A Learning Process for NPD in Business Networks

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ABSTRACT

The point of departure for the research presented in this paper is that although there is much
evidence that a firm’s product development often requires resources beyond the boundaries of
a single firm, the question of how knowledge resources are accessed and learning takes place
in product development is much less understood. For the success of product development,
practitioners have devoted much interest to building relationships with other firms that
contribute to mutual benefits; scholars too have highlighted the importance of ‘collaborative
learning’, ‘innovation networks’ (e.g. Håkansson et al. 1999; Gnyawali and Madhavan 2001;
Pyka 2002; Powell et al. 2005). To improve product development performance, learning in
business networks is not optional, but a compulsory action (Jabar et al. 2010; Moenaert et al.
2000; Narver et al. 2004). Nonetheless, how such learning occurs remains under-researched.

Research on network learning includes the work of Beamish and Berdraw (2003) and Nonaka
and Toyama (2005), who identify respectively the models of transfer – transformation-
harvesting and the SECI process – socialisation, externalisation, combination, and
internalisation. Other ideas of importance to emerge in the field of learning include
‘protectiveness’, (Hamel 1991, McEvily et al. 2004; Saunders et al. 2014), whilst the terms
exploitation and exploration of learning (March 1991), explain how firms learn either from
the refinement and extension of existing competences or from the experimentation with new
alternatives. Yet these studies and others in their wake have not been focused on product
development management per se and their insights remain unsynthesised in this context such
that we still do not know ‘how does learning happen in product development networks?’ In
order to find out the answer, we commenced a cross-industry multiple-case study to explore
the empirical practices.

The organising framework for this research is addressed through examination of learning in
three broad stages of the NPD process, namely, the idea management, product development
and launch cycles. In order to meet the challenge of finding appropriate samples in network
research (Andersson and Dahlqvist 2001; Håkansson and Johanson 2001), a ‘snow-balling’
approach was adopted, with the unit of analysis being a completed product development
project within a network. In total, three case studies were compiled by 48 in-depth interviews
and direct observations in 11 product development business forums, together with archival
records and documents.

The findings were derived using NVivo analysis of transcripts as well as documentary
analysis and allowed the development of a learning framework in product development
networks, comprising syndicated, situated, synergised selected modes of learning which
occur at and throughout different stages of the NPD process, as summarised in figure 1. The
analysis, emergence of terms, their definitions and implications will be the focus of the full
paper.
Figure 1: A Learning Process Framework for NPD in Networks

References