Management Focus

Guest Editors’ Introduction: Understanding Learning Networks. Part 1

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It is an honour and pleasure to guest-edit this special issue of the EMJ. We are particularly pleased to say that we were overwhelmed by the response to our initial call for papers: thirty eight authors from around the globe had submitted interesting thought-pieces, in-depth case studies, and formal academic articles for inclusion in what we hoped would fill one special issue, and also shed more light on three important key challenges (discussed below). After reviewing the submitted papers, however, we found we were wrong on both counts. First, there were more high-quality papers than we could do justice to in a single special Management Focus. Second, the papers raised more questions than answers in terms of our three key challenges. To deal with these pleasurable problems, EMJ’s editor-in-chief Paul Stonham thankfully agreed to embark on a second special Management Focus to appear in the future.

Where do we put the focus of the present Part One of the EMJ Management Focus on Learning Networks? Take one of the most fundamental processes, Learning (the ultimate source of knowledge and innovation), and combine it with one of the most powerful structures enabling the dynamic creation and diffusion of value, Networks. What emerges is the concept of Learning Networks. Our initial research on Learning Networks (LN), indicated that such inter-organizational forms of knowledge creation and management can assume many different shapes and have been analyzed from various vantage points. For example, the strategic alliance literature has examined how learning in mergers and acquisitions evolves and how competitors can learn from each other; researchers in innovation management have studied from where and from whom the impetus for new knowledge comes and develops; the knowledge management literature has sought to understand better how and why individuals within a company share their knowledge; and finally, researchers in the field of learning, communities and technologies have analyzed how collaborative processes unfold in traditional as well as virtual contexts, shedding more light on the benefits and pitfalls of technology in the learning process.

Despite these insights, Learning Networks are surrounded by a number of challenges, which also provide the context for this special issue. An analysis1 of the key governance and value creation processes of Learning Networks has helped us identify three key issues/challenges surrounding learning in networks: real versus virtual forms of interaction, collaboration and competition in the learning process, and value creation and appropriation in networks:

❖ Real Versus Virtual Forms Of Interaction. The integration of increasingly sophisticated information and communication technologies (ICT) to enhance, extend or even enable the emergence of new forms of learning in networks represents a first opportunity and challenge worth focusing on. This is witnessed by a large number of initiatives labeled with buzzwords such as ‘e-Learning initiatives’ or ‘virtual learning communities’, and by the growing number of globally dispersed ‘communities of learning’ and ‘communities of practice’ making
extensive use of ICTs. Research and emergence of increasingly rich media, highly personalized, collaboration-oriented, and ‘socially-aware’ technologies are extending our understanding (and our imagination) of how to enable more productive learning exchanges among individuals, teams, organizations and communities. However, despite this promise, the integration of technological artifacts as a significant factor in Learning Networks poses serious challenges in terms of issues such as loss of ‘direct touch’ and possibility to diffuse non-explicit (but rather experiential, endemic, or even existential) knowledge components, building and sustaining trust and relationships in computer- and network-mediated contexts, capturing attention of the members of mainly ‘virtual’ learning networks, as well as designing and sustaining learning in computer-mediated, distributed environments. Furthermore, IT has enabled the emergence of new forms of distributed collaborative learning and knowledge creation contexts, as witnessed e.g. by the way open source communities operate and create value. However, the applicability of models of learning (by doing) in highly collaborative open source communities of individuals contributing their competencies, attention and time without any or very intangible economic rewards, seems limited to the software development realm, and its promise in contexts other than software development is still an open question.

- **Collaborating Versus Competing In Learning.** Learning Networks draw their value from the collaborative attitude of their members. The collaborative attitude seems to be a function of how well members ‘speak the same language’ (i.e. share the same ontology). However sharing the same ontology usually means that knowledge-sharing partners operate in similar industries, and even in similar stages of the value chain (e.g. engineers from one company talking to engineers from another company). In other words, the learning potential is greatest when interacting parties are potential market competitors. This suggests that an appropriate balance be sought between collaboration and competition, dealing with issues such as ‘free riding’ problems, non-sharing behavior on the one hand, and unintentional transfer of knowledge while learning in inter-organizational networks on the other hand.

- **Distributed Value Creation Versus Focused Value Appropriation.** Learning Networks potentially enable the emergence of different types of value for their members as well as for their companies, and beyond. It seems evident from the literature that by fostering knowledge exchange, knowledge creation, and synergies, Learning Networks lead to the creation of intellectual and social capital, and to the development of individual competencies of members. Nevertheless, it is still unclear to what extent such value creation processes taking place within Learning Networks can be linked to more traditional (and accepted) performance indicators used in organizations. In other words, it still seems an open question how the value created in the network can be quantified using tangible, rather than intangible indicators. Furthermore, the problematic quantification leads to an additional challenge: which mechanisms have to be put in place to guarantee a fair re-distribution of the value created within such a network (e.g. how can companies cooperating with their customers within the Learning Network re-distribute the value thus created fairly to customers as the co-creators of this value?)

We believe the present Part One of EMJ’s Management Focus allows us to make a meaningful cut across these three challenges: rather than cutting across the key challenges themselves, and publishing two special issues with an emphasis on only one or two of our three key challenges, we decided to cut across topic areas within these three key challenges. The lead article by DeSanctis, Fayard, Roach, and Jiang addresses the first challenge: Can people share information, form strong working relationships, and develop insight and understanding when their interaction occurs primarily through electronic media? Can e-based Learning Networks be built to last? Is the propensity of group learning similar across various electronic forums? Answers to these questions respond to various dimensions of the first challenge of Learning Networks, namely real versus virtual forms of interaction. This research paper is empirically substantiated from within three field experiments in Europe, Asia and the US within different e-based venues, such as videoconferenced classrooms, group discussion spaces and online communities. The paper proposes a comprehensive framework, which aims at a deep understanding of how such e-based venues influence the learning process of participants. This particularly interesting piece of research concludes with specific guidelines for building and sustaining Learning Networks through the use of e-media; such factors balance the existence of an electronic media space with the appropriate requirements for human interactions within such technology defined spaces.

One of the basic conclusions of the lead article, that such a learning space is better defined as a social rather than purely technological environment, leads us to better appreciate the paper by Soekijad and
Andriessen, which addresses dimensions of the second challenge identified for Learning Networks, namely collaborating versus competing in learning. The paper collects empirical insights from two case studies in knowledge-sharing groups within the context of competitive inter-organizational alliances. Starting out by aiming to identify conditions for learning in such alliances, the paper rightly identifies challenges of the learning process in the existing mode of ‘co-opetition’; the paper provides at the end an insightful overview of success factors for learning across different inter-relating scales: the Learning Network, the group as well as the individual relationships that were evidenced as actively contributing towards learning in the involved alliance formations. The paper is innovative in its emergent focus and outlook on the role of the inter-personal rather than the ‘a-personal’ inter-organizational factors that contribute to the success of the learning venture.

Positioned broadly within the same key challenge, the empirically-driven paper by Benson-Rea and Wilson presents a conceptual model which relates the use of inter-organisational networks to learning as moderated by the lifecycle of the firm. The data imply that the ability to fundamentally change network focus, what the authors have called network revolution, might enhance firm learning. This network structure-process-learning nexus is explored by combining the entrepreneurship and industrial marketing and purchasing literatures. Benson-Rea and Wilson use these literatures as a conceptual lens to study the New Zealand wine industry. The authors suggest that bringing these two literatures together will contribute to expanding the scope of network studies by focusing on the dynamic processes and learning outcomes of networks in the wine industry, both from an intentional (revolutionary) and from a static (evolutionary) perspective – without doubt to the benefit of wine lovers internationally.

Finally, the challenge of distributed value creation versus focused value appropriation in Learning Networks is taken up by the Subirana and Bain paper, which outlines the issues involved with building a framework for legally compliant agent-based Virtual Learning Networks. In response to this last and open challenge about the nature of more adequate value measurements for Learning Networks, the authors make an open claim that such value will be guaranteed with the appropriate design for legal compliance. The outcome of the paper is a framework that reconceptualizes the view of the firm to incorporate processes of value creation through electronic operations, such as online transactions, whether commercial or educational (e-learning) ones. The paper provides a substantial contribution in linking advanced technology design with internationally involving legal frameworks that regulate interactions in the electronic space.

Overall, while it may not be possible to solve the key challenges, we believe the four papers in this special Management Focus Part 1 provide interesting vistas into how the challenges can be addressed systematically. After all, the management of Learning Networks is about making difficult trade-off decisions based on limited information. Certainly the selection of papers and hence managerial approaches to initiate, manage, and sustain Learning in Networks presented here is limited. As will the selection of papers in Part 2 be. Together, however, we believe that both special Focuses will help managers to make more informed decisions in an increasingly important area. From a theoretical perspective, we believe that the papers we present raise a number of important and timely topic areas for further research on various levels of analysis. This particular subject will be addressed in a pre-conference workshop at the Strategic Management Society Conference in Baltimore, November 9, 2003.

Last, but not least, we would like to say a heartfelt thanks to Paul Stonham, who remained helpful, cheerful, and supportive even after we had inflicted a two-part Management Focus on him.

Note
1. Initial research on LN was conducted in the context of a project aimed at better understanding the nature of self learning processes at work in the context of inter-organizational networks. The project included the analysis of LNs ranging from initiatives driven by local industry clusters, to associations and alliances formed to address relevant management and business-related issues in an inter-organizational context, to new forms of organizations and (virtual) communities of globally-distributed knowledge workers operating within open source. The project was done under the auspices of the EU IST project "Knowlaboration."
UNDERSTANDING LEARNING NETWORKS

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