Introduction to HICCS-48 Minitrack: Knowledge Management for Innovation, Agility and Complexity Management

Suzanne Zyngier
La Trobe University
s.zyngier@latrobe.edu.au

Danny Samson
University of Melbourne
d.samson@unimelb.edu.au

Marianne Gloet
University of Melbourne
marianne.gloet@unimelb.edu.au

The view of knowledge as a key organizational resource underpins the imperative for effective and strategic knowledge management (KM). As such, knowledge aligned strategies must secure and maintain competitive advantage through innovation, agility and competitiveness. While there is merit in and debate on other motivations for investing in KM such as efficiency, maintaining market share, increasing market share, and research and development, this minitrack focuses on the contributions of KM to supporting organizational innovation, agility and complexity management.

Organizations again this year continues to be challenged by the global economic environment, the transforming nature of social media platforms for communication, the increasing speed of product and services to market, crowd sourcing of ideas, and a growing demand for participation from a changed demographic. This changes the way in which knowledge is shared between individual, groups and organizations. It fundamentally changes the permeability of organizations and our understanding of how the flows of knowledge have impacted internal innovation and fundamentally the environment for the external use of innovation. Another major reason that organizations invest in KM is to support organizational agility and sustain competitive advantage in such a complex business environment.

The paper by Dong highlights the impact of developing diverse interdisciplinary teams together to generate innovation. This paper shows how interdisciplinary knowledge integration mediates between functional diversity and innovation, and between a knowledge-sharing climate and innovation. Another paper focusing on innovation is presented by Weiwei, Yuqiang and Luning who develop and test a theoretical model that integrates the role of two organizational factors fairness of reward and job autonomy levers together with individual absorptive capacity understood as the ability to identify new knowledge, assimilate and transform knowledge, and then to apply assimilated knowledge. This research helps to better understand how management can utilize such motivations for knowledge sharing to positively influence innovative behavior of their employees. The research by Samson and Gloet joins innovation management as intrinsically linked to knowledge management, although not always linked the other way. They examine the manufacturing and services sectors in their ability to capture value. Their study reveals that realizing and communicating idea generation employees have the requisite skills and attributes required for supporting innovation, and that appropriate communication flows and opportunities from internal and external partners.

Another paper by Raymond, Bergeron, Croteau and St-Pierre explores absorptive capacity as a theoretical lens to study the effect of e-business upon the competitive performance of SMEs. They find that knowledge acquisition and assimilation capabilities have an indirect effect on organizational competitive performance. Performance is strongly mediated by organizational knowledge transformation and exploitation capabilities as these are developed as a result of a more entrepreneurial orientation on their part. Where this orientation is more highly developed so too is their competitive performance.

Xiahua and Wei investigate the agility and success of online knowledge communities in order to provide a frame for design mechanisms that will effectively motivate voluntary user contributions. Juxtaposing virtual rewards and reputation, on the quantity and quality of user contributions in online community to reveal that is the relative reputation that serves as the motivation. This finding highlights the importance of peer effect and social comparison in the incentive design of collaboration platforms in and between organizations.

Finally the paper by Campos dos Santos & Nogueira de Castro Júnior presents the use of ontology as a novel data integration resource that facilitates interoperability. Preliminary work indicates that ontologies can drive knowledge acquisition processes for the purpose of managing knowledge complexity across domains. Applying this to the biodiversity domain they find ontologies to be a valuable resource.