These may not be worth patenting and so could be part of an open source resource centre.

#### **Files\\3rd Way meeting notes**

The open source guild model offers the advantages of a franchise, but goes further than that as it based on shared values rather than just replicating a business model. Membership of the guild is at the discretion of the founding individual or organisation. Members gain access to the commons of shared information and experience and can benefit from collaborating with other members.

- “Without the open source guild, you can’t do it” this is the missing element that brings it all together.

See Technology Readiness Levels diagram, available on Wikipedia. The open source guild model could be seen as ‘soft’ technology. Hard technology is the easiest to implement, socio-economic innovations are hardest to implement as it involves changing people’s world-views and taken-for-granted assumptions.

### **A.2.4 Nodes\\Enacted by human or other actors\\scale**

#### **Files\\3rd Way email correspondence**

OSG fits extremely well with other thinking in the Creative Commons space, such as Fab Labs, Open Source Ecology and others. It also fits extremely well with the need for better quality models to take solutions to scale such as franchising. There is a great need to better support the franchisee and enable them to develop their competences. There are other models used to take to scale which I expect require similar support mechanisms.

Figure A.5: ICSF Five Stages of Social Replication



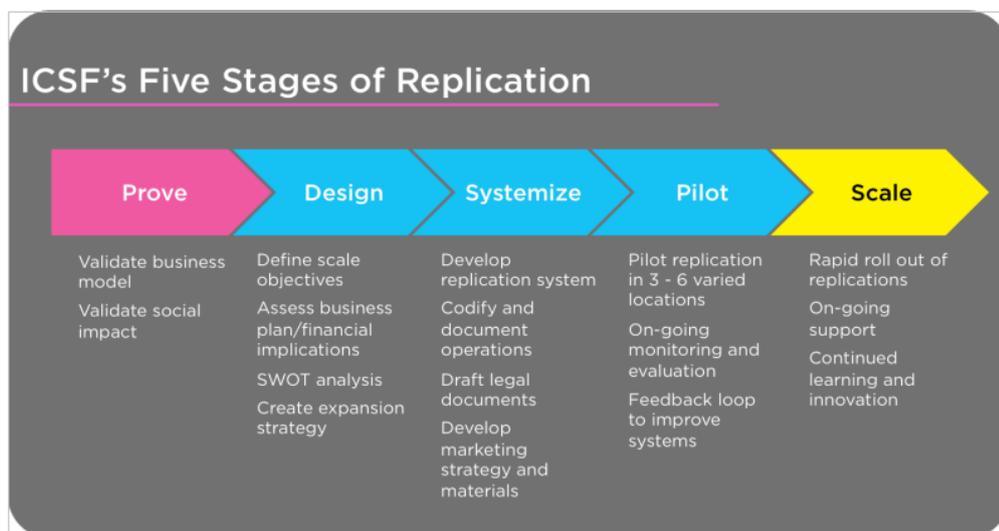
## International Centre for Social Franchising

### [Our methodology](#)

<http://www.the-icsf.org/our-methodology/>

#### *Our 5-stages replication framework*

Based on practice and research, we have developed the Five Stages of Social Replication to meet an organisation "where they are at" on their journey to scale. We know that each social organisation is unique so we develop a customized replication strategy for every project.



<http://www.the-icsf.org/wp-content/uploads/2015/01/Five-Stages.png>

### Files\ \3rd Way email correspondence

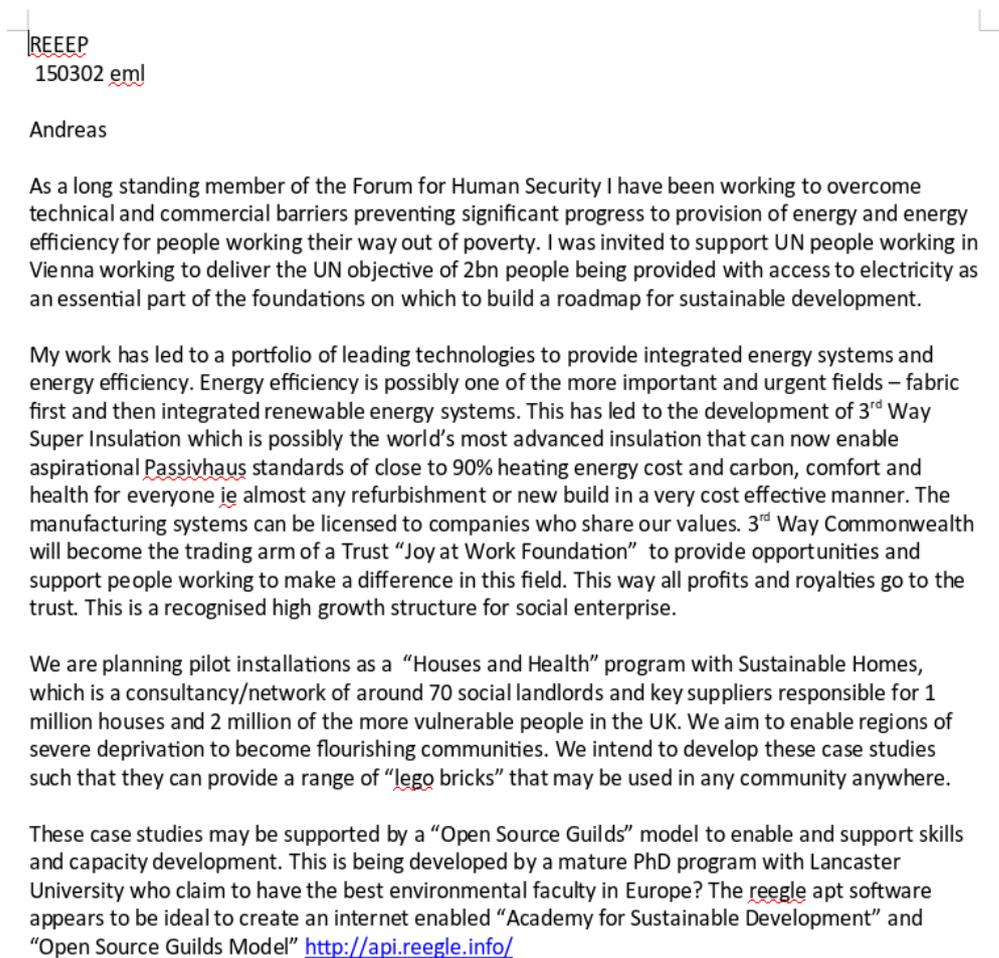
See Figure A.5: ICSF Five Stages of Social Replication.

## A.2.5 Nodes\ \Enacted by human or other actors\ \software

### Files\ \3rd Way email correspondence

I am also interested in evaluating an Open Source ERP system which appears to offer additional benefits. We may be able to bring the two together to give us a very powerful system that is appropriate etc meet the needs as

Figure A.6: Email from Mike Knowles on the 2nd March 2015 mentioning the potential for Open Source Guilds



we take the business model to scale by social franchising. The model enables local labour to meet local needs anywhere in the world with digital connection to each other. Local communities connected digitally across our global village.

### **Files\\3rd Way email correspondence**

See Figure A.6: Email from Mike Knowles on the 2nd March 2015 mentioning the potential for Open Source Guilds.

### **Files\\3rd Way email correspondence**

As CEO of a high growth start-up company I must develop the business processes and enable new recruits to learn how to effectively and efficiently operate and develop/iterate these processes until they are complete and ef-

fective. The business process will continuously change and evolve as we are in a dynamic environment. Hence the ability to capture the creativity and develop into a small, simple data base application would be very useful. Word docs and spreadsheets are OK for many aspects of this requirement however I/we also need to create data bases. I have never developed a data base before and so this is a barrier for me which is becoming urgent and important issue as we prepare to manage rapid growth. Please could you advise suitable software that is quick and easy to use to develop basic data bases as part of a “manual management process”. We will use these “simple prototype data base applications” for a few weeks/months, develop and prove them with a view to passing to a professional data base developer to add into our ERP system? The simple data base would then be redundant.

Can we set up a basic internet enabled facility to help this process with the people who are coming together and forming the vanguard of such efforts and enable informed peer to peer mentoring between a high trust network of expertise from the many facets of this more complete and holistic program to address what are perceived to be complex and challenging societal issues?

I feel this really complements the vision described by the Mayor and Chief Architect of Barcelona for Barcelona to be the first city to work its way out of poverty using local labour/manufacture to meet local needs interconnected digitally with others around the world. To my mind Barcelona and others cannot do this in isolation and they cannot do this to the required standards nor sustainably/competitively against the traditional economy without OSG. Hence OSG is a very rare, very important and valuable “key enabling technology” that opens a door to the future in ways that no one dreamt possible.

I have just had a meeting with an internet service provider which includes telephone and can facilitate high quality broad band audio/visual comms. This will enable us to provide remote “mentoring” by a “master craftsman” to a “junior craftsman or project manger” etc anywhere in the world. It will also enable our associates to communicate as if “under one roof”

The use of audio-visual resources ie video training resources together with internet enabled on-line real time audio-visual communications can contribute and enable.

Websites are an important part of an internet enabled Open Source Guild. The skills to develop your own website to high standards using “instant expert” approach supported by peer to peer mentoring could be a first step towards the internet enabled Open Source Guild?

## **A.3 Nodes\\Particular incidents or events**

### **A.3.1 Nodes\\Particular incidents or events\\ accountability**

#### **Files\\3rd Way meeting notes**

The Joy at Work Foundation can act as an auditor like with Fair Trade, the licence will be a sanction against people doing what they want if it against the interests of the majority, they have 'got to be accountable', protecting the brand

### **A.3.2 Nodes\\Particular incidents or events\\ knowledge**

#### **Files\\3rd Way email correspondence**

We need a platform that makes it easy to share knowledge and experience and help us to come together as one in unity with efficiency and effectiveness.

#### **Files\\3rd Way meeting notes**

- The IoC have the idea of the International Academy of Sustainable Development which could be realised through the guild model. The academy could work both face-to-face using the apprenticeship model, backed up by the internet to share knowledge and experience.

The open source guild could be a way to move away from the culture of "jobs", into one where resources and knowledge are freely shared through the Internet enabling young people to develop their own work. Groups of them could then come together and form a guild based on their particular expertise.

### **A.3.3 Nodes\\Particular incidents or events\\learning**

#### **Files\\3rd Way email correspondence**

These observations have led me to think of developing the innovation/entrepreneurial process into a business process rather than an art to get more benefits to society. Also to development of the franchising model so those who do not have the abilities/skills to develop new technologies but want to

work to take the benefits to society – including those traditionally marginalised – can do so as a franchisee. Franchising has a bad name as many franchisors do not provide proper training and support. I believe responsible franchising can be a very powerful vehicle for vocational training and rapid socio-economic development. I feel this fits very well with the creative commons and open source guilds – responsibly working to serve and build the common good.

There are three barriers to development – education, education and education and by this I mean vocational education. Also we find those with economic power take 2x as much “counselling” as those who need their support ie another form of “vocational education”. [text removed]

Potentially it is central to efforts to enable people to work their way out of poverty, and also enable all people to develop knowledge and skills required to enable them to make what they want to make and realise their dreams. How do you put a value on that? Vocational learning is normally done by working next to someone who already has the required knowledge and skills. The internet potentially redefines “next to” as we are no longer limited by distance.

Internet enabled confidential and public peer to peer mentoring to support action based learning (especially for change makers) appears to me to be an essential part of the foundations to enable better and more productive relationship?

The UK has 23% of under 25 year olds out of work, most with no training or skills (this figure needs checking as it may be out of date). Also the biggest barrier to delivery of the 17 UN SDGs is skills and capacity development ie vocational training.

I have presented it in stages of evolution which hopefully will end up with 3rd Way being a part of an Internet enabled International Academy for Sustainable Development to accelerate delivery of UN Millennium Devt Goals (Sustainability Goals from 2015) using vehicles such as Justin’s Open Source Guilds and effective Peer Mentoring together with vocational training and academic education as appropriate. The biggest barrier to socio-economic development is provision of such education.

### **Files\ \3rd Way email correspondence**

See Figure A.7: Document from Mike Knowles outlining 3rd Way’s vision and strategy.

Figure A.7: Document from Mike Knowles outlining 3rd Way's vision and strategy



**90% Energy Savings, Comfort and Health for All**

37,000 houses across Europe have been treated to Passivhaus standards. The families are typically realising 90% energy reduction. The barrier preventing large scale replication is the prohibitive thickness of insulation, 230-400mm (9-16"). This is not only impractical but also encroaches on living space and hence devalues the property typically by 10%.

3rd Way Commonwealth is a technology social enterprise working to overcome barriers that prevent substantial progress to deliver United Nations' Sustainable Energy for All (SE4All) initiative. We have developed a new insulation that can now enable everyone to enjoy 90% energy savings for conditioning of living spaces. We plan a number of "light house" pilot projects across Europe and globally to provide beacons of hope that we can work together to substantially reduce carbon emissions and energy poverty.

Energy usage per capita of population is the key indicator of socio-economic development. It is impossible to have sustainable development without energy.

- Step one is energy efficiency - hence our strategic focus.
- Step two is community energy schemes – where the energy poor benefit from sales of heating, cooling and power to the greater community
- Step three is remote health care and social inclusion to enable people who are so easily marginalised to progressively enjoy better quality of life in community, paid for by the energy income streams

The UK has over 2.3 million people in energy poverty with associated heart disease, respiratory and mental health conditions which cost the National Health Service £2.5 billion each year. The UK has 23% of under 25 year olds out of work, many with no training or skills, together with the worst housing stock in Europe and the lowest cost energy – we throw it away. 27 million houses need to be refurbished to Passivhaus standards to achieve 2050 targets of 80% carbon reduction. This will create around 200,000 UK jobs (DECC)

3rd Way Commonwealth, with a growing number of partners, are planning a more complete, holistic approach to transform the energy poor into the new energy rich through a Housing with Health program. The delivery of this will be focussed on creating vocational training, skills and capacity development ready for taking to scale across UK, Europe and beyond.

The business model has been designed to contribute to the emerging movement working to address the challenges of our times empowered by our shared values and enabled by the internet, by facilitating collaboration and franchising/licensing to enable local labour to meet local needs anywhere across our global village. We do not have all the right answers but together we are looking for them. All intellectual property is to be held in trust, the Joy at Work Foundation, on behalf of people working their way out of poverty. License fees are paid into the trust. The Trust will provide personal and values based leadership development opportunities to encourage, develop and support those working to make a difference. Values Based Leadership is increasingly being recognised as the only catalyst available to take us into the future we all want to see.

We are looking for partners from civil society, the private sector and especially social enterprise to pilot this initiative in their own regions with a view to taking to scale.

3rd Way Commonwealth Ltd; Unit 3, Co-op Yard; Station Road; Adlington; Lancashire; PR7 4LA

Tel +44(0) 1257 474288 UK Co Reg 07379189 Reg'd Name: 3rd Way Commonwealth Ltd Vat No: GB 122 6468 25

mediastudio/KINGSTON/Learning/Thesis re-write/Anal ysis/3 Case Study on 3rd Way and EBTA/3rd Way documents/Can the Energy Poor become the New Energy Rich.docx 1 of 1

**Files\\3rd Way email correspondence**

I think I told you that at the Caux Forum for Human Security several years ago a few of us talked about the importance of education and especially vocational education. This led to thinking of an internet enabled Academy for Sustainable Development?

I suspect that Open Source Guilds would tend to develop more distant relationships. The “learner” being supported by the “tutor” . I suspect the relationship would last as long as the learner needs to learn from the tutor? The “adult -child” relationship becoming “adult-adult” . In time the new adult may support other “children” or learners. Here can be seen the parallels with responsible franchising.

**A.3.4 Nodes\\Particular incidents or events\\legitimacy****Files\\3rd Way email correspondence**

To my mind the OSG model is pivotal and a very important framework to enable access to vocational skills development required by such initiatives and to accelerate delivery of UN Sustainability Goals. We may be able to describe an internet enabled “Internet Academy for Sustainable Development” where the OSG model may be an important part of the delivery and development of vocational skills and capacity by action based learning and peer to peer mentoring?

**A.3.5 Nodes\\Particular incidents or events\\market****Files\\3rd Way email correspondence**

The technologies are being taken to market in the form of spin out co-operatives.

**A.3.6 Nodes\\Particular incidents or events\\stories****Files\\3rd Way meeting notes**

Web workshop with Initiatives of Change on the theme of Storytelling:

- Values through storytelling.
- Leadership through storytelling.
- Adaptive leadership, horizontal leadership.
- Stories are told from the authentic past to the present, then the desired change in the future, leading the change.

- Stories can hold collective wisdom.
- Leadership is about remembering the story, holding it on behalf of followers
- Can also be the role of art
- Storytelling is important for individuals, ‘tell your story or someone will tell it for you’.
- Listening is key, empathy through storytelling.

### **A.3.7 Nodes\Particular incidents or events\structure**

#### **Files\3rd Way email correspondence**

Genuine social networks operating in the social sector are not appreciated or valued by the command and control structures developed by traditional legal and organisational structures – more divides

The manufacturing companies need to be franchises our subsidiaries. The energy assessors and installers need to be Guilds. Master Assessors or Installers (responsible for standards, quality assurance and training) could be employed by 3rd Way of national installer such as Carillion. Some new technologies to support people working their way out of poverty need to be available under Open Source. Those with high commercial value need to be patented and the patents held in trust

We need to set up joy at work foundation ASAP as a Co ltd by guarantee to start with so at least we have a legal entity to include within legal agreements. Should I be director or someone else who is independent as “Trustee” with appropriate legal documentation?

[text removed] structures where appointment/removal of directors could be over ridden by Foundation if required and that would be governed by a Foundation or other entity? Also possible structure for the Foundation which essentially is a vocational training facility focussed on developing Values Base Leadership together with audits of training needs etc. Funds come from royalties on patents. Also research to prioritise needs and commissioning of R&D to overcome barriers to progress.

3rd Way Commonwealth and spin outs need to come under control of the Trust but with a basically co-operative culture. Do you agree?

Is 30% voting strength for the Trust or “Boffins” practical? Can a provision be made for the Trust to appoint and remove directors – possibly in exceptional circumstances?

### Files \ \ 3rd Way email correspondence

See Figure A.8: First part of a document from Mike Knowles on the 5th December 2013 outlining 3rd Way's developing structure.

#### Figure A.8: First part of a document from Mike Knowles on the 5th December 2013 outlining 3rd Way's developing structure

Association) and is assisting with development of the legal structures. He will assist us to establish the Joy at Work Foundation. He believes this is best as a Co limited by Guarantee which will become a Charitable Guarantee Company once registered with the Charities Commission.

We started on Super Insulation Sept 2010 by registering 3<sup>rd</sup> Way Commonwealth Ltd as a Private Ltd Co 100% owned by myself as sole Director. This is a clean company which has developed the Super Insulation product, production and installation technologies. The patents are to be held in Trust on behalf of those working their way out of poverty. 3rd Way Commonwealth (Business Development, Marketing, Franchising, Vocational Training etc) and Solutions (R&D & Engineering) should be owned by the Foundation possibly with minority share holders until such investors are bought out by the Foundation. Commonwealth and Solutions could be the same company with Solutions being the R&D + Engineering department of Commonwealth or a separate company generating incomes streams from sales of machines, R&D and technology transfer services as commissioned by Joy at Work leaving Commonwealth to generate income streams from franchising, marketing, consultancy and training services etc for spin outs and franchisees.

The leadership and skills required to alleviate poverty will be encouraged, developed and supported by Joy at Work Foundation. The Trustee/Directors of Joy@Work will mainly comprise people who are working in the front line of socio-economic development and poverty alleviation. They will develop the strategic objectives in collaboration with the operational Directors of 3<sup>rd</sup> Way operational companies and commission R&D to overcome barriers preventing significant progress to alleviate poverty, especially energy poverty. The Trustee/Directors, if required, will have power to nominate, appoint and remove Directors of all operating companies. Joy@Work will provide vocational training including personal development opportunities in Values Based Leadership in association with Initiatives of Change (lofC) [www.lofC.org](http://www.lofC.org) and similar organisations, for leaders who can make a difference and especially for Christian Key Workers. Also audit values, leadership &

3<sup>rd</sup> Way Commonwealth Ltd; Unit 3, Co-op Yard; Station Road; Adlington; Lancashire; PR7 4LA

See Figure A.9: Second part of a document from Mike Knowles on the 5th December 2013 outlining 3rd Way's developing structure.

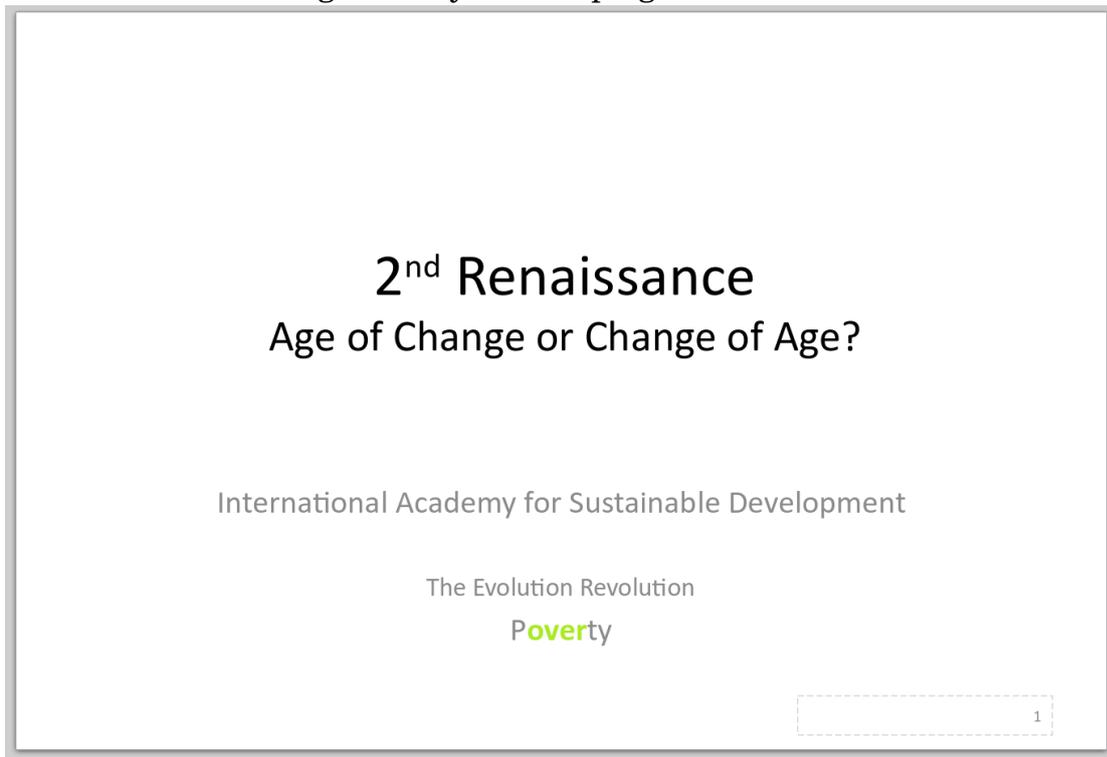
#### Figure A.9: Second part of a document from Mike Knowles on the 5th December 2013 outlining 3rd Way's developing structure



management effectiveness, Quality ISO9000 and environmental ISO14000 etc identifying training needs and providing/prescribing training. The Foundation can also make donations to lofC and/or similar organisations especially Christian organisations.

Super Insulation was registered as a Multi Stakeholder Industrial Provident Society (MS IPS) Nov 2011 with 4 Member Groups based on impact and frequency of impact. Joy at Work Foundation "Boffins" has 30% voting strength, workers and mgt team 25%, installers 25% and investors 20%. Investor shares increase in value to an agreed formula to provide an attractive investment opportunity for Triple Bottom Line and social investors. An MS IPS was chosen as the co-operative model is head and shoulders above any other to enable and empower people to work their way out of poverty, participate in the growth of the Company developing the skills required to do so through "Action Based Learning" and also provide good welfare for those associated with the company.

Figure A.10: First slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way's developing structure



### **Files\\3rd Way email correspondence**

See Figure A.10: First slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way's developing structure.

See Figure A.11: Second slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way's developing structure.

See Figure A.12: Third slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way's developing structure.

See Figure A.13: Fourth slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way's developing structure.

See Figure A.14: Fifth slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way's developing structure.

See Figure A.15: Sixth slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way's developing structure.

See Figure A.16: Seventh slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way's developing structure.

### **Files\\3rd Way email correspondence**

See Figure A.17: Diagram by Mike Knowles on the 5th of August 2015 outlining 3rd Way's structure.

Figure A.11: Second slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way's developing structure

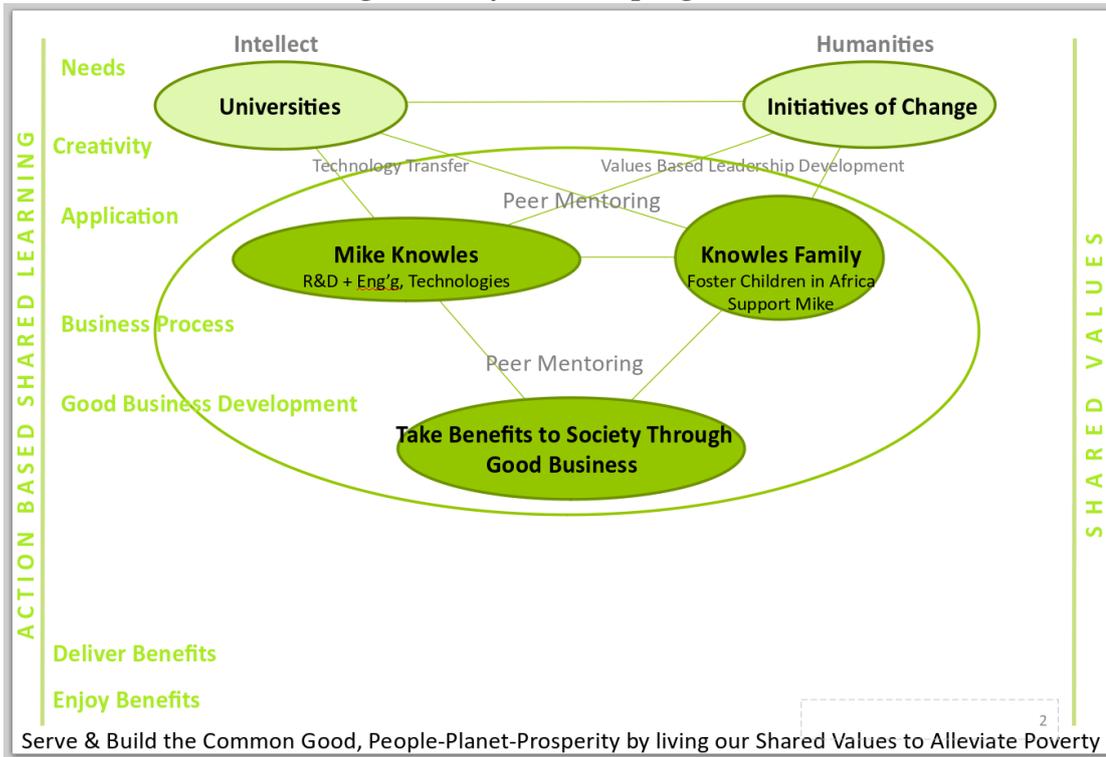


Figure A.12: Third slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way's developing structure

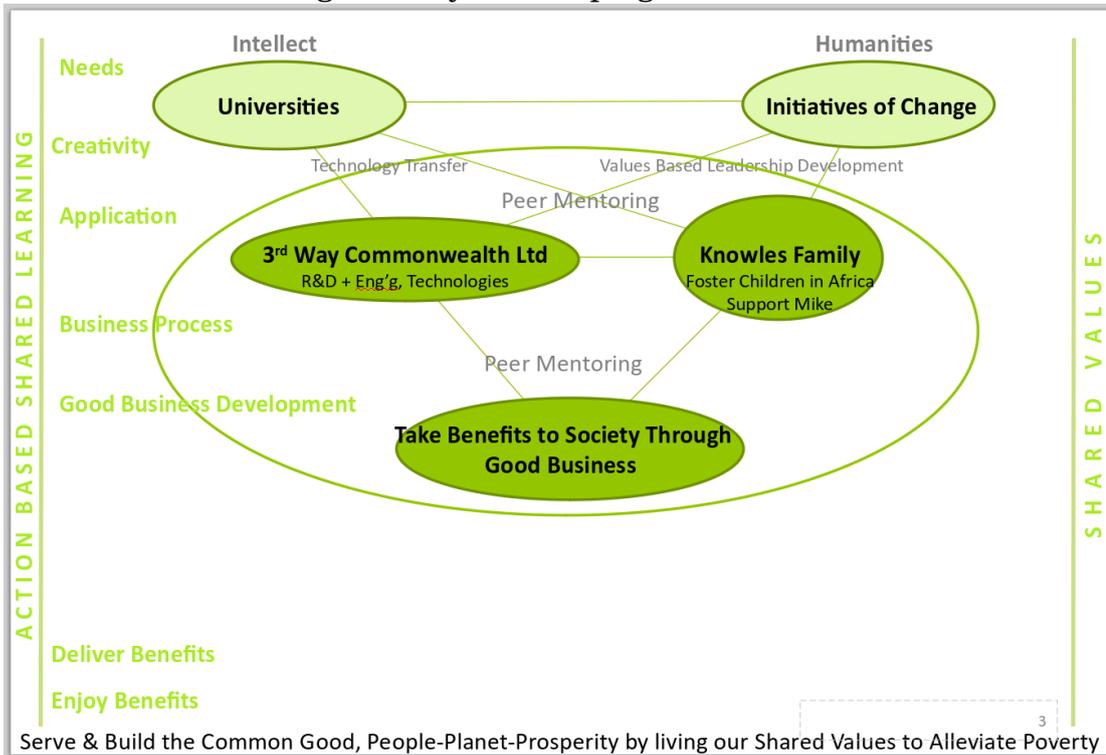


Figure A.13: Fourth slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way’s developing structure

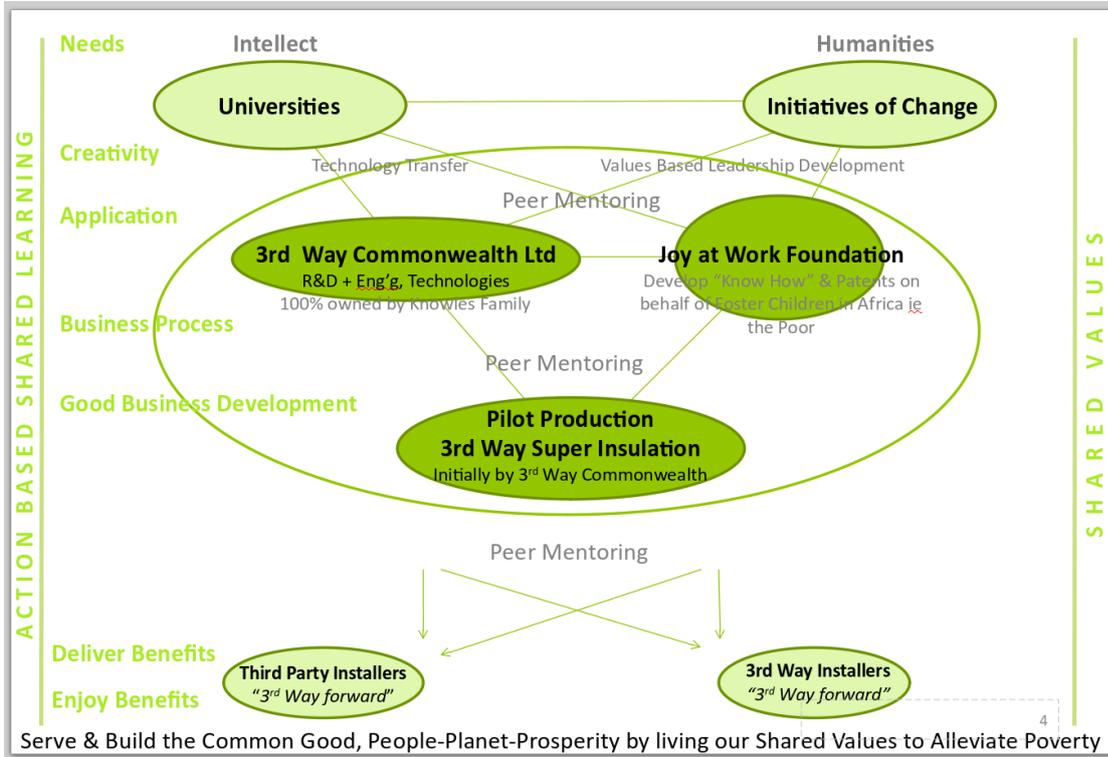


Figure A.14: Fifth slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way’s developing structure

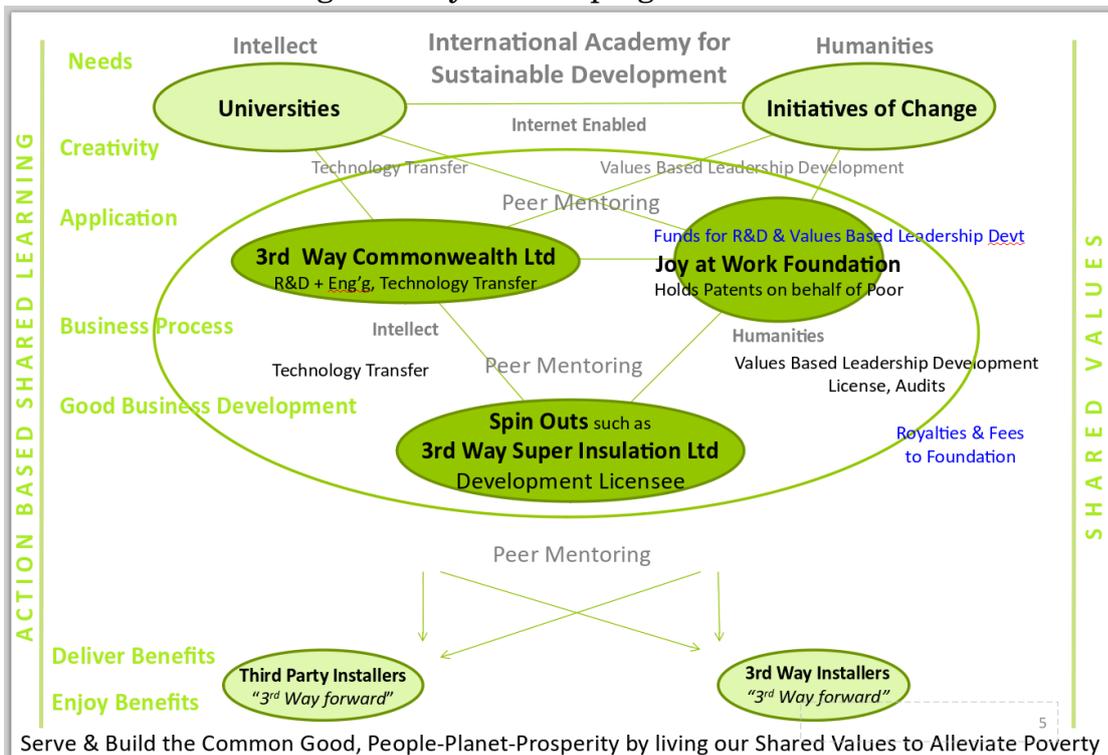


Figure A.15: Sixth slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way’s developing structure

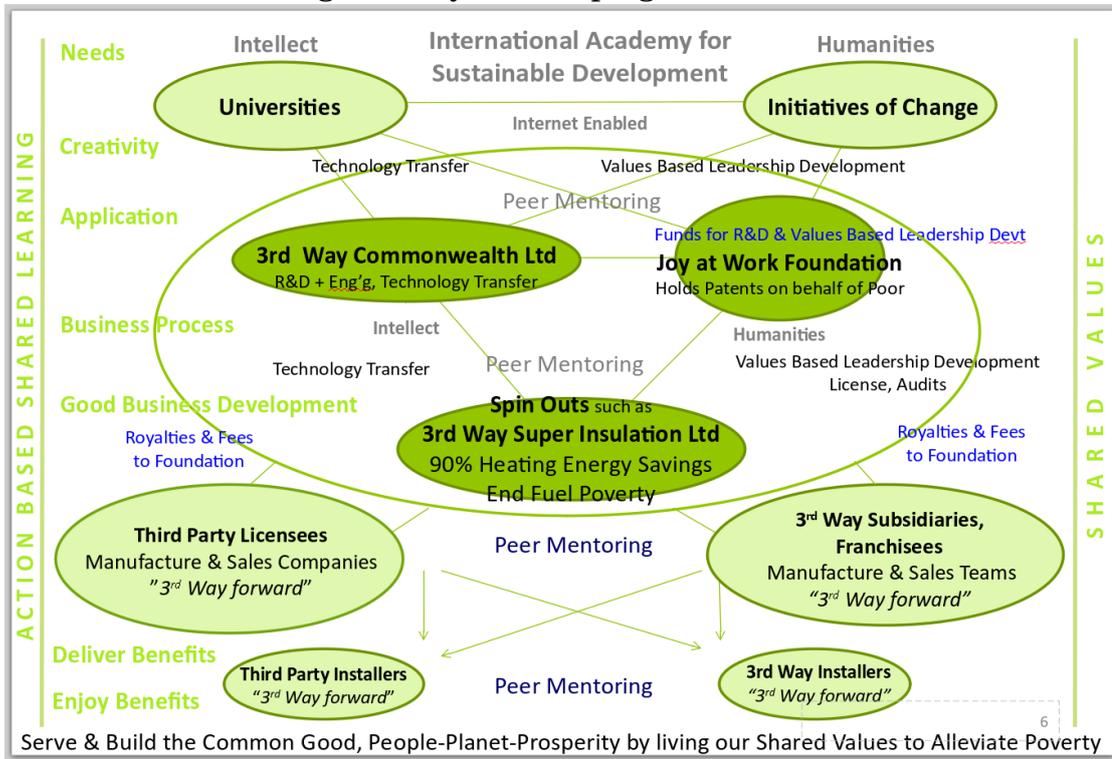


Figure A.16: Seventh slide of a presentation by Mike Knowles on the 6th December 2013 outlining 3rd Way’s developing structure

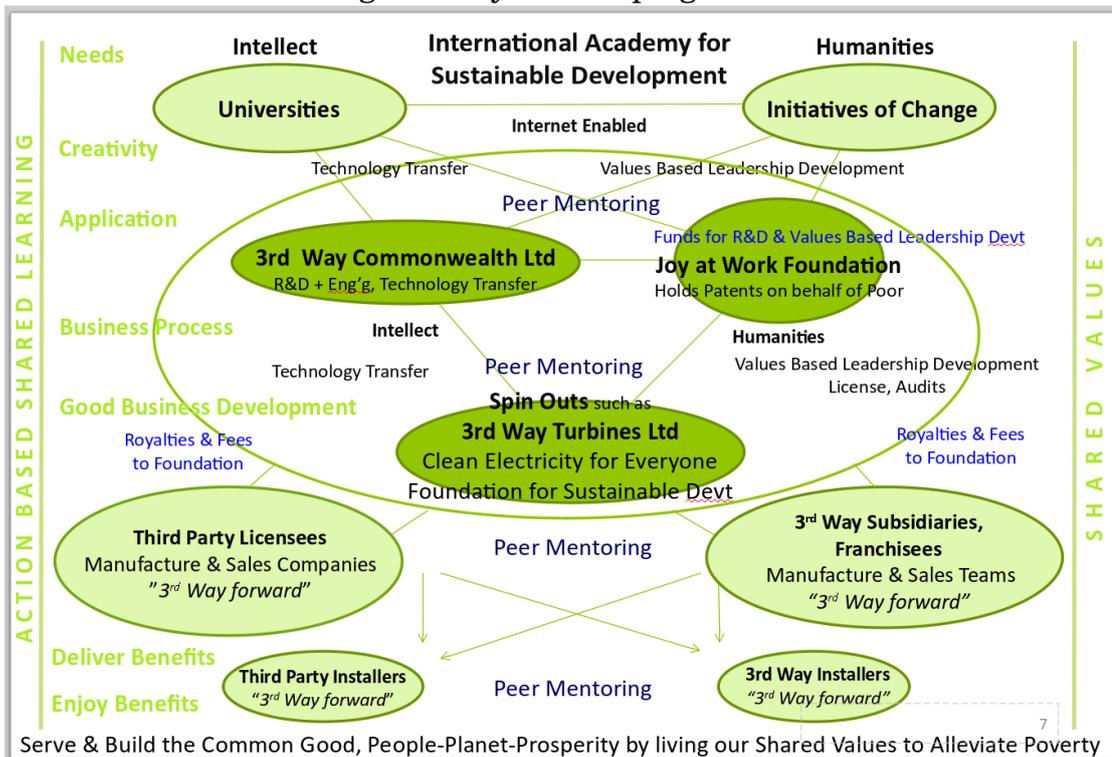
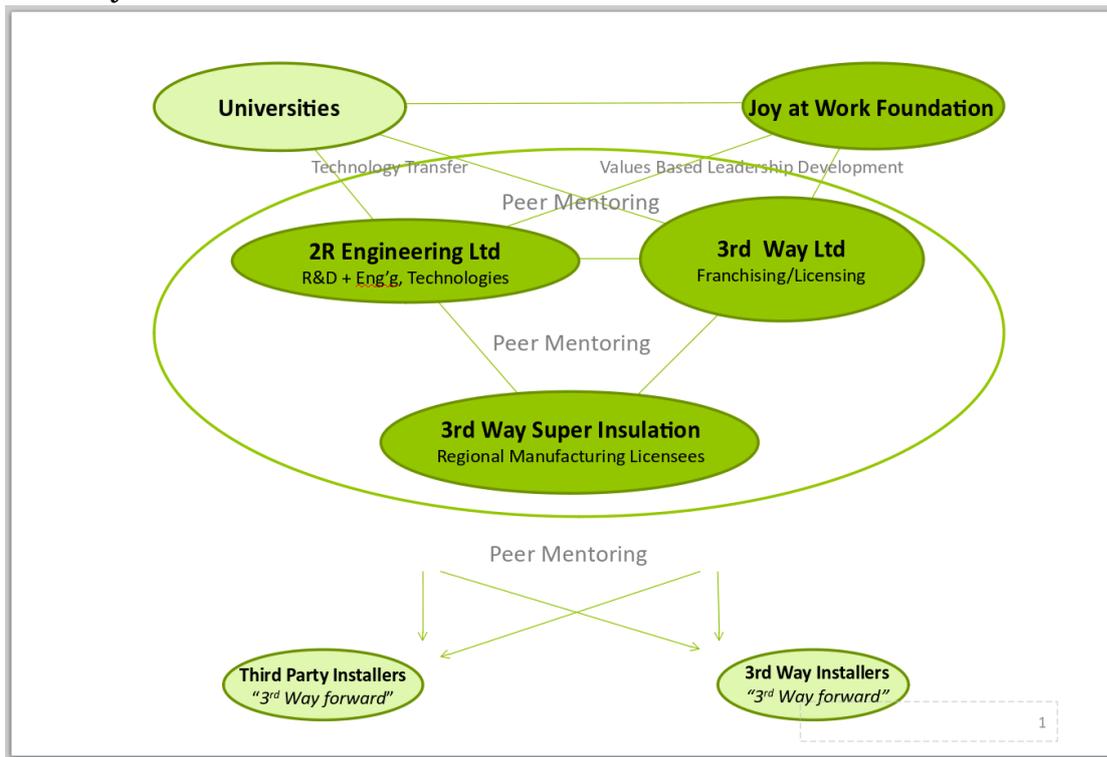


Figure A.17: Diagram by Mike Knowles on the 5th of August 2015 outlining 3rd Way's structure



### Files\\3rd Way meeting notes

- Mike talked about people in organisations are inside the structure, can't see it for what it is.
- He suggested that the open source guild was 'all about education', if people learn at school about different ways people could work together then they could see outside the structure, see that there are alternatives.

Then Mike was introduced to Initiatives of Change, which is more about the human soft technologies rather than engineering. IofC has been around for 80 years, and encourage values based leadership. Considering the questions 'how does it work without a structure', it is about working with people who are natural leaders working to shared values, 'things just happen with a minimal organisational structure', where an 'instant team' could form from people who had not met before.

### A.3.8 Nodes\\Particular incidents or events\\vision

#### Files\\3rd Way email correspondence

I proposed the overarching vision "Passivhaus standards of 90% energy cost savings, comfort and health for everyone".

No one seems to be able to get their heads round a “Commonwealth” . They are used to working for a weekly wage and are “socially conditioned” by what has gone before. Only a very few appear to be able to relate to the vision and fewer committed to fulfil it. What alarms me is that self interest is not sustainable, indeed it is mankind’s greatest enemy - yet all our economic models assume that economic man and organisations will only act out of self interest

Step one is energy efficiency ie our vision “Passivhaus standards of 70-90% of heating energy and cost savings, comfort and health for everyone”

Step two is Community Energy Co-operatives where the energy poor are included in the ownership. The quarterly income streams for Renewable Heat Incentives and Feed in Tariffs are expected to more than pay for the quarterly loan repayments to provide positive income streams that can pay for care services to help people work their way out of poverty and/or enhance their quality of life - the “Joy Index” . The universal definition of “joy” is “sharing the happiness of others” . As such we can develop joy as a KPI?

#### **Files\\3rd Way meeting notes**

- Will need guilds to assure quality standards and peer to peer mentoring. All about standards, up to competency levels, sharing knowledge only goes so far. A vision is needed (as with Linux), to serve a common good (in that case to create an operating system that was the equal of commercial operating systems).

## **A.4 Nodes\\Causal sequence**

### **A.4.1 Nodes\\Causal sequence\\decision-making**

#### **Files\\3rd Way meeting notes**

Quiet time is an essential part of Quaker meetings, where the Quaker business model is about how they conduct their meetings.

Alternative model has a group of masters (no more than 4).making decisions by the Quaker model, Decisions made by members not part of guild model.

The Quaker meetings could be seen as a design process, where all viewpoints are taken into account to arrive at a solution which can be agreed by all present.

## **A.4.2 Nodes\Causal sequence\sustainability**

### **Files\3rd Way email correspondence**

See Figure A.18: Excerpt from Guardian article 16th February 2016 that connected with sustainable business.

See Figure A.19: Excerpt from transcript of Ban Ki-moon's call for support on 25th October 2013.

### **Files\3rd Way email correspondence**

If we are to see a sustainable world fit for all children of the world and those yet to come then we have to change our attitudes – especially in the private sector. I believe the Open Source Guilds has remarkable potential to contribute to such efforts in a very natural and healthy manner. Indeed I believe this is probably the most valuable contribution to the future that Open Source Guilds can potentially provide.

The “Open Source Guild” (OSG) is revolution with mind blowing potential to change history. The main barrier to sustainable development is education and especially vocational training.

## **A.5 Nodes\Reflect reality and create it**

### **A.5.1 Nodes\Reflect reality and create it\financial value**

#### **Files\3rd Way email correspondence**

There is a risk that information may be hi-jacked for self interest by people whose relationship is based on money and exploitation of resources to maximise profit and competitive advantage etc. The finance people do not realise that when they crunch numbers it is people and relationship in the meat grinder. They talk of “sweat the assets” and do not realise it is people they put under intolerable and in-human stress.

IofC will be a benefactor of the Trust with a view to contribute to efforts to make up this shortfall in future. The Trust could have over £8m on deposit within 3-5 years.

Figure A.18: Excerpt from Guardian article 16th February 2016 that connected with sustainable business



As the rich get richer everyone else gets less happy

<http://www.theguardian.com/sustainable-business/2016/feb/16/inequality-happiness-rich-getting-richer-poor-wellbeing-life-satisfaction?CMP=ema-1706&CMP=>

**Guardian sustainable business**

Rethinking prosperity

Tuesday 16 February 2016 13.39 GMT

Research suggests that as the wealth of the richest explodes, the rest of us are left stressed, worried, angry and with lower levels of life satisfaction



People who are young, less educated or on low incomes tend to suffer more as the richest get richer. Photograph: Peter Parks/[AFP/](#)[Getty Images](#)

Figure A.19: Excerpt from transcript of Ban Ki-moon's call for support on 25th October 2013

### Secretary-General Ban Ki-moon - Sustainable Energy For All

[https://www.youtube.com/watch?v=uSGEWw\\_zW58](https://www.youtube.com/watch?v=uSGEWw_zW58)



#### Transcript of Ban Ki-moon's call for support Published on 25 Oct 2013:-

"We need new ideas, and influence, to address the world's unfair energy gap and the threat of climate change. My Sustainable Energy for All initiative promotes a clean energy transformation and low carbon growth

We have three achievable, ambitious objectives to be realised by 2030

1. To provide universal access to modern energy sources
2. To double the world wide rate of energy efficiency improvement
3. To double the global share of renewable energy

Achieving these goals will unlock opportunity for billions of people and generate massive business opportunities.

The Sustainable Energy for All initiative is combining the efforts of governments, civil society and the private sector. I count on you to support Sustainable Energy for All

I ask you to lead by example in securing tomorrow's energy today" - H.E. Ban Ki-Moon

**Files\3rd Way meeting notes**

- Mike's business associate could possibly be a part of the management team who run the manufacturing organisation Super Insulation Ltd, and support efforts to bring in strategic investors could best contribute to efforts to take the Company forward with appropriate and reasonable financial returns for all parties commensurate with our shared values. This return will be enhanced by them being the only commercial licensee for the designated geographical region and/or market sectors. The fact that the patents are in trust means they can't be bought by a third party and disappear (thus there is a potential business benefit).

**A.5.2 Nodes\Reflect reality and create it\governance****Files\3rd Way email correspondence**

I think we may have come up with a solution the Co-op Bank's governance problem. This is something I identified as a weakness some time ago. The Co-op Bank debacle proves the difficulty of governing a co-op (or any company but especially co-ops)

**Files\3rd Way meeting notes**

If ownership falls into the hands of people who do not share the same level of concern and direction then there is a risk of introducing entropy within the 3rd Way Investor Community and at Board level, which would inevitably introduce entropy and absorb enthalpy ie capacity to do useful work and deliver exceptional achievement.

It's not about governance on a day-to-day basis, the guild is about values, not to be confused with the sort of governance that charities and commercial businesses struggle with.

The social enterprise, currently registered as Super Insulation Ltd which is a Multi Stakeholder Industrial Provident Society (MS IPS) needs to be wholly owned by the Trust, with groups of members including academics and contractors, working to a franchise model. It is currently set up by 4 member groups ie Boffins, Workers, Installers and Shareholders. This needs to be developed before a license may be granted (which is imminent) as the directors must be appointed and removed by the trustees based on merit.

### **A.5.3 Nodes\ \Reflect reality and create it\ peer review**

#### **Files\ \3rd Way email correspondence**

I briefly explained the importance of peer to peer mentoring, quoting that 95% of successful entrepreneurs (leaders) state that peer to peer mentoring was the most important part of their success.

I feel those who we lift out of energy poverty could be great peer mentors.

Also installers who have gone from no skills and being unemployable to skilled under the Guilds program could be good peer mentors

The biggest barrier to socio-economic development is education which can take the form of academic, vocational and peer mentoring ie those who have been through it mentor those going through it.

There is clearly a need for social sector, as well as personal, use of information to support “benevolence”, “Organised professional friendship/love” and also genuine informal friendship/love. I believe the Open Source Guild has remarkable potential here to enable peers to share “what works”

Why I briefly describe this scenario is because we each need to change and come together as an effective and efficient team. I believe there is great scope for peer to peer mentoring between each and all of us who will hopefully become the leadership and management team (or teams). I feel this could be an ideal opportunity to pilot the internet enabled peer to peer mentoring facility we have discussed between such peers?

#### **Files\ \3rd Way meeting notes**

The structure of an organisation should be a framework to enable people within that structure. IofC has almost no structure, operates though peer mentoring

The model has potential for ‘exponential growth’ as it is framing a sustainable natural way of working that people can recognise.

Mike sees the Open Source Guild model as ‘natural’, promoting ‘peer-to-peer mentoring’ which has happened throughout history.

People are only as good as their last job, but the guild can help them become better at their job. The guild can develop not only peer to peer mentoring but also standards and identify problems. The guild mark offer reassurance that this is happening, that there are shared standards (like the FairTrade logo). But people are not infallible, whatever model there is needs to deal with this infallibility.

### **A.5.4 Nodes\Reflect reality and create it\property rights**

#### **Files\3rd Way email correspondence**

The technologies (IP assets) have been developed by years of networking with like minded expertise, including universities, who want to see people lifted out of poverty. It is only right that the technologies are owned by a Trust that is legally committed to such aims and implemented primarily through the Social Sector such that profits from meeting commercial market needs may be used to support and accelerate efforts . Potentially this model could naturally grow to provide a significant proportion of UK renewable energy, potentially arround 30% of national energy demand. The model also provides quality employment and helps to develop community. The “new clear” alternative?

#### **Files\3rd Way email correspondence**

See Figure A.20: Excerpt from a document sent by Mike Knowles about the problems with the patent system.

#### **Files\3rd Way email correspondence**

I feel we need to set up a company ltd by guarantee so at least we have a legal entity that can hold the patents and which can be included in legal documents/agreements. At the moment there is no legal entity and so this cannot be included in any legal agreement. To be able to include this requirement in legal agreements is urgent and important.

I think I should register Joy at Work Foundation as a Co Ltd by guarantee ASAP so at least we have a legal entity for the patents and legal agreements. Do you agree?

The innovation/entrepreneurial process to identify a need and develop an innovative solution to that need and develop a business to reliably meet that need is very demanding and high risk. Seed capital gets a 16x uplift in 3 years and once you have a production sample and sales orders then venture capital commends 3x times uplift in 3 years. This is to get the innovator/entrepreneur through the “valley of death” or “black night of the innovator” if they are fortunate enough to win appropriate support. Most do not get support. 9 out of 10 that do fail in the first 5 years (so there are many patents with no owner which is effectively placing the IP in the public domain). The challenge is to realise the full potential of those patents and

Figure A.20: Excerpt from a document sent by Mike Knowles about the problems with the patent system

The patent system is meant to provide incentives for the research and innovations which society might need. However, there is debate about whether the patent system is the most effective way to achieve this and whether current standards of protection are excessive. Many patent-based industries base much of their research on previous public sector innovation, fail to address research needs in areas where there is no market, and even use patents to block new research and competition.

pa  
na  
inc  
int  
im  
Re  
Pr  
wl  
Or  
an  
pr  
of  
co  
be  
nc  
in

develop the specialist expertise to do that and resource the efforts required to continuously improve and maintain your leadership position in serving society.

We can then discuss a lean over specific patents with investors as required. I am prepared to let go of my patents into the trust. Having said that my family needs our money back and hopefully a reasonable provision for our retirement from the work to date.

### **Files\\3rd Way meeting notes**

Sustainability can't happen without broader societal change, from one where money and property have become more important than people to one where there is a realisation that the historical problems of hunger, housing, disease are now solvable, raising the question of what is truly important in life.

## **A.6 Nodes\\Context**

### **A.6.1 Nodes\\Context\\competencies**

#### **Files\\3rd Way email correspondence**

It's one thing developing a set of rules but another to implement the judgments and actions required. Many boards suffer from "whimp syndrome" ie the CEO/board do not confront or remove members as required. How do we develop insight to identify the best course of action to serve the purposes of the organisation and the moral courage to confront and remove board members? How do we circumnavigate the "politics" that comes from a majority of board members who covertly seek varying degrees of comfort and self-interest? I have known boards of trustees where they did not realise it themselves and were unconsciously incompetent.

#### **Files\\3rd Way meeting notes**

- The key thing for him is finding an individual who gets what Mike is trying to achieve, wants to contribute to that achievement and has the means to do so (i.e. to both have the resources and the ability to make decisions without going through a committee).

## **A.6.2 Nodes\\Context\investors**

### **Files\\3rd Way email correspondence**

I agree with Justin the patents cannot be touched. All investors including the [name removed] will object to this and so we need to develop a mean through this impasse.

[text removed] [name removed] is trying to quickly and easily bring in friends as investors in “his own image” who will take 30% control. Potentially leaving me with no alternative.

### **Files\\3rd Way meeting notes**

- Investment is a problem, how to find investors who share one’s values. Ones who will take over and exploit intellectual property seem to be more common. Considering the worst case, if the patents are held in trust and investors get a lien on them, then the good guys will at least ensure they are used for social benefit (rather than just lining someone’s pockets).

Initially, some investors have been found who have offered £250K for a 30% share in the business and the patents; however, there is potentially some element of risk that this share ownership could end up increasing until Mike and the leadership to end energy poverty lose control to people who are primarily focussed on making exceptional financial returns and demonstrate little, if any, leadership to end fuel poverty and serve the underserved. Mike feels that such investors will not demonstrate the required discernment and recruit directors who in turn will recruit key people with the wrong values.

## **A.6.3 Nodes\\Context\licence**

### **Files\\3rd Way email correspondence**

The model can be licensed or franchised – ideally within the Social Sector/Co-operative Sector. Mondragon can also potetially assist in efforts to take the model overseas as they employ over 75,000 people in over 80 countries and have a department who specialises in helping to take such initiaves to meet global needs through the co-operative movement. The co-operative model is head and shoulders above any other model to enable peopel to work their way out of poverty. Modragon are the “jewel in the international co-operative crown”

This be Super Insulation or a machine build company and potentially a

joint venture with a North East family company who I am seeing end Nov. This will be lucrative and the NE company can bring in a good management team and proven company. This would take much of the burden and risk of developing the 3rd Way Commonwealth (Solutions) team to do this. The down side is that it would reduce profit and ability for Commonwealth to invest in Super Insulation and hence place more emphasis in bringing in more from investors. Also licensing fee would have to go into 3rd Way Commonwealth or the Trust to enable it to buy shares in Super Insulation. Such shares could be a part of the licensing agreement in lieu of the usual up front licensing fee.

### **Files\\3rd Way meeting notes**

- The Super Insulation patents are the core intellectual property and must be protected against exploitation by putting them in a trust, possibly with investors having a lean over them.
- The patents can be licensed to a commercial business, who shares the required shared values, direction and concern to serve the energy poor and underserved with the purpose of manufacture the insulation and generation of revenues to deliver our shared objectives as agreed and authorised by the Trustees on behalf of the poor working their way out of poverty . The manufacturer will be a key trading partner, gaining an exclusive licence for a geographic region and/or market sector to the patents for a number of years in return for paying royalties on the product back to the Trust.

## **A.6.4 Nodes\\Context\\relationships**

### **Files\\3rd Way email correspondence**

It is OK whilst we are small with more personal relationships but I hope we do not lose it as we grow and as we build the senior mgt team who will inevitably bring with them their “social conditioning” from the past.

It is impossible to legislate or develop legal structures to get the best out of everyone - such structures are only a framework. It really comes down to the relationships between team members and especially the leadership/management to realise the vision & objectives in a manner that provides fulfilment, quality of relationship and an enjoyable experience.

The thought that came to mind was that people take time to build relationships. Hence it is natural that initially people see 3rd Way as another “job opportunity” competing with other opportunities.

**Files\\3rd Way meeting notes**

- Real wealth could be seen as being relationships (or land), where money can be seen as a “legal fiction” , part of an economic system. Capital is seen as stewardship rather than ownership from this perspective.

**A.6.5 Nodes\\Context\\resources****Files\\3rd Way email correspondence**

I feel there are links with IofC who claim to have 80 years international experience in “building bridges across the world’s divides” . Potentially building a bridge between rich and poor is the most challenging of their experience to date? IofC have been working on developing resources to enable people to make best use of their 80 years’ experience/ heritage. They also work at the highest level with UN and so have very good credibility.

**A.7 Nodes\\Specific point of view****A.7.1 Nodes\\Specific point of view\\desired future****Files\\3rd Way email correspondence**

See Figure A.21: Core values of Initiatives of Change.

**Files\\3rd Way email correspondence**

I feel that we could start with self-build housing for refugees coming into Europe to enable them to build their own homes and develop skills & capacity to build the 1 to 3 million affordable homes required in the UK. 75% of the infra structure that will exist in 2050 has not been built yet and so such skills are in demand. When the time is right some of these people could return to their native regions to contribute to build peace and reconciliation – the built environment can be very powerful.

Figure A.21: Core values of Initiatives of Change

**Core values of Initiatives of Change**

<http://www.lofc.org/affirmations>

As an international fellowship open to people of all cultures, nationalities, religions and beliefs, Initiatives of Change affirms that

- in this era of globalization, an individual can be a powerful agent for positive change in society;
- in this age of overabundant information yet appalling human need, listening in silence - for God's leading, to the inner voice, or to conscience - is an essential source of inner freedom, discernment and direction;
- in this age where pressures on our life and time lead us to live on the surface of our being, change on a personal and global scale starts with a process of deepening self-knowledge;
- in this climate of moral relativism, unchanging values of honesty, purity, unselfishness and love offer a practical framework of principles by which to measure our individual and collective behaviour;
- in this time when profits and results are made paramount, genuine care for and by individuals is at the heart of any effort toward lasting change in society;
- in this time of communal tensions, all people should be valued equally: every person has a story to tell and a part to play;
- in this time when cycles of hatred and resentment are perpetuated, acknowledgement of past wrongs, restoration and forgiveness are means by which the human spirit is liberated and the wounds of history are healed;
- in a society that is quick to assign blame, honest conversations and readiness to accept our own responsibility can unite people for action across barriers that have historically divided them;
- in a world marked by divisions and self-interest, communities of dedicated people can unite to serve as models of a more just and compassionate society.

## **A.8 Nodes\\New point of view**

### **A.8.1 Nodes\\New point of view\\inner lives**

#### **Files\\3rd Way email correspondence**

In the illustration “Initiatives of Change” includes people trying to live their faith and/or values in both public and private life.

### **A.8.2 Nodes\\New point of view\\leadership**

#### **Files\\3rd Way email correspondence**

Values Based Leadership is the only catalyst available to take us into the future we all want to see.

The Trustees need to be Values Aligned senior people to encourage, develop and support Values Based Leadership throughout the Company and all operations/franchises etc to reform/develop our personal values and hence corporate values (made up of the sum of our personal values). If there is misalignment there will be friction and entropy (chaos and energy wasted in confronting and addressing wrong attitudes, covert & overt conflict etc) where we need well oiled wheels and enthalpy (capacity to do useful work)

The only value to 3rd Way has been my more realistic insights and understanding of this area, my improved ability to develop financial forecasts which can be used for scenario planning as we take to market and will need to iterate our strategy/business plan. I have come to understand the extreme difficulty in bringing in material support and commitment from people. Leadership is a very lonely place.

I feel this presents extremely well the need for the second web or as I framed it at the Caux Forum for Human Security around 2009 an “internet enabled International Academy for Sustainable Development”. This will include the Open Source Guild to encourage, develop and support values based leadership – those helping others to overcome the barriers that prevent them from working their way out of poverty.

Certainly the leadership team must have such a heart and hence aspirations/commitment. Ideally everyone should feel the same way however in reality many people (especially those in lower skilled roles) need a job primarily to pay the bills and don’t look much further than that.

At the moment I feel I largely stand alone and need to bring in senior people to develop the leadership/management team and investors who will have significant influence over the Company

Figure A.22: 3rd Way statement on Values Based Leadership 19th February 2016



Values based leadership (under the right Spirit) is the only catalyst available to take us into the future we all want to see - hence our focus. 3rd Way Commonwealth is an embryonic Christian organisation working with a number of leading partners including Churches Together, social landlords, clinical commissioning groups, vocational training academy for young offenders and many others to substantially alleviate energy poverty, in a more complete and holistic manner, to enable people to progressively flourish in community. We create vocational skills and capacity for unemployed youth, including young offenders. This provision may be extended to include refugees and other people who are so easily marginalised. We provide opportunities for personal and values based leadership development.

Leaders see what is going on that is commonly unperceived by most people and “frame the future”. Leaders push the boundaries of human achievement, define the steps and make the journey enjoyable.

3rd Way need a structure where the Trustees/Directors can be the rudder than steers the great ship and appoints/removes the operational directors.

### **Files \ \3rd Way email correspondence**

See Figure A.22: 3rd Way statement on Values Based Leadership 19th February 2016.

See Figure A.23: Excerpt on the future of work from the Global Opportunity Report 2016.

See Figure A.24: Information on an event about public leadership for young people.

See Figure A.25: Excerpt on leadership from a report on the TIGE conference 2013.

### **Files \ \3rd Way email correspondence**

A change culture starting with personal change may be helpful? If so then IofC are potentially very relevant as they have long established tools in this area and many years international experience and stories to help the personal change process for people in leadership or destined for leadership.

**Figure A.23: Excerpt on the future of work from the Global Opportunity Report 2016**

Urban citizens breathe WHO safe levels. Trans- ne, however, societies pple and goods to p.

Youth all over the world are joining the ranks of the unemployed. Almost a quarter of the planet's youth are neither working nor studying. Jobless growth is now a global reality for the next generation.

Today there is enoug on the planet, but st go to bed hungry ev percent of all food p a human stomach. Ir feed nine billion pec with lower yields.



**ABILITY**

system provides flexi- forms of transport and ile today many people's ces are being dicated by :s in for example a car.

**ISPORT**

orative economy is together and transport 1 will bring down con- tion from emissions.

**ORT**

ity where all your activ- 1 on foot, by bike or by nsport system. A low 1 a place.

OPPORTUNITIES:

**FUTUREPRENEURS**

Conventional thinking sees entrepreneur- ship as an alternative to the conventional corporate world, but bringing the two worlds together through corporate incubators is an opportunity to grow jobs.

**THE DIGITAL LABOUR MARKET**

Opportunity and talent are not evenly distributed. Digital technology can bring jobs to marginalised youth in remote corners of the world.

**CLOSING THE SKILLS GAP**

Education for a changing labour market needs to be flexible, giving youth the ability to learn skills in general or learn how to learn more when needed.

OPPORTUNITIES:

**NEW DIETS**

A global dietary tran ting more local prod of proteins on our pl. to put people, plane prosperity on a healt

**SMART FARMI**

Vast dissemination o ical tools at an afforc that both large and s new and more precis with less.

**REDUCE FOOD WASTE**

From our farms to gr tables, much of the f eaten. Reducing foo- nity to innovate alon

Figure A.24: Information on an event about public leadership for young people



## Public Leadership Gatherings

<http://www.thepublicleader.com/gathering/>

Young public leaders wanted! ||| 18-20 March – Staffordshire // 15-17 April – Northern Ireland

We're passionate about public leadership because this is how we believe things change. We want to see more and more leaders standing up and speaking out, and becoming voices for God in their neighbourhood, workplace and nation.

In July 2015 we gathered in Sussex with 27 young adults for our first ever public leadership gathering. Drawing from politics, business, education, charities and more the participants brought a wide range of experience to the weekend.

Figure A.25: Excerpt on leadership from a report on the TIGE conference 2013

## *'If you're not doing it because you believe in it, you will be found out'*

*Joe Garner talks to TIGE on the qualities of leadership*

It seems that there is a word that gets thrown around a lot in the corporate world; it's a title, it's a position and, in many cases, it is an attitude. That word is leader. But what does it actually take to become a leader? Can anyone learn how to lead? What is the difference between managing people and leading people?

Until very recently Joe Garner was Head of HSBC Bank UK and was invited to Caux this summer to make the opening keynote presentation. Little did the TIGE speakers in the audience know that the bar was about to be well and truly set! With his imaginary shirt and tie at the ready, Joe Garner began:

***'In economic terms the old world has gone and isn't coming back.'***

Joe's opening remarks reflected his strong views that there is a 'massive pressure for change' as everything in our world today is 'accelerated and amplified by the internet'. The need for change sits hand in hand with a 'very dramatic erosion of trust'. This has been one of the fundamental indications of why effective leadership is needed now more than ever.

***'Never has there been less respect for people just because of a job title.'***



*Joe Garner, former Head of UK Retail Bank and Deputy Chief Executive of HSBC Bank PLC*

environment where people can be themselves at work; an environment where people 'can stand in front of the rules rather than hide behind them'. As Joe would have it, leadership is about valuing and supporting those around you. When he took over at HSBC UK he wanted to do precisely this: so he gathered his team and headed out of

**Files\\3rd Way meeting notes**

Leadership will come out of the social and voluntary sector, who ‘would walk on broken glass’ to see an end to energy poverty. Servant leadership is one of the nine forms of leadership, a good leader can adopt whichever style works for the situation. Do some structures only promote one style of leadership? Some organisational structure and cultures could precipitate a particular form of leadership.

Otto Scharmer describes four ways of listening. He advocates focussing on the future rather than the past, can create the future. Creating the future is the task of leadership, leadership by story telling. Initiatives of Change have found that storytelling is the best form of leadership.

**A.8.3 Nodes\\New point of view\\motivations****Files\\3rd Way email correspondence**

Immediately what springs to mind is the motivation of stakeholders. Are they really committed to say alleviation of energy poverty or to their own self interests? Such motivations, which can often be covert, would significantly have an effect on governance. There are other key issues that would influence effective governance.

**A.8.4 Nodes\\New point of view\\personal development****Files\\3rd Way email correspondence**

It is not easy employing people when the historic social conditioning is “Business is there to make money. We go to work to make money” Very few look at work as the means by which they can find personal growth and fulfilment in relationship and community

I have put together a spreadsheet to use as a form for subjectively assessing behavioural profiles. I have added “Enthalpy” and “Entropy” for discussion with [name removed] I hope this form may help to develop discussion between team members. I hope each of us will ask ourselves and each other “how do you feel I need to change my behaviour?”

**Files\\3rd Way email correspondence**

See Figure A.26: Information on the basic ideas behind Initiatives of Change. See Figure A.27: Information on the aims and objectives of Initiatives of Change.

Figure A.26: Information on the basic ideas behind Initiatives of Change



### The basic ideas of lofC

Initiatives of Change (lofC) works on the principle that changes in people's motives, attitudes and behaviour are not only possible but are the only sure basis on which wider lasting change in society can be brought about. This is the experience of millions of people, whether involved in lofC or not, who have decided to start the 'change process' in their own lives.

It often begins with a person's moral and spiritual response to the needs of the world. 'Starting with myself' may sound too simple, but there is a certain logic to it. Do I want to see peace in the world? How about starting with my own relationship with family and neighbours? Do I want to see an end to corruption and crime? Why not begin by being honest and trustworthy myself?

The experiences of Initiatives of Change show, as a trade union leader put it, that 'when people change, the structure of society changes; and when the structure of society changes, people change. Both go together and both are necessary.' Initiatives of Change proposes some tools for this process of inner transformation:

- [A daily time of silence](#) where we listen to our conscience or 'inner voice'- for people of faith, the leading of God - for direction and correction;
- Seeking to apply absolute moral values of honesty, purity, unselfishness and love to daily life; restoring, where possible, for past mistakes, and embracing new motivation;
- Seeking and deepening our roots in our own religious tradition, and discovering what our faith means in practice; and for people of no particular faith, making the experiment of responding to the call of conscience and compassion;
- Open, honest dialogue between people of different backgrounds.

Figure A.27: Information on the aims and objectives of Initiatives of Change

**Aims and Objectives of lofC**

<http://www.lofc.org/aims>

Initiatives of Change (lofC) is focussed around the interaction of people, whether few or many, in homes, small or large groups, personal encounters, training courses, and local or international conferences. For over 70 years lofC has brought people of diverse backgrounds and faiths together. It has provided a rallying point for individuals and teams to work for justice, healing and human development, based on personal change starting in their own lives. Current initiatives are aimed at:

- Healing the wounds of history that sustain cycles of revenge, especially where cultures and civilizations meet.
- Strengthening the moral and spiritual dimensions of democracy, so challenging selfish interests and corruption.
- Helping individuals and families to counter the climate of blame and selfishness with a culture of care and personal responsibility.
- Strengthening the motivation of care and moral commitment in economic life and thinking, in order to create jobs, correct economic and environmental imbalance, and tackle the root causes of poverty.
- Rebuilding a sense of community and hope in cities and tackling the causes of racial and communal discrimination.
- Forging networks among people from different cultures and faiths based on a shared commitment to work for reconciliation, justice, and peace.

3<sup>rd</sup> Way Commonwealth Ltd; Unit 3, Co-op Yard; Station Road; Adlington; Lancashire; PR7 4LA

**A.8.5 Nodes \ \ New point of view \ \ potential future****Files \ \ 3rd Way email correspondence**

Scharmer claims that emergent listening can promote “Connecting to the emerging future – to a future possibility that links to your emerging self; to who you really are” .

Scharmer’s work goes beyond this. The 4th level of listening is looking for the potential future and opportunities to move into the future we want to see and so could become “transformational listening” .

Linking this to “AHA” ie Alarm (coming from concern), Honest conversation with ourselves and with others, than agreed Action

The first product is 3rd Way Super Insulation which enables refurb to be insulated to passive house standards with an expected heating energy cost ( and carbon) saving of around 75-90%. It appears to be the only solution that can lift the home occupier out of long term energy poverty. The second step is Community Energy Co-operatives where the energy poor are co-owners. It is feasible to think of supplying 33% of UK grid with renewable energy and eliminating energy poverty with this model.

Figure A.28: Information on the University for the Common Good, an initiative of Glasgow Caledonian University

### **University for the Common Good**

Glasgow Caledonian University will, by 2020, have a global reputation for delivering social benefit and impact through education, research and social innovation. We will be recognised as the University for the Common Good that transforms lives, enriches cities and communities, innovates for social and economic impact, engages globally and aligns with others in partnership and collaboration to deliver our goals.

---

3<sup>rd</sup> Way Commonwealth Ltd; Unit 3, Co-op Yard; Station Road; Adlington; Lancashire; PR7 4LA

### **Files\\3rd Way meeting notes**

Early adopters will develop the methods to undertake self-build projects, then others including the homeless can take on their own projects.

Young people are currently losing hope in the future due to unemployment and lack of housing, self build and co-housing could offer hope. 3rd Way could work with the Princes Trust to offer peer mentoring to young people, who could then be mentors to others and so on. Self build projects could offer hope to young people, they can learn a trade, build their own house and then find employment working within a guild.

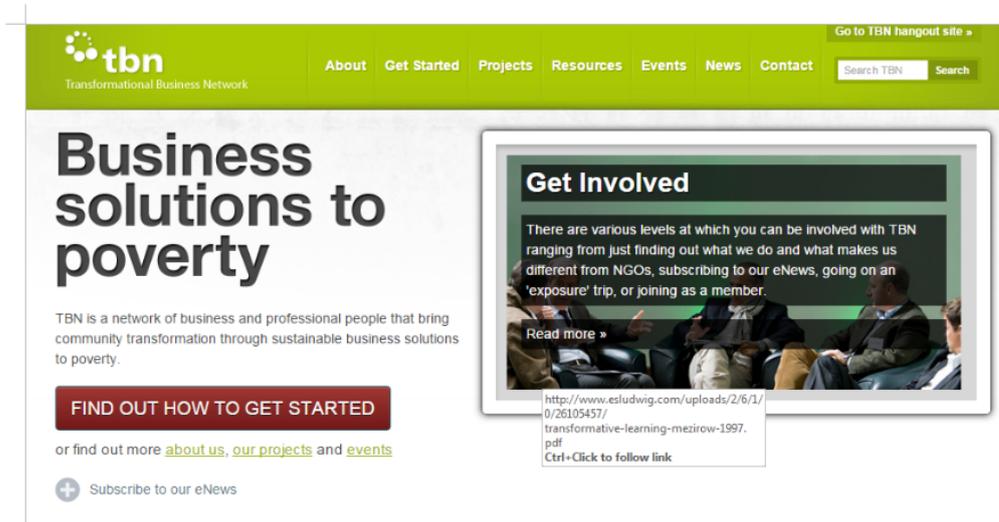
## **A.8.6 Nodes\\New point of view\\transformation**

### **Files\\3rd Way email correspondence**

See Figure A.28: Information on the University for the Common Good, an initiative of Glasgow Caledonian University.

See Figure A.29: Information on the Transformational Business Network.

Figure A.29: Information on the Transformational Business Network



Transformational Business Network

<https://www.tbnetwork.org/>

## A.9 Nodes\\Become institutionalised

### A.9.1 Nodes\\Become institutionalised\\boundary-spanning

#### Files\\3rd Way email correspondence

See Figure A.30: Excerpt from report on farming in Romania that highlights difficulties in coordination between different activities.

### A.9.2 Nodes\\Become institutionalised\\collaboration

#### Files\\3rd Way email correspondence

Collaborating engineers could share parts, tooling etc to make it easy for someone to make locally and buy parts that are difficult to make or need investment to tool up for from someone who has already done this and can supply at a fair price.

Figure A.30: Excerpt from report on farming in Romania that highlights difficulties in coordination between different activities name several opportunities.



A local market near Posesti



Aurel Nita, a bee-keeper in Posesti

Two situations aroused the admiration of the group: the first, in a remote mountainous area, showed the fruits of 20 years of work based on mobilisation of local people in small projects leading to the revitalization of the Viscri village: crafts, sales from farms, guest houses and agro-tourism, a phyto-purification station, organization of common pastures, restoration of traditional buildings (house, fortified church and old crafts)... The town has stabilised its population and stopped the rural exodus and succeeded in integrating the Roma members. It hosts 3,000 tourists every year.

Alba Afroda is an agro-tourism association in Alba Julia region. It has worked with the Rhone Chamber of Agriculture (France), facilitated many exchanges of trainees and developed Bed & Breakfast (B & B) on many farms that are owned by members. The Rhone Chamber of Agriculture had helped launch CUMA by sending second hand and pre-used equipment.

There was a warm welcome in a third village, Purcareni - But is also showed the difficulties of coordination between the very different activities: agro-tourism associations, farmers and municipalities. The unity between these three groups is essential for the success of development projects across the village.

Our return to Posesti allowed the Franco-Romanian group to share their findings with local stakeholders, the exercise will lead to a development project supported by the GAL. There remains to do to raise awareness and to urge Posesti farmers who apparently do not seem interested to become involved in the process. This is essential since the City Council of Posesti voted for its participation in the process implemented by the GAL.

Hopefully the meetings held during this visit will motivate and inspire people to ensure continued rural development in Posesti, a village with great possibilities.



Local transport for tourists



Initiatives of Change

Farmers' Dialogue is a programme of Initiatives of Change

[www.farmersdialogue.org](http://www.farmersdialogue.org)



THINK GLOBAL  
-ACT LOCALLY  
Where farmers renew their calling to feed the world

### A.9.3 Nodes \ \ Become institutionalised \ \ intellectual property

#### Files \ \ 3rd Way email correspondence

The patents are potentially of considerable commercial value and are to be placed in a Trust on behalf of those working their way out of poverty.

#### Files \ \ 3rd Way meeting notes

- Mike is ready to set up the Joy at Work Foundation, to his knowledge no one has set up a trust to hold IP of commercial value before, this relates to the guild model.

The technologies have been developed by a network of expertise who want to see people work their way out of poverty orchestrated by Mike. The work to date has been done under the understanding that there is a moral obligation to place the patents into trust on behalf of those working their way out of poverty and to protect them from abuse, then to form a co-operative structure led, developed and governed by the trustees to make and install the insulation, especially in areas of the UK that are in severe

deprivation and fuel poverty.

#### **A.9.4 Nodes\\Become institutionalised\\organic structure**

##### **Files\\3rd Way meeting notes**

Mike has found that prospective new staff have self selected out at the interview stage, realising that 3rd Way was not for them. This could be evidence of a healthy organisation rejecting new unhealthy cells.

People come together based on shared values, natural but recognised as process can incubate it and develop it (cf IoC) Then from this 'soup' of shared values a nucleus emerges that the guild forms around.

Structures only go so far, it is the character of the founder which is the organisation's DNA, however the right structures can help propagate that DNA and ensure a healthy organisation. The Quakers have found that even the healthiest of organisations seem to die off after a few hundred years, perhaps organisations have a natural lifespan, just like people, the DNA gets degraded slightly every time new people (cells) take over.

# Appendix B

## Initial Analysis Appendix: ESTA

In this data, meeting notes are from the author and verified by the founder and email correspondence is from the founder. Figures are either created by the founder or are something of interest to them, where the caption for each figure indicates its source. In the case of long documents, the relevant parts are extracted as one or more images as appropriate. The data is not presented in narrative order, text under each heading could be from a number of different meetings or correspondence at different times. Any spelling or grammatical errors are in the original documents and are not corrected here.

### B.1 Nodes\\Purposeful intent

#### B.1.1 Nodes\\Purposeful intent\\conflict

##### Files\\ESTA email correspondence

See Figure B.1: The Lens of Understanding diagram that Michael Hallam related to personas.

##### Files\\ESTA meeting notes

See Figure B.2: Diagram by Michael Hallam that shows how the ESTA Consortium could satisfy the four bottom lines.

#### B.1.2 Nodes\\Purposeful intent\\individual limitations

##### Files\\ESTA meeting notes

A group of students from Cumbria University are helping Michael and ESTA members with communication, this has so far resulted in a developed web-

Figure B.1: The Lens of Understanding diagram that Michael Hallam related to personas

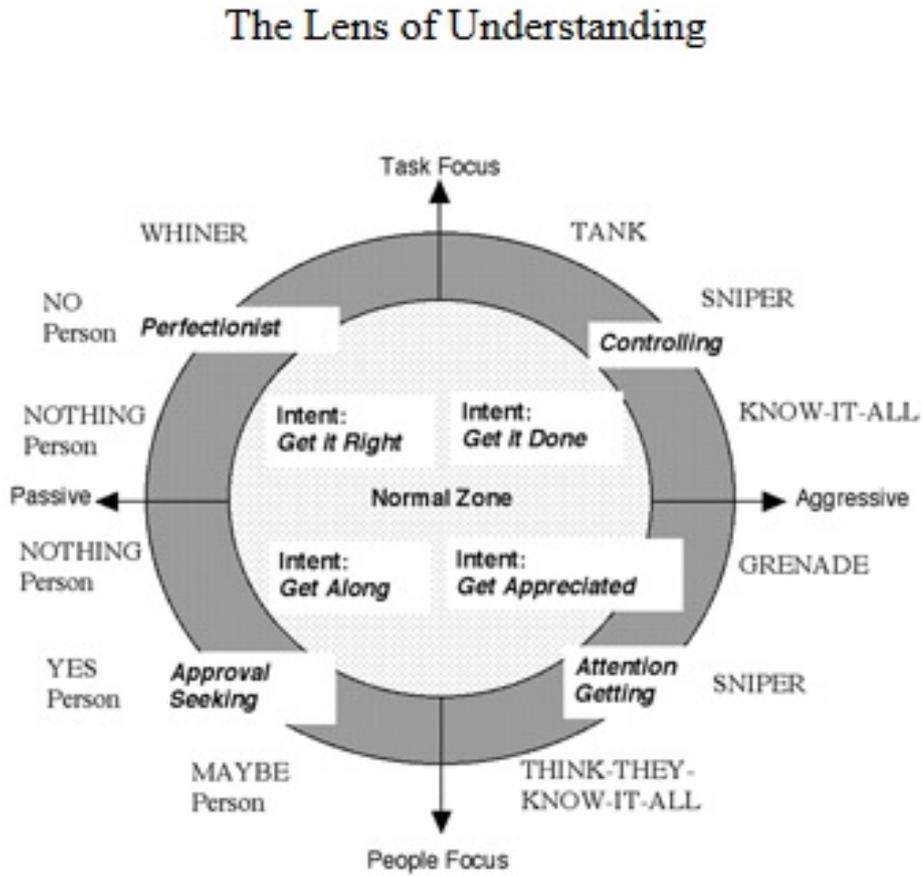
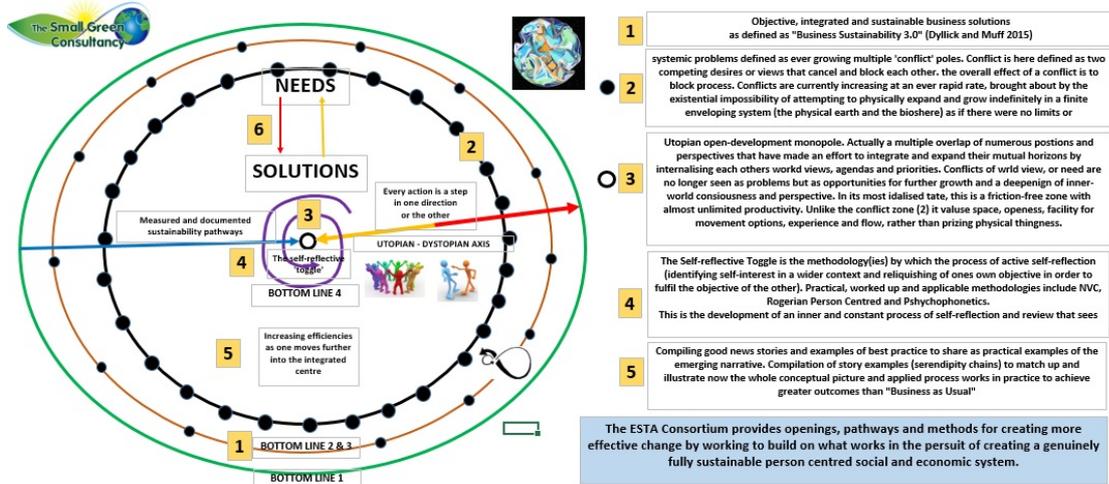


Figure B.2: Diagram by Michael Hallam that shows how the ESTA Consortium could satisfy the four bottom lines



site with a Members Offers section. The students observed that Michael was ‘a very busy man’, not always able to reply to emails etc.

### **B.1.3 Nodes\\Purposeful intent\\narrative**

#### **Files\\ESTA email correspondence**

You will also need to create a narrative for yourself and your business on any or all of the following themes:

- What makes you passionate about what you do and why.
- What you do that’s different and how what you do and sell informs and educates both yourself and your clients and customers.
- What you have learned as a result of running your business to date that you didn’t know when you started out.
- What needs and wants your products and services help to meet.
- Your awareness of the wider environmental and social impact of your business and what you are doing to help make what you do as sustainable as possible.
- Any skills and increased capacities that your business activity brings to others, either as customers and clients, suppliers, co-workers or your wider network.

#### **Files\\ESTA meeting notes**

Michael is working on a presentation of how the consortium model could work. The personas could connect a theoretical view of the consortium with a more inner psychological view of it.

THIS FORMS THE SPINAL NARRATIVE FOR THE ESTA CONSORTIUM MICHAEL !!!!!!!

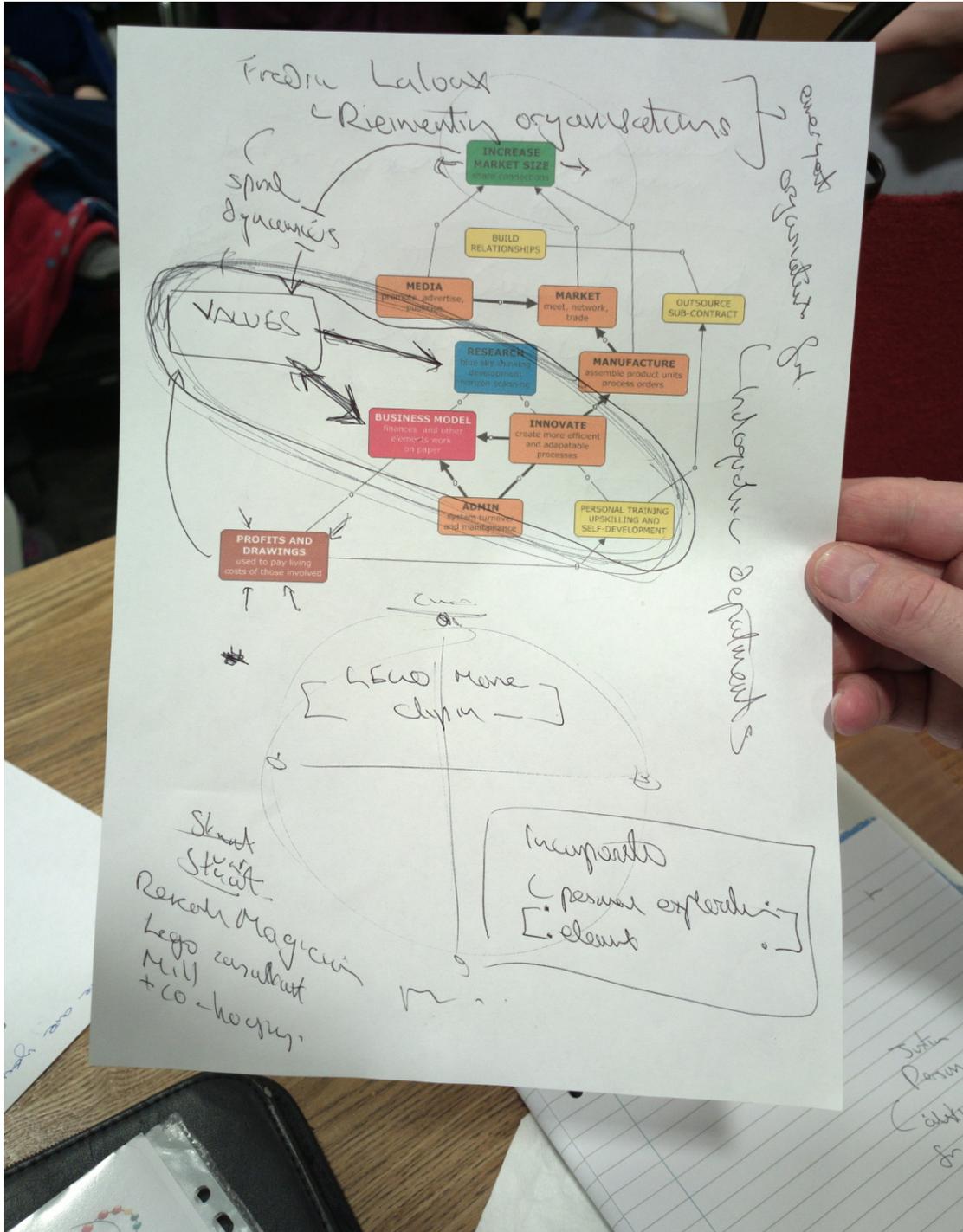
Michael is now getting together an audit of consultants to create a list of who can offer what (like the healthcare consortium). Could create directory like the healthcare group, could be online rather than printed. The key aspect of the healthcare directory was creating ‘a common narrative’ which took a year.

### **B.1.4 Nodes\\Purposeful intent\\values**

#### **Files\\ESTA meeting notes**

See Figure B.3: Annotated diagram of the ESTA consortium by Michael Hallam on the 5th February 2016 highlighting the importance of values.

Figure B.3: Annotated diagram of the ESTA consortium by Michael Hallam on the 5th February 2016 highlighting the importance of values



See Figure B.4: First ESTA Health and Wellbeing Directory produced in 2015.

### **Files\\ESTA meeting notes**

Connections happen one at a time, each person might find one or two others who share their values. Gradually there is a critical mass, like with local spending of money, when it gets to 75% people become aware that every pound is multiplied four times.

ESTA is an example of being values-based rather than rules-based, where ‘prescription-based systems lead to creative gridlock’ (see presentation that covers this issue). Conventional membership organisations based on democracy are rules-based, these organisations can be manipulated by individuals to their own interests.

Michael’s role is to guard the values, this connects with Steiner’s collegiate which corresponds to masters in a guild, there’s ‘no need to build empire’.

## **B.2 Nodes\\Enacted by human or other actors**

### **B.2.1 Nodes\\Enacted by human or other actors\\community**

#### **Files\\ESTA email correspondence**

See Figure B.5: First part of a paper drafted by Michael Hallam showing how the four bottom lines relate to each other.

See Figure B.6: Second part of a paper drafted by Michael Hallam showing how an organisation can relate to its environment

See Figure B.7: Third part of a paper drafted by Michael Hallam offering a systems approach to considering unknowns.

See Figure B.8: Fourth part of a paper drafted by Michael Hallam incorporating the author’s idea that Maslow’s hierarchy of needs could be inverted.

See Figure B.9: Fifth part of a paper drafted by Michael Hallam showing how the four bottom lines could relate to each other.

#### **Files\\ESTA meeting notes**

The Third Industrial Revolution created a ‘vanishingly small’ number of additional jobs as the value of everything tends to zero, with a drift to an

Figure B.4: ESTA Health and Wellbeing Directory produced in 2015

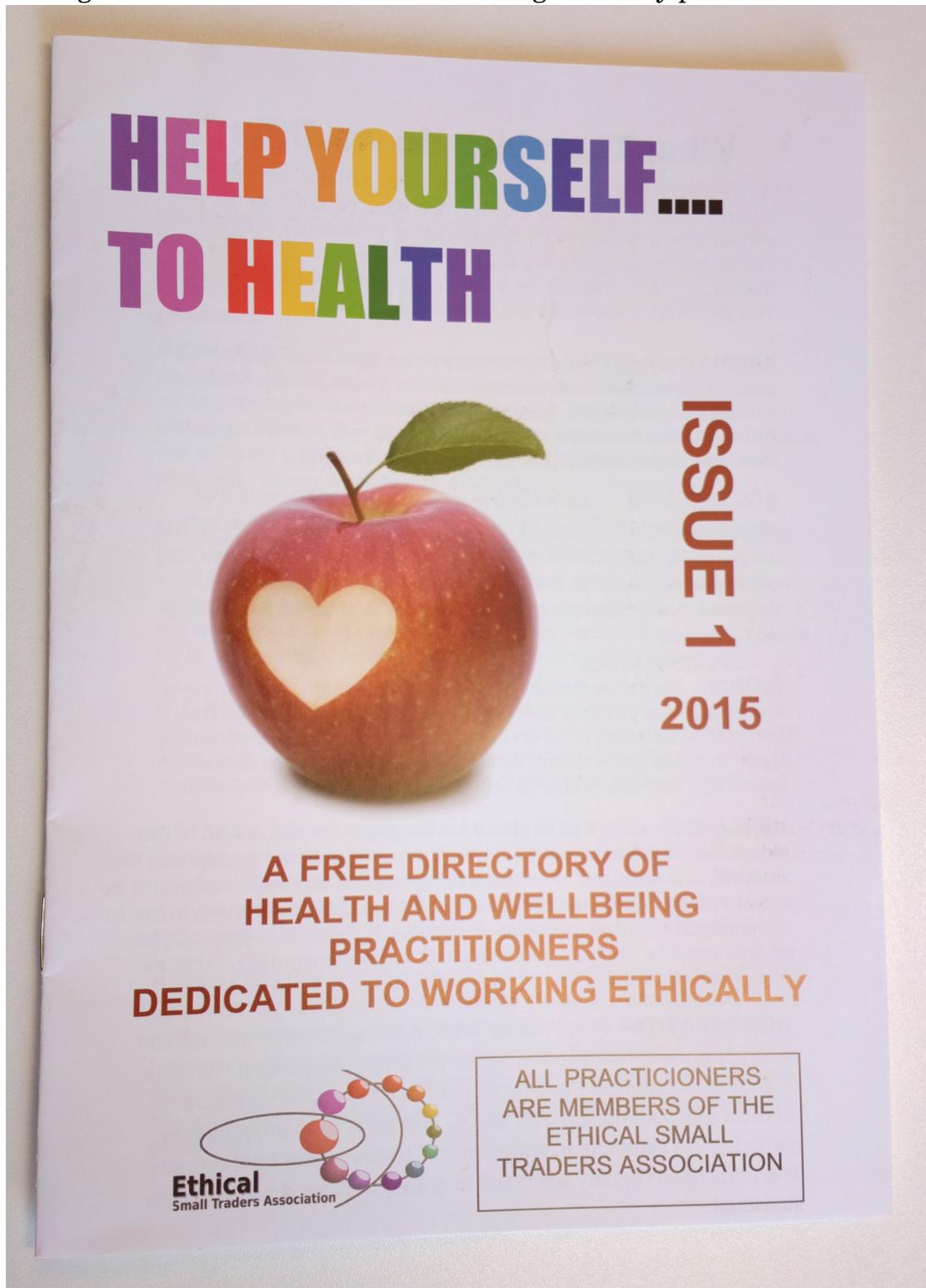
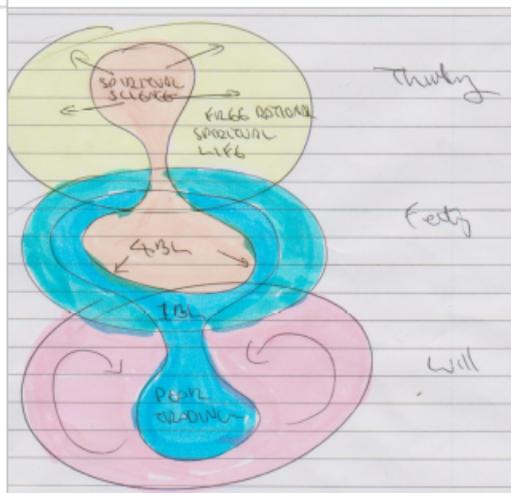


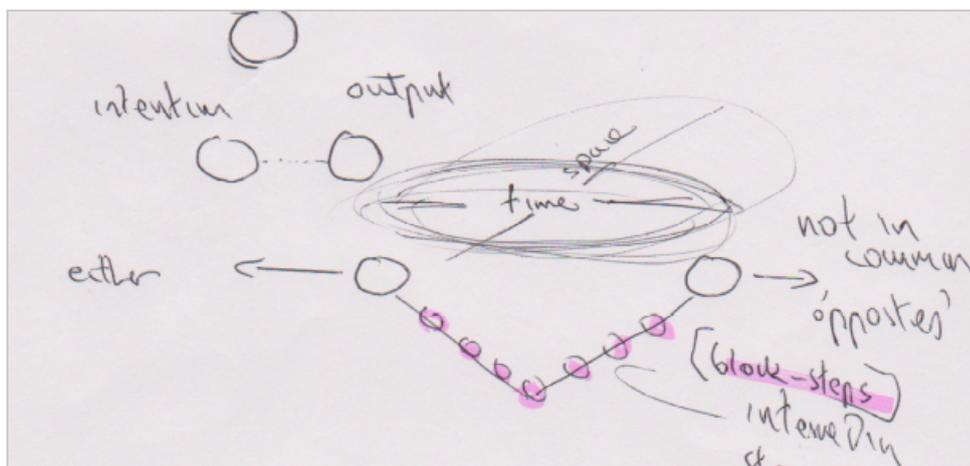
Figure B.5: First part of a paper drafted by Michael Hallam showing how the four bottom lines relate to each other



the complete Local social organism

A meta organisation consists of several independent organisational elements operating interdependently as 'living social organs' meeting the needs of the whole human being : learning, experiencing and acting. A fourth level: the self-reflective level – emerges when these three are in balance.

Do we have to reference Steiner here?

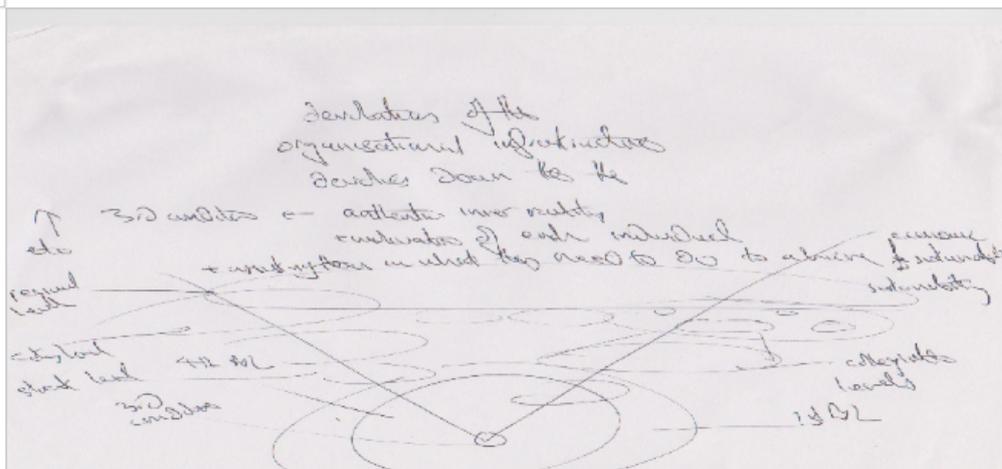


Steps between Intention and Realisation tend to grow as the time separating them increases.

A regular evaluation process to remove redundant steps

Design simple operations to achieve profound effect – for each and every block step encountered engineer a triangulated work around. (system back up)

Figure B.6: Second part of a paper drafted by Michael Hallam showing how an organisation can relate to its environment



Counterpoint: Job focus at the centre and context extends outwards into past and future (Essentially a 4<sup>th</sup> BL gesture)

Devolution of the organizational infrastructure devolves down to the authentic inner reality and motivation of each individual assisting them in what they need to achieve.

Another interpretation is individual level (centre)  
 Collegiate level  
 Local level (individual orgs)  
 Infrastructure level (local)  
 Infrastructure (regional)  
 Infrastructure (global)

Are there redundant infrastructure levels (eg national political entities?) that are hampering healthy organisational person-centred organisations development?



Figure B.8: Fourth part of a paper drafted by Michael Hallam incorporating the author's idea that Maslow's hierarchy of needs could be inverted

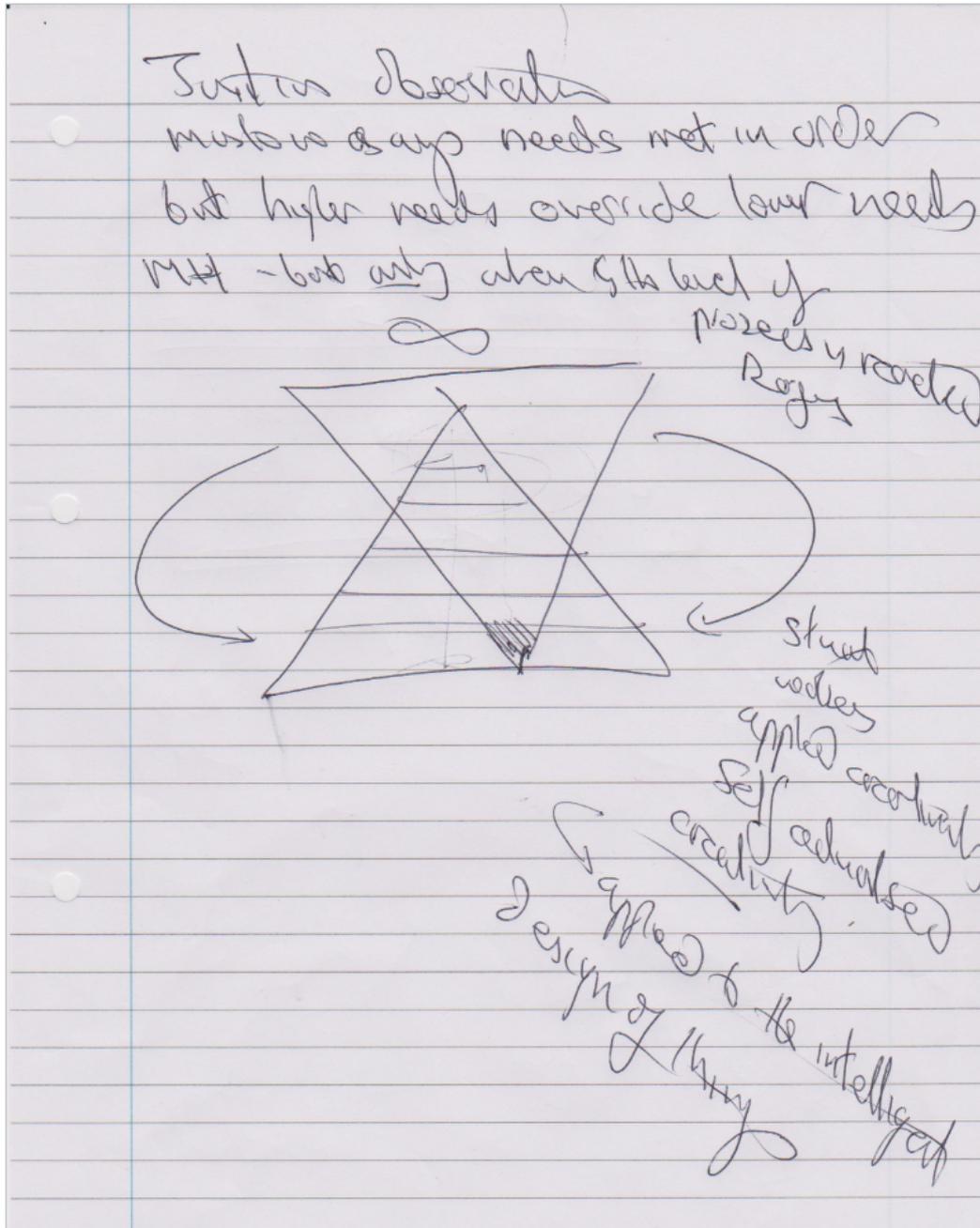
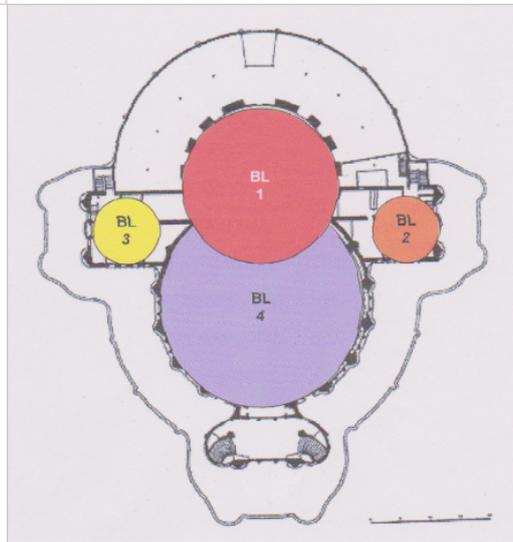


Figure B.9: Fifth part of a paper drafted by Michael Hallam showing how the four bottom lines could relate to each other



Not sure if it would go in the paper but it's a good analogy for how the 4BLs relate to each other. Maybe one for the unwritten Guild Ethos.

open source model. Hard to contain things, keep them special. There will only be a small number of companies providing the infrastructure, everyone else will do things for free. The elite will control all the resources, assets are shifting from skills to money and assets. In order to regain control, local communities have to use the technology for themselves, through local money, where it comes into existence as payment for real work.

## **B.2.2 Nodes\\Enacted by human or other actors\\fluid space**

### **Files\\ESTA meeting notes**

Michael pointed out that a guild master is one who 'understands the value of protecting an open space' (like open source). Generally people self select to participate (like open source), only rarely is necessary to exclude someone. The guild master 'has to be facilitating all the time', trying to 'facilitate everyone's objectives for them'.

### **B.2.3 Nodes\\Enacted by human or other actors\\focal organisation**

#### **Files\\ESTA meeting notes**

Michael has established the founding micro-business as a CIC to administer the guild, where people join a 'club' that is run by ESTA CIC.

### **B.2.4 Nodes\\Enacted by human or other actors\\group**

#### **Files\\ESTA meeting notes**

ESTA includes sector groups such as Health and Well-being, who are starting to work more collectively. Any member can go to any of the groups but need to be able to offer something relevant.

ESTA is based on the realisation while at Totnes that 'lateral connections' were the strongest element in their Strategy Group.

ESTA was originally a project of the Lancaster Social Enterprise Forum, which operated like a mutual support group. The group dissolved, but many of its members became members of ESTA.

The Health and Therapy group have produced a directory after nine months of discussion and consultation, an example of members working independently of Michael.

There's now a 'phase shift' in how ESTA members are networking, at first it seemed to be the connections made at larger meetings as Michael anticipated it would work. Now these connections have been made, 'hand-crafted' connections are now being formed in smaller groups of members, where 'bits of infrastructure drop out'. An example of this is where Gilson's bag shop became a centre for recycling Jiffy bags, once they had a room-full they were able to sell them in bulk to a specialist recycler. This is like a 'metabolic process' at a social level, where waste becomes resources.

### **B.2.5 Nodes\\Enacted by human or other actors\\members**

#### **Files\\ESTA meeting notes**

ESTA is now nearly four years old, with 95 members ranging from 'pre-startup' businesses to established ones with up to 20 staff. The majority of members would be classed as micro-businesses by the UK Government with 10 employees or less. Members include social enterprises and the local

Chamber of Commerce. ESTA has a knowledge base of practical information in the form of ‘apps’, such as one that lets members know all the places they can advertise for free. ESTA also makes extensive use of social networking tools, including Twitter, Facebook and Linked In. As well as on-line communication, ESTA also organises face-to-face meetings between members on various topics.

Michael is now re-structuring ESTA to have two levels of Basic and Associate members. These could correspond to apprentice and journeymen levels in the original guilds (with Michael as guild master). The basic membership is for a year, and offers access to networking (the benefits people are getting now but with increased emphasis on business promotion). This group is ‘self-maintaining’ for £4 a month. This year is an opportunity to ‘shake people out’ after the first year, they can become an associate member after undertaking an audit. Additional benefits include ‘sector-specific’ groups, based on businesses who know each other. The process is about filtering the people who aren’t really committed. This enables Michael to focus on ‘consortium building’. At the moment there’s the Health and Wellbeing group and the new consortium.

## **B.2.6 Nodes\Enacted by human or other actors\ network**

### **Files\ESTA meeting notes**

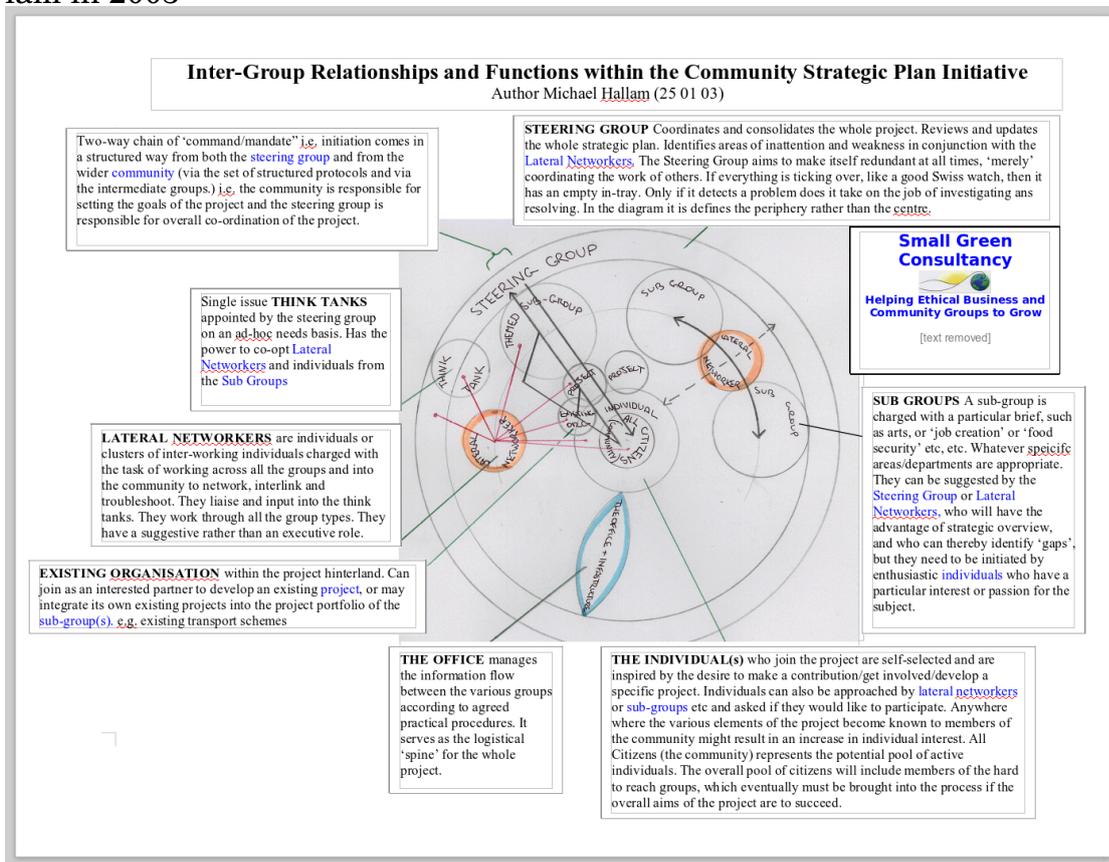
See Figure B.10: Decentralised organisation structure proposed by Michael Hallam in 2003.

### **Files\ESTA meeting notes**

Michael has now created a ‘local food game’ which is involving local people and promoting local food. The Food Loop game can offer an additional dimension to ESTA’s network, recording when local food is consumed locally

Michael made the point that distributed networks (rather than existing commercial social networks) are a ‘natural fit’ with ESTA.

Figure B.10: Decentralised organisation structure proposed by Michael Hallam in 2003



## **B.2.7 Nodes\Enacted by human or other actors\open source**

### **Files\ESTA email correspondence**

I would say that ESTA, and by extension the Open source Guild model, describes nicely the type of organisational form that is emerging to facilitate the developments and trends described in this article.

### **Files\ESTA meeting notes**

See Figure B.11: Ideas for how ESTA could relate to its wider community drawn by Michael Hallam.

### **Files\ESTA meeting notes**

A future development could be a consultancy, operating as an LLP to bring together ‘workers on the same level’, including Michael [and other ESTA members]. The consultancy would be part of the ESTA guild, where ‘the guild is always above’ what its members are doing, ‘process not thing driven’. The ‘guild is like a story’, an oral tradition in the collective minds of those who participate in it, ‘founded on an open source process’.

Michael has been reading the book *A Radically Beneficial World* by Charles Hugh Smith and sent it to Justin. Smith’s CLIME model is what might happen if ESTA’s business model (the open source guild) was applied to the whole of society.

Replicating ESTA could be analogous to people taking the ‘source code’ and applying it to their situation.

These talks and workshops can take people out of their ‘coal-face context’ by working at a meta-level, gaining the benefit of depth, and recontextualising techniques as a ‘living source code’. This living source code is the open source guild as a way of working, not as a set of rules.

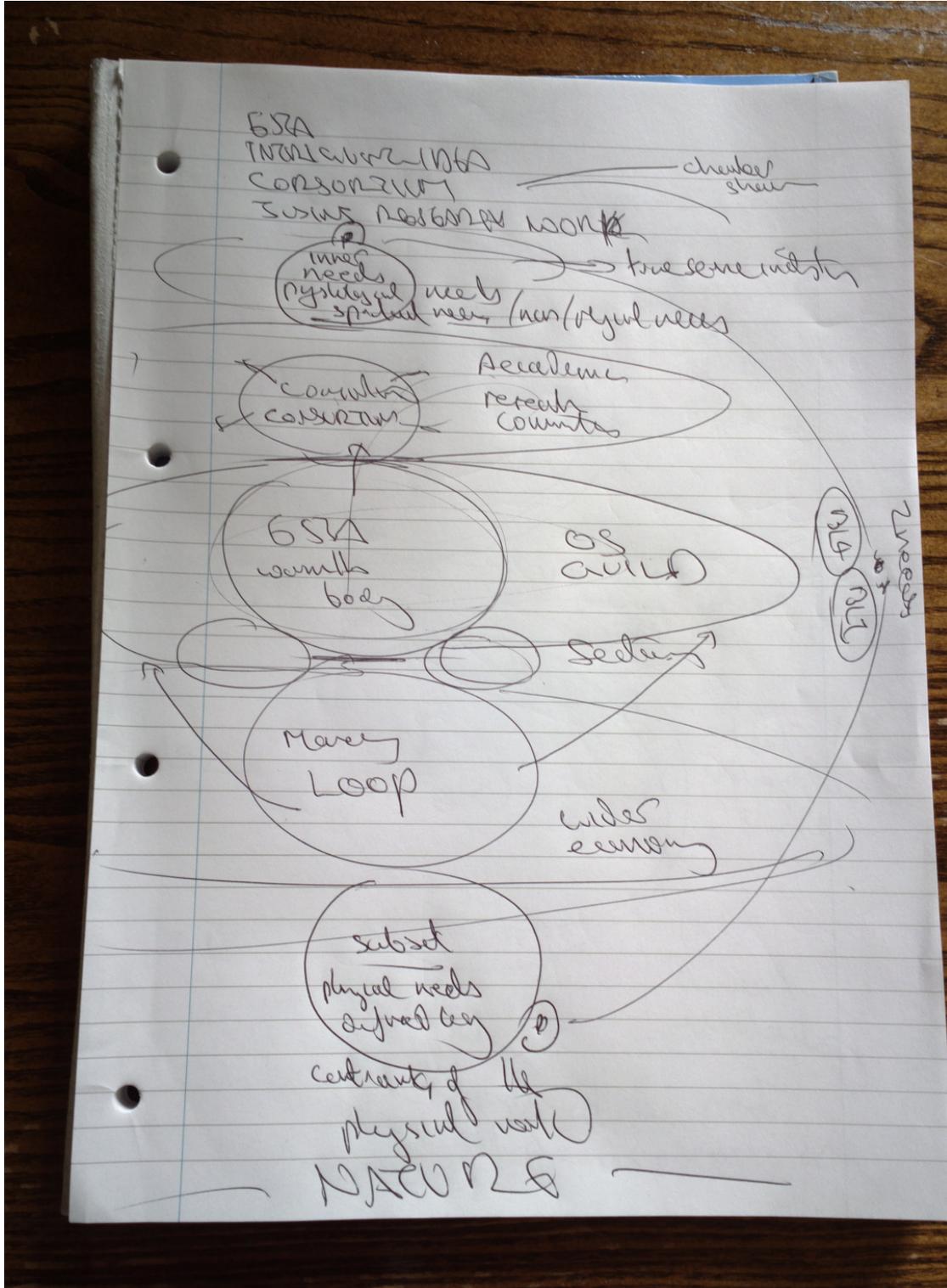
With ESTA, Michael is the ‘guardian of ideas’, corresponding to the core values in the open source guild model.

## **B.2.8 Nodes\Enacted by human or other actors\scale**

### **Files\ESTA meeting notes**

The intriguing idea is to expand the ESTA model to the next level. At a time when the UK leaving the EU could be a trigger for Europe to implode, Michael is thinking ‘let’s create a new federation’ via the Internet. Could

Figure B.11: Ideas for how ESTA could relate to its wider community through the Money Loop drawn by Michael Hallam



almost be satire but also something that might just work. Michael is thinking big, the ESTA model could embrace Europe and Northern Africa. In all these areas there will be many thousands of worthy projects

Micheal has attempted to franchise the ESTA model in Preston, but the problem was ‘finding someone to run it’, they needed to ‘get it’.

ESTA could become ‘open source’, keeping within 100-200 members, ‘breaking bits off’ if it gets larger. This would lead to ESTA becoming ‘holographic’, replicating its principles with local brands.

- ESTA is about ‘bigger than self’ intrinsic values, could be scaled up.
- An alternative viewpoint is that the way forward is to ‘communicate what it is we are doing’ to the outside world, about ESTA as a network, rather than scaling up.
- Michael pointed out that ESTA is not about ‘growth at all costs’, instead promoting gaining a competitive by acting locally and working collaboratively.

### **B.2.9 Nodes\\Enacted by human or other actors\\software**

#### **Files\\ESTA meeting notes**

Michael finds the idea of an ‘ESTA button’ on smartphones appealing, but appreciates the need to communicate with people who wish to live in a ‘tech-free zone’. Random encounters in the street are another way of promoting what’s going on at ESTA. Some experienced members are now starting to act as mentors for new ones.

## **B.3 Nodes\\Particular incidents or events**

### **B.3.1 Nodes\\Particular incidents or events\\accountability**

#### **Files\\ESTA email correspondence**

See Figure B.12: Excerpt from the document Using the ESTA logo Audit, terms and conditions.

Figure B.12: Excerpt from the document Using the ESTA logo Audit, terms and conditions

### **Using the ESTA logo Audit, terms and conditions**

The ESTA Business Membership club is primarily a business-to-business networking club in which the main advantage to date has been the facilities which the club provides to enable members to meet and communicate with each other.

The ESTA club is growing, developing and 'evolving', and as ESTA develops its public profile it become more advantageous for members to display the logo as part of their profile to customers.

This request to display the ESTA logo on a member's website arose just over a year ago and since then, and in the light of several discussions and conversations with various members, the following terms and conditions have been formulated.

Unlike 'simply' being a member of the business network, displaying the ESTA logo on your publicity and promotional material makes a public statement about what kind of business you run, namely an ethical one

This begs the question as to what an ethical business is? From a customer's point of view it has to be, above all, that they have a certain assurance that when they do business with you they will be treated fairly, honestly and with consideration.

In addition there must be some degree of tangible commitment to actively working towards increased sustainability, as outlined in the Four Bottom Line Framework.

I have therefore arrived at a simple process of 'qualification', in which members apply to display and use the ESTA logo.

**Files\\ESTA meeting notes**

ESTA is aiming for 200 members, with sub-groups that form a 'second tier' where people have to go through the audit process. Ordinary 'basic' members benefit from the website, networking opportunities etc. Michael can then focus on building consortia and networking groups.

Locality have published a report on Diseconomies of Scale. This report points out that centralised public services are inefficient, with layers of back-office systems, losing local knowledge in the process. The report calls for locally accountable services, connecting with how ESTA is looking to do business.

Michael is developing the audit process that gives members the right to use the ESTA logo, currently being trialled with a few members.

**B.3.2 Nodes\\Particular incidents or events\\  
knowledge****Files\\ESTA email correspondence**

Campus in the City is all about bringing the resources and assets of Lancaster University into town and strengthening engagement. We thought that a good theme could be emphasising how ESTA member businesses are developing their knowledge and know-how base.

**Files\\ESTA meeting notes**

By gaining insight into other people's worlds, one's own world expands. Such a process is also part of creating genuinely new knowledge (which entails changing one's own world-view and perception of self). Social organisms that allow for a reflective process are needed to enable individual reflection. Many people who want to 'save the world' are doing so from egoistic motives, they don't realise that they need to change in themselves. This is a factor in why pursuing bottom lines two and three (social and environmental) have not been successful so far.

Can create a platform and invite real projects to subscribe with a small donation. The guild model will do the rest, together with the money loop concept. It could be presented as a knowledge exchange project, develop things gradually.

One of the roles of the consortium can be to deal with the bureaucracy of bidding for contracts, particularly the many policies and procedures needed. At the moment, small organisations are collapsing because they can't tick

the funding boxes, the work going to big national organisations who have whole departments to tick boxes. However local organisations will offer services that leverage all the advantages of being local and having local knowledge.

### **B.3.3 Nodes\\Particular incidents or events\\learning**

#### **Files\\ESTA meeting notes**

The circular four stage learning cycle is actually a spiral, linking to spiral dynamics, as the learner doesn't come back to the same place they started from, this is where the learning cycle can link with the seven stages of reflective judgement. The critical point is where the learner is willing to "let go" of their previous view of the world and move up a level, this will be at the reflection and conceptualisation stages in the learning cycle

Justin introduced the Seven Stages of Reflective Judgement (in the book *Fostering Critical Reflection in Adulthood* by Mezirow and associates), Michael agreed that they could correspond to Carl Roger's seven stages in becoming a person. The 12 Jungian archetypes can be equated to a combination of the three-fold structure of pioneering, maintaining and breaking up with the four stages of the learning cycle of concrete experience, reflective observation, abstract conceptualisation and active experimenting.

### **B.3.4 Nodes\\Particular incidents or events\\market**

#### **Files\\ESTA email correspondence**

See Figure B.13: The Money Loop system diagram created by Michael Hallam on 19th July 2016.

#### **Files\\ESTA meeting notes**

Every ESTA meet-up is potentially a market-place, an opportunity to trade, like the original village squares. However the consortium is 'considerably more strategic' and 'serves the sector'.

### **B.3.5 Nodes\\Particular incidents or events\\stories**

#### **Files\\ESTA meeting notes**

The commons in ESTA is one of interests, stories of personal development.

Figure B.13: The Money Loop system diagram created by Michael Hallam on 19th July 2016

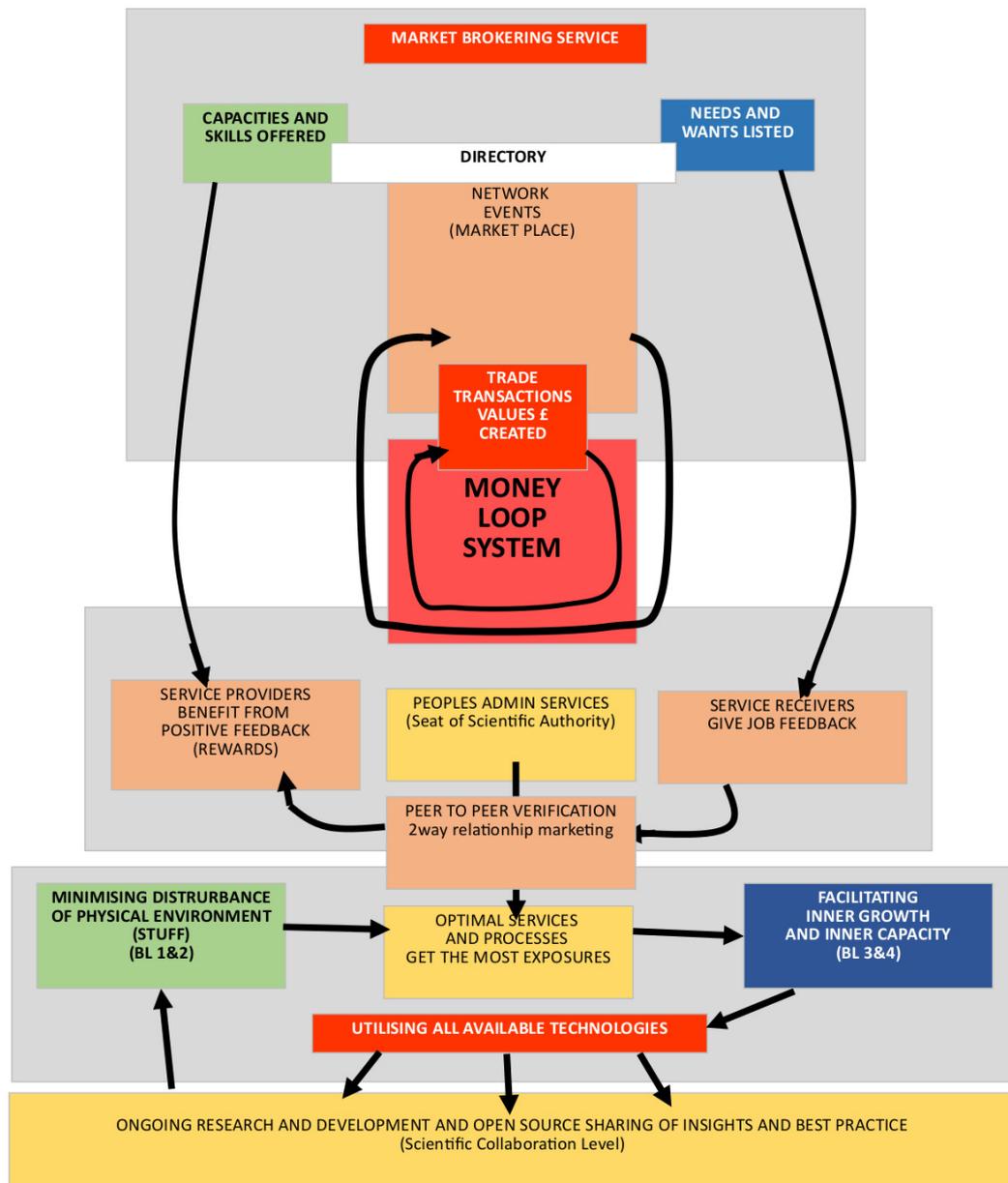
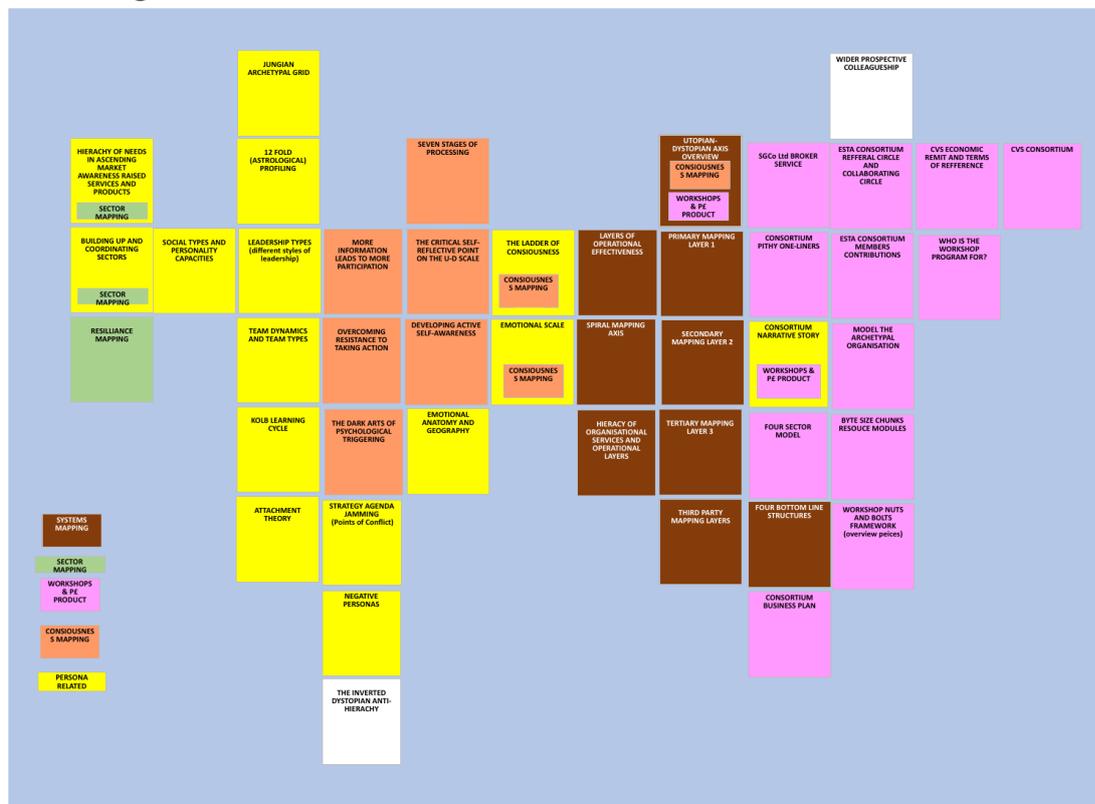


Figure B.14: The Money Loop system diagram created by Michael Hallam on 23 August 2016



### B.3.6 Nodes\\Particular incidents or events\\structure

#### Files\\ESTA email correspondence

See Figure B.14: The Money Loop system diagram created by Michael Hallam on 23 August 2016.

See Figure B.15: Organic model of organisation created by Michael Hallam.

#### Files\\ESTA meeting notes

Some people ‘bounce off’, don’t engage with ESTA and don’t acknowledge that it has been helpful, showing a lack of capacity to reflect on their own development. ESTA is a robust structure in the sense that those individuals who would manipulate a voluntary sector organisation into meeting their needs are the ones who self select out of ESTA, not seeing a structure they can engage with. In this sense, ESTA has its own ‘immune system’.

A recent meeting of the Biodynamic Group revealed that it had a ‘spindle’ model, with common aspects connecting the activities of members. ESTA leads the group in a ‘chain of initiatives’ rather than a chain of command, where ‘joining up is an inner process’ as there is no formal legal structure.

Figure B.15: Organic model of organisation created by Michael Hallam

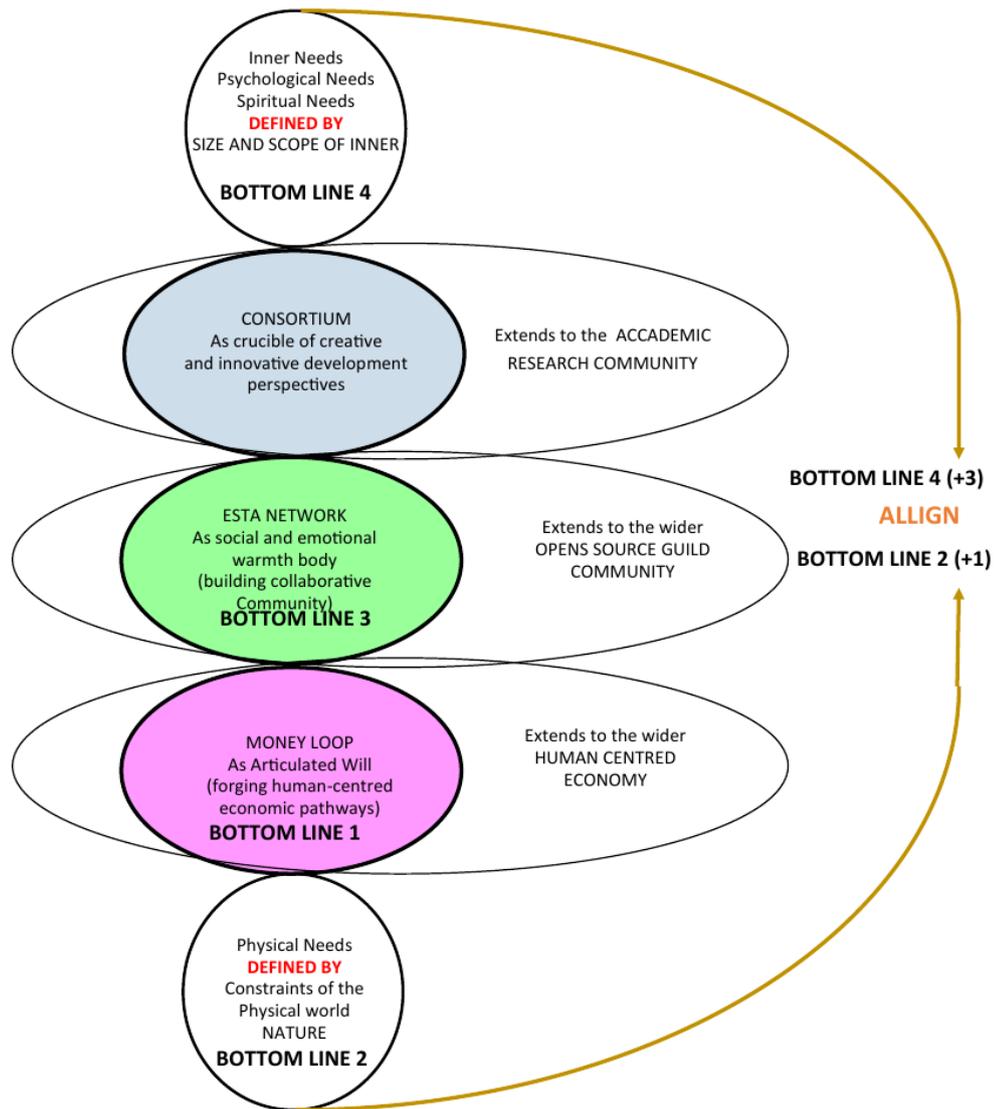
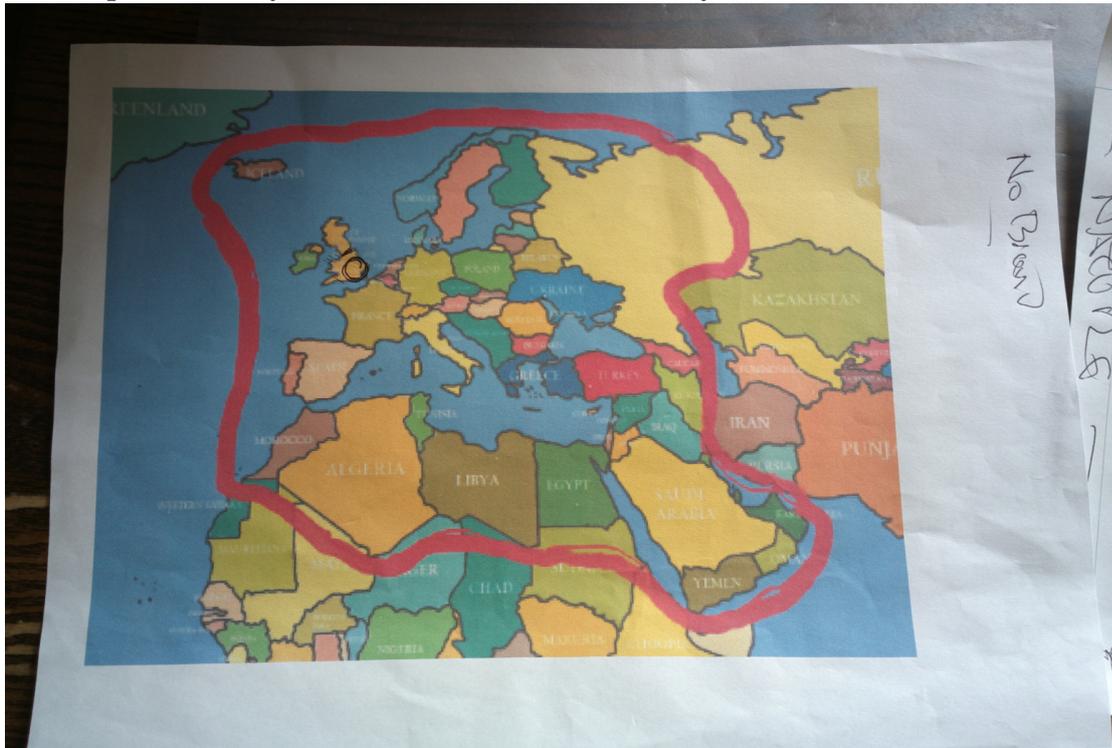


Figure B.16: Possible extent of the “No Brand” concept for how ESTA could scale up created by Michael Hallam in February 2016



The same intangibility applies to ESTA itself, where there is a ‘culture of inner remembering’ with effects that can be seen, including offering the same benefits as a union. However, not everyone ‘gets it’.

ESTA was started by considering ‘how to create a dynamic that isn’t self-serving’ which is process-driven and self-regulating both individually and with respect to the world. ESTA exists in a ‘non-physical realm’ (but no less real), in this respect as a ‘free association’ (Steiner, 1972). At the moment, it doesn’t exist in a legal sense, but a Limited Liability Partnership (LLP) could be a possible legal structure for a guild.

It is a disadvantage for the guild to exist legally, Michael is ‘wary of anything that becomes a legal structure’, it could be subverted or taken over and in any case will suffer the problems of being governed by a committee. ESTA doesn’t need an outer structure to operate.

### **Files\\ESTA meeting notes**

See Figure B.16: Possible extent of the “No Brand” concept for how ESTA could scale up created by Michael Hallam in February 2016.

### **B.3.7 Nodes\\Particular incidents or events\\vision**

#### **Files\\ESTA meeting notes**

ESTA as an identity could be promoted more, a brand which stands for the local community, developing social capital and an aspiration to ‘change society’ one bit at a time. In this aspiration, ESTA joins initiatives such as credit unions and co-housing projects.

Michael shared his thoughts about ESTA with the group, describing it as a ‘movement’, a ‘catalyst for change’.

The structure of ESTA puts Michael firmly in the driving seat as decision-maker and visionary

The vision that is driving ESTA is that personal fulfilment is compatible with economic success, where a person who is acting from their deepest needs and wishes will be more effective in gaining appropriate economic reward for their work.

## **B.4 Nodes\\Causal sequence**

### **B.4.1 Nodes\\Causal sequence\\decision-making**

#### **Files\\ESTA meeting notes**

A problem with traditional co-ops is ‘social paranoia’, where one individual can block the whole group. In contrast, the Quaker decision-making process is more like a design process. ESTA’s decision-making process is more like the Quaker method as demonstrated in the previous networking meeting where Justin proposed that Michael could help another member with their website.

Members of the guild are specifically not members of the CIC, which avoids the voluntary sector and co-operative problem of creating committees of too many inexperienced decision-makers.

### **B.4.2 Nodes\\Causal sequence\\identification of needs**

#### **Files\\ESTA email correspondence**

See Figure B.17: Excerpt from a Locality report on the future of public services.

Figure B.17: Excerpt from a Locality report on the future of public services



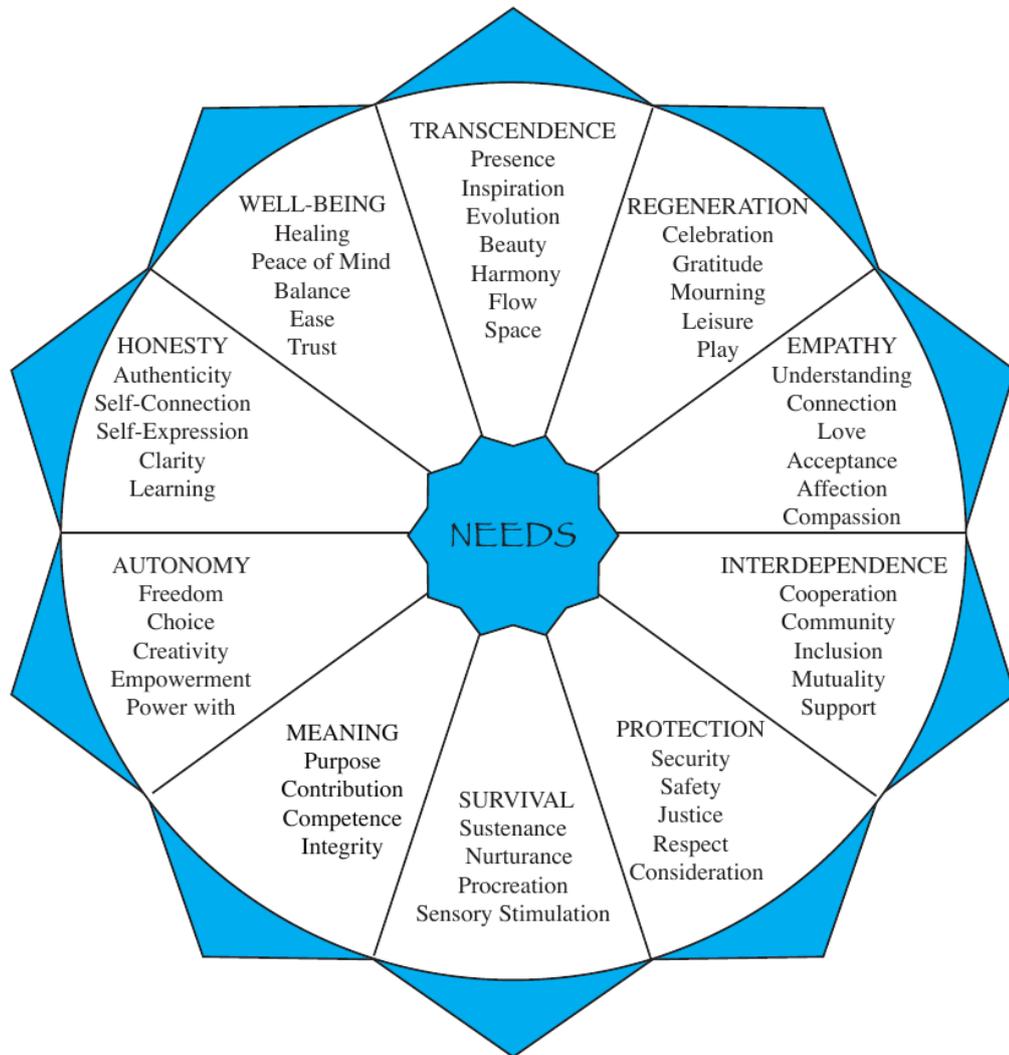
### Files\\ESTA email correspondence

That leads me onto another trend that I would add, which I think is absolutely critical, and that is the need to seek genuine productivity gains by creating a much deeper conscious relationship between what we really need (as opposed to what we are told we need) and how we achieve those needs, using minimal operational steps and using minimal physical stuff. This corresponds to what I would characterise as 'Peak Stuff' (which we want to use more intelligently) and 'Peak Consciousness-Identity' (which is the massive big growth area: and where the real service economy lies) What makes it possible at the small scale is the double edged sword of "Peak Technology", which makes the transformative processing power of digital technology a potential force for liberation (if we use it in a collaborative context) or for social destruction (if used in a combative and controlling sense).

### Files\\ESTA meeting notes

See Figure B.18: The Needs Wheel diagram that informed Michael Hallam's thinking.

Figure B.18: The Needs Wheel diagram that informed Michael Hallam’s thinking



**Needs:** Resources required to sustain and enrich life.  
 Needs are universal.  
 Needs make no reference to any specific person  
 doing any specific thing.

*Key Distinction: Need vs. Strategy*

Inspired by the work of Marshall Rosenberg, Ph.D. and Manfred Max-Neef, Ph. D., Chilean economist  
 © 2005 peaceworks Jim & Jori Manske, CNVC Certified Trainers in Nonviolent Communication<sup>sm</sup>  
 cnvc.org radicalcompassion.com

**Files\\ESTA meeting notes**

Current society is manipulated by big business, the money loop system puts needs first, accelerates the economy in the right way, replacing the invisible hand of the market with the intentions of real people in a 'visible market system', creating a protective inner system. At the head of the money loop system is the information database, which enables brokering between needs and capacity to satisfy those needs. At the centre of the needs wheel is a person, surrounded by multiple persons providing for those needs.

**B.4.3 Nodes\\Causal sequence\process****Files\\ESTA email correspondence**

ESTA itself is a living organisational experiment in how to better integrate and support many active players in becoming effective agents for internal and external capacity building. (I increasingly like the idea that life is a game, albeit at times a very serious one!)

In this context, ESTA, is a dynamic organising process that seeks to simultaneously enhance and strengthen personal identity and group identity, without compromise to either.

I am beginning to experience anecdotal evidence from a number of ESTA members that when both intrinsic and extrinsic needs are met with the same activity then motivation and 'buy in' to the process increases (and ESTA is essentially a process rather than a thing).

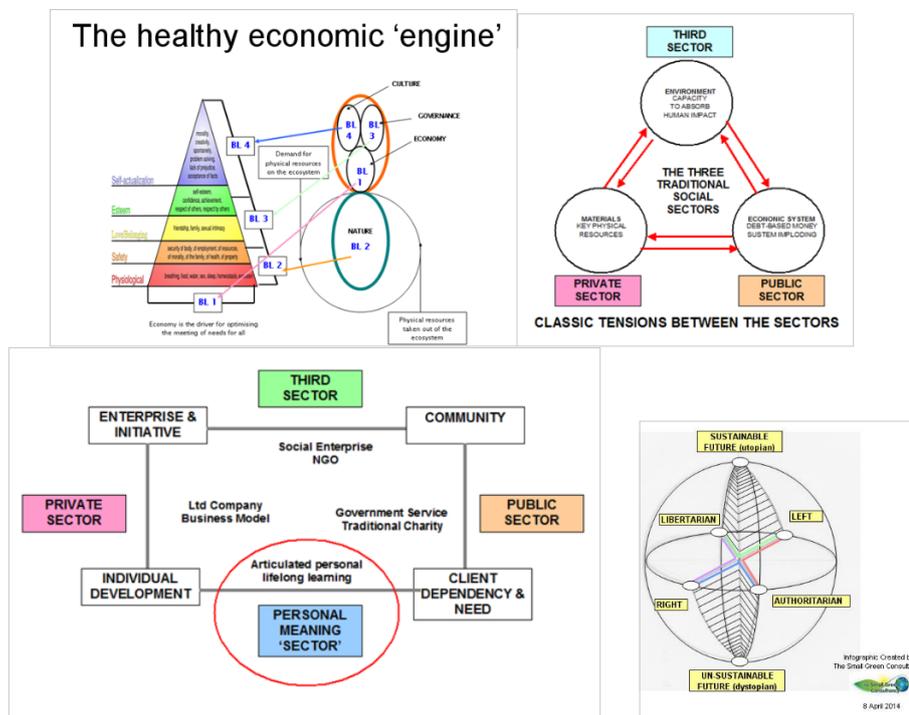
**Files\\ESTA meeting notes**

See the book *Reinventing Organisations* by Fredrick Lotus, which is about how people at top can empower others and lateral individuals who co-ordinates people across the organisation (how ESTA works). Process driven rather than thing driven (shared process). How to co-ordinate autonomous individuals

ESTA is an example of resistance to the neo-liberal agenda through shared values, the four bottom lines and a whole systems approach. In all, 'more of a process than a thing', where people internalise the process and become ambassadors.



Figure B.20: Second part of a presentation that Michael Hallam made to Cat Smith, Lancaster's Member for Parliament on the 5th October 2016



### Files\\ESTA email correspondence

See Figure B.21: The Quadruple Bottom Line Framework of Indicators used in audits of ESTA members.

See Figure B.22: The Seven Peaks Model, created by Michael Hallam to relate consciousness to sustainability.

See Figure B.23: The Quadruple Bottom Line Framework of Indicators used in audits of ESTA members.

### Files\\ESTA email correspondence

See Figure B.24: First excerpt from the document From Three Sectors to Four, showing how Michael Hallam developed the Quadruple Bottom Line.

See Figure B.25: Second excerpt from the document From Three Sectors to Four, showing how Michael Hallam developed the Quadruple Bottom Line.

### Files\\ESTA email correspondence

Creating a directory of sustainable things sold by ESTA member businesses and exploring ways of encouraging the public to make better use of local "stuff".

Figure B.21: The Quadruple Bottom Line Framework of Indicators used in audits of ESTA members

**Appendix II**  
**of the Terms and Conditions**  
**for ESTA Business Club Members**  
 to use the ESTA BC Logo

**THE QUADRUPLE BOTTOM LINE FRAMEWORK OF INDICATORS**  
 Michael Hallam  
 The Small Green Consultancy



Please use this reference guide to choose three areas where you intend to make improvements to the overall sustainable operation of your business over the next twelve months. On your ESTA Audit form indicate what the current status of your business is with regard to the chosen fields and then indicate what improvements you intend to make over the coming year.

- **EDUCATION**
- **Contribute to Education & Wellbeing**
- Indicator 6: CREATING NEW OPPORTUNITIES FOR PEOPLE - BL3
- Indicator 43: PROMOTE EDUCATION WHICH ENCOURAGES LIVING IN INCREASING COMPLIANCE TO THE 4BL FRAMEWORK - BL4
- Indicator 44: ENCOURAGE AND FACILITATE LIFE-LONG LEARNING AND SELF DEVELOPMENT - BL4
- Indicator 45: PROMOTE LOCAL CULTURAL DISTINCTIVENESS AND DIVERSITY - BL3
- Indicator 53: ENCOURAGE PHYSICAL ACTIVITIES TO MAINTAIN PHYSICAL HEALTH- BL4
- Indicator 42: STRIVE TO PROVIDE HIGH-END [MASLOWS HIERACY] PRODUCTS, SERVICES AND EXPERIENCES - BL4
- **Increase Positive Collaboration**
- Indicator 8: BE PREPARED TO ADAPT PRACTICES IN THE FACE OF INNOVATION BY OTHERS - BL4

Figure B.22: The Seven Peaks Model, created by Michael Hallam to relate consciousness to sustainability

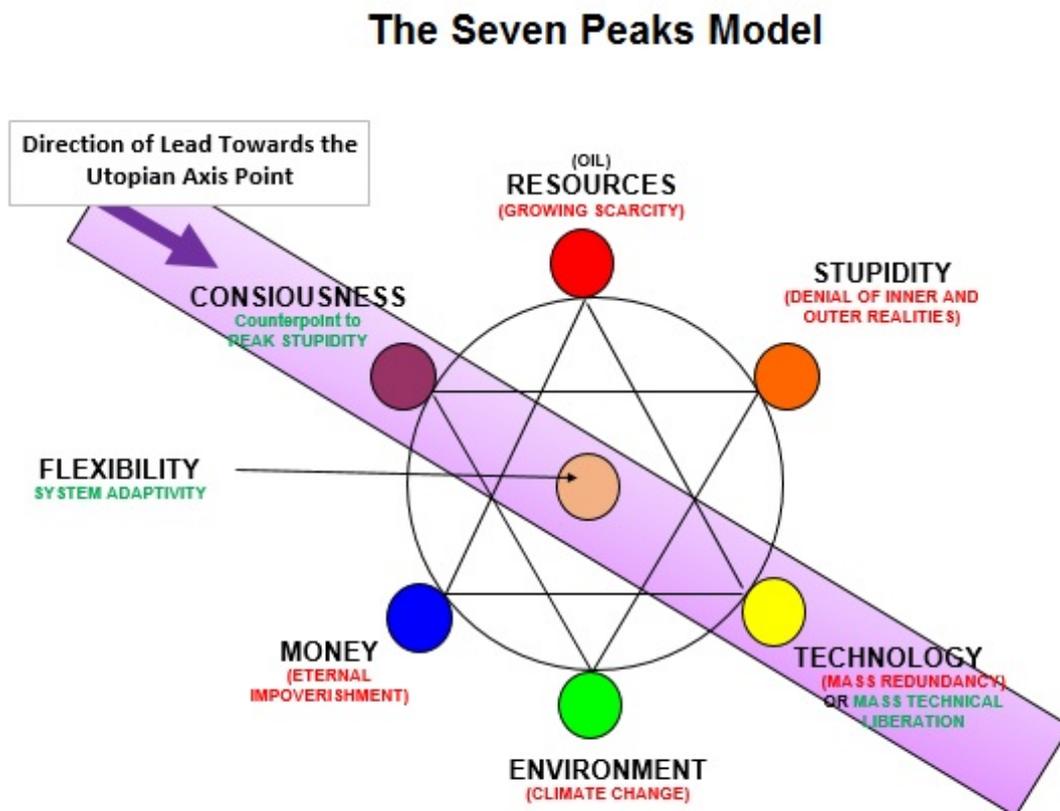
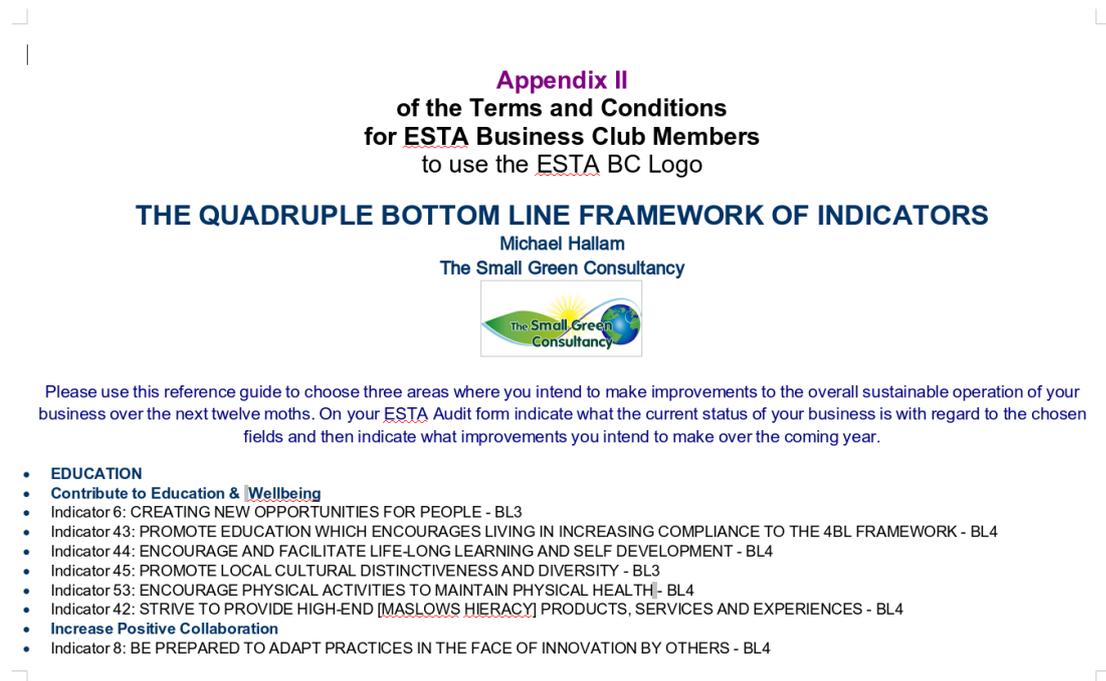


Figure B.23: The Quadruple Bottom Line Framework of Indicators used in audits of ESTA members



In my experience, one of our core offerings for encouraging effective and sustainable (in all senses) change, that we have to offer is that which arises out of the marrying of inner change and effective resource management (Bottom lines 1 and 4).

The OS Guild model may well be a question of building organisational/in-frastructural life-boats in the face of a rapidly deteriorating economy, society and environment in which over half the population drive themselves mad with denial and a refusal to face up to the real reasons for the persistent unwillingness to live within sustainable limits.

### **Files\\ESTA meeting notes**

One issue with volunteering is that not everyone can volunteer, this needs independent resources. Using a business model to promote sustainability offers the possibility of making a living while working for a better future. An example of applying a business model to social problems could include housing for people who are well educated and have worked for the public good but this means they end up with no resources of their own.

Figure B.24: First excerpt from the document From Three Sectors to Four, showing how Michael Hallam developed the Quadruple Bottom Line

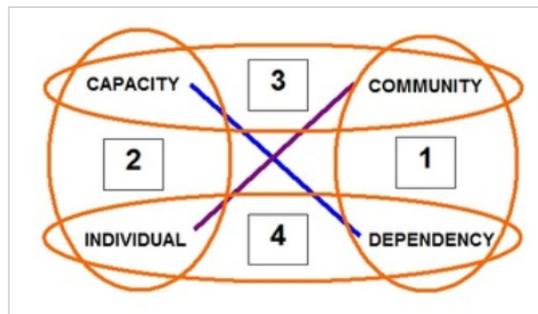
### The Fourth Sector Unlocks the Logjam

By analysing these repeated failures a picture begins to emerge whereby the mutual tensions between the public and private sectors and between the third sector and the private sector (and with the public sector when it allies itself with the private sector) are seen, at a more fundamental level, as an attempt to balance two naturally conflicting polarities.

These are between community and individual development, on the one hand and between capacity and need on the other.

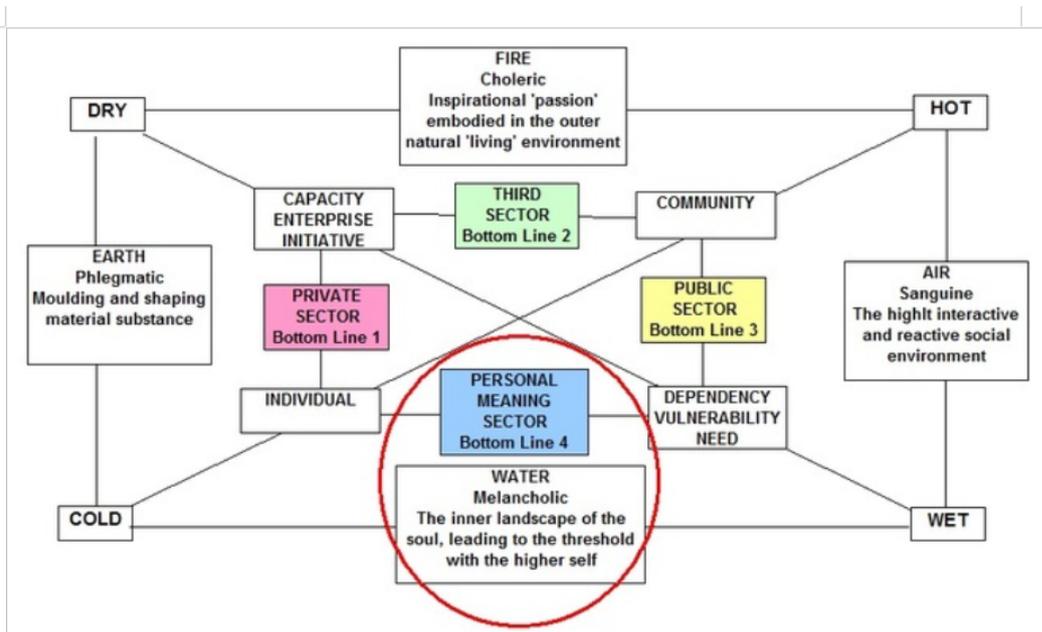


When these two axis are crossed they create four areas of overlap. This gives us four unique sets comprising of combinations of two terms. If we explore the relationship between these combinations we can begin to see how they epitomise the characteristic qualities of the three current sectors.



Providing an infrastructure that addresses the communities dependencies characterises the central role of the state (1) whilst the correlation of individual and capacity characterises the process of putting personal capacities to work in the development of the private sector.(2). The most recent of

Figure B.25: Second excerpt from the document From Three Sectors to Four, showing how Michael Hallam developed the Quadruple Bottom Line



This final illustration attempts to reconcile the four-fold sector model with the traditional medieval four fold system and the more ancient platonic two-axis system that originally gave rise to the characterisation of the four possible states of matter. ( Earth (solid), Water, (liquid) Air (gaseous), Fire (plasma)) Although the Ancient Greeks lacked our modern technological tools, their basic methods of system analysis have proved sound enough to endure into modern times, and the remnants of their rational outlook still endure within our current educational systems. Look out for a future article on this theme.

Figure B.26: Part of a spreadsheet showing Michael Hallam's interpretation of the work of Yehuda Tagar from 2003 on humanising the workplace

	A	B	C	D	E	F	G	H	I	J	K	L	M
170													
171		The 4 Bottom Lines of economic activity											
172		In light of											
173		Anthroposophy,											
174		the human being											
175		comprises 4 dimensions of being											
176		The Physical Body, The Life-Body, The Soul-Body, and the I.											
177		The sustainability of each activity or project therefore must be evaluated in light of their effect on all 4.											
178		The 1 <sup>st</sup> bottom line: Physical level											
179		- impact on financial resources: return on investment, profit or loss)											
180		The 2 <sup>nd</sup> bottom line: Environmental/ Life Forces level											
181		- impact on the environment: level of renewability of resources used in the process, pollution/contamination of natural resources, waste management etc.											
182		The 3 <sup>rd</sup> bottom line: social level											
183		- impact on the social capital of the community in which the activity is taking place, level of contribution to local social and economic services,											
184		proportion of profit re-invested in the community, value added to local properties and quality of life.											
185		The 4 <sup>th</sup> bottom line: spiritual/ personal developmental level											
186		- impact on the personal and spiritual development of the individuals involved.											
187													
188		If the main game of it all was the physical existence,											
189		than the financial remuneration for their labour would be the only concern in monitoring the value of human work..											
190		But if											
191		the main game in human life is unfolding human potential, personal, human, moral, social, cultural and spiritual development											
192		than work											
193		which takes the bulk of time and energy of working people											
194		must be also one of the main opportunities for them to pursue the main endeavours of their human development.											
195													
196		The 4 <sup>th</sup> bottom line in											
197		monitors the value of any economic activity											

## Files\\ESTA meeting notes

See Figure B.26: Part of a spreadsheet showing Michael Hallam's interpretation of the work of Yehuda Tagar from 2003 on humanising the workplace.

See Figure B.27: Excerpt from a paper by Yehuda Tagar from 2003 on humanising the workplace that inspired Michael Hallam.

## B.5 Nodes\\Reflect reality and create it

### B.5.1 Nodes\\Reflect reality and create it\\financial value

#### Files\\ESTA meeting notes

Manual recording of expenditure shows that over £30K has been spent so far within the ESTA network.

Trading within the ESTA network can promote the local multiplier effect, leading to 'local trading loops' (see info from NEF).

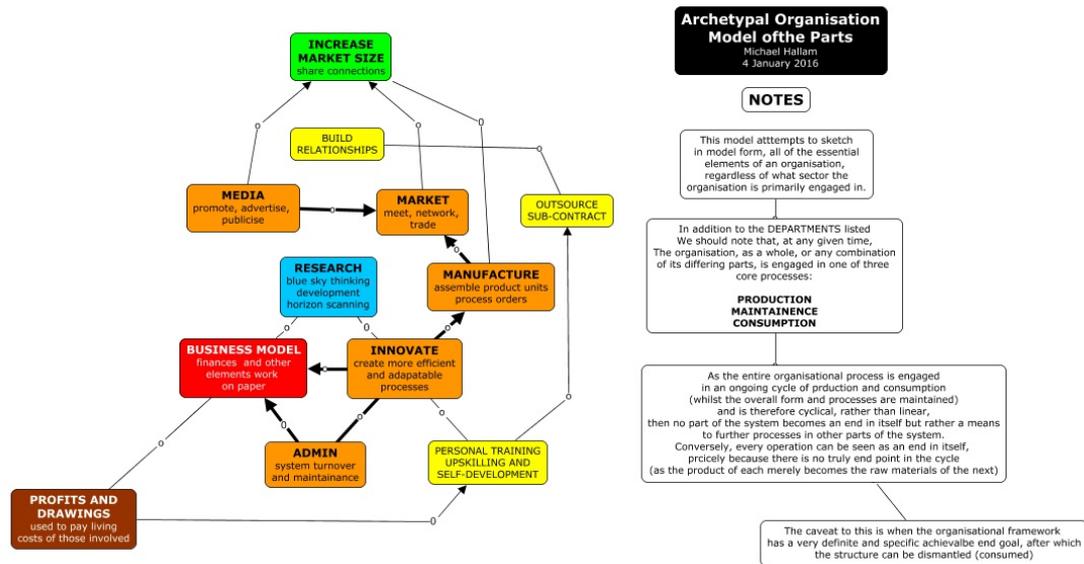
### Figure B.27: Excerpt from a paper by Yehuda Tagar from 2003 on humanising the workplace that inspired Michael Hallam

labour would be the only concern in monitoring the value of human work. This is the single bottom line approach. But if the main game in human life is unfolding human potential, personal, human, moral, social, cultural and spiritual development – than work, which takes the bulk of time and energy of working people, must be also one of the main opportunities for them to pursue the main endeavours of their human development.

The 4<sup>th</sup> bottom line in monitoring the value of any economic activity is: to what extent does the activity in question provide for the workers who carry it the opportunity for unfolding their human potential in terms of personal growth, on-going learning path, spiritual and social development. It is a call for accountability of workplaces to their obligation to honour their responsibility in claiming the bulk of people life forces, time, intelligence, spirituality and energy – by giving them in return an opportunity to grow as human being while they carry the objectives of the operation they serve.

In many workplaces professional and progressively personal development requirements are expected of workers in order to serve the interest of the workplace. This is to say: **workers are expected to change in order that the organisation can grow and prosper. The 4<sup>th</sup> Bottom Line approach is the reverse of this expectation: it expects workplaces to change in order that the people working in them can grow and prosper as people.** To do so may cost the workplaces something. But than, to pay workers salary also costs the workplaces something, and so would the care for the environmental and the social

Figure B.28: Diagram created by Michael Hallam showing how the proposed ESTA Consortium could work



### B.5.2 Nodes\\Reflect reality and create it\governance

Files\\ESTA meeting notes

See Figure B.28: Diagram created by Michael Hallam showing how the proposed ESTA Consortium could work.

### B.5.3 Nodes\\Reflect reality and create it\peer review

Files\\ESTA email correspondence

See Figure B.29: Excerpt from an online book by Charles Hugh Smith, asserting that all individuals have the power to change the economic system.

Files\\ESTA meeting notes

The Charles Hugh Smith book points out that ‘profit flows where there is scarcity’, at the moment to people who can constantly innovate to solve current problems. Future scenarios could include one where the 1% get everything and the 99% live in a virtual world created by the 1%. Another one is where technology can be used for good, including co-design and peer creation / review. However, the book doesn’t mention the ‘inner transformation’ which would be needed to bring such a society about.

Figure B.29: Excerpt from an online book by Charles Hugh Smith, asserting that all individuals have the power to change the economic system

We don't want to keep failing by changing the flavor of our jelly beans and wondering why the results don't change. Change the system, and the outputs will become:

- opportunity
- autonomy
- secure work
- ownership of the sources of prosperity.

There is one planet-changing difference between our current system and the one described here. The current order is top-down, and to change anything, you need wealth and/or political power (if you have the wealth, you can buy the power). The individual is essentially powerless in this system; votes are counted but the top-down power structure remains unchanged.

In the system described in the pages to come, *every individual has the power to change the system for the betterment of themselves and every other participant*. Being at the top of the heap is no longer a prerequisite. Everyone who is powerless in the current arrangement is empowered in this new system. Empowered to not just better themselves and their family, but to better their community and through that organization, the larger community of Planet Earth.

## B.5.4 Nodes \ Reflect reality and create it \ revenue

### Files \ \ESTA meeting notes

Another emerging project that is a good example of the guild model in action is the social enterprise Outrageous Ambition, which was started by [another ESTA member] to help disabled people in work. ESTA members could buy shares in the enterprise as it becomes established (possibly using the Community Shares model) or give it gifts (which can be given to a business, it doesn't have to be a charity). This allows the enterprise to become established without having to obtain outward investment (such as bank loans or charitable funding, both of which come with their own agenda).

ESTA is moving towards becoming viable financially, the membership fees are providing some income for the CIC as founding micro-business.

The meeting was to plan a series of bi-monthly workshops that can go beyond voluntary sector training to offer an open trans-sectional perspective. These workshops will be part of a move to a functional economy, building resilience where reality is the authority. As well as aiming to achieve these objectives, the workshops will also be an income generating activity for ESTA and the consortium members who get involved. The workshops could also help to develop new products and services within ESTA.

The overall process of the consortium could be one that makes money through business and generates a surplus that could then fund projects to benefit people with disabilities. Income generation could be from charging a fee for successful business through the consortium.

## **B.5.5 Nodes\\Reflect reality and create it\\value proposition**

### **Files\\ESTA meeting notes**

ESTA members could potentially offer services to people on personal budgets, a 'shopping list' of services.

## **B.6 Nodes\\Context**

### **B.6.1 Nodes\\Context\\competencies**

#### **Files\\ESTA meeting notes**

Each consortium member can highlight how their skills contribute to each of the four roles, potentially reducing friction. The book *Reinventing Organizations* by Frederic Laloux includes spiral dynamics, which links with ESTA's 'emergent organisational structure' with 'holographic departments'. Talking about creating a consortium is also creating it, though 'emotional engagement' as well as pooling skills and experiences, it comes into being through the conversations.

Marginalised people in society are attracted to organisations that promote open decision-making as they can have a voice as stakeholder and 'make a difference'. However, many groups that wish to promote social good have 'confused equality at the level of human relationships with equality of decision-making', where the latter implies competence. In this situation, decision-making can be undermined by one or two individuals with the result that issues were not addressed and decision-making became replaced by giving needy individuals attention. Michael's experience of working in a Steiner school revealed that this is the sort of environment that 'lends itself to this process so easily'.

Michael learned from this experience that there 'needed to be a clear separation between the two kinds of meeting': 1) Focusing on external tasks, based on expertise. 2) Focusing on internal tasks, addressing inner personal needs.

## **B.6.2 Nodes\\Context\partners**

### **Files\\ESTA meeting notes**

A successful model is Shared Futures CIC who have a number of partners and associates, now undertaking major consultancy projects.

## **B.6.3 Nodes\\Context\relationships**

### **Files\\ESTA meeting notes**

He pointed out that 'ESTA is becoming more strategic', with 'longer-term relationship-building', moving on from their initial focus on networking.

## **B.7 Nodes\\Specific point of view**

### **B.7.1 Nodes\\Specific point of view\desired future**

#### **Files\\ESTA meeting notes**

Michael is interested in future personas, they can be used to reframe and re-contextualise past decisions to bring about future worlds, imagination plays a crucial part in this, rendering new pictures. Personas and other design techniques in a management context can shift perspective from trying to predict the future to co-creating it.

The past is where someone is coming from, it shapes who they are and their values. When going towards the future, it is important to know where one is coming from, from which direction one is approaching the future. Moving towards a future consistent with those values, obstacles by remodelling, creating a flow towards a destination consistent with values (like being on top of a hill, which stream do we choose?). Having seen the landscape from the hill offers a map, guiding us to the right destination. Going into self-reflective mode creates the 'hill', from which potential destinations can be seen (taking the moment and unpacking it, then unpacking that, etc.).

### **B.7.2 Nodes\\Specific point of view\information**

#### **Files\\ESTA meeting notes**

The University of ESTA is about developing an information commons which feeds into the Community Civil Service.

Need decentralised local stores of information to avoid it being held by corporations which could go bust at any time.

Creating an information commons could be the best way to get round the current systems and create a local economy in what Michael calls the Community Civil Service.

#### **Files\\ESTA meeting notes**

See Figure B.30: Diagram from a paper by Mark van Vugt outlining the 4i Framework, or how information can relate to belonging.

### **B.7.3 Nodes\\Specific point of view\\value capture**

#### **Files\\ESTA email correspondence**

See Figure B.31: Excerpt from a document on the Lancaster Food Loop Game circulated by Michael Hallam in June 2015.

#### **Files\\ESTA email correspondence**

Just processing another 96 receipts from June. This will add another £709 to the growing pile of money being tracked in our local food economy. That total now stands at £9,806 so it will only take a few more receipts to crash through the 10k barrier. Keep them rolling in.

Thats up from £500 last time I updated you all. Furthermore £103 of that money has been re-spent by two retailer players, which makes a total of £1,403 spent into our local food economy so far. and we have only just got going.

Them aim of the game is to collectively put as much money into the local food economy as possible and to encourage those food businesses we spend with to pass our money on within our local food economy so that it effectively gets spent twice (or more)

To date we have evidenced £11,341 of spending with local food and drink retailers. This has been further spent 1.3 times, creating an additional £15,501 in the local food economy. If we had all spent that £11,341 in the supermarkets it would typically yield only a further £560 for the local economy. So well done all of you. And keep those receipts rolling in. :)

You might have noticed that I haven't been chasing you for receipts these last few weeks. That's because I have been focussing on getting some of the businesses that you trade the most with to join in and evidence their

Figure B.30: Diagram from a paper by Mark van Vugt outlining the 4i Framework, or how information can relate to belonging

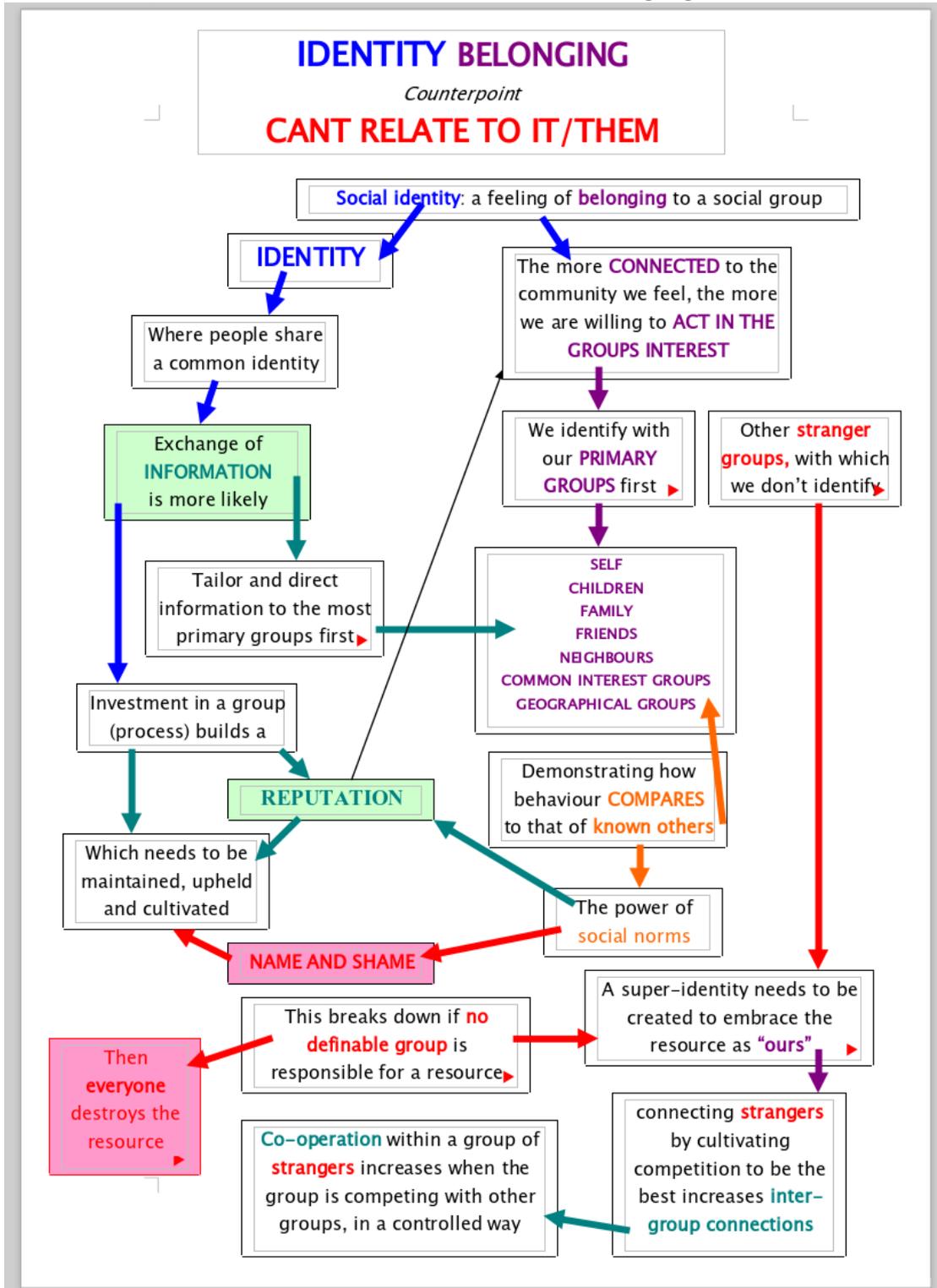


Figure B.31: Excerpt from a document on the Lancaster Food Loop Game circulated by Michael Hallam in June 2015

## **Welcome to the Lancaster Food Loop Game**

The aim of the game is to make visible some of the money looping its way around our local food economy and to have some fun whilst we submit and collect the spending data.

Every time you let me know that you have spent money with a local food retailer I will allocate you points according to:

- how far away they are from where you live. (Reducing food miles.)
- how much you spend. (Supporting our local food economy.)
- You will also gain extra points if the retailer you have spent with joins in the game and lets us know when they spend with a local supplier. (Boosting our local food economy.)

### **Spending creates a food link in the game.**

And every further re-spend of your money by that businesses creates a further link in the Local Food Chain.

If any of that money finds its way back to you or another trader who has already re-spent it creates a Food Loop. (See definition of a local business below)

**The more you spend the more points you get.  
The more the food businesses you spend with re-spend your money  
with other local food businesses the more points you get.**

When a Food Loop is created everyone in the loop gains extra points.

**There is a league table, just for fun, and I may even award prizes!**

.. . . .

spending with other local food businesses. Which, put simply, means that when they do they are re-cycling your money locally.

I now have eight businesses doing this and am actively chasing more. All of those eight have easily re-spent the money you have spent with them, which gives us a current total of nearly 38% of ALL the money you have spent with all 64 food businesses to date now having been re-spent by just those eight!

### **Files\\ESTA meeting notes**

The Food Loop game aims to present local financial information in a form people can understand. Supermarkets only put 5% of their turnover into the local economy while local shops will put back 50%. Moving 5% of expenditure from supermarkets to local shops will double a person's contribution to the local economy.

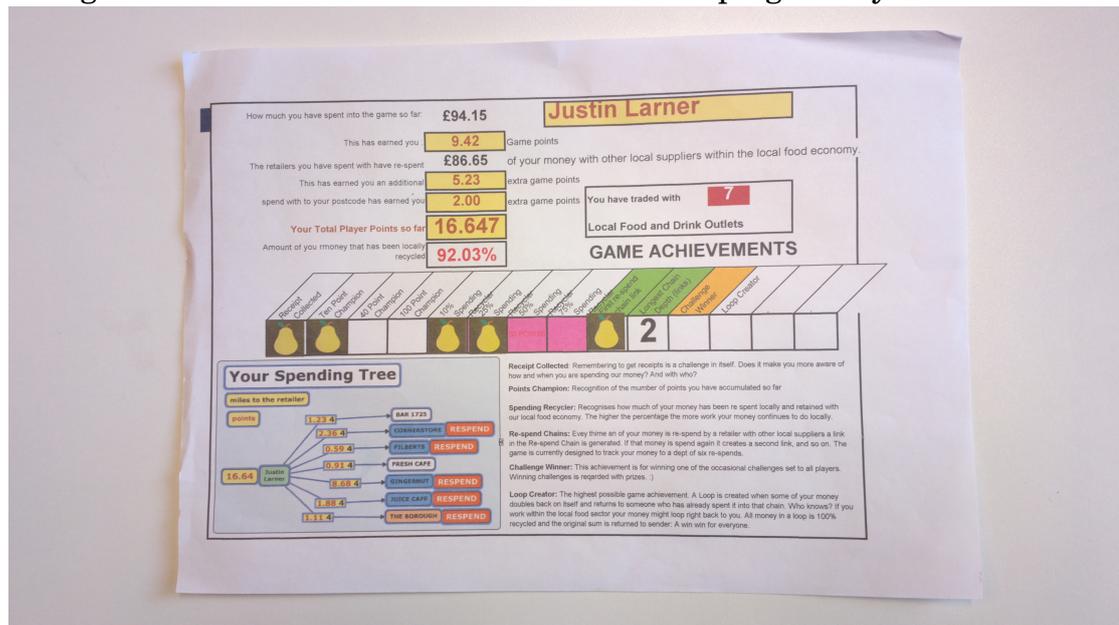
The circulation of money locally is like the water cycle, the same money can be multiplied in value rather than being siphoned off away from Lancaster. The Lancaster economy is worth £2Bn a year, at the moment 50% of money is spent locally. Going to 66% would add another billion to the economy. 75% would add another billion again, 80% yet another billion, but at this point there will be diminishing returns.

Money circulating in the local economy becomes very powerful, if Michael spends £25 with a local business, who then buys from another local business who then commissions Michael for some work, he then gets the money back, but real value has been created as well (from nothing). The PEAR card is intended to record this value being created in the local economy, which for Lancaster is estimated at £2Bn.

Michael's has got some initial data from the Food Loop project, over £3,000 has been spent locally in Lancaster by ESTA members with 56% re-spent from June to November this year. 50% represents a doubling of the initial investment, but 66% represents a tripling, as there is an exponential effect when money is invested locally. Local currency as such isn't needed, hard currency is already an abstraction of wealth that can be tracked locally.

Michael can now demonstrate that over 111% of nearly £10K has been re-spent in Lancaster. This can happen because the money can go round more than once. There is the amount of money going round and its velocity. But would this lead to inflation? It's the same money going round, there isn't more money being created. Money only changes hands when real goods and services are exchanged. Michael is now getting more local shops in-

Figure B.32: The author’s contribution to keeping money local in 2015



volved, and is now able to trace a burger served in Gingernut from the field to the butcher to Gingernut. This money circulating is a ‘standing wave’. Once these standing waves have been identified, the actual money could be reduced by replacing some of it with a discount voucher. This could reduce taxes and hence increase the amount of money circulating in the local economy, a process of ‘controlled deflation’.

Michael estimates that 50% of money spent with local businesses generates as much wealth again as it circulates round the loop, but 66% spent locally would triple local wealth.

**Files\\ESTA meeting notes**

See Figure B.32: The author’s contribution to keeping money local in 2015.

**Files\\ESTA meeting notes**

Michael reported progress with the Food Loop game, which has now recorded over £5,000 of spending and 92% of that re-spent in the local area. This is an example of ‘trading money into existence’.

**B.7.4 Nodes\\Specific point of view\\value creation**

**Files\\ESTA email correspondence**

The thinking behind the FLoop Project is the recognition that, by harnessing the power of positive feedback loops (where an activity becomes self-

reienforcing) we can win back our local economy. In this case, by making sure our local food money gets re-spent lots of times locally and loops back on itself. £100 spent locally 10 times is worth £1,000 to the local economy. And, if you work in one of those local food businesses, it might even come back to you in the form of future wages.

**CAN WE PLUG THE HOLES IN OUR FOOD SPENDING BUCKET?**  
 “Every time money is re-spent in your local economy, it is like new income for the person who receives it. The more money is re-spent, the higher the multiplier effect.”

### **Files\\ESTA meeting notes**

The rules of the guild are enshrined though consciousness, to put this in practice means being able to understand the systems that enable the guild to work. People are enabled to internalise their locus of authority, to work with others to co-create things of value rather than just accepting mainstream culture.

## **B.8 Nodes\\New point of view**

### **B.8.1 Nodes\\New point of view\\inner lives**

#### **Files\\ESTA email correspondence**

See Figure B.33: Good Will Ill Will, a diagram created by Michael Hallam to emphasise the importance of personal development as well as vision.

#### **Files\\ESTA meeting notes**

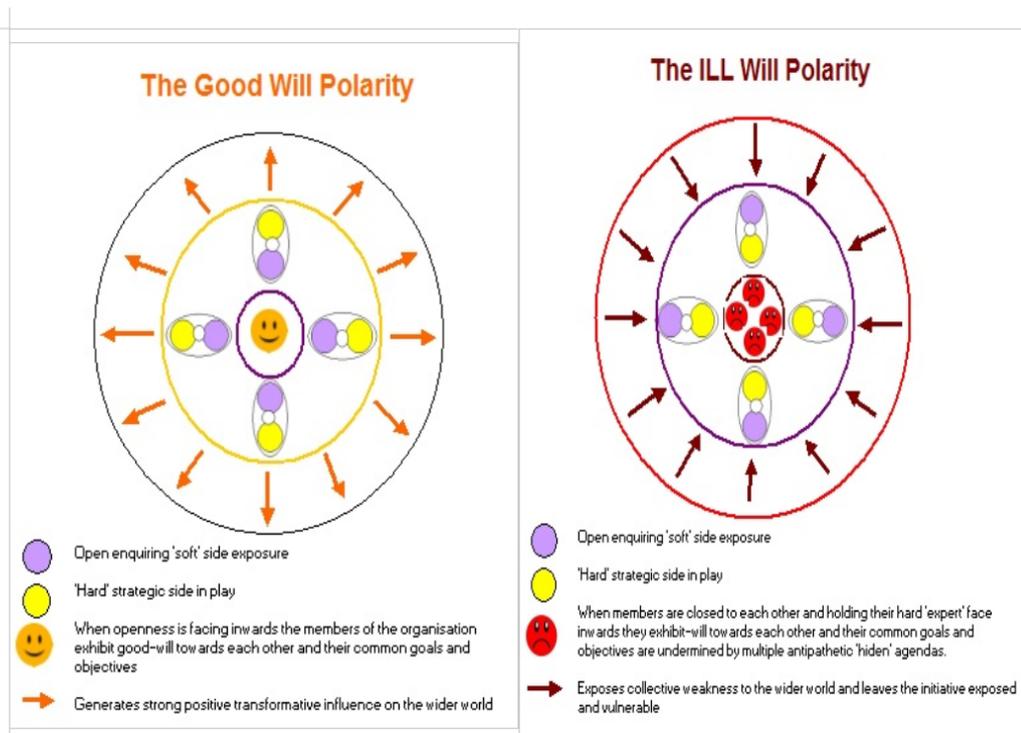
See Figure B.34: Part of a spreadsheet showing Michael Hallam’s development of the seven stages of becoming a person introduced by Carl Rogers.

#### **Files\\ESTA meeting notes**

Attachment types is another useful concept, this is where early life experiences can ‘imprint’ on a person, ‘hardwire’ how they live their life, personas could enable reflection on this process, ‘connect the now with then’ and enable participants to ‘make their own judgement’ and try new patterns of behaviour.

On an individual level, personas can express aspects of someone’s personality that they haven’t fully acknowledged or realised. Personas can be a

Figure B.33: Good Will Ill Will, a diagram created by Michael Hallam to emphasise the importance of personal development as well as vision



**But how to achieve this?**

I discovered that having a shared ideal is not enough to really work together effectively in the long term. What is needed is some facility for encouraging ongoing personal development, which is formally supported and assisted by the organisation as part of its ongoing 'professional development' program.

Figure B.34: Part of a spreadsheet showing Michael Hallam’s development of the seven stages of becoming a person introduced by Carl Rogers

	A	B	C	D	E	F	G	H
1	<b>SEVEN STAGES DETAILED BREAKDOWN</b>							
2	from "On Becoming a Person" Carl Rogers (1961) pp125-159 "A Process Conception of Psychotherapy"							
3	deconstruction and additional categorisation conducted by Michael Hallam: The Small Green Consultancy : May 2008							
4								
5	Stage One	Stage Two	Stage Three	Stage Four	Stage Five	Stage Six	Stage Seven	
6	<b>PROBLEMS</b>							
7	No problems are recognised or perceived at this stage		Personal choices are often seen as ineffective.	there are feelings of self responsibility in problems, though such feelings vacillate.	There is an increasing quality of acceptance of self-responsibility for the problems being faced, and a concern as to how he has contributed. There are increasingly freer dialogues within the self, an improvement in and reduced blockage of internal communication.	In this stage there are no longer "problems", external or internal. The client is living, subjectively, a phase of his problem. It is not an object.		
8	<b>MEANING</b>							
9		Differentiation of personal meanings and feelings is very limited and global.	Differentiation of feelings and meanings is slightly sharper, less global, than in previous stages.	There is an increased differentiation of feelings, constructs, personal meanings, with some tendency toward seeking exactness of symbolisation.		Differentiation of experiencing is sharp and basic.		
10	<b>LOCUS OF EVALUATION</b>							
11	There is no desire to change	Problems are perceived as external to self.	Experiencing is described as in the past, or as somewhat remote from the self.	There is a realisation of concern about contradictions and incongruences between experience and self.	There is a beginning tendency to realise that experiencing a feeling involves a direct referent.	another characteristic of this stage is the psychological loosening which accompanies it.	Internal communication is clear, with feelings and symbols well matched, and fresh terms for new feelings.	

powerful technique, enabling a person to externalise aspects of themselves, such as fantasy personas that represent their potential or a ‘monster’ which a person took ownership of as a pet.

**B.8.2 Nodes\\New point of view\leadership**

**Files\\ESTA meeting notes**

There was an interesting article in Scientific American a few years ago which reported that that an influencable benevolent dictatorship style of leadership is most effective, which Michael aims to put into practice.

**B.8.3 Nodes\\New point of view\personal development**

**Files\\ESTA email correspondence**

See Figure B.35: The contents page of a document produced by Michael Hallam on 22 July 2016 compiling meeting notes and other reflections.

**Files\\ESTA meeting notes**

Michael observed that ‘money is loaned into existence’ while ‘real wealth is traded into existence... at the point of exchange’, and can be in terms

Figure B.35: The contents page of a document produced by Michael Hallam on 22 July 2016 compiling meeting notes and other reflections

- ... a persona for their benefit. Open source tools could enable a more true personality to be expressed.
- Michael will send the presentation and data from Cumbria University students.
  - Justin will draft a "story" of his work with Michael and ESTA. Go through it with Michael - Create a 3,000 word "story" that is about my engagement with ESTA and its development from emails and discussions with yourself. This story brings in my previous work with you and ESTA members into the research, focusing on values. I can create an initial draft, then send to you for additions / corrections / comments.
  - Justin will send Michael the paper that mentions fantasy personas, also a sample persona.
  - Michael has set up the Spiritual Science Online website to offer links to other sites that 'take their cue from how nature and life hangs together' but are not too "woo". Invite Justin to join [SSO](#)

## CONTENTS

---

- 1) This (LANCASTER CLIME-MONEY LOOP BROKERING SYSTEM) model
- 2) THE [ESTA](#) CONSORTIUM - REGARDING CVS CONSORTIUM AND DEVELOPING NEW COMPLEX INNOVATIVE ROLES AND RELATIONSHIPS:
- 3) FORMAL STRUCTURES TO HOUSE GUILD ORGANISATIONS
- 4) [OPENSOURCE](#) SEMINARS
- 5) WORKSHOP PROPOSAL - DETAILS
- 6) PERSONA WORK
- 7) HORIZONS SCANNING – FUTURE CASTING:
- 8) BOOK AND ARTICLES CREATION
- 9) University of [ESTA](#) ([Converse.ity](#)) ONGOING STRATEGIC RESEARCH
- 10) NATURE OF COLLABORATIVE WORK WITH JUSTIN:
- 11) [JUSTINS](#) PHD
- 12) DEEPER FOUNDATIONAL UNDERPINNINGS
- 13) [REASEARCH](#) LEADS.....
- 14) PAN EURASIAN NO BRAND SUPER-PROJECT

of capacity for growth in personal self-development rather than material goods.

Personas in self-development links with personas in counselling and also connects with Rogers seven stages process of development. Stage 3 is where a person admits that they are not perfect, by projecting their failings onto a third person. Not ready to admit that it actually them who has the problem (this is stage 5 or 6). Might be possible to develop personas tools that not only work on an organisation development level but also for personal development, to enable people to make the transition from 3 to 5. Some people have left ESTA, but one came back when they showed the capacity for self-reflection, that they could have been at fault (progressed from stage 3 to 4 on the Rogers scale).

Existing social enterprises have focused on the social and environmental bottom lines, neglecting the economic and personal bottom lines. Such organisations have struggled to achieve their aims and gain funding. Michael took a different approach by founding ESTA to ‘promote intrinsic value in a way which assists people to earn a living’. ESTA’s support for personal development is ‘not just developing the business but the self as an individual’.

A key dimension of sustainable management and of the quadruple bottom line is personal development, where Michael added to the seven stage process from Carl Rogers. At around the fifth stage, the person becomes capable of self-reflection and embraces change rather than resists it. At this point, they can invert Maslow’s hierarchy of needs, knowing what they want from life and finding the resources they need to get it.

ESTA offers all new members an hour of ‘counselling’, promoting personal development.

### **Files\\ESTA meeting notes**

See Figure B.36: Leaflet produced by Michael Hallam, emphasising ESTA’s four bottom lines.

### **Files\\ESTA meeting notes**

ESTA’s core value is the ‘fourth bottom line’, emphasising how they can contribute to the personal development of members, both individually and through collaboration and co-operation.

Figure B.36: Leaflet produced by Michael Hallam, emphasising ESTA's four bottom lines



## **B.8.4 Nodes\\New point of view\\potential future**

### **Files\\ESTA email correspondence**

The next step is to communicate the following to our fellow small band of ESTA Consortium members and invite them to join us in leading the charge to take the ESTA Model to its next level. (Co-branded as the Open Source Guild Model when appropriate)

The gist of the narrative is:

That we have the outlines of a structure that is an improvement on what is already in place, because this one builds in the sustainable and wealth creating and personal empowerment elements as core elements from the off (rather than bolting them on as reluctant afterthoughts to a 18th-19th century construct) So the steps would be: Acquaint with the model and comment on its elements in order to join a co-creating and co-refining process. Identify the element of it that are working, to some extent, already and invite participation with those elements. Present the system-as-is to a wider audience (or elements thereof) and offer training to help them profitably engage with it whilst meaningfully upgrading their strategic working practices.

Critically I want to move away from the awful practice of getting buy-in by inviting everyone to co create structures on large sheets of A1 paper and sticky notes. In my experience this is like asking a bunch of people with a very rudimentary knowledge of physics to outline the kind of physical laws they would LIKE to be and then being disappointed down the line when no one is flying and walking through walls (which we all agreed would be a desirable part of the plan)

The key point here is that we are attempting to render a more sophisticated joined-up social construct than the one that currently operates (increasingly dysfunctionally) that actually works. So that is a science experiment, not a playgroup. (ie. its a model that more accurately reflects the way things actually work in an applicable whole systems approach and not an art project)

That's why the existence of the system is presented as a fait accompli and why participants are invited to find creative and profitable ways in which they can engage with it, rather than design it.

Further co-design and refinements are reserved for those who demonstrate they have the relevant expertise and capacity to collaborate (the self electing inner coordinators of the Guild) Practically speaking ESTA Consortium members

Figure B.37: Part of a document compiled by Michael Hallam on the Twelve Leverage Points proposed by Donella Meadows

## Twelve leverage points

From Wikipedia, the free encyclopedia

This article is about leverage points related to System Dynamics. For other uses, see [Center of gravity \(military\)](#).

The **twelve leverage points to intervene in a system** were proposed by [Donella Meadows](#), a scientist and system analyst focused on environmental limits to economic growth. The leverage points, first published in 1997, were inspired by her attendance at a [North American Free Trade Agreement \(NAFTA\)](#) meeting in the early 1990s where she realized that a very large new system was being proposed but the mechanisms to manage it were ineffective.

Meadows, who worked in the field of [systems analysis](#), proposed a scale of places to intervene in a [system](#). Awareness and manipulation of these levers is an aspect of [self-organization](#) and can lead to [collective intelligence](#).

Her observations are often cited in [energy economics](#), [green economics](#) and [human development theory](#).

### Files\\ESTA meeting notes

Keeping things local encourages the money to go round faster. The constraints on development are physical, not the amount of money in circulation. The academic community can come up with solutions to these problems and the open source guild can be the infrastructure layer in between the two. The money loops between guilds and through the wider economy. The consortium becomes the 'development brain' for guild-like structures. Michael drew a diagram of how this can work. At the bottom there are physical needs, the physical world and nature. At the top, there is the academic and consortium layers satisfying inner non-physical needs. This is where the true service industry lies. These ideas have taken some time to develop, it's difficult to capture them, they are 'like smoke'.

### B.8.5 Nodes\\New point of view\power

#### Files\\ESTA meeting notes

See Figure B.37: Part of a document compiled by Michael Hallam on the Twelve Leverage Points proposed by Donella Meadows.

**Files\\ESTA meeting notes**

The ESTA guild model gains power by being different, 'anti-power'. It has been recently discovered that fungi are joined by tendrils in the soil, that what appear to be individual plants can act as one organism. This is analogous to how ESTA works, individual micro-businesses joined by the Association and able to act together.

**B.8.6 Nodes\\New point of view\transformation****Files\\ESTA email correspondence**

What I envisage is looking beyond the remit of the paper and, in an ESTA context, forming an associative group of members that are actively looking at the question of organisational transformation.

**Files\\ESTA meeting notes**

At the moment, Michael has to deal with conflicts between members or possible breaches of ethics. members could contribute to mediation (the final decision would still rest with Michael as guild master). The process would always seek a win-win situation which in Michael's experience can lead to a 'transformation', by an empathic going with them on their journey of realising what they did wrong and what they can do to right the situation. This transformation deepens relationships, and is at the heart of how ESTA works. Psychopaths would find it hard to manipulate the organisation, but there's 'nothing for them to get hold of, nothing here'.

Further development of these ideas led to applying the concept of the fourth bottom line as personal development, which opens up the possibility for dealing with personal issues and needs in the context of business, avoiding the 'tyranny of perfection'. Acknowledging the need to deal with personal issues enables therapeutic work that helps individuals to gain insight into behaviour, change their worldview, resolve problems and develop new capabilities. This development process leads to the individual gaining new applied expertise.

## **B.9 Nodes\\Become institutionalised**

### **B.9.1 Nodes\\Become institutionalised\\assemblages of institutions**

#### **Files\\ESTA email correspondence**

See Figure B.38: Part of a document on the Commons Society, which Michael Hallam identified as having a structure similar to that of ESTA.

#### **Files\\ESTA meeting notes**

ESTA, people have a different problem, in that they are succeeding as individual organisations but would benefit from ‘contributing to a common pot’, co-creating a common infrastructure, this could be an extension of their marketing budget.

### **B.9.2 Nodes\\Become institutionalised\\collaboration**

#### **Files\\ESTA email correspondence**

Within the wider ESTA membership there are several collaborations taking place between small groups of members operating in the same or adjacent ‘sectors’ working on expanding and developing the products and services they offer, expanding their markets and deepening their overall business understanding.

There are moves afoot within ESTA to create our own Professional Consultancy Network with a joined up approach to collaboration, referring on and enhancing the profile of the services that we offer. Whilst all ESTA meet-ups are open and general this one will have a particular theme, namely how, as social enterprises and professional consultants can we actively explore ways of working closer together.

In many respects I think that the ESTA Ethos and ESTA itself is ahead of the curve, seeking, as it does, to transcend the traditional sector model via its quadruple bottom line approach. As such it has already started working with many of the ‘next steps’ that are advocated as a solution to the current dysfunctional organisational landscape.

I may have mentioned a while back that I want a more joined up set of connections between those ESTA members who are in the business of offering strategic business mentoring and support and/or personal development

Figure B.38: Part of a document on the Commons Society, which Michael Hallam identified as having a structure similar to that of ESTA

**The Commons Society is a mutual aid membership Society that manages the relationships within and between an ecosystem of organisations. It has an ethos of purposeful, accountable activity that opens up a community space between public and private ownership that releases cash, creativity and contentment into its communities through a new economic architecture independent of government.**

**A Commons Society is more than a new business model for a single social enterprise. It is an economic network or civil ecology of for-profit and not-for-profit organisations and new institutions under a single umbrella whose architecture connects them together in a mutually supportive way.**

**A Commons Society offers a new paradigm that mixes the best of commercial business and public service. It is a network of organisations connected in such a way that enables them to collectively function as a community wealth management system. It is best thought of less as an innovative individual organisation than as a network and infrastructure within the free market that by nature of its design functions to enable enterprise to naturally perform in a socially beneficial way.**

**It uses the exponential forces of the market to expand and scale up by means of an Economic Development Fund, an embryonic Commons Bank, that purchases new companies into the structure. At the same time it invests in the social and environmental commons through an internal community fund called the Community Commons Foundation, which is supported through its hard coded virtuous circle of surplus distribution. The Community Commons Foundation is democratically managed by the members and curates, stewards and empowers a portfolio of civil society services to support the wellbeing of the members, the wider community and their environment. Consequently it can be thought of as a kind of commercial mutual provident society driven by the surplus of member companies rather than the savings of individuals.**

**The governance of the Commons Society manages the space in between its member organisations to protect their interdependence and maximize mutual benefit. It uses a combination of existing legal mechanisms to focus the energy of individual initiative and enterprise in building a stable self-regulating ‘domestic economy’ that may be local, national or international.**

**It is distinct from other mutual forms such as co-operatives or single social enterprises or even community benefit societies because of its systemic approach. Unlike worker owned companies that simply distribute and consume their surplus (for example John Lewis and Scott Bader in the UK), a Commons Society is a systemic engine for change because of its inherent structural logic which invests in the commons through built in mechanisms for expansion and**

support. In a nutshell, general capacity building at the organisational, personal and inter-personal level.

This process was kicked off a while back by one member who said they would like to be able to refer prospective clients to other ESTA members where appropriate.

So anyone who is a member of this consortium would be working towards the following objectives.:

Identify USP's of the 'consortium' members to see where our individual core expertise lies. Identify those areas of common service overlap. Create a referral tree within the consortium for fielding enquiries and for potentially undertaking joint pieces of work. Work together to create some copy and branding materials for the consortium Work together on mutual capacity building training

This might sound like a lot of work but there is a precedent for this process, as pioneered by the therapists who make up the Health and Well-being 'sector' group within ESTA. They have been meeting and working along these lines for over two years now with some very positive and mutually beneficial outcomes.

Over Christmas I have created an 'archetypal' organisational template, for want of a better phrase. (see images below) This has generated a list of sections, departments, operational areas, social organs, or however you want to describe them, which I can now match up to the collated skills list. Which is what I will attempt a first draft of next. Once that is done there are several ways to sort the information which will effectively produce 'clusters' of consortium members loosely (or strongly) associated with each area of organisational and inter-personal expertise. After which we can start to map out a rudimentary referral tree.

CVS et al wish to create a consortium to both bid for larger contracts and to keep the deliverables connected to real people and the whole thing to be person-centred.

As I see them we are seeking to: Develop an ESTA-branded Strategic Development Consultancy Consortium that provides help, support and training for groups, organisations, businesses and individuals to assist with structural organisational, personal and inter-personal development.

Specific elements of this would include:

- 1) A knowledge of what we each do and provide, in order to find overlaps and commonalities and what we especially excel in.
- 2) Some degree of strategic common narrative to demonstrate the cutting edge nature of what we can collectively offer.
- 3) some structure and/or protocols for working together

jointly, in various combinations, and/or for reffering prospective clients onto other members of the consortium 4) whilst continuing to retain our own organisational branding, modus and ethos and to continue to work independently as we see fit.

#### **Files\\ESTA email correspondence**

See Figure B.39: Excerpt from an article by Jo Confino highlighting Jeremy Rifkin's perspective on the potential for technology to create a collaborative commons.

#### **Files\\ESTA email correspondence**

I have advocated that the ESTA Consotium could, as part of any emerging wider consortia, ply a key role in bringing the best practices of the human-scale private sector to the service of these organisations.

#### **Files\\ESTA meeting notes**

See Figure B.40: Excerpt from a report produced by Michael Hallam on why he created Lancaster Ethical Trading Association (ESTA).

### **B.9.3 Nodes\\Become institutionalised\\organic structure**

#### **Files\\ESTA meeting notes**

People who join ESTA 'tune into the DNA' of the network, which is based on a natural metaphor rather than the prevailing mechanical model of conventional business. The aim is to bring work and life together, where self development becomes the 'first bottom line'. Listening is key, not only to others but to one's own inner needs.

Considering 'what is it that ESTA offers', being previously targeted at new members, but now can be targeted more at consumers spending with ESTA members and who share their values. Michael sees ESTA as a 'social organism' with 'permeable boundaries'.

Michael circulated a diagram of how the consortium as an 'organism' could develop and the range of skills people can offer. The colour coding relates to Steiner's four temperaments, which links to Belbin's four roles: - Red = Choleric = outgoing - Blue = Melancholic = reflective - Yellow = Sanguine = an airy quality - Brown = Phlegmatic = earthy, bedrock

Figure B.39: Excerpt from an article by Jo Confino highlighting Jeremy Rifkin's perspective on the potential for technology to create a collaborative commons

Fri 7 Nov 2014 17:04 GMT

## Radical new economic system will emerge from collapse of capitalism

[Jo Confino](#)

Political adviser and author [Jeremy Rifkin](#) believes that the creation of a super internet heralds new economic system that could solve society's sustainability challenges

Current economic system is headed for collapse says [Jeremy Rifkin](#). Photograph: [Linda Nyland](#)

At the very moment of its ultimate triumph, capitalism will experience the most exquisite of deaths.

This is the belief of political adviser and author [Jeremy Rifkin](#), who argues the current economic system has become so successful at lowering the costs of production that it has created the very conditions for the destruction of the traditional [vertically integrated corporation](#).

[Rifkin](#), who has advised the European Commission, the European Parliament and heads of state, including German chancellor Angela Merkel, says:

No one in their wildest imagination, including economists and business people, ever imagined the possibility of a technology revolution so extreme in its productivity that it could actually reduce marginal costs to near zero, making products nearly free, abundant and absolutely no longer subject to market forces.

With many manufacturing companies surviving only on razor thin margins, they will buckle under competition from small operators with virtually no fixed costs.

"We are seeing the final triumph of capitalism followed by its exit off the world stage and the entrance of the collaborative commons," [Rifkin](#) predicts.

### **The creation of the collaborative commons**

From the ashes of the current economic system, he believes, will emerge a radical new model powered by the extraordinary pace of innovation in energy, communication and transport.

"This is the first new economic system since the advent of capitalism and socialism in the early 19<sup>th</sup> century so it's a remarkable historical event and it's going to transform our way of life fundamentally over the coming years," [Rifkin](#) says. "It already is; we just haven't framed it."

Figure B.40: Excerpt from a report produced by Michael Hallam on why he created Lancaster Ethical Trading Association (ESTA)

to create an organisation that could give such 'lone workers' the benefits of collegiate working with little or none of the downside.

I was also aware of the fact that those who are self employed are less likely to waste their time and mess around working at what I characterise as 'label production' \*(3) for the simple reason that, if they do, they are likely to go out of business.

One area that needed tackling was the nature of the organisational structure itself. I have noticed on numerous occasions, that as soon as a group has responsibility for resources and legal responsibilities much of the energy that initially was available for the primary task of the people that inhabit the organisation is absorbed by the body of the organisation itself. \*(4)

I also wanted to learn from my experience serving on the Totnes Community Strategy Group, in many ways a pre-cursor to the Transition Town Movement, where we experimented with an executive model of facilitation and checking rather than initiating in which the initiatives (for community development projects) arose directly in the various specialist groups (youths, arts, business, environment, transport etc) rather than at the 'centre' with the executive. In this organisation model it became the executive/steering groups task to facilitate grass roots initiative and only intervene directly if the tasks and projects initiated deviated from the agreed remit of the organisation. \*(5)

With these three elements to hand: a highly motivated group of people with their own projects (businesses), a very resource-lite organisational framework and a non-hierarchical organisational structure I founded the Ethical Small Traders Association (ESTA) in the summer of 2010. \*(6)

Michael is applying how Steiner theory can be applied to economics, which hasn't been done much before. His findings include that there is a characteristic form which an organisation takes as it evolves (seeing an organisation as a form of life).

Michael sees ESTA as evolving like an organism from his vision of a different way of working.

Some members are electing themselves out of ESTA in an organic process when they realise it's not for them, a sign of a healthy organisation (relates to good will ill will). Healthy organisations can survive for a long time, the Roman Empire arguably survived until the 15th century with the fall of Constantinople (or even to the present day in the form of its offspring the Roman Catholic Church). Like natural systems, organisations can become unhealthy or can become a naturally balanced system with multiple moderate needs rather than big yields of one product.

#### **B.9.4 Nodes\Become institutionalised\relationship building**

##### **Files\ESTA meeting notes**

[Another ESTA member] is also working in similar territory, using technology to connect people based on questions, to find connections between individuals who might not otherwise meet

#### **B.9.5 Nodes\Become institutionalised\shared narrative**

##### **Files\ESTA meeting notes**

Like participatory budgeting and direct payment, the consortium could have peer auditing. Before looking at the details, the consortium needs to 'create a narrative on why it is important in the first place', with reference to Carl Roger's 7 stages of consciousness. Stage 5 in particular marks the transition of an individual from inward to outward oriented, going from resisting change to embracing it, looking for win-win outcomes in their interactions with others. ESTA was set up to apply Roger's 7 stages to business, adding 'trust'. The ESTA model can potentially overcome the rules-based focus of the third sector who are 'hung up on words', moving towards a more process driven model.

The skills grid has collected together the collective skills offered by the

ESTA consultancy group. Bringing together these skills in a narrative could start with some key words, Michael will overlay the list over a framework of an archetypal organisation, to create a narrative that 'runs through'. Gap analysis of the narrative can highlight what skills might be missing. These gaps could inspire members to develop skills or identify where new members with specific skills are needed.