Living Design

Design for Sustainability in Small Maker Enterprises

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Dedicated to the memory of Alice Blakeney-Edwards co-founder of Cable and Blake, Kendal, Cumbria, UK

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Executive Summary



Executive Summary

This report presents findings from the *Living Design* project funded by the Arts and Humanities Research Council, UK. The project investigated the relationship of small maker enterprises to the principles of sustainability, using Walker's *Quadruple Bottom Line of Design for Sustainability* (QBL) as a basis for examination. The research location for the project was the county of Cumbria in North West England, UK. As the project developed, a key element of the research became the relationship of the maker enterprise activities to 'place' – a concept we refer to as *Located Making*. We define *Located Making* as purposeful goods whose design, production or use is strongly related to the heritage, culture and/or geography of place

While there are a large number of maker enterprises spread across the county, the research revealed that a relatively small proportion had any significant connections to Cumbria. Subsequently we concentrated on those enterprises with strong connections to place and particularly eight enterprises that we examined in-depth. Our research revealed that these small maker enterprises, which are in many ways continuing long-established place-based traditions or developing new directions based on those traditions, are often working in ways that adhere strongly to the four interrelated elements of the *QBL*.

- **Practical meaning and environmental impact** use of local materials and services; incorporation of renewable materials; low production of waste products; avoidance of toxic or other harmful materials; low energy use processes.
- **Social meaning** drawing on informal local networks for knowledge and skills exchange and supplies; collaborating with other maker enterprises to co-produce products, packaging, marketing and/or web presence; employing local people, training apprentices; committing to place through local giving, developing local initiatives and participating in events; developing a sense of community and belonging through context-related production activities, product aesthetics, branding etc.
- **Personal meaning** enterprise-related activities that are continually challenging, fulfilling and spiritually enriching; enterprise as a whole aligns with one's personal values and conscience; the work is consistent with one's sense of well-being.
- **Economic means** earning enough to ensure the future sustainment of the enterprise; contributing to the local community; investing locally by using local suppliers, services etc; ethical pricing; sharing of wealth, for example, by employing local people; sense of sufficiency rather than profit maximisation.

In addition we identified three broad sets of factors that inform the concept of *Located Making* and help maker enterprise owners, regional development organisations and designers better understand the nature of the enterprise activities in order to ensure future developments are consistent with the traditions and culture of place, the enterprises' values, and the need to ensure future economic viability in ways that are socially and environmentally responsible. These factors are summarised as:

Place

- **Locale** understanding place including facilities, services, resources available to makers.
- **Roots** relationships to place through materials and meaningful connections.
- **Network** historic connections to other centres of excellence in larger region.

People

- **Support** connections to other local enterprises and wider development agencies.
- **Values** priorities and motivations of enterprises, and of development agencies.

Product

- Viability feasible production methods, business development.
- **Opportunities** potential design contributions for viability and sustainability.

These factors informed the development of a framework for enterprise owners and others (such as development agencies) to self-assess their conformity to sustainability principles and others that could be improved upon in the future. In addition, the framework offers an opportunity to compare the values and priorities of small maker enterprises with those of national and regional economic development agendas in order to better understand the disparities, and hence find ways of better supporting such enterprises. The framework includes a simple sustainability profile assessment as well as a tool for identifying those areas where designers could make a constructive contribution at the enterprise and/or regional level.

The following opportunities for design to contribute to small maker enterprises have been identified:

Product Design: where appropriate and desirable.

Branding and Packaging: to develop strong identity e.g. the development of a *Located Making* brand and environmentally responsible packaging.

Storytelling: conveying compelling stories of products related to the history and heritage or connections to the region e.g. brochures, point of sale, website.

Online Presence: design/management of websites, photography, social media.

Enterprise Service Hub: visualising the case for small make enterprise support.

Bridging by Design: design of effective services and their communication.

The following recommendations have been developed from this research:

Route to market – develop a range of opportunities suited to the particular needs of small maker enterprises e.g. juried market, e-commerce support. *Remit: regional economic and policy support organisations in collaboration with local enterprise networks.*

Place-based branding and packaging – develop the identity of regional products while sharing the cost of design services. *Remit: local enterprises and networks in conjunction with related support organisations and design service providers.*

Maker enterprise business support – bridging the values and priorities of small maker enterprises and those of regional development organisations to provide appropriate business support. *Remit: regional economic and policy support organisations in conjunction with local enterprise networks.*

Network development – enhancing existing informal networks to better share knowledge, skills, and information about local services. *Remit: local enterprises in consultation with related organisations such as the Crafts Council and the Heritage Crafts Association.*

Collective value of place-based enterprises – develop appropriate mechanisms to better recognise and promote the collective economic and cultural value of place-based maker enterprises. *Remit: regional development and tourism organisations with input from local maker enterprises.*

Creation of a destination venue – develop an integrated approach to regional promotion, which includes small maker enterprises, to create a multi-faceted destination venue. *Remit: regional development and tourism organisations.*

Development of a maker enterprise resource directory – to raise awareness of relevant suppliers and services, including related heritage manufacturers in the lager region. *Remit: regional business support organisations such as Chambers of Commerce in consultation with local maker enterprises and networks.*

Introduction



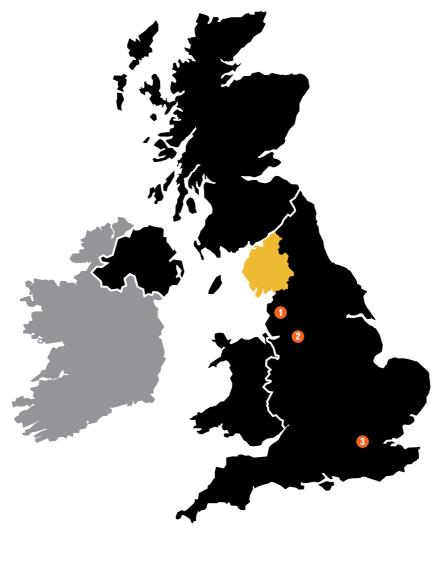
Introduction

This report presents findings from the UK Arts and Humanities Research Council funded project *Living Design: The Effective Use of Design for Sustainability in Small Maker Enterprises*, undertaken by Lancaster University and Manchester Metropolitan University between 2016 and 2019. The project examines small maker enterprises that, for various reasons, are deeply rooted in 'place'. These kinds of enterprises often continue long-established traditional practices but, today, they are frequently in decline. Ironically, this decline is occurring at the very time there is renewed interest in such practices, which are associated with heritage, provenance, authenticity and cultural identity.

Here we present evidence-based findings including the concept of *Located Making*, which recognises the connection of these practices to the place and culture in which they operate. Our research identifies factors that may help – or hinder – such enterprises, as well as areas where design can make a contribution to ensure resilience commensurate with *design for sustainability*.

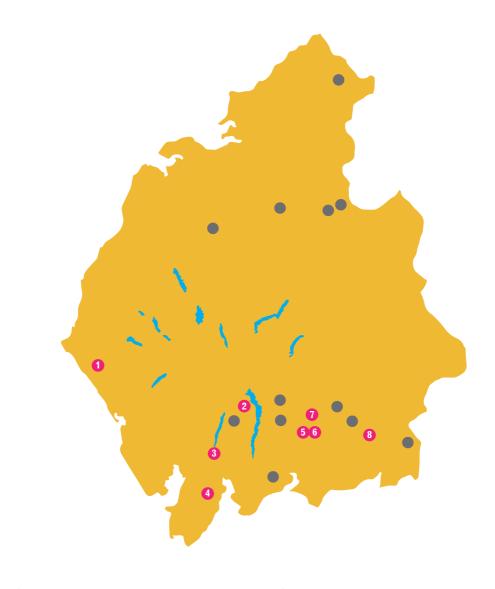
Through its robust engagement with the complex and interrelated issues of design, sustainability and place-based heritage, the research presents insights and recommendations that will be of interest to small maker enterprises, sector organisations, national and regional economic development and policy organisations, local and regional tourism organisations, researchers and designers.

The research location is the county of Cumbria in North West England, UK. The area was chosen because of its rich array of maker enterprises, which include woollen textiles, art materials, baskets, bags, cut glassware and home furnishing, even natural wool mattresses. The county is diverse in terms of cultural, historical, geographical and economic landscapes and at its heart lies the Lake District National Park, an Area of Outstanding Natural Beauty that in 2017 was awarded UNESCO World Heritage Status (Lake District UNESCO, n.d.). It is a mountainous landscape with a long history of sheep farming and is now a popular tourist area, attracting around fifteen million visitors each year.



- e Cumbria
- 1 Lancaster
- 2 Manchester
- 3 London

Figure 2: Map of Cumbria and locations of maker enterprises



- **1** Florence Paint Makers Egremont
- 2 Herdwick Limited Sawrey
- **3** Owen Jones High Nibthwaite
- 4 Cumbria Crystal Ulverston
- 5 Cable & Blake Kendal
- 6 The Herdy Company Kendal

- Iorna Singleton Skelsmergh
- 8 Laura's Loom Sedbergh
- Other interviewed maker enterprises
- Major lakes

Our Research Approach



Our Research Approach

Living Design aims to develop effective ways of using design to contribute to the continuance and flourishing of small maker enterprises in ways that are consistent with principles of design for sustainability. The research was driven by a central research question:

How can design contribute to the effective implementation of sustainability principles at the local level in small maker enterprises (fewer than 10 employees), especially in ways that conform to Walker's *Quadruple Bottom Line of Design for Sustainability?*

The *Quadruple Bottom Line of Design for Sustainability* (QBL) (Walker, 2011:185-205; 2014:7-23, 42) is a development of the work of John Hick (Hick, 1989) and also Elkington's Triple Bottom Line (Elkington, 1997, 1998). It is a more comprehensive approach than technologically driven (Davison, 2001) and material- and energy-based approaches to sustainability, as represented by such initiatives as the Natural Step (Upham, 2000), Cradle to Cradle (McDonough & Braungart, 2001) and the Circular Economy (Ellen MacArthur Foundation, n.d.).

The Quadruple Bottom Line of Design for Sustainability takes into account:

Practical meaning: providing for physical needs plus their environmental impacts;

Social meaning: ethics, compassion, equity and justice;

Personal meaning: conscience, well-being, questions of ultimate concern;

Economic means: financial viability to ensure the above are realised.

In particular our research explores the making and selling of long-lasting, desirable products; development of local skills; use of local materials and the development of new market opportunities.

To understand the knowledge and concerns of local makers and enterprise owners (see Gray, 2004: 159-160 for overview of this constructivist approach), we conducted a series of semi-structured interviews in two key phases.

The first phase of interviews involved over twenty-five small maker enterprises whose selection was broad and intentionally inclusive to provide a rich understanding of such enterprises across Cumbria. A combination of interview and direct observation provided insights into the nature of the making practices. What became evident through the analysis of the field research was that, although based in Cumbria, a significant proportion of these enterprises had little or no connection to the region or its rich cultural heritage. Consequently, they did not wholly conform to the principles of sustainability because their practices were not context-related and dependent upon the particularities of place (Van der Ryn & Cowan, 1996: 57-81).

The second phase of interviews was more focussed and intended to reveal direct connections to place. Enterprises were selected where there was a demonstrable relationship to Cumbria and whose working practices drew on the culture in which they operate. Eight maker enterprises were selected based on these place-based criteria, while ensuring a range of business models were represented. Analysis showed that these enterprises also had strong ethical approaches consistent with the 'beyond self' values necessary for sustainable futures (Crompton, 2010).

As *Living Design* intended to explore how design may contribute to the continuance and flourishing of small maker enterprises, interviews were conducted to ascertain if design input can help to embed sustainable principles in making practices and, if so, what role design might play. Our approach drew on co-design (Sanders & Stappers, 2008) and participatory design (Robertson & Simonsen, 2012) approaches by actively engaging with and listening to makers and enterprise owners. This process developed an awareness of the short- and longer-term needs of maker enterprises, the challenges they face and the particular areas where design may make a meaningful contribution. This is in line with recent international research projects that have engaged designers and makers in co- and participatory design relationships (Zhan et al. 2017; Kaur & Bahl, 2018), often in order to enable the revitalisation of traditional making practices through the updating of the design. In such examples the designer works directly with the craftsperson.

While our research initially explored the potential for developing products through pairing product designers with makers, during our initial interviews it became apparent that makers did not necessarily want designers to develop new products that reimagined traditional products and long-standing making practices. However, we identified areas where maker enterprises could benefit from working with designers from a range of specialisms to develop more professional and contemporary marketing, branding, websites and product packaging.

Comparisons between the findings from field data and literature allowed us to better recognise the contributions of craftspeople and traditional maker enterprises to sustainability, community, well-being and place; to develop recommendations and a framework for supporting them through design; and to align this support with their values, priorities and needs. **Located Making:** purposeful goods whose design, production or use is strongly related to the heritage, culture and/or geography of place.

The Enterprises



The Enterprises

Our research was conducted through interviews and observations of processes with a wide variety of small maker enterprises in Cumbria. In-depth examination was carried out on the maker enterprises listed in Table 1, which have a strong connection to place.

Table 1: Cumbrian Enterprises with a Strong Connection to Place

ENTERPRISE	PRODUCT
CABLE & BLAKE	Interior fabrics, furnishings and accessories from Herdwick wool
CUMBRIA CRYSTAL	Luxury cut-glass crystalware
FLORENCE PAINT MAKERS	Fine art paints, chalks and pencils
HERDWICK LTD	Bags and accessories from Herdwick wool
THE HERDY COMPANY	Branding, products from Herdwick wool, branded chinaware
LAURA'S LOOM	Hand- and machine-woven products from local wools
LORNA SINGLETON	Traditional and contemporary oak swill basketware
OWEN JONES	Traditional oak swill basketware

Cable and Blake

Founded by two friends, this small company is located in Kendal, a small market town in the southern part of the county of Cumbria. The town has a rich history associated with the wool trade and has the motto *"Wool is my bread"*. The company sources fleeces from local farmers, including those from the locally distinctive Herdwick breed. The fleeces are processed into yarn, woven into fabric, dyed in single colours after weaving and then finished. These steps are outsourced to operations in nearby Sedbergh and Huddersfield. The dyes are matched to the colours found in the landscape of Cumbria. The fabrics are then sold directly to buyers, or used to upholster refurbished furniture found at auctions and used in newly commissioned furniture pieces. In addition, the fabrics are used by local crafts people to make other products that are sold in the Cable and Blake shop in Kendal in the south of the county. These include throw cushions, lampshades, handbags, caps, and waistcoats.

www.cableandblake.co.uk



Cumbria Crystal

Based in Ulverston in the south west of Cumbria, this enterprise makes luxury cut-glass crystalware. They are the last producer of hand blown and hand cut lead crystal in the UK. It provided an interesting case study as they produce crystal products for the luxury market and has its glassware featured in James Bond films and the British television show Downton Abbey, as well as having other worldwide high-profile customers. The Managing Director trained as a glass maker and also has business experience, in contrast to many of the other enterprise owners interviewed. There is a focus on productivity, marketing, website development and social media. A key challenge faced by the enterprise is how to make their traditional products relevant and attractive to contemporary customers, particularly younger international markets.

The products they make are relatively expensive, which reflects the cost of the production process. Making glass is very energy intensive, which poses issues in terms of sustainability. The company also faces challenges on the British high street, particularly as they position themselves as a 'luxury' brand. The management is keen to forge collaborations that enable the company to grow and is trying to diversify their audience and capture younger markets, as the crystal has traditionally appealed to older age groups.

www.cumbriacrystal.com



Florence Paint Makers

This micro-enterprise, located at the disused Florence Mine in Egremont, on the west coast of the county. It is run as a cooperative by a small group of dedicated volunteers who donate all proceeds from sales of their artist's materials to the Florence Arts Centre, which is located in the former shower blocks of the mine. A pigment making workshop was held by an artist at the centre and inspired some local artists who attended to investigate whether they could establish a small commercial venture. Not long after the workshop they formed a cooperative and set about developing their skills. They learned more about making art materials by studying online videos and through experimentation.

The volunteers make artist's pigment, oil and watercolour paints, watercolour pencils and pastels using the red iron ore left over from the mine. They originally used just the iron ore pigment, which they called Egremont Red, but soon realised a wider range of colours would enhance their product offer. Using pigments from locally sourced minerals, including yellow sandstone from St. Bees and grey slate from nearby Kirkby Moor, they have increased their range to reflect the local landscape.

For a small enterprise they operate on a professional level, having collaborated with a local designer to develop their branding and packaging, and local schools to develop specialist pigment grinding equipment. They are experimental and innovative, always striving to improve their products. Their ethos is inspired by John Ruskin, William Morris and the Mechanics' Institutes, which aimed to maintain craft skills and offer training to tradespeople.

www.florenceartscentre.com/paintmakers



Herdwick Limited

Located in Near Sawrey, a small village in south Cumbria, Herdwick Limited produces bags and accessories made from tweed which is woven using traditional looms. The yarn is Cumbrian Herdwick wool from flocks owned by the National Trust using only the natural colours from the fleece.

Based in Castle Cottage, the former home of Beatrix Potter, the sole proprietor lives as the custodian for the National Trust. The small enterprise was born when Mandy Marshall ran out of some Herdwick tweed she had purchased locally to reupholster a window seat in the cottage and was unable to source more, so decided to learn how to make it.

For Mandy, working closely with local Herdwick farmers is fundamental to her enterprise and she has developed working relationships with them that have enabled her to produce the tweed. She also works closely with heritage manufacturers to create the cloth and bags, valuing their expertise and care for producing high-quality products. Mandy also values feedback from customers which enables her to develop designs that are functional and attractive.

www.herdwick.co.uk



The Herdy Company

The Herdy Company, a design-led company that started in 2008 with three products (mugs, pin badges and keyrings) is owned by Spencer and Diane Hannah, whose backgrounds are in branding and design and interior design respectively. Their simple yet striking branding that uses the iconic Herdwick sheep, is widely recognised and stocked in their own shops and other outlets throughout Cumbria and beyond.

They fund farming- and landscape-related initiatives throughout the county through The Herdy Fund, their charitable foundation that is funded through donating a percentage of profits. The first project funded the training of two dry stone builders in 2008.

50% of The Herdy Company range is now made in the UK and they support independent retailers from the Shetland Isles to Cornwall. They have four shops, two in the Lake District (Grasmere and Keswick), one in Kendal and one in the Yorkshire Dales (Hawes). They also sell internationally to Japan, Australia, USA, Denmark, Portugal and Germany. In 2017 they appointed Kevin Roberts, former global chief executive of Saatchi & Saatchi, as their chairman. Their branding and storytelling offer a case study as to how design can contribute to the development and marketing of small enterprises.

www.herdy.co.uk



Laura's Loom

Laura's Loom is run by Laura Rosenzweig, a sole trader who has a workshop in an historic mill situated on the county border between Cumbria and Yorkshire. The mill is now a thriving craft centre and home to a variety of micro-enterprises producing a range of products using traditional modes of making.

Laura started weaving about twenty years ago after leaving a career as a scientist and moving to the small market town of Sedbergh in the east of Cumbria. She produces a range of hand woven and commercially woven products, including scarves, throws, socks and blankets. She sources the wools locally. She prototypes the pieces intended for commercial production on her handloom, and defines the specifications for each piece. The wools are processed into yarns in Huddersfield and then sent to the Borders to commercial weavers and finishers. She also has socks made in Leicester.

The combination of hand production, handloom prototyping and commercial production enables Laura to stock her shop with a range of products and a range of price points while also being able to weave by hand – an endeavour that allows her to be creative and brings her a great deal of personal fulfilment. Furthermore, our research reveals that the places where Laura sends her work to be commercially produced at scale, namely Huddersfield, the Borders, Galashiels and Leicester are all well-established centres of excellence with a long heritage of producing products in wool.

www.laurasloom.co.uk



Lorna Singleton

Lorna trained as a swill basket maker with Owen Jones while completing a three-year coppicing apprenticeship. Coppicing is a traditional woodland management method that is not widely practised in the UK today, although recent years have seen a slight resurgence in the practice. Lorna found the skills she learned on the apprenticeship useful for growing and harvesting the wood for her baskets, a task she often carries out with Owen.

Lorna came to realise that to make only swill baskets would not offer a viable business and so learned to make them from other materials such as ash, using different methods to make bags and different types of basket. Her work also includes leather, which adds a contemporary element to the more traditional goods. To Lorna, the development of new products enabled her to reach the fashion market and a way of getting oak seen by new markets. She has also collaborated with Sebastian Cox, a well-known contemporary UK furniture maker. She sells her work widely, including London, where she is represented at The New Craftsman, a high-profile contemporary craft gallery in Mayfair.

www.lornasingleton.co.uk



Owen Jones

Owen makes traditional swill baskets and has been practising for over thirty years, having been taught by a maker who was one of a long line of traditional makers. This type of basket is characteristic of the south Lakeland where Owen lives and works.

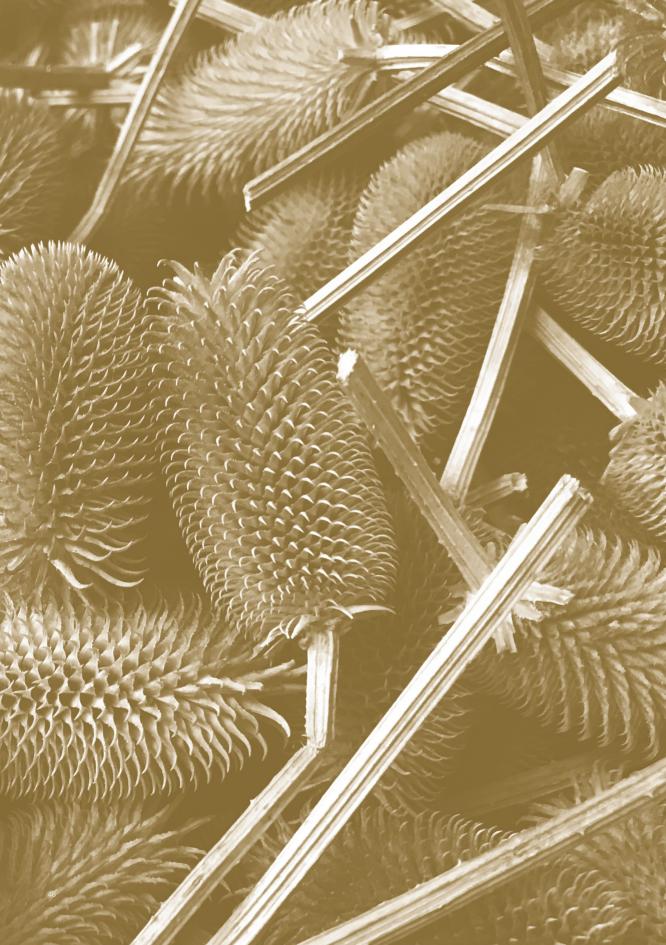
In the past, the area was very busy with small woodland industries, the result of the geography of the area with fast flowing water, being largely rocky and unsuitable for grazing animals. As a result, woodland remained intact and small industries such as coppicing, charcoal making and bobbin making flourished in the area.

Swill baskets are utilitarian in nature and traditionally used for the transportation of bobbins in the weaving industry, for agriculture and the carrying of coal to load onto steam ships at ports such as Liverpool. There were small workshops scattered around the area (between the Rusland Valley, Coniston and Broughton-in-Furness), making baskets that have barely changed to the present day. Now, Owen is one of the last makers, as the baskets are no longer used in local industries, instead being used domestically or as aesthetic and decorative objects.

Owen attends many agricultural and country shows throughout the year, where he demonstrates basket making and sells his work. The process of making is very meaningful to him and he finds his practice to be almost meditative.

www.oakswills.co.uk





The findings from *Living Design* comprise two key interrelated themes:

1. Relationship of Enterprises to Sustainability

After completing in-depth research with the eight selected place-based maker enterprises, the data was analysed thematically in order to reveal the relationships between the enterprise activities and the four elements of the *quadruple bottom line of design for sustainability*. Here we present the findings as they relate to the various enterprises.

2. Connections to Place, People and Products

From our analysis of the enterprises, it became evident that they were strongly connected to place in terms of: *locale* – their knowledge of the local facilities, services and resources available to them; *roots* – their relationship to place through materials and meaningful connections with and commitments to community; and *network* – historic connections to other centres of excellence in the larger region. We refer to this bond with place as *Located Making*.

Relationship of Enterprises to Sustainability

These relationships are discussed in relation to the *Quadruple Bottom Line of Design for Sustainability* in the following sections: practical meaning and environmental implications, social meaning, personal meaning, and economic means.

Some of the key findings include high levels of environmental responsibility and use of locally available materials; significant contributions to community through, for example, planting trees to provide resources for future generations and contributing part or all of the profits from an enterprise to community-based causes; high levels of satisfaction in the enterprise-related work with makers describing their practices as meditative, spiritually enriching and deeply fulfilling; and finally, while economic viability is obviously an important consideration for many of the enterprises, job satisfaction and environmental and social factors were often much more important than solely the maximisation of profits.

Practical Meaning and Environmental Implications

Goods are purposeful, of moderate or classic design (e.g. not following transitory fashion trends), long-lasting and hard-wearing. Products are made or sourced locally to the enterprise. Consideration is given to the environmental impact of production methods, processes and lifespan of the products, e.g. through use of renewable energy, low energy production methods, design of goods that are long-lasting and repairable.

As the research examined how design can contribute to embedding sustainability principles in small maker enterprises, we identified that the design of goods may embody sustainability principles through use of renewable materials and consideration of the product's functionality and longevity. However, it is striking that none of the interviewees stated a desire for designers to assist with the design of their products per se; rather, they spoke about receiving assistance in branding, packaging and web-design, i.e. using design as an enabler to present the products to the market in a desirable manner.

Enterprise owners may not consider the re-design of their products as a desirable intervention from designers, but they do see the value of design and its potential contribution in other areas. Makers are creative people who seldom want designers 'interfering with' or suggesting changes to the products they are already making. There are various reasons for this. For example, oak swill baskets are made by Owen Jones, who is one of the few remaining practitioners of this



craft, which is rated as 'critically endangered' in the Heritage Craft Association's 'Radcliffe Redlist Report' (Heritage Craft Association, 2017). The oak swill basket is a very traditional design that has been much the same for centuries and this traditional knowledge plays an important role. Owen says, "the language [of making] has passed on ... I haven't sat down and thought I'm going to change the design of this. Essentially, I'm still making them as I was taught" (Jones, 2018).

An area in which design can make a meaningful contribution relates to supporting mechanisms to enhance business effectiveness, such as websites, packaging, branding, and photography. Enterprise owners expressed a lack of confidence and expertise in these areas, and a lack of time to be able to dedicate to learning these skills, suggesting these are suitable areas in which to receive support from designers. For example, oak swill basket maker Lorna Singleton finds managing her website a challenge, in particular the development of the design and adding content. She says *"maybe a designer could help and I'm not sure what the best thing to do with the website is. I would like to be able to do it myself, to update it ... so maybe it would be better to have a website service or ask someone to do it rather than having to learn it" (Singleton, 2017).*

These small maker enterprises often comprise just one or two people. In addition to hand making the stock they sell, they also have to undertake all the other elements of running a business. Learning additional skills, such as website design or branding can be problematic, as these are skills that take time to learn and often the necessary training is not available in a suitable format. In addition, an important aspect of such design contributions is effective *storytelling* through words and visuals, so that the heritage, meaning, significance and value of the products are conveyed in a compelling manner. Such aspects may be very familiar and 'taken for granted' by the makers themselves and designers offer a 'fresh pair of eyes' and in doing so may be able to see aspects of their work which especially resonate with contemporary sensibilities.

For some, the design of their products does not occur through conventional modes of design practice, such as sketching, prototyping and making the goods themselves. Of the eight enterprises we focussed on, four received formal training in their area of their making practice (Owen Jones, Lorna Singleton, Laura's Loom, Cumbria Crystal); one had formal design training (The Herdy Company); and the others had no formal training in their area of practice or design (Herdwick Limited, Florence, Cable & Blake). Nevertheless, all enterprises produce goods of very high quality, in terms of their production and aesthetic value.

Those enterprises with no prior training in design and making tend to work with experts in the development of products and see design as a particularly 'hands on' activity. For example, Mandy Marshall, owner of Herdwick Limited does not design in the traditional way. She says, *"I don't design in a 'sit down and draw"*

type of way, because I have absolutely no skills like that". Instead she works closely with heritage businesses, such as spinners, weavers, dyers and bag makers to develop the Herdwick tweed and the bag designs. Throughout the process she conveys her own vision but considers feedback from specialists. In addition, many makers cite creativity as a major motivating factor in their work. Their designs are created and developed during the making process, and are adapted as they go, often in response to material behaviours or features. Therefore, external interventions by designers into that intimate process are frequently not appropriate or welcome. Because of the importance of their own creative process, the makers do not simply want to produce other people's designs. We have also included examples of enterprises where the enterprise owners do not make the goods themselves, but rather design them and commission them to be made by craft makers or other businesses in the region. In these cases, creative fulfilment is achieved in the design work and in the managing of a creative enterprise. For example, Mandy, owner of Herdwick Limited and Alice, co-owner of Cable & Blake are not makers themselves and do not have formal design training, but both have enterprises with strong visual identities.

Others place importance on the design of their packaging and work with designers to develop solutions sympathetic to their products. An example is Florence Paint Makers – a small community-based cooperative that produces artist materials in the buildings of a former iron ore mine. They work with a professional designer on their branding and packaging, which is influenced by William Morris and is of very high quality. Initially their products used haematite (iron ore) from the mine and later expanded to include paints derived from other minerals found in the region. The products are developed and produced by a small group of volunteers who gather weekly to make and pack the goods.

In contrast, Chris Blade from Cumbria Crystal has had formal training in glassmaking. Spencer and Diane Hannah who run The Herdy Company are experienced graphic and interior designers. None of these make the goods themselves, but their vision and in-depth understanding drives their enterprises and enables them to work closely with artisans to develop their products.

All respondents recognise the environmental impact of their activities and this is reflected in how they conduct their businesses – in the materials they use, their environmental footprint and the longevity of their products. We also found that the lifestyles of the enterprise owners often mirror their practices, in that their care for the environment is reflected in the way they live.

Swill basket makers Owen Jones and Lorna Singleton grow their own materials in nearby woods. This requires coppicing and woodland management skills, which means they act as environmental stewards. It also means they don't have to purchase the materials used in their products. Owen says, *"it's important to use local wood, and I am providing wood for generations to come ... If an acorn is planted now, I won't be cutting the tree down myself. It is important to think*

ahead for another generation of swill makers". This also highlights the longer-term, intergenerational thinking that is an important aspect of many traditional making practices. New conceptualisations of the 'local' demonstrate the potential for rethinking supply chains and the support of other small enterprises in creating circular and more sustainable systems of production and consumption (Manzini, 2010).

Other makers may not grow their own materials, but the fabric-based enterprises we examined do source their wools from local farms that raise heritage sheep breeds. The Herdwick, in particular, is an ancient Cumbrian sheep breed. Herdwick wool is abundant in Cumbria, but its coarseness makes it unsuitable for most types of clothing. Consequently, until recently it was buried or burned due to its low economic value. In recent years, its increased use by small enterprises, often to produce accessories rather than clothes, has raised its value. This not only reduces waste from farms, it also provides farmers with an additional, albeit a relatively small, source of income. The owner of Laura's Loom uses fleeces predominantly from Blue-Faced Leicester sheep, found in the eastern part of the county. Laura says she was motivated to "make use of a resource that was natural and locally available, renewable and environmentally friendly". The enterprises carefully consider the environmental impact of their products. Alice, co-owner of Cable & Blake, which uses their own locally made woollen fabrics to upholster recycled furniture says their approach is about "not being takers, it's really trying to work with this idea of re-using things ... being able to have something local".

Makers are also aware of the environmental impact of their processes. In the case of Cumbria Crystal, glassmaking is an energy intensive process, using natural gas to fire the furnaces. The company has worked with Lancaster University in an effort to improve efficiency, for environmental and cost-saving reasons.

Social Meaning

Enterprise owners care for the communities in which they live and work. They collaborate with local makers and suppliers, giving back to the community and supporting other local enterprises. They support charities and good causes through 'in-kind' support or through donating some or all of their profits.

Our research reveals the importance of localisation to social aspects of sustainability. Localisation fosters face-to-face contact and human relationships, a sense of community and belonging, and a sense of responsibility to others and the local environment. It also results in reduced transportation of materials and goods, decreased energy use, and packaging, all of which are essential in terms of developing sustainability within enterprises (Manzini, 2010).

By working with local suppliers, enterprise owners have not only helped raise the



value of wool (Mullagh et al., 2019) but have also developed close working relationships and fostered a sense of belonging within their local community. Laura, of Laura's Loom, spoke of a sense of belonging in the community resulting from these relationships, as she had very few social connections when she moved to the area. Mandy, of Herdwick Limited, also spoke of the importance of the relationships she had developed with farmers and the development of her enterprise as a 'personal journey'.

We also found informal support networks were important to the well-being and social life of enterprise owners, particularly through other makers in the area. Florence Paint Makers are all volunteers. They spoke of the importance of community to their enterprise and the sense of well-being and fulfilment they feel from getting together each week. We also found that enterprise owners support other makers just starting out, or who are unable to produce enough goods to support themselves. The owner of Herdwick Limited supported a new furniture maker by purchasing wood for them to make footstools upholstered in Herdwick Tweed; these were then sold under the Herdwick Limited brand. Similarly, Cable & Blake support makers in the area who produce goods using their Herdwick fabric, which they sell via their shop and website.

Three enterprises we interviewed donate to good causes, reflecting the importance they place on contributing to their community. Florence Paint Makers donate all their profits to the Florence Arts Centre, where they are based. to support creative activities in a community that has faced economic challenges in recent years. Their motivation is "to get the Florence Arts Centre going ... it's a new product, it's something positive since the iron industry came to an end". Laura's Loom donates a percentage of a particular line of throws to a local training charity as she believes in giving something back to the community. For the owners of The Herdy Company "being responsible is really important – we need to be part of the Lake District and the Lake District needs to be part of us ... *How you respect and invest in place, everywhere, this is important.*" When they set up the company, they also created a charitable fund, as they felt it was "the right thing to do". The Herdy Fund contributes a percentage of company profits to supporting upland farming, rural communities in Cumbria, and the Herdwick sheep. In addition to financial support, the fund also "brings people together to create innovative and ambitious solutions to the problems facing farmers and rural communities" (The Herdy Company, n.d.).

It becomes clear that enterprise owners are motivated to support their communities and local good causes, and through their own first-hand knowledge they are aware of the impacts of this support. Knowing the people who are positively affected, rather than donating to anonymous concerns, creates a sense of personal well-being and roots the enterprise within the community – socially, economically and environmentally. Such endeavours also reflect and encourage intrinsic values such as self-respect, benevolence, equality and unity with nature (Crompton, 2010:24) and relates to the conservation of traditions and of the natural environment.



Personal Meaning

Enterprise owners find their work personally and spiritually fulfilling, their practice is rooted in place through their materials, communities and as inspiration for their work. Their enterprise enables them to feel a sense of belonging and to be morally satisfied.

When talking to enterprise owners about their motivations, no one expressed a desire to become wealthy, or to make more than was required to sustain themselves and their business. Rather, we found their work creates a sense of well-being, connection to place and creative fulfilment, all of which lie within the intrinsic, or self-transcending aspect of personal values (Crompton, 2010).

Also, all find their enterprise or making practice meaningful and fulfilling. For those who are not involved in the making, creativity and personal achievement provide a sense of fulfilment. Mandy, owner of Herdwick Limited, was originally motivated to build a business, supply a number of shops and then sell it on. However, getting to know local farmers and developing in-depth knowledge about bag making has "changed her along the way". For Alice of Cable & Blake, a life-long love of the local Herdwick led her to start an enterprise that commissions fabric made from their fleece. She says, *"I always wanted to do something with Herdwick, I was amazed to think they were burning fleeces ... anything that is a bit outside of the box is ... very nice for me to be able to do something much more creative on this side".*

Swill basket maker Lorna Singleton says, "It's deeply spiritually satisfying for me to do this ... Once I realised I could make a living creating things then there's not really any going back from that, it's too satisfying ... Doing something that's rare is appealing in a way". Her fellow swill basket maker Owen Jones spoke to us about finding the repetition making process 'meditative' and the whole journey from growing and cutting the wood, making the baskets and meeting the customers to be deeply fulfilling.

For some makers, the practice is often intuitive and physical. Chris of Cumbria Crystal loves the traditional glass-making process, *"It is purely addictive, glass being blown is primeval and primordial, fire and heat are very elemental and fascinating. I like the challenge of trying to turn the business around".* Laura of Laura's Loom weaves every day and finds that if she does not weave, she is not personally fulfilled, and the feeling is visceral. She spoke about her initial experience of weaving and why she chose to continue learning, *"Because that's what I love. Don't ask me why, I have no idea why. I wasn't trained as a weaver, I'm a scientist, and I learned to weave 20 years ago and I got the bug within ten minutes, literally, and that's never happened before or since, that I've done something and thought 'this is for me'".*

A further motivation was a sense of responsibility to one's practice and those who have gone before. Owen Jones spoke of this, *"I am driven to make just*

because that's what I do and that's my routine in my life". For Owen, his sense of responsibility resides in the notion of continuing the skills he was taught by his predecessor, saying he feels a moral responsibility to his teacher for passing the skills on and he would feel bad if he took the craft to the grave with him, so it is important for him to also pass the skills on.

Economic Means

Enterprise owners earn enough money to make a living and to ensure the sustainment of the enterprise into the future. They may embed ethical pricing into their business model, meaning their goods are available to a wider range of customers. They share the wealth, through investing locally and employing local people, using local suppliers and selling their products locally.

We found respondents did not necessarily create their enterprise with the sole intention of making money. Rather, they expressed a wish to generate sufficient income to make a living and to support employees. Makers talk of sufficiency, having enough to live on, giving back, supporting the wider economy and supporting local makers and the wider ecology of place-based goods.

Even though enterprise owners do not wish to become wealthy through their enterprise and just wish to make a living, they face significant challenges in generating enough income to support themselves. Often, they have to rely on another source of financial support, for example another job or support from a spouse or partner. In particular, key issues faced by enterprise owners include a lack of suitable outlets through which to sell their products; producing enough stock to sell; pricing their goods adequately and lack of suitable business-related support from regional development agencies.

While there are a small number of high-profile commercial galleries and other retail outlets in the region, they tend not to sell products by regional makers even though their products are often of very high quality. Also, there are a plethora of gift shops in the popular tourist centres, many selling products made elsewhere and only notionally related to the area. Typically, they sell artisanal food and drink, toiletries and jewellery. Lorna Singleton says "Souvenir and tourist shops rarely sell anything made in Cumbria. They may have a Herdwick sheep [a distinctive Cumbria breed] on the label but they aren't made locally. They don't reflect rural life ... there isn't really anywhere ... that has any crafts for sale or on show". When asked whether he would sell his baskets through galleries, Owen Jones stated "I have sold them there before ... I'm not on a huge hourly rate but shops would want their own profit margin ... they'd want to squeeze the price down". Owen has what might be considered an egalitarian approach to pricing, in that he doesn't believe in charging what he thinks is too much for what was traditionally a simple utilitarian artefact, saying "I don't want to make them available only to the elite for who money is no object". Lorna Singleton sells baskets through her own website and at shows. She also sells then through a gallery in London.

Makers also sell at country fairs and shows where they can engage directly with customers. Sometimes they use these venues to demonstrate their practice and garner feedback about their products. The shows also provide opportunities to connect socially with other makers from different parts of the country. We found a similar instance of this in previous research in Santa Fe, New Mexico (Walker et al., 2018).

The amount of money perceived to be 'enough to live on' differs according to each enterprise and is strongly related to personal values. Abiding by such values can have a direct impact on lifestyles. Owen and Lorna both live environmentally conscious lifestyles, which not only has positive environmental consequences, but means they are able to work in their practice full time and have relatively few overheads. Laura of Laura's Loom has changed her operational model over the last few years, as she realised she was unable to make the enterprise viable through hand-weaving alone, "I'm not driven by money, but driven by making things and being creative ... I never get back on a hand-woven piece the amount of time and effort that's gone into it. So, having learned that over my first couple of years weaving, I branched off into this more commercial way of doing business, I still hand-weave but it enables me to have stock". Laura now sells handmade products alongside lower priced products made in higher volumes by long-established commercial weaving and finishing enterprises located in the larger region. **Sustainability:** our research shows that small maker enterprise owners embody the principles of sustainability intuitively, usually because the way in which they operate 'feels right' rather than setting out primarily to be sustainable.

Connections to Place, People and Products

From our analysis of small maker enterprises in relation to sustainability, it becomes evident that there are three primary factors to be taken into account. These can be understood as Place, People and Products.

'Place' includes having a good working understanding of the facilities, services, and resources that are available to makers within the immediate area of their operation. It also includes the relationship of their business to the place in which they operate. This might be through the (local) materials they use, the connections to suppliers, and/or the connections to the traditions, customs, designs and patterns that are characteristic of the area. It might also include historic connections to other 'heritage' manufacturers in the wider region.

'People' refers to the connections an enterprise owner has within the community, especially to other enterprises and agency bodies that provide support to small businesses. It also includes the values, priorities and motivations of enterprise owners and those of wider development agencies.

'Products' refers to the viability of the enterprises in terms of the artefacts being produced, the feasibility of sustaining the existing production methods, and exploring new opportunities for business development. It might also include the introduction of new designs or the use of design services to contribute to the future viability and sustainability of the enterprise.

These factors are summarised in Table 2.

PLACE	
LOCALE	understanding place – facilities, services, resources available to makers
ROOTS	relationships to place through materials and meaningful connections
NETWORK	historic connections to other centres of excellence in larger region
PEOPLE	
SUPPORT	connections to other local enterprises and wider development agencies
VALUES	priorities and motivations of enterprises, and of development agencies
PRODUCTS	
VIABILITY	feasible production methods, business development
OPPORTUNITIES	potential design contributions for viability and sustainability

 Table 2: Located Making – factors for sustaining small maker enterprises

PLACE

LOCALE – Understanding Place – facilities, services, resources available to makers

Cumbria is the second largest county in England and the geographically dispersed nature of the population presents economic challenges (Cumbria LEP, 2014) as well as geographical, with many small maker enterprises located in remote and rural areas. The region's economy relies on tourism, it is a UNESCO world heritage site (UNESCO, n.d.) and attracts around 15 million visitors each year, with the economic value of tourism to the area estimated at £2.6 billion in 2015 (Cumbria LEP, 2017). However, tourists tend to visit well-known areas, such as the Lake District National Park where the tourist attractions and services such as hotels are located. Whilst this is an opportunity for enterprises located within these areas to capitalise on such high visitor numbers, it also leads to challenges for those who have workshops and studios in rural locations that do not enjoy the benefits of tourism.

Spencer Hannah, owner of The Herdy Company, says of tourism *"everyone wants* a piece of the Lake District … from a boat trip and ice cream to a fabulous house, because the Lake District makes you feel good". Florence Paint Makers and Laura's Loom are located in Egremont and Sedbergh respectively, on the western and eastern fringes of the county in small towns that are not popular with tourists. Laura says *"Putting Sedbergh on the map is a big challenge as it isn't a honeypot town. We have Kirkby Lonsdale in one direction and Hawes in the other … they all draw people in the summer and very few of those people will make it there."* The UNESCO designation of the Lake District holds significant potential for increasing visitor numbers, particularly internationally, but this also risks further disparities between those areas within this designation and those on the fringes.

The cost of setting up their own retail outlets is prohibitively high for small maker enterprises, particularly within the key tourist villages and towns, so many choose to sell their products online and through country shows and fairs. Websites are key to selling for many enterprises but are often costly and require specific skills that many enterprise owners do not possess. All of the enterprises in our selection have a presence online, whether through social media or their own website, this enables them to sell their work and either replaces or adds an alternative to having a physical shop or retail space. The Craft Council report "Craft in an Age of Change" (BOP Consulting, 2012:3) states that sales of craft in real-world outlets have fallen, while online sales have increased, although these have grown from a very small base. Enterprise owners who sell online find various benefits, including the ability to cut out the middleman of shops or galleries thus saving on commission, enabling them to sell their work from their often rural and remote workshops without the need for physical retail space, and the ability to tell the stories of their products and control stock.



that recognise their quality and that enable them to make a living and support their business. In our interviews we heard that although Cumbria has a diverse ecosystem of museums, historic houses, galleries and independent shops, enterprise owners struggle to find suitable retail outlets in such venues. There are a number of high-profile commercial and public galleries and other retail outlets in the region. These include Blackwell, an Arts and Crafts house in Windermere showcasing traditional and contemporary crafts; Brantwood, the former home of John Ruskin; Dove Cottage and Museum, the former home of Wordsworth; the Rheged Centre, a heritage facility and gallery; and Abbot Hall, a high-profile art gallery that showcases predominantly British fine art. As mentioned earlier, these outlets tend to offer few or no products made by small enterprises in the region. The various gift shops and commercial galleries in the tourist centres (e.g. Bowness on Windermere, Grasmere, Ambleside and Keswick) sell products made elsewhere and only notionally related to Cumbria.

While enterprise owners can market their products to different audiences, beyond the region, this requires knowledge of different routes to market and often involves modifying their designs in order to be attractive to these audiences.

ROOTS – Relationship to place through materials and meaningful connections

Enterprise owners spoke frequently about the importance and significance of place in their business, as sites for sourcing materials, a source of inspiration and for personal well-being. The enterprises create beautiful place-based products - products that can be regarded as physical manifestations and tangible symbols of their inner values. An important part of this is the commitment they feel to place and the landscape around them. Laura describes the place where she lives and works as being the inspiration for her work. particularly the colours of the landscape, stating "My stuff is very rooted in place and that's what initially drove me to start what I'm doing." Mandy's designs directly reflect a significant aspect of the Lakeland landscape through the grevs of the Herdwick sheep; her fabrics are not dyed. The landscape is also reflected in Cable & Blake's fabric. They take photographs of the local fells and mountains, which they use to match colours for fabric dyes and to develop patterns for digital fabric printing, about which Alice told us "We are very much trying to represent Cumbria ... so it is represented through the colours ... we have spring colours and we have autumn colours."

'Relationship to place' and the notion of 'local' are vital to the enterprises, in terms of using materials that have been sourced nearby, supporting other local makers (as in the case of Cable & Blake and Herdwick Limited), and selling through fairs, shops and shows within the county. Local production and



consumption are key to sustainability in terms of the environmental impact of the supply chain. Manzini (2010) discusses the implications of the 'local' in relationship to the global, in terms of operating as 'nodes' within networks. In the case of the enterprises in this research, they all operate partially online, selling to customers nationally and internationally. They also utilise skills they do not have themselves but which they need for the success of their business – such as web-design, marketing and perhaps most significantly, the specialist companies who spin, weave, dye and finish their goods.

Cable & Blake, Herdwick Limited, The Herdy Company and Laura's Loom all use fleece that has been sourced locally. Working with local farmers and fleece from sheep that have been raised on the hills close to the enterprises connects them directly with place whilst embodying their own values. Laura buys her fleece from local farmers, about twelve fleeces each year, and told us *"It would be easier to buy it [from retail suppliers], but I like the idea that it comes from local farmers and it supports them."* Mandy works with four specific farms who manage National Trust Heritage flocks, that were originally bequeathed to the Trust by Beatrix Potter, who became a Herdwick sheep farmer in later life. Mandy pays them a premium to split the flock, so they get the light and dark fleeces for the tweed. Cable & Blake also use local fleece, because *"The brand is all about quality ... Herdwick ... made as locally as possible."*

Owen Jones and Lorna Singleton use wood they have grown themselves, or collected locally, in their work. The process of growing the wood used in their products is a fundamental motivation and embodies their sense of continuity for future generations and commitment to environmental sustainability. Owen does not buy any of his materials in, using only the wood he grows, and makes use of waste wood in added-value products such as beesom brooms and pea-sticks. He used to work with a local coppice merchant for his supply of wood, but after his death Owen began using local wood and developed his own coppicing skills, which enabled him to become more or less self-sufficient. Lorna, who was Owen's pupil undertook training in coppicing through a 3-year Bill Hogarth apprenticeship, during which she learned woodland management skills and studied ecology.

Florence Paint Makers produce high quality artist's materials that are made from pigment extracted *from* the local place, so are directly linked to the geography of Cumbria's western coast. Their first pigment, haematite, came from the disused iron ore mine and is ground, then used in paints, pastels and pencils. They also use local slate for the grey pigment and the local sandstone from St. Bees for their yellow.

Not all enterprise owners are able to use local materials in all of their products. For example, The Herdy Company combine local materials and production with materials from elsewhere. Their 'The Herdy Company Sleep' mattresses are made from local wool but made in Yorkshire, 40% of their mugs are made in Stoke but their recently launched bag range is produced through collaborations in



Japan and Hong Kong and made in China. Recently they started to produce "The Herdwick Tup", a soft toy made from Alpaca wool in Ironbridge, England's last teddy bear factory, as a limited edition product.

The enterprises symbolise place in various ways, such as through the materials they use or through utilising heritage skills that are particular to that location. Owen and Lorna's baskets are functional and have been made in the same region for at least several centuries. Their function lies in the storing and transportation of goods for shipping, agriculture, and the textile industry. Swill baskets represent the aesthetics of the South Lakeland region, an area that is still largely wooded, unlike much of the Lake District. Through using locally grown oak and hazel, the baskets represent both the history and aesthetics of that particular region. The materials used by Florence Paint Makers symbolise the very essence of place as they are sourced from the geology of the area and artists who use the materials to create images of that place create a direct link back to the west coast of the county. Products made from Herdwick fleece symbolise the iconic sheep. Fabric colours and patterns used by Cable & Blake directly symbolise the landscape, as they are copied from photographs taken by the owners. Their production methods symbolise the past woollen industry of Kendal and their fabrics are woven in a heritage mill, then dved and finished in heritage manufacturing companies. The bags made by Herdwick Limited symbolise the heritage of the Herdwick sheep and the important role Beatrix Potter played in the development of the National Trust, Products also symbolise the aesthetics of the area, as the only dyed fleece is for the red that runs through the light and dark grey fabric, which is based on the smit mark used by Potter and is a unique identification mark for each farm and is traditionally made from Egremont Red pigment (as used by Florence Paint Makers).

The place in which enterprise owners live and work not only enables them to gather and use locally sourced materials, but also offers inspiration through the landscape and the peace and quiet afforded by living in a rural location. This quiet reflection is also important to Owen, who does not advertise the location of his workshop, so as not to be interrupted by customers calling in without appointments. Some enterprise owners work in a solitary environment in a workshop, such as Owen Jones and Lorna Singleton, whereas Laura, owner of Laura's Loom has a small studio in an old mill that is now a crafts centre. Florence Paint Makers occupy a small area within the Florence Arts Centre and enjoy the spirit and camaraderie of working as a cooperative.

NETWORK – Historic connections to other centres of excellence in the larger region

During our initial interviews with enterprise owners we discovered that Laura's Loom, Herdwick Limited and Cable and Blake, all of whom work with wool as their primary material-collaborate closely with heritage manufacturers such as

spinners, weavers, dyers and finishers in areas that are traditionally associated with the British cloth industry, such as the Scottish Borders and Yorkshire. Laura told us about the links between Huddersfield and the Scottish Borders, saying *"I work with a weaver and a cloth finisher in the Scottish Borders, and it travels via the old wool route. The street the cloth finishers is on in Galashiels is called Huddersfield Road and I thought that was just brilliant as I start in Huddersfield having my yarn spun, and it ends up in Galashiels where the cloth is finished."* Laura also has socks made in Leicestershire, which is the heartland of the UK sock industry, at a factory that has been operating for 150 years.

Relationships with heritage manufacturers who are able to produce small batches of fabric are fundamental to the viability of the small enterprises, enabling them to commission larger quantities of products in addition to making by hand, in order to generate income and therefore make a living. The enterprise owners told us about the value of working with experienced companies who are able to produce small amounts of fabric and who are able to offer support and advice in areas in which they lack experience and knowledge. In order to gain insights into the work they carry out and to understand their connection to the place in which they were located we visited three heritage manufacturers; Drove Weaving and Schofields Finishers and Dyers in the Scottish Borders and W.T. Johnson in Yorkshire. The manufacturers are all located on the traditional 'wool route' on the A7 from Scotland down to Yorkshire.

Weaving and textiles have a very long history in the Scottish Borders dating back to the Flemish immigrants who settled in these areas. During the Middle Ages the Border Abbeys were amongst the biggest landowners in England and became the Western world's largest producers of wool. However, in the 12th century, wool production in England and Scotland began to outstrip demand and the Border monasteries began exporting to Flanders. By the end of the 12th century, wool was exported to Bruges out of Berwick and as a consequence the town became the base for a large immigrant population of merchants. By the end of the 18th century, there was an emerging woollen industry in Galashiels and the first mill was built in 1800. However, during recent years, many of the Border textile mills have closed due to the trend towards more mass production and lighter, man-made fabrics rather than tweed.

Yorkshire has also been a centre of excellence for wool processing for over 700 years due to the quality of the Pennine water that filters through the local grit stone and shale, making it pure and soft, which is perfect for washing and scouring wool. Huddersfield in particular has been home to a large number of woollen mills and finishing plants. In our interview in Huddersfield, the representative from W. T. Johnson told us *"the reason we are here is because of the water, the chemistry of the water. If the soap doesn't make lather that's no good for us so we have to have soft water which is particularly big in this area ... [soft water is] more effective – we use natural soap to wash the fabric and what we do is really traditional and done in a modern way, and we have some million-pound machines but what we really do is washing and pressing. It's not new ... our expertise, knowledge and machinery are based on the understanding and behaviour*

of wool for this process". This expertise relating to the materials and the place-based elements that produce high-quality finishes are of great importance to the small enterprises, who are unable to carry out these processes on their own.

The fabrics produced in the mills was of very high quality and those who worked there developed a high level of expertise. Huddersfield became synonymous with fine woollen cloth manufacture and 'Made in Huddersfield' became a highly revered brand, with skills handed down from generation to generation. However, during the 20th century, the business declined and many of the mills closed. Those mills which remain in both the Borders and Yorkshire are now specialised niche businesses that continue the traditions of textile manufacture in a highly demanding marketplace.

The use of heritage manufacturers who have high levels of skill and produce quality fabric that has a strong connection to place enables small enterprise owners who do not make products themselves to produce goods that embody their own values. We found the connection to place and the rich provenance embodied within the heritage manufacturers to be of great import to the small enterprise owners as they want their products to have integrity and would not have them made in factories internationally which produce low quality goods in high volume. Laura from Laura's Loom struggled at first to find a way of making enough products to ensure a living and when she first explored the potential of using batch production methods in a factory was concerned she would sacrifice the integrity of the product and her own values, saying *"I do distinctly remember feeling like I was selling my soul when I decided to go into production weaving".* She reconciled this concern through still being able to hand-weave and work with enterprises rooted within the traditions and heritage of high-quality cloth manufacturing.

Whilst working with heritage manufacturers affords an increase in the production of goods for these enterprises, this method of working brings with it its own challenges. We were told about the length of time required to produce goods now that the stages of cloth production have been separated and are carried out by different manufacturers. Traditionally the whole process from spinning, weaving, dyeing and finishing would take place in vertical mills. However, after the closure of many mills the processes all now take place in specialist businesses, as we saw in our fieldwork. Small enterprises now have to pay each separate manufacturer for each separate process, meaning significant financial outlay and sometimes lengthy production processes as the cloth must be transported between manufacturers. The staff we spoke to at the manufacturers are very aware of the issues this causes and work hard to ensure production times are kept to a minimum. They also tend to use the same companies, for example Drove Weaving send most of their cloth to Schofields as they know the quality is high and they are able to carry out the finishing process in the required timeframe. This also means that enterprise owners do not have to transport the cloth themselves. This demonstrates care for the small enterprises on the part of the heritage manufacturers.

Figure 3: An example of a wider network





- 2 Fleece purchased from local farmers
- 3 Spinning and dyeing Yorkshire
- Weaving Scottish Borders
- 5 Dyeing and finishing Galashiels
- 6 Sock makers Leicestershire

The processes of weaving, dyeing and finishing fabric all require a high skill level, often developed over many years, where the staff are able to feel whether the fabric finish is correct, a skill that only comes with experience. The staff in the manufacturers we visited are all highly valued, and many have worked in the same place for a long time. The manager of Drove Weaving told us "We don't go looking for anyone, they come to us ... All our people come from time served in mills. There's a fella working for me that did his apprenticeship with me 50 years ago," Both representatives from the finishing factories used the term "the black art" to describe the nature of some tasks carried out in the dyeing and finishing processes, suggesting they can only be learned through doing, which takes a long time and is difficult to communicate and teach. This was reinforced by the manager of Schofields, who told us "It [finishing] takes a good few years to learn. To become really competent – depending on the process, some they can pick up but other processes like a dye house labourer ... they've got a lot to do with chemicals like measuring and knowing which chemical does what as there is a lot to that process ... The older guys have been here 40 years so they know a batch would come out of the decator and they put their hand on it and they'd know straight away if something was amiss and it's trying to get these guys to that level. A lot of experience". The manager from W.T. Johnson also spoke about the length of time it takes to develop the skills in the finishing process, saving "A lot of our employees like me who've been in textiles all their life understand the difference".

When asked whether they felt the industry is currently in a good position all interviewees told us they felt it was and that they don't have to go out and find work. The manager from Drove stated *"I think it [the textile industry] is in on the rise. There's more interest"*, which was echoed by the manager from Schofields, who told us *"It's in an excellent place, and we are going from strength to strength ... I don't see any threats, anyone starting here will be told not to worry about their job."* This is partly down to lack of competition, about which he continued *"There isn't much competition, there's one or two that finish their own fabric, but very few vertical mills left."* Perhaps the biggest threat is that of younger people not being attracted into the industry and the ageing workforce.

There is still a great sense of pride in fabric that is Made in Scotland, Made in England and Made in Huddersfield, both in the UK and internationally – perhaps more so internationally. Even with competition from China and India, where fabrics can be produced much faster and cheaper, there is a recognition that the heritage manufacturers in the UK offer quality and provenance. None of the small enterprises we work with use fabric manufacturers abroad (although The Herdy Company do get some ceramics made in China), as they value the personal contact available through the heritage manufacturers in the UK and the provenance and heritage attached to UK fabric. The manager from Schofields spoke about this, saying "some customers sent work to China as it was so cheap, but a lot was coming back to us to finish it. They were shipping it to China and had to pay money up front and what they got was what they got, so it didn't work for them. The Made in Scotland name is still a big thing and carries a lot of clout".



This demonstrates that even in a global industry, the nature of provenance and quality attached to a particular place is still important to some. This echoes the importance of place the small enterprise owners talk about in their interviews and the importance of telling the stories of place in marketing and branding. The manager from W.T. Johnson says "You can get things from the other side of the world, but they don't say 'Made in Huddersfield' down the edge. Most of what we do is apparel fabrics for menswear – fine wools finely spun, designed cleverly and finished very well".

PEOPLE

SUPPORT – Connections to other local enterprises and wider development agencies

Crafts in the UK are supported nationally by two primary non-governmental organisations, the Crafts Council and the Heritage Crafts Association and are categorised within the creative industries. The Crafts Council, established in 1971 (as the Crafts Advisory Committee) is the national development agency for contemporary crafts in the UK, whose purpose is to advance craft. They aim to do so through championing new makers, empowering new making and inspiring new audiences, and supporting national initiatives to increase participation in crafts education, grow audiences and support makers and craft enterprises (Crafts Council, n.d.). The Heritage Crafts Association, established in 2010 is the advocacy body for traditional heritage crafts who also offer support to craftspeople and aim to work towards creating a sustainable framework for such practices in the future (Heritage Crafts Association, n.d.).

Whilst valuable support is offered by the national agencies, during our conversations with enterprise owners we discovered that many fall between the remits of the Crafts Council and the Heritage Crafts Association and, as a result, do not access support or advocacy from either body. Much research has been carried out by the Crafts Council in recent years, through which a potentially valuable body of work and rich data has been created. The Heritage Crafts Association have also carried out significant research in producing the Radcliffe Red List report (Heritage Crafts Association, 2017), which highlights crafts as risk of becoming extinct and highlights issues faced by makers throughout the country.

Regional and local development agencies, such as Local Enterprise Partnerships (LEP) and Chambers of Commerce also offer support to enterprises. The LEPs are voluntary partnerships between local authorities and businesses, set up in 2011 by the Department for Business, Innovation and Skills to help determine



local economic priorities and lead economic growth and job creation within local areas. Cumbria LEP sources funding from Government and the European Union, predominantly through the Local Growth Fund. Working with government and businesses, they provide strategic leads on activities contributing to Cumbria's growth, and are currently developing the county's new Local Industrial Strategy in order to demonstrate Cumbria's strengths to make the case for investment from the private sector and government.

In order to understand the support landscape for small enterprises in greater detail we interviewed a representative (consultant) at Cumbria LEP and a manager at Kendal Chamber of Commerce, in addition to reviewing the key policy documents produced by both organisations.

VALUES – Priorities and motivations of enterprises, and of development agencies

As outlined above there are various national and regional bodies that offer support and advocacy for small maker enterprises. During interviews with enterprise owners we explored the issues they face in terms of operating their business and accessing support from organisations. We found that many small enterprises are operated by sole traders, which mirrors the national picture, with 88% of businesses in the craft economy operated by freelancers or sole traders (BOP Consulting, 2012:3). Operating as a sole trader brings with it benefits and challenges. Interviewees told us that operating as a sole trader enables them to work flexibly around family or other commitments. It also gives them the ability to work creatively and to follow their own path. However, they face challenges in balancing all aspects of operating a business as well as the financial precariousness of having to continually produce in order to generate income, with no safety net that covers sickness etc. Furthermore, many of the enterprise owners came to their business as a second or third career, and do not have previous experience of operating their own small business. Their primary motivations, as discussed above, relate to the creative aspects of the enterprise, with the business aspects being essentially a necessity. Lorna Singleton enjoys the freedom afforded by self-employment, but also experienced the negative side when she was unable to work for a period of time and told us "I didn't have time to keep fit and healthy ... It made me realise the business needs to be more resilient, but it's really hard when you're self-employed". Lorna's aim is to make the business more stable and have more of a routine, enabling her to find her way through more difficult times and to take holidays without sacrificing the business. Owen Jones also spoke of the difficult balance sole traders face, stating "If your hands stop, you're not earning ... I get sucked into the computer more and more, to write emails ... and all that time I'm not earning because I'm not producing. You can kid yourself that you're working guite hard by doing a lot of paperwork and admin work, but you're not actually earning anything". He describes the work as

'relentless', telling us that you have to be self-motivated to keep going. Owen also spoke about the issues with the lack of benefits, saying "being self-employed, you deceive yourself, you don't have the benefits of an employee ... You aren't hiding behind a company, so you never have days off sick and you have to keep working. It wouldn't suit everyone, but I love the flexibility of it and the freedom."

Very few of the enterprise owners talked about support or training they had accessed in order to develop their business skills or other areas of their enterprise, choosing instead to access advice through informal networks (e.g. other enterprise owners) or through online resources. In our interview with the LEP representative we asked about the support offered by the organisation to small enterprises in the county and the experience they had of dealing with such enterprises. She explained that a key focus for the LEP is economic growth in the county, across all sectors, which include the nuclear industry, manufacturing, tourism, hospitality and retail.

As growth is vital to the LEP they often seek to engage with small enterprises in order to enable them to grow, but they often face challenges, as these enterprises, many of which are what were referred to as lifestyle enterprises (e.g. where the enterprise forms a supplementary, rather than a primary income) do not wish to grow. She told us "our difficulty in Cumbria is that a lot of these businesses don't want to grow to that next level ... the LEP's role is to develop the economy and ensure growth. The difficulty you've got ... is that you have to have businesses that want to do that and a lot of them don't". When we spoke to enterprise owners about their hopes for the future and ways in which they would develop their business none expressed a desire to 'grow' in the terms described by the LEP. Instead they spoke to us about focussing on product development and consistency rather than taking on staff or growing the business financially. Alice at Cable & Blake talked about growth in terms of expanding the brand, saying "[]] definitely want to grow it [the business], the beauty would be to be like the Harris Tweed equivalent, for Cumbria ... The idea would be able to sell the fabric internationally". For Alice, growth will occur slowly, and its nature will relate more to developing the product range and expanding the brand, rather than taking on more staff or making more money. Similarly, Mandy at Herdwick Limited feels she could grow the business but in terms of product development and consistency rather than expansion. She had the opportunity to grow the enterprise after appearing on a British television programme and receiving excellent exposure for the business. She said of this experience *"it is a bit scary*" because the TV programme brings you a huge hit and ... therefore you can over-invest and try to run before you can walk". After the programme, numerous shops asked to stock her products, which she largely declined. She now sells her products through just two shops, as well as online and through country fairs.

For Florence Paint Makers, growth is not something they can consider due to the limitations of volunteering and the space available to them. They sell their products all over the county, predominantly through art supply shops but also in several galleries, and through online orders have shipped their products abroad. However, they are unable to fulfill large orders. As a small volunteer-run enterprise, which the members enjoy, an increase in production and pressure would diminish their experience.

The difficulties faced by small enterprises often relate to their status as sole traders, meaning the whole business operation falls to them. Many do not possess the skills to run all aspects of a business, such as finance, marketing, web skills, design, finding markets, as they do not come from a business background and their prime motivations are driven by their practice. The LEP offer skills training to enterprises and these are largely delivered by Chambers of Commerce. When asked whether there is a gap between the skills enterprise owners need, such as web and business skills and those offered by organisations such as the LEP, the consultant told us there wasn't one, instead telling us that her experience is that there is a lack of take-up from creative businesses. When asked whether she thought this was due to lack of communication or the wrong kind of support, the consultant stated "I could find you [significant financial support] in this county ... not all of it is relevant to this sector, but there will be areas they can access that support them. The difficulty you've got is the businesses will tend to not have the turnover where they want to pay, so that becomes a challenge ... but that onversation might be the best they ever had." From the point of view of the enterprises. Mandy Marshall says "I think the problem is in order to go to all these things you'd spend half your time going to meetings to find out what you need and that is the issue".

Due to changes in the funding available to LEPs nationally, as a result of Brexit and the UK's planned departure from the European Union, there was uncertainty at the time of our interview as to the level of support that would be available to small enterprises in the future. However, the consultant did suggest that the current limitations in the distribution of funding in the region might be lifted once the majority of their financial support is sourced from the UK government, rather than the EU.

Our research highlights the lack of take-up of opportunities offered by organisations such as the LEP and Chamber of Commerce, which appear to be related to financial costs or lack of time available for small enterprises. We have also found that the values espoused by the LEP, who have a responsibility to grow the region's economy, and the values espoused by the enterprise owners, who aren't interested in financial growth, may also be a barrier.

The LEP did not suggest they would be developing skills packages specifically for small enterprises in the near future, but we have highlighted an opportunity for increased marketing and visibility of their services for small creative enterprises that might result in take-up. In addition to financial and training support, the LEP representative told us about the potential for developing informal peer-to-peer skill sharing and support networks amongst small enterprises to fill the gap that currently exists in the region. She explained *"I think where we have the creative industries [in Cumbria] and things like Woolfest, it is the peer learning networks that are the strongest … I firmly believe the landscape going forward should include these network events".*



We have found examples of this in the region, perhaps the best example being Wool Clip, a cooperative organisation near Penrith that operates a shop selling wool-based products made by its members. The group was set up after the foot-and-mouth outbreak of 2000, which greatly affected the region's economy (Mullagh, Walker & Evans, 2019). Woolfest, an annual event organised by Wool Clip and held in Cockermouth in the north of the county, attracts thousands of visitors and promotes the producers of wool and wool products, as well as livestock owners. We visited the 2018 Woolfest and found it to be a busy and vibrant event, with many small enterprises in attendance. The enterprises we interviewed who work with wool attend, as does Owen Jones, who has a stall and demonstrates his basket making. The benefits of the Wool Clip, who organise the event, according to the LEP representative are the "strength in numbers and ability to share ... they are doing that peer-to-peer exchange but exchanging skills, so it's the old-fashioned village committee". Members all contribute different skills, including marketing, formal tasks such as accountancy, and administration. This type of community is prevalent in rural farming communities, where farmers and their families pool resources and skills in addition to sharing machinery. After foot-and-mouth this became more important as farmers were unable to afford large financial outlays and the community offered support amongst itself. These informal, peer-to-peer support networks and co-operatives, such as Wool Clip offer a potential template which might be developed through the county for enterprises whose work falls between the gaps of assistance from organisations. Such networks tend to be founded on shared values and develop organically, perhaps with initial seed-funding, but they grow and eventually become self-sufficient.

Through this research we have found that the collective contributions of enterprises create more than the sum of the parts, contributing to an understanding and tangible notion of 'authenticity' related to people and place, which can have an *indirect* benefit to the local economy beyond the contributions of any single maker. The collection of makers contribute to building a sense of place and identity which flows out into other areas such as hospitality, food, arts programmes, museums and other cultural assets, visitor experiences etc. This can have the effect of raising the perceived value (cultural and economic) of the contributions of makers. However, in Cumbria due to the rural nature of the county, enterprises are geographically distant to one another. In places such as Santa Fe, New Mexico, USA there are plazas and a central location for makers to gather, which over time has enabled a sense of community to grow amongst makers. In a location such as Cumbria, geographical isolation and lack of such central locations poses significant challenges.

Important support for makers will be in those areas which individual crafts makers often find more challenging e.g. identifying their markets, knowing who their customers are, marketing, publicising their work and 'right pricing', telling the stories of their craft, traditions, heritage, etc. related to provenance and cultural, branding and so on.



PRODUCTS

VIABILITY – Feasible production methods

In order to make a living, enterprises need to produce enough goods to sell whilst maintaining the integrity and quality of products. Making by hand places limits upon the quantities produced and some enterprises struggle to make enough. When coupled with issues faced by enterprises in charging enough for their products, this issue can mean an enterprise is not financially viable.

Enterprise owners tend to carry very little stock, particularly those who make their goods entirely by hand, such as Owen, Lorna and Florence Paint Makers, as their practice is constrained by the time it takes to produce. Laura, owner of Laura's Loom, Cable & Blake, The Herdy Company, Herdwick Limited, and Cumbria Crystal produce all or part of their stock using mechanised systems, thus enabling them to carry higher levels of stock.

In order to have stock, Laura from Laura's Loom started to use heritage weavers in the Scottish borders (as discussed above). She says of this *"in terms of business, it's just volume. I can have my designs made into more products and that enables me to run a business, as hand weaving is so slow and there's no way I can charge per piece what it actually costs me. I never get back on a hand-woven piece the amount of time and effort that's gone into it. So, having learned that over my first couple of years weaving, I branched off into this more commercial way of doing business." Laura still hand weaves, but now she is able to hold stock and to make a living from her enterprise.*

For Florence Paint Makers their ability to stock retail outlets comes down to their availability and the quantity of products they are able to make, as they only get together one day a week. During that day the volunteers must make and package the products, meaning they are very aware of their stock levels. They are stocked in art shops throughout the county, as well as heritage centres such as Rheged, in Penrith. Maintaining the quality of the art materials is of utmost importance, and so they are pragmatic in terms of taking new orders and developing new products.

Mandy, from Herdwick Limited faced increased demand for her products after appearing on a national TV programme, which she found to be a significant challenge. She could have ordered a larger number of bags, but to do so is a significant financial investment as she is trying to grow the company sustainably. She was supplying as a retailer and also online, so to keep up with demand and stock was very difficult. She doesn't have a retailer's mark-up on her products, as there isn't a profit in that. Mandy also faces issues with customer service, something which is fundamental to her and she feels offering a personal service is what enables small enterprises to be unique. Trusting online retailers,



or other retailers, to give customer service she feels is adequate is very difficult, saying "a lot of retailers don't want to give service. A lot of places are almost self-serve. At the moment we are supplying a shop in Grasmere, who had started off with a small range and I would say is now the cornerstone and major part of their business, but I trust them, and it works well." She also stocks a shop in Coniston but wouldn't want to stock many more.

Very few enterprises interviewed sell to retail, citing issues such as stock production, pricing and loss of control as issues that put them off this way of retailing. For those enterprises producing solely hand-made goods, this option is not possible, simply due to the time it takes to make their goods. The nature of their products means other makers are unable to have production methods that are more efficient. Lorna Singleton says "I often envy potters for being able to mass produce products in a way, they can get more into a factory production line. But with baskets, each basket is individually made, and you can't mass produce *it in any way really".* For enterprises who use mechanical production, such as Herdwick, Cable & Blake and Laura's Loom, consistency and guality can still be an issue, particularly when using difficult yarns such as Herdwick. Mandy from Herdwick Limited finds consistency a particular issue, saying "What I'm really striving for is to have continuity of a cloth design and leather – otherwise we have to have everything re-photographed for the website." Using natural materials such as wood or yarn means inconsistencies in the products, whether hand or machine made. For some enterprises who stock retail outlets in larger quantities this is an issue, but for those making by hand, imperfections are an inherent and positive quality of the product. As Lorna Singleton states, "If you mass produce things and want things to look the same, imperfections don't work, but for a product like mine, it works. In the baskets you can get a bit of a knot, so it makes it more personal. I'm not sure if it is a preference or I have learned to like it as it is a necessity, like you have to prove it isn't just an ordinary product and to prove it is something different to charge a price, that it isn't mass produced." Owen Jones says similarly that "inevitably the materials can be guite varied. Some baskets are better than others, but you just have to accept that really, you can't make the perfect basket."

However, for enterprise owners selling online, the imperfections that add uniqueness to their products also means they often have to add a new product image on their website when an existing product is sold. Enterprise owners don't have the facilities to take high enough quality images of their work, for example Lorna Singleton states *"I have some friends who are good photographers, but it would be handy to do it myself. I would like space in my workshop set up for photos so when I have finished something I could take photos immediately".* Mandy gets her products photographed professionally, but issues with quality and consistency in fabric means that sometimes products have to be re-photographed where the appearance of a new batch differs slightly. This can result in a significant financial outlay for a small enterprise. Mandy also faces issues with uploading photographs to her website, as her rural workshop has significant internet speed issues, suggesting *"If you could go to a business centre* and there was super-fast broadband and there was a photography studio with a photographer and you are paying for it – but if you could go and just have an hour and then I have my photos and somebody could give you advice on how to present".

BUSINESS DEVELOPMENT – Varying types of business models

Through the interview analysis we identified five principal business models. These enable enterprises to operate in a way that provides them with enough income to sustain their business. A business model is defined as "*the rationale of how an organisation creates, delivers, and captures value*" (Osterwalder, 2010:14):

- **Sole Maker:** One sole maker who designs and makes the goods on their own, exclusively by hand without the aid of machinery (e.g. Owen Jones, Lorna Singleton).
- Sole Maker + Heritage Network: One sole maker who designs and combines making by hand with machine production, working with heritage businesses, in order to increase the quantity of goods they make while maintaining the quality and integrity of the goods (e.g. Laura's Loom, Herdwick Limited).
- **Hub Model:** A central enterprise that works with other makers to produce goods under one brand. The enterprise owner may or may not be a maker, but works with others in the design and/or production of goods. The owner drives the enterprise creatively. The owner might be considered a 'design manager' who gives direction to the company (e.g. Cable & Blake).
- **Cooperative:** A group of makers who work together to produce goods that are sold under the umbrella of one brand. Either all or a percentage of the proceeds go back into the enterprise or to a good cause (e.g. Florence Paint Makers).
- Larger Enterprise Model: A larger enterprise that is place-based, but where the owner/manager does not make the goods themselves. They have more than ten employees and their goods are a mix of hand- and machine-made (e.g. The Herdy Company, Cumbria Crystal).

These models have mostly been arrived at organically by the enterprises through processes of trial and error but are in line with their own values. Each model brings with it its own challenges, such as the pressure placed upon Sole Makers to undertake all aspects of their business and a sense of precarity; the length of time taken to get pieces produced by heritage manufacturers and financial outlay required by the Sole Maker + Heritage Network; the reliance upon other small makers and their ability to produce goods in the Hub Model; commitment and time available to contribute to the Cooperative model and the need to produce high quantities of goods, potentially internationally in the Larger Enterprise Model.

OPPORTUNITIES – Potential design contributions for viability and sustainability

When asked about what a designer might do to help in their enterprise no enterprise owners suggested input into the design of the products they produce. Instead, they spoke about the issues they faced regarding marketing, branding, packaging and telling their stories, all of which they felt would enhance their products and enable them to raise the perceived value of what they produce. In order to be able to make a living from their enterprise, it is vital that products can be sold for adequate prices that reflect the quality of materials, provenance and high levels of skill required to produce them. However, we found that this is often not the case and enterprise owners told us that public perceptions regarding value for money and appreciation of the time and skill it takes to produce high-guality, unique goods are lacking. For example, Lorna feels that explaining or demonstrating the process and the story of the product helps people appreciate the process and the product more, stating "The person selling the product needs to know the process of making and history in order to explain to customers ... when I am demonstrating and selling I feel that's why people buy the baskets ... so if you just put it in a shopping centre, there's no context, so it's just a basket that's expensive". Lorna also talks about the whole process of making baskets, which for herself and Owen includes the time spent in the woodland managing the trees they use. Furthermore, she spoke of the perception that the longer a product takes to make, the more it should cost, stating "they aren't iust buving a basket but also the skills that have gone into it. I'm sure every crafts person gets it, but people always ask how long it takes to make it - it may just take 10 minutes but only because I have made thousands, so the aspect is of skills but also woodland management. I am looking after a woodland which is unique and making sure the habitat isn't lost, which is tough." She suggests that one way to tell the story of her product would be through nicely designed labels, that include the story of the product.

Laura, from Laura's Loom talks about the differences between hand and machine made products and the lack of understanding between the processes and time involved in each, stating *"People don't appreciate the difference between the two, the hand woven and machine woven … When its hand woven versus machine woven, they don't really see the difference and they prefer the machine scarf as it is a smoother finish than you can get by hand, but they don't know about it so can't appreciate it".* Laura also echoes Lorna's views on the benefits of customers seeing the maker in action, saying *"I have sold wool scarves that I have made"*

finer, wider and longer in different designs for relatively high prices, but I can only sell a scarf for that much if people visit and see me weaving, as they can appreciate the work going into it. That works out at £10 per hour, but it doesn't work out like that as I physically can't weave for 8 solid hours a day, but when you explain this to someone standing by the loom and watching you throw the shuttle backwards and forth, that's when they realise what goes into making it. Then if they have a go they realise you have a skill and they don't ... You've got to get that story across to people". Laura also highlights the difference between arts and craft, that a piece of textile framed and put on a wall would be priced much higher than one of her scarves that is made from the same fabric. This is an issue inherent in craft products, which have often been considered as low value, utilitarian products as opposed to high value art. However, in recent years there has been an increase in objets d'art, those craft objects that are not functional, but made with the intention of elevating the object to the status of art and often exhibited in galleries.

Enterprise owners recognise the importance of marketing and branding in telling the story of their products, but rarely have a budget dedicated to the promotion of their work. Rather than paying for advertising, we found enterprise owners prefer to attend shows and fairs, use social media and word of mouth to promote their products. In recent years provenance and the story of products has become increasingly important, with authenticity being cited as a key strength of craft products (Schwartz and Yair, 2010). Many enterprise owners talk about their stories, but don't always know how to communicate them in order to develop trust and connections with customers. Spencer, co-owner of The Herdy Company says, "There is a need to make sure that provenance and story are well articulated, well repeated, via social media channels." Chris Blade from Cumbria Crystal considers stories as key to building trust with customers, saying "We can't compete on a cost basis, people want it cheaper so it has to be quality and have a story, like expensive whisky, all they do is tell a fantastic story. It also builds trust in the brand, particularly when buying online." Cumbria Crystal are an example of an enterprise who are using innovative relationships to build their brand through marketing via partnerships with Aston Martin and Downton Abbey. This has raised their profile globally and enables them to tell their story to a new audience and attract new customers.

Laura, owner of Laura's Loom tells the story of the wool and her practice on her website, recognising that if people understand the story of the product and the time it takes to make, they might be more willing to pay the price she needs to recoup the time, effort and materials it takes to make, saying *"I have a story on the website and a brochure I give to people, it is about wool more than anything else."*

Florence Paint Makers have to be very careful with the amount of marketing they do, as this is driven by their capacity to produce due to the enterprise being run by volunteers. "We have to be quite careful how much marketing we do as we can only generate so much … It's all hand-made and we keep it consistent. If we got a big order from Jacksons [art shop] we don't know what we'd do."

Cable & Blake produce high-quality, creative marketing that uses the local landscape and communicates their message through light-hearted imagery and stylish branding. They work with local enterprises, using a local photographer, printer and other associated services to produce their material.

For Cumbria Crystal, their international market is essential and a key area of growth for the company, and they are looking at how they engage through digital marketing and websites. This removes the need for sales agents and retailers, which can add double the cost to products, stating he is trying to work "smarter, not harder".

The Herdy Company has a clear and consistent branding and marketing strategy, both in their shops and online. The owners Spencer and Diane have experience in branding and interior design, meaning they possess the skills to create high-quality branding and product designs. The visual branding of The Herdy Company is now synonymous with Cumbria and Herdwick sheep, and they keep their visual identity consistent across their ever-expanding product range. In 2017 they appointed the ex-global chief executive of Saatchi and Saatchi, Kevin Roberts, as the chairman of the company, boosting their profile and the potential of the enterprise to increase their exposure. Spencer says of their branding "We did what we'd do for an oil company – we branded it – cleanly, simply, elementary, then turned this into products which are memories and mementos, souvenirs and *aifts.*" Their aim for the brand is to be *"the most lovable brand personality in the* world. The most powerful brand here in the Lake District" and Spencer suggests they could open a shop in China, such is their appeal to international visitors who visit the area and states the brand is "made to make you smile, which overcomes cultural barriers."

Whilst our findings indicate that enterprise owners often do not wish to use design to develop new products, we have identified areas where design could help in sustaining these kinds of small enterprises:

• **Product Design:** Where appropriate and desirable, designers can contribute in the area of product design to create: new products using existing materials and techniques, or in combination with other materials and contemporary techniques; a unified range of products that are attuned to contemporary needs and lifestyles; and products that supplement or serve as accessories for existing products. One example of this is Lorna Singleton's adaptation of traditional oak swill basket-making to create a contemporary women's handbag. This product, which features leather fittings, is based on the designs of traditional fishing creels. When the existing products are very traditional, any product design contributions – if indeed they are warranted – should be approached with care and sensitivity.

- **Branding and Packaging:** Design can be used to develop strong branding, in ways similar to the approach of The Herdy Company, who have taken the iconic Herdwick sheep found in the Lake District and built a distinctive narrative around it for the enterprise, the products they produce, and, more broadly, for the place itself. The development of a *Located Making* brand and associated, environmentally responsible packaging that seeks to promote and develop place-based products could potentially assist enterprise owners by raising the profile not only of their own enterprise, but collectively across the region.
- **Storytelling:** This can be a key contribution of design, which can be achieved through visualising aspects of the story via brochures, websites, point of sale displays etc. Many of the enterprises have fascinating and compelling stories to tell, whether they relate to the history and heritage of their products and/or the materials they use, or the craft or business, or the connections to the region. The stories relate to and are rooted in place through materials, deep concern for the environment and personal connections. They are living examples of sustainability that can be brought to the fore by conveying personal journeys and using design to effectively curate and communicate the stories of place.
- Online Presence: A further area in which design can contribute is through the design and management of websites and associated areas such as photography and social media. As discussed, enterprise owners feel they lack the skills, time and often the financial means to develop an online presence to market and sell their products. All of the enterprises we interviewed use the internet to some extent, but many struggle with designing their own website, adding content and photographing their products in a professional and appealing manner.
- Enterprise Service Hub: Several enterprise owners suggested the creation of a 'hub' would be highly beneficial, through which they could access the services of design professionals. While our interview with the Local Enterprise Partnership (LEP) highlighted that these skills are available in the county, the take-up among small maker enterprises is low due to issues relating to communication of what help is available and the practical limitations of accessing it, such as the demands placed upon sole traders in terms of time.
- **Bridging by Design:** A further area in which design could make an impact is through the design of effective services and their communication, for example working with the LEP to develop engaging and accessible training and support for marketing, website or design suited to the needs of small maker enterprises. The relationship between the enterprises and policy agendas is an area where our research revealed tensions due to different priorities and motivations.

Living Design Framework



Living Design Framework

A framework has been developed to visualise various aspects of a maker enterprise to help reveal and better understand its relationship to place; its underlying values and how these relate to sustainability and to the priorities of business support agencies; its relationship to sustainability; and where design can make a useful contribution. The framework components include tools to facilitate understanding of:

- Context in which the enterprise operates;
- Values and priorities of enterprise owners;
- Values and priorities of economic development organisations;
- Accordance with the four elements of the Quadruple Bottom Line of Design for Sustainability (QBL);
- Design opportunities in relation to production cost and product value.

The *Context and Values* tools incorporate an indicative five-point scale (0 = Low; 5 = High) to allow an estimation of the significance of the various factors in relation to small maker enterprises.

The *QBL Tool* incorporates an indicative scale (Low; Med; High) to allow an estimation of the accordance of the enterprise with the four elements of the QBL, and an indication of overall accordance. This tool allows enterprise owners to identify areas where they are currently effectively conforming with sustainability principles as well as those areas that may require further consideration and development.

The *Design Opportunities* tool is a quadrant-based assessment. The appropriate quadrant is chosen for the enterprise's product. This identifies opportunities where design might make useful contributions and, in some cases, where the use of design may be less appropriate.

The elements of the various tools are described in more detail below, and include Cumbria-specific visualisation examples. All these tools are also included in the Appendices, for application in other contexts.

CONTEXT – The relevance of place to maker enterprises

This tool, which may be completed by regional development or research organisations, allows a particular place to be mapped in terms of its resources and facilities and assessed in terms of strengths and weaknesses. Through such means, makers can ensure they are aware of the resources available to them, and regional development organisations and others can create opportunities for strengthening those areas that are currently underrepresented in the region. The unit of assessment might be at the level of a town, a county or a larger geographical region. This tool has the following components:

Resources: Availability and access to local materials, availability of other materials, suppliers and service providers, such as photography, website support, design, branding, packing etc.

Professional Development: Availability of learning resources and training, in formats that are suited to small enterprise owners. These might include opportunities to learn new skills and techniques related to their principal production process; business skills such as financial management, marketing and routes to market, and pricing; and e-commerce skills, such as website management and effective use of social media.

Cultural Events: Cultural events that may be directly or indirectly related to an enterprise's operation can provide opportunities for maker participation, sales, practical demonstrations, workshops, profile raising, and increasing public awareness about the history and heritage of a product, the various stages of its making and so on. Through such understanding, the significance and cultural value of locally made products can be better understood.

Cultural Organisations: Organisations in the area such as museums, galleries and libraries can often provide a direct benefit to maker enterprises. Museum resources, including archives, can offer opportunities to research the practice, including traditional processes, materials, patterns and techniques, as well as tools and equipment, and the traditional uses of products. By drawing on these resources, makers can develop their skills, their products and the backstory of their practice, which can be employed to better convey its cultural significance and value. Such organisations may also offer potential for exhibition and sale of goods, and for raising the visibility and profile of the practice and the products.

Policy: This section refers to policy initiatives that are relevant to and impact small maker enterprises, especially those that can aid and help sustain such enterprises. Such initiatives could include funding support for makers to train apprentices in their practice, or to attend professional development and/or business development courses. They may also include grant opportunities for attendance at events, or for study or travel, tax credits, and support for maker-related business development initiatives such as the creation of high-quality, juried craft markets, the development of regional branding and positioning; the creation of a business development hub, etc.

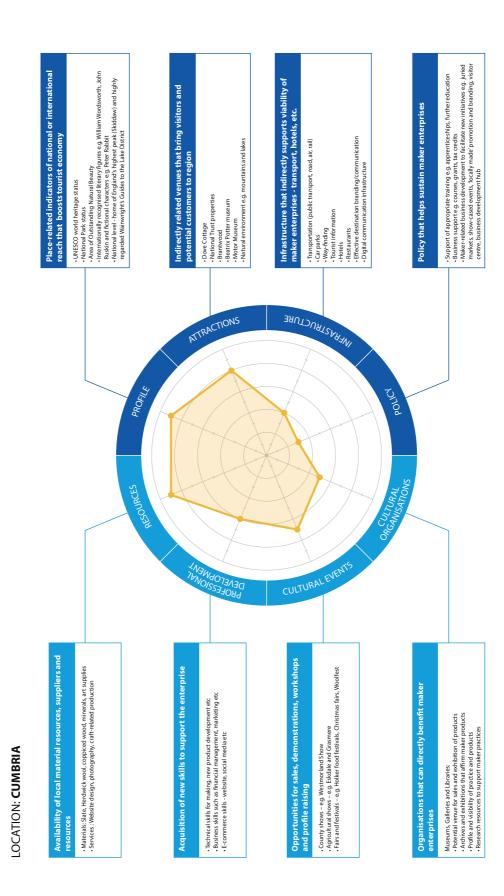
Infrastructure: Appropriate infrastructure can have significant implications for small maker enterprises, because it facilitates the influx of visitors, and therefore potential customers, to a region. It includes transportation facilities such as road access and car parking, bicycle paths, buses and rail, proximity of airports. It also includes hotels, B&B's, camp sites and restaurants, as well as effective destination branding, communication, wayfinding and digital communication infrastructure.

Attractions: A region's attractions can significantly enhance the business opportunities of small maker enterprises, and their presence can help the area become a destination venue, comprised of a variety of elements such as visitor sights, cuisine, natural environment activities (walking, climbing, cycling, etc.) and special events such as summer fairs, Christmas markets, music events, etc.

Profile: A region's national or international profile is a significant factor in attracting visitors and stimulating the local economy and the opportunities for small maker enterprises. International standing such as gaining UNESCO World Heritage Status, and national standing through designations such as National Park and Area of Outstanding Natural Beauty, can boost an area's economic opportunities. In addition, effective marketing of high-profile figures or events related to a region, in conjunction with regional galleries, museums, enterprises and events, can create a coherence as a destination venue.

Applying the Context Tool

An example of the *Context Tool*, completed from our research in Cumbria is shown in the following visualisation. Our research indicates that the region is especially strong in sectors such as attractions, national and international profile, availability of resources and maker-related cultural events. It also indicates that there are development opportunities in areas such as policy, infrastructure and relationships between cultural organisations and local businesses producing regionally and culturally relevant products in ways that maintain regional traditions while often conforming remarkably well to contemporary aspects of sustainability.



The potential of context-based elements to support maker enterprises

RELEVANCE OF PLACE TO MAKER ENTERPRISES:

Note: the diagram is indicative rather than definitive

VALUES – Characterising the values that underpin the priorities and actions of an enterprise or support organisation

This tool, which may be completed by an individual maker enterprise, a group of enterprises, or by regional development or research organisations, allows participants to visualise their values and assess how they correspond with values related to sustainability, and with the values of others with whom they may be dealing.

It allows users to identify areas that could be developed in the future to improve compliance with sustainability principles and values, while also recognising potential differences of purpose (e.g. between small maker enterprises and economic development agencies).

The tool is adapted from the work of Schwartz (2012) to meet the particular needs of maker enterprises and related stakeholders. It has the following components:

Innovation

- Openness to the introduction of new techniques and technologies – this might include the adoption of non-traditional materials and/or process; the introduction of automated or semi-automated processes to those areas that are not dependent on highly-skilled hand crafting or finishing; and the introduction of approaches, designs or techniques that may be traditional elsewhere i.e. learning from other traditional makers whose approaches have evolved in other contexts.
- Novelty and change continuous development of new product types, patterns, product lines and designs. To remain relevant to the times, maker enterprises may need to adapt or update their product lines to suit contemporary needs, tastes and preferences. If traditional processes and practices have endured for many years, even many generations, we can be sure that they have adapted to the times in some ways. Generally, however, such change is far slower than is often expected in today's consumer culture. Therefore, traditional makers should exert caution and avoid short-term trends and fashions that foster disposability and waste.

Conservation

• **Continuity and stability of working methods** – a sense of responsibility to place, family- and/or community-based knowledge and skills, and well-established practices, and a commitment to their conservation and continuation.

• **Continuing or advancing traditional practices** – ensuring the maker enterprise adheres to and manifests traditional techniques and modes of making, designs, patterns, etc. and pursues innovation *within* those traditions.

Concern for Others – adherence to self-transcending or 'beyond-self' values

- Welfare of People and Planet care for other people and nature beyond one's own immediate environment. This complies with the notion of cosmopolitan localism (Manzini, 2010) and forms of social innovation that connect with wider communities of practice.
- **Commitment to Community** care for and contribution to those with whom one is in frequent contact. Looking after one's own local environment and concern for neighbours and local communities of practice.

Self-Advancement – adherence to self-enhancing or 'self-oriented' values

- **Recognition by others** affirmation by peers and organisations through such means as entering competitions and seeking awards and prizes, selection for exhibitions, gallery representation, news articles and so on.
- **Personal ambition and prosperity** opportunities for individual development and income generation. Such self-oriented aspirations could have positive or, potentially, negative effects on traditional practices.

Applying the Values Tool: Differences in values and priorities

In addition to maker enterprises, we also interviewed representatives from Cumbria's Local Enterprise Partnership (LEP), which is an organisation made up of public and private bodies to administer European and UK Government funding for the region. We also reviewed a range of national craft-related development agency reports, including the Crafts Council and the Heritage Crafts Association (HCA).

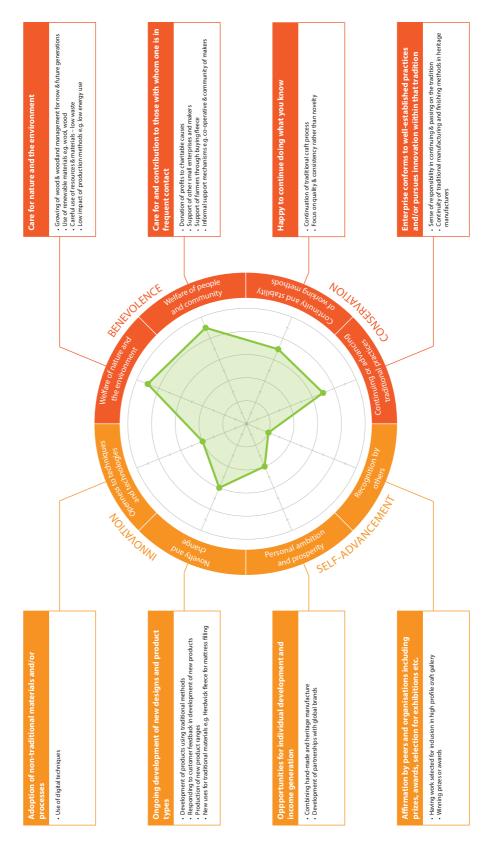
It became apparent that the main areas of concern for regional development and other government-related economic development bodies is economic growth, innovation and the introduction and exploitation of new technologies. They also spoke about the need to produce higher quantities of goods that would lead to economic growth.

These priorities contrasted significantly with the values and priorities of small maker enterprises as well as those of national craft-related development agencies. When speaking to small maker enterprises, their concepts of growth related to the development of more consistent product quality or developing a wider range of products. Maker enterprises were less interested in conventional notions of growth or the introduction of new technologies that might conflict with traditional practices.

VALUES MAP: MAKER ENTERPRISES

Characterising the values that underpin the priorities and actions of regional enterprises

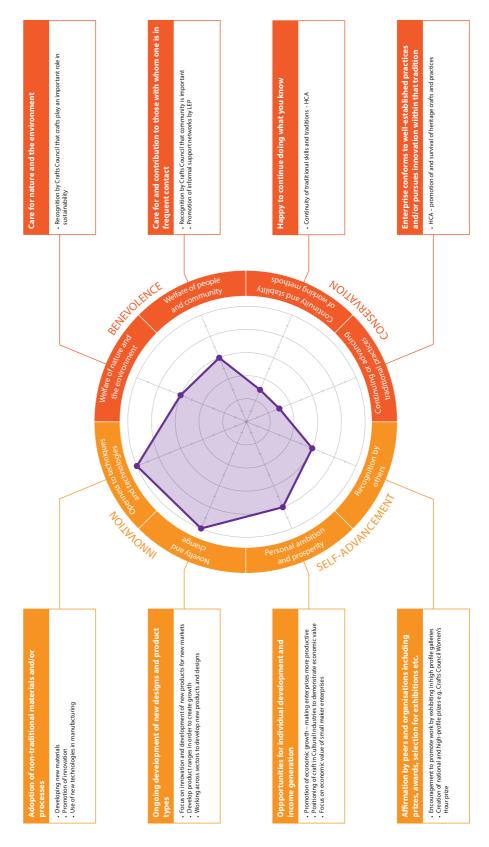
NAME: CUMBRIA



VALUES MAP: ECONOMIC DEVELOPMENT ORGANISATIONS

Characterising the values that underpin the priorities and actions of economic development

NAME: NATIONAL AND REGIONAL



COMPARISON OF VALUES: SMALL MAKER ENTERPRISES AND ECONOMIC DEVELOPMENT ORGANISATIONS

LOCATION: CUMBRIA



SUSTAINABILITY PROFILE – Characterising the sustainability profile of small maker enterprises

This tool, which can be completed by an individual maker or enterprise owner, allows participants to self-assess the accordance of their enterprise activities with the four components of the Quadruple Bottom Line of Design for Sustainability. From this, an indicative overall assessment can be determined. This tool enables enterprise owners to identify those areas of their operation that currently have good compliance and those areas that they could develop further in the future to better align their activities with sustainable principles and values.

The tool is adapted from the work of Walker (2014: 92-93, 118-126) to meet the needs of maker enterprises. It has the following components:

Practical meaning and environmental implications – utilitarian benefits plus the environmental repercussions of resource or materials acquisition, processes, making, packaging, marketing etc., including energy use and production of waste. Positive indicators may include:

- Use of local materials and services.
- Incorporation of renewable materials.
- Low production of waste products.
- Avoidance of toxic or other harmful materials.
- Low energy use processes.

Social meaning – contribution to social equity, justice and community. Positive indicators may include:

- Drawing on informal local networks for knowledge and skills exchange, supplies, etc.
- Collaborating with other maker enterprises to co-produce products, packaging, marketing and/or web presence.
- Employing local people, training apprentices.
- Committing to place through local giving, developing local initiatives and participating in events.
- Developing a sense of community and belonging through context-related production activities, product aesthetics, branding etc.

Personal meaning – ensuring enterprise activities are in accord with personal flourishing and 'beyond self' values. Positive indicators may include:

- Enterprise-related activities that are continually challenging, fulfilling and spiritually enriching.
- Enterprise as a whole aligns with one's personal values and conscience.
- The work is consistent with one's sense of well-being.

Economic means – ensuring economic sustainability of the enterprise in ways that accord with customer needs as well as one's own values, social responsibility, and environmental care. Positive indicators may include:

- Earning enough to ensure the future sustainment of the enterprise.
- Contributing to the local community.
- Investing locally by using local suppliers, services etc.
- Ethical pricing.
- Sharing of wealth, for example, by employing local people.
- Sense of sufficiency rather than profit maximization.

Overall Assessment – an overall assessment is attained by using a numerical equivalent to the above ratings (Low = 1; Med. = 2; High = 3) and calculating the average of the four ratings. This results in an indicative overall rating. Those individual areas currently assessed as 'Low' will be the ones to work on in the future if the overall assessment is to be improved.

SUSTAINABILITY PROFILE: Alignment of Maker Enterprise with Principles of Sustainability

NAME: CUMBRIA

Practical meaning and environmental implications: Utilitarian benefits plus environmental repercussions		
 Local materials and services Renewable materials 		
Abucil materials Low vaste - Avoidance of toxic materilas • Low energy use		
Social meaning: Contributions to social equity, justice and community		
Drawing on informal local networks Collaborating with other enterprises Collaborating on the enterprises Concelling and people Record in place Sense of belonging Sense of belonging		
Personal meaning: In accord with personal flourishing and 'beyond self' values		
 Continually interesting and challenging Fulfilling and spiritually enriching Aligns with personal values and conscience Consistent with one's sense of well-being 		
Economic means: Ensuring financial viability of enterprise		
- Financially viable - Contributes to local economy Investing Incruit		
 Entraining vacuity Entraining vacuity Entraining of wealth through employing local people Sharing arough to ensure the future sustainment of the enterprise Eaning enough to ensure the future sustainment of the enterprise 		
OVERALL RATING		
	 	HDIH

DESIGN OPPORTUNITIES for Small Maker Enterprises

The *Design Opportunities* tool helps identify the potential of design to contribute constructively to the effective implementation of sustainability principles in maker enterprises, based on their product value/production cost profile. This is a quadrant-based assessment with a horizontal **production cost** axis ranging from low to high, and a vertical **product value** axis, ranging from low to high perceived value. The enterprise owner selects the most appropriate quadrant for the kind of product they are producing. Within this quadrant, opportunities are identified as to where design might make a useful contribution or, in some cases, where the use of design may be less appropriate. The quadrants are as follows:

Lucrative Product – High Perceived Value Product, Low Production Cost

The product has a high perceived value even though it might be made from low-cost materials and employ low or moderate skills in its manufacture, and be relatively quick and easy to complete. Examples might include decorative products such as handmade chandeliers or other lighting products, or furniture pieces whose aesthetic value lies in its unfinished or raw aesthetic. In this case, design can contribute by:

- Helping to ensure the perceived value is maintained through effective, contemporary branding and packaging; effective communication of the product's provenance, connection to place, cultural and/or historical significance; and by ensuring its contemporary usefulness, cultural relevance or aesthetic qualities.
- Identifying and developing appropriate processes and product design variations to ensure the product's continued relevance and viability.

Exclusive Product – High Perceived Value, High Production Cost

In this case, the product's materials are relatively expensive, and its making is time-consuming and requires high-level skills. Examples might include luxury glassware or handmade jewellery made from gold or other precious materials. Here, design can contribute by:

- Helping to ensure the perceived value is maintained, as in the previous
 example, through effective branding and packaging; effective communication of the product's provenance, connection to place, cultural significance and/or historical significance; and by ensuring its contemporary usefulness, cultural relevance or aesthetic qualities.
- Exploration and development of new product opportunities adaptation of designs to contemporary needs and tastes, development of new markets, representation of the product to new audiences.

• Ensuring production processes are efficient and effective in order to reduce production costs where possible, without eroding the product's associated traditions and legacy.

Everyday Product – Low Perceived Value, Low Production Cost

The product might be made from low-cost materials using low or moderate skills and be relatively quick and easy to make, but its perceived value is also low. Examples might include a handmade basket or broom. Here, design can contribute by:

- Helping to increase the perceived value of such products through effective branding, packaging and storytelling in order to be able to command a more viable price point.
- Developing a range of complementary products to create a product range with a similar aesthetic and a well-branded presence.

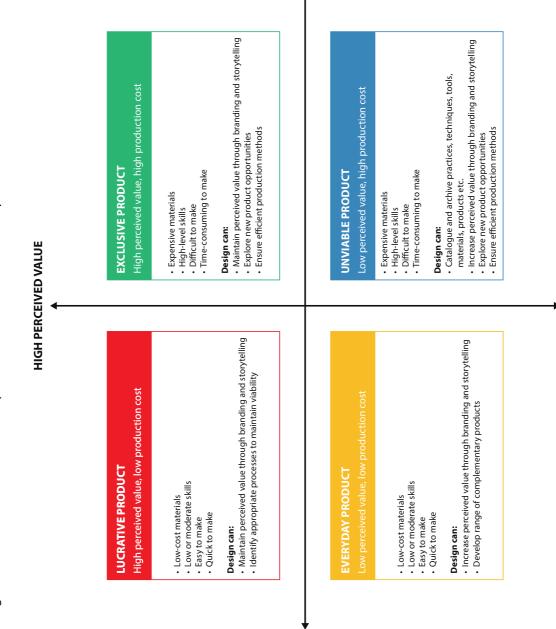
Unviable Product – Low Perceived Value, High Production Cost

Such products might be made from relatively expensive materials, employ high-level skills and might be relatively difficult and time-consuming to make. Despite this, the perceived value may be low due to the products being old-fashioned or because their traditional use is no longer required. Examples might include highly decorative, gold-embossed ceramic ware, intricately crafted clocks or decoratively carved furniture pieces that are no longer in fashion. In this case, design could be used to:

- Develop new products that employ the traditional skills, techniques and materials but reinvent the product to suit a contemporary market.
- Help increase the perceived value of the product(s) through branding, packaging and storytelling in order to be able to command a more viable price point.
- Ensure the production processes are efficient and effective, employ mechanical techniques where appropriate and ensure hand techniques are used for the intricate finishing work only, thereby reducing production costs wherever possible.
- Catalogue and archive the practices, techniques and tools (including by video) so that if the craft does decline and disappear it could, potentially, be revived in the future.

DESIGN OPPORTUNITIES:

Potential for designers to contribute to Maker Enterprises based on their value/cost profile



LOW PRODUCTION COST

HIGH PRODUCTION COST

Conclusions



Conclusions

This research has examined eight *Located Making* enterprises in Cumbria, UK. The findings demonstrate that, in many respects, they embody Walker's *Quadruple Bottom Line of Design for Sustainability* through their personal values and the ways in which they conduct their businesses. The findings offer clear examples of how enterprise owners, whilst facing challenges, manage to conduct their businesses in ways that are economically and environmentally viable whilst providing the owners with meaningful work and a fulfilling life.

This research reveals the importance of an integrated approach to sustainability. The *inter-relationships* among *practical and environmental*; *social*; *personal*; and *economic* factors are fundamentally important. It is not enough just to understand the individual components as separate entities. This is evident with makers such as Lorna Singleton who considers her environmental impact whilst assessing the practical aspects of her work – through stewardship of the woods and coppicing – all of which she finds deeply fulfilling. Hence, like the other makers we have examined, her practice accords with the four interdependent elements of the *Quadruple Bottom Line of Design for Sustainability*, through:

- the sustainability of the local environment, through woodland management practices;
- the future of the craft practice by ensuring resources for generations to come;
- a sense of belonging and contribution to the community;
- a deep sense of personal meaning, well-being and fulfilment through the practice, including time spent in the local natural environment and in the making process itself;
- through her practice and her commitment to creating new and often innovative products that can be categorised as 'innovation within tradition', she manages to generate enough income for her enterprise to be viable.

These characteristics are common among the enterprises we studied. Many face challenges related to selling their work and not having the skills to develop sales opportunities further through effective marketing and branding. All the enterprises highlight the importance of considering the interrelationships of sustainability principles as an integrated whole. Elkington (2018) has acknowledged that his Triple Bottom Line (TBL) (Elkington, 1997) is not working as it should because companies prioritise profit over well-being and other factors. He says the TBL has become an accountability exercise, but *"success or failure on sustainability goals cannot be measured only in terms of profit and loss. It must also be measured in terms of the wellbeing of billions of*

people and the health of our planet" (Elkington, 2018). This identifies critical concern in how sustainability is being understood, how it is being addressed, and how compliance with sustainability goals is being implemented and reported.

In our research, it is evident that the different aspects of the *Quadruple Bottom Line* can and are being integrated at the local level, which is an appropriate and effective place for holistic implementation to occur. We have observed that enterprise owners embody the QBL's four principles *intuitively*, usually because the way in which they operate 'feels right', rather than setting out primarily to be sustainable. This is also evidenced in research carried out by the UK Crafts Council (Yair, 2010). The enterprises we studied are being developed in line with the enterprise owner's values, with economic viability being the means to support the enterprise and their creative work, rather than being the primary motivator.

Our research reveals the values and motivations of the individuals in the enterprises and how a sense of personal meaning affects the nature of their business, the kinds of materials they use and where those materials come from. Their relationships with the community in which they work, with suppliers, other makers and so on highlight the importance of personal values and motivations with respect to a sense of responsibility to the social and environmental fabric of place. In turn, this rootedness and sense of belonging and responsibility to people and place overcomes the emerging shortcomings of the Circular Economy (CE) approach (Ellen MacArthur Foundation, n.d.). CE tends to focus on physical flows of materials and energy, metrics and computations, but frequently ignores values, social structures, cultures and worldviews (Korhonen et al., 2018: 551, 555). Such metrics-based approaches to sustainability have also been linked to rebound effects related to energy and productivity efficiency (Zink & Geyer, 2017).

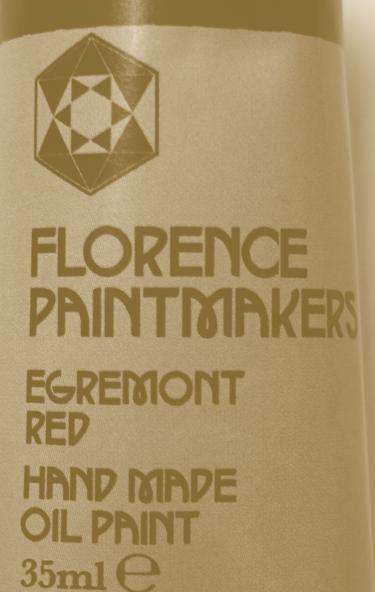
Whilst design is not a panacea to all the issues faced by enterprise owners, based on the findings from this research, we have highlighted practical areas in which design interventions at a local level could have a positive effect. By their nature, the enterprise owners all possess creative skills, but these are often focussed on other areas of design and production of goods rather than wider business acumen.

When we began this research, we anticipated opportunities for design to update and extend the product range of small maker enterprises through re-design. Our findings show that, as such, product design may be appropriate, but it is often not required because, for example, the design of the product is long established and key to its cultural value.

However, there are important design opportunities in other areas, including branding and packaging; storytelling and online presence; development of an enterprise service hub; and developing bridging opportunities between regional business development organisations and small maker enterprises. All such design contributions will rely on designers getting to know local enterprises, the values and motivations that drive their businesses, the current and potential customer bases, the culture, heritage and natural environment, and a willingness and sensitivity to contribute by helping develop well-designed business models, raising awareness of local products, their provenance, their life cycles and their relationship to place and sustainability. At the regional level, this includes raising awareness among development agencies, tourist boards etc. of the presence of maker-enterprises and making the case for appropriate kinds of business support. On this point, our research identified something of a mismatch between the needs and wishes of small maker enterprises and the agendas of regional economic development agencies.

While each enterprise may be small in itself, taken together there is potential for these kinds of maker-enterprises to be a significant part of a region's cultural draw for visitors. As such, they would become part of a larger ecology of art, design and other creative and cultural assets of the region. These might include music, theatre, literature and so on, which would add to the colour, vibrancy and attractiveness of a place for visitors, while also enhancing a sense of cultural identity and belonging among residents as well and providing income to the region through increased visitor numbers and sales of locally made products.

Recommendations



Recommendations

Emerging from our research, the findings lead to the following recommendations which will be of interest to small maker enterprise owners; development- and policy-related support organisations such as the Crafts Council and Heritage Crafts Association; national and regional economic development and policy organisations such as Local Enterprise Partnerships, Chambers of Commerce and Regional and Local Authorities; local and regional tourism organisations; researchers; and designers from a range of design disciplines including product, branding and graphics and service design.

Route to market: Develop a range of opportunities for supporting retail channels that are suited to the needs of small maker enterprises while also ensuring that high quality goods are available to potential purchasers. Opportunities for selling direct to the customer are especially important for small maker enterprises and can complement sales through galleries and other retail outlets. For example, from our previous research (Walker et al. 2018) we found that 'juried markets' have been used very effectively elsewhere and have proved to be an important venue for small makers to sell their products while also serving to continuously improve the products' quality. Such markets also offer opportunities for makers to learn from their peers and from face-to-face interactions with customers. In addition, direct sales to customers can be supported through e-commerce, however this requires enterprises to keep their website up to date and of a suitable standard (appropriate business support may be required in this area, see below). *Remit: regional economic and policy support organisations in collaboration with local enterprise networks.*

Place-based branding and packaging: Place-based branding and packaging can be designed for collective use by a variety of small maker enterprises e.g. *Located Making:* Cumbria. This would be another way of ensuring the quality of goods sold under the regional brand while also making it affordable by spreading the design costs among a large number of small enterprises. Such branding and packaging could have strong connections to place while also offering opportunities for the stories of individual enterprises and their products to be communicated to customers. *Remit: local enterprises and networks in conjunction with related support organisations and design service providers.*

Maker enterprise business support: Through our research we have identified something of a gap between the values and priorities of small maker enterprises and those of national and regional economic development organisations. For this reason, we recommend developing ways of bridging this gap to better understand the needs of local enterprise owners in order to provide business support in ways that are tailored to the particular needs of maker enterprises. Examples might include a business support hub; online business support and training that maker enterprises can access at times suited to their work routines; and other kinds of support tailored to working in rural areas. *Remit: regional economic and policy support organisations in conjunction with local enterprise networks*.

Network development: Enhancing existing informal networks that support maker enterprises through such means as sharing connections, resources, knowledge and skills and related services such as photography, web-design, market outlet information, pricing, etc. Policy-related support organisations such as the Craft Council and the Heritage Crafts Association could also play a role in providing advice and facilitation. *Remit: local enterprises in consultation with related organisations such as the Crafts Council and the Heritage Crafts Association.*

Collective value of place-based enterprises: The collective value of place-based enterprises is a cultural and economic asset to a region and needs to be better recognised. We recommend that regional development and tourism organisations develop appropriate mechanisms to better capture, communicate and promote the contributions of small maker enterprises and their relationship to sustainable ways of living. Such enterprises are an important element of a region's cultural 'offer', along with art, theatre, music, heritage etc. *Remit: regional development and tourism organisations with input from local maker enterprises.*

Creation of a destination venue: Develop an integrated approach to regional promotion which foregrounds the value of small maker enterprises and their products and practices to create an attractive, multi-faceted destination venue through a variety of locally available activities and experiences. *Remit: regional development and tourism organisations.*

Create a maker enterprise resource directory: To improve the ability of maker enterprises to effectively conduct their business they need to be aware of regionally available suppliers and services that they can draw upon. Through maker collectives, cooperatives and support organisations we recommend a maker enterprise resource directory be created that includes related suppliers, service providers, makers and related heritage manufacturers within the larger region. *Remit: regional business support organisations such as Chambers of Commerce in consultation with local maker enterprises and networks.*



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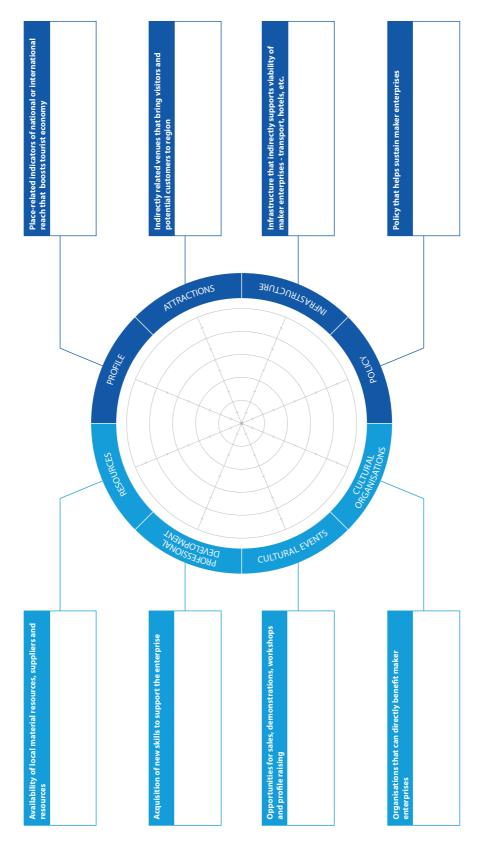
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Appendices



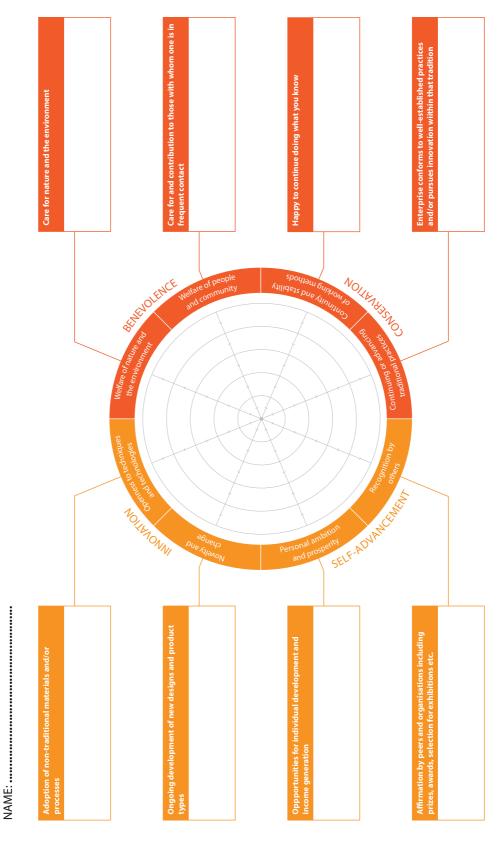
The potential of context-based elements to support maker enterprises

LOCATION:



VALUES MAP: MAKER ENTERPRISES

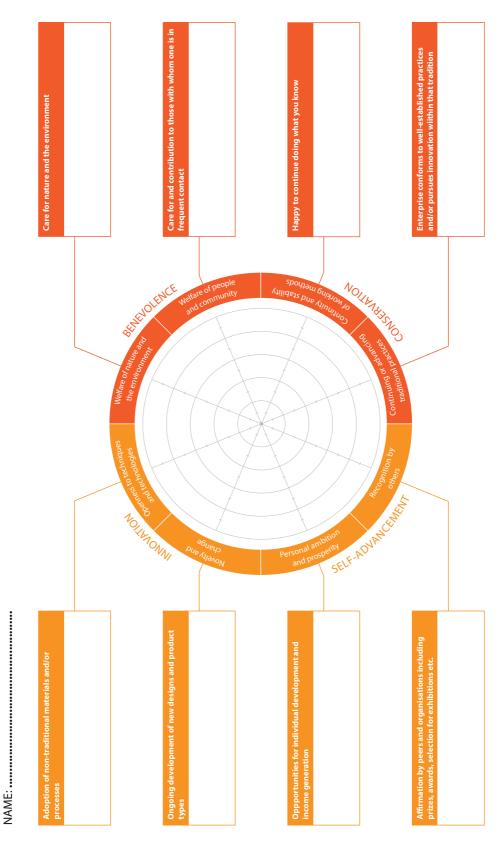
Characterising the values that underpin the priorities and actions of regional enterprises



Adapted from Schwartz's Values Circumplex, Common Cause Handbook, p.16, available at https://publicitenestorgu/kdownload/values/Common%.20Cause%20Handbook.pdf, accessed 273.8.019.

VALUES MAP: ECONOMIC DEVELOPMENT ORGANISATIONS

Characterising the values that underpin the priorities and actions of economic development



Adapted from Schwartz's Values Circumplex, Common Cause Handbook, p.16, available at https://publicineesicorg.uk/download/values/Common%20Cause%20Handbook.pdf, actessed 278, 2019.

COMPARISON OF VALUES: SMALL MAKER ENTERPRISES AND ECONOMIC DEVELOPMENT ORGANISATIONS

LOCATION:

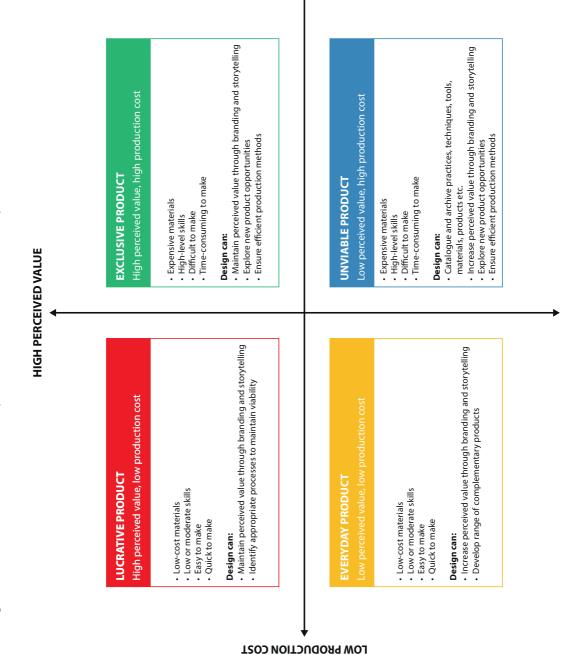
SMALL MAKER ENTERPRISES

ECONOMIC DEVELOPMENT AGENCIES



DESIGN OPPORTUNITIES:

Potential for designers to contribute to Maker Enterprises based on their value/cost profile



HIGH PRODUCTION COST

Acknowledgements

We would like to thank the AHRC for supporting this project under grant number (AH/N006615/1). We would also like to thank the enterprise owners who so generously gave their time to talk with us and show us their workshops, manufacturing and heritage facilities.

Credits

Published by ImaginationLancaster, Lancaster University, 2019

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Suggested citation:

Walker, S., Evans, M. & Mullagh, L. (2019) *Living Design: Design for Sustainability in Small Maker Enterprises*, ImaginationLancaster, Lancaster Institute for the Contemporary Arts, Lancaster University, Lancaster, UK, ISBN: 978-1-86220-371-6

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The research has been funded by the Arts and Humanities Research Council (AHRC).

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