

Knowledge in Collectives of Experts
Exposing the Role of Social Processes in
Developing and Sustaining Expert Knowledge

Sasikala Rathnappulige

Research thesis submitted to the Business School of the
University of Adelaide, for the degree of Doctor of Philosophy

August 2014

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Abstract

This doctoral thesis explores *development and sustainability of knowledge* within *expert collectives*, as an outcome of a dynamic *social phenomenon*. The rationale of this research is the observation that collectives of experts are a classic example of knowledge based social structures, where a group of specialists jointly learn and share their knowledge to achieve a common goal or to fulfil a shared interest. Therefore, the social processes within these communities are worthy of investigation, in particular, as to how they contribute to the collective cultivation and renewal of expert knowledge.

A qualitative inquiry of case study analysis is employed to investigate the research problem. In doing so, two case studies representing two different alternatives of expert collectives are explored in this research. The findings reveal that the development and sustainability of knowledge in expert communities is an evolving cycle of collective learning and sharing facilitated through a complex and unique set of social processes.

From a theoretical perspective, this thesis makes a novel contribution to theory by introducing the collectives of experts' perspective of knowledge. By doing so, it reveals how the notion of collectives of experts can be used to inform the knowledge refinement and revision in specialist groups more broadly. Secondly, this research broadens the traditional understanding of knowledge by elaborating its sociological importance.

From the practical perspective, this thesis contributes to improve the managerial practice, by informing managers the significance of social interactions and relationships between employees, to effectively leverage their specialist knowledge. In doing so, the findings of this research inform managers how they could foster social dynamics conducive for the advancement and renewal of the specialist knowledge in their organisations.

Declaration of Originality

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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Sasikala Rathnappulige

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Acknowledgements

First and foremost, I would like to sincerely thank my principal supervisor Dr Lisa Daniel, for her exceptional support, continuous encouragement and guidance, both academic and otherwise. This thesis would not have been possible without you! I thank you from the bottom of my heart.

I would also like to express my sincere gratitude to my supervisor Dr Marilyn Clarke, for her great support and constructive feedback. Big thanks to Dr John Rice for his support during the research proposal.

Many thanks to the participants from the guilds and research teams. This project would not have been possible without your support. I would also like to thank the academics and the staff of Business School for their support.

And to my parents, thank you for your endless love, support and encouragement.

Finally, big thanks to all my friends for their support, encouragement and friendship.

Definitions

Collectives of experts	Groupings of uniquely skilled individuals, continuously learning and sharing their specialist knowledge to achieve a common goal or to fulfil a shared interest.
External expert collectives	Groups of uniquely skilled individuals with shared personal interests, operating for the <i>benefit of the individuals</i> that constitute them.
Expert knowledge	The resultant knowledge of performing a particular task or set of activities, over and over again, to reach full professional competence.
Internal expert collectives	Groups of specialists bound by formal organisational agendas, operating for the <i>benefit of the organisations</i> that control them.
Knowledge development	The advancement of knowledge through continuous activities of learning, knowledge sharing and new idea generation.
Knowledge sustainability	The renewal of knowledge through continuous processes of relearning, extrapolation and interpolation under changing circumstances.
Social processes	The activities and actions that are a result of interactions and relationships between members in a group.