LEVERAGING SOCIAL CAPITAL FOR KNOWLEDGE DEVELOPMENT IN CLUSTERS

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ABSTRACT

This doctoral thesis explores how social capital is leveraged for the transfer, sharing and spillover of knowledge (knowledge development) to achieve competitive advantage in clusters. The rationale behind this research is that, paradoxically, in a time of information technology and high labour mobility, location still matters for firms. Clusters - a term describing the spatial agglomeration of firms and institutions of one particular industry - can be the source of advantages for those firms located within the cluster as well as for the entire region. This research contributes to a body of literature devoted to explaining how the advantages of clustering come about.

A resource based perspective on clusters is adopted, focussing on the interplay of the two intangible resources social capital and knowledge. In exploring the research problem of how social capital is leveraged for the development of knowledge in clusters, this project unveils 1) the drivers of social capital for knowledge development and 2) the role of different cluster actors in the development of knowledge.

A qualitative methodology is employed to empirically investigate the research questions. A case study explores an Australian biotechnology cluster, with semi-structured interviews as a method of data collection. Addressing the drivers of social capital, results revealed that different dimensions of social capital drive knowledge development in distinct ways. Specifically, interpersonal relationships between cluster members and informal interaction, which are manifestations of different social capital dimensions, are identified to be the main drivers for knowledge development. In addition, several indirect factors affect knowledge development, through their impact on those interpersonal relationships and informal interaction. Regarding the cluster actors involved in the development of knowledge, results highlight the importance of facilitating actors, which assume the role of a broker of social capital between cluster members.

From a theoretical perspective, this research makes a valuable contribution by showing that the overlap of the three theoretical streams knowledge, social capital and clusters can be drawn on to explain how competitive advantage is created in clusters. Specifically, findings highlight the distinct impact of different social capital dimensions on knowledge development. Furthermore, this research has implications for practitioners and cluster policy makers as findings suggest how social capital is best managed to foster prosperity of the cluster.

DECLARATION

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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Lisa Neale, 7/4/2016

Signature

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GLOSSARY

Cluster actor: firms and institutions located in, or associated with the cluster.

Cluster firms: privately owned, for profit entities that operate in the cluster and contribute to the cluster's main product. Include both horizontal and vertical actors.

Cluster: a spatial agglomeration of firms and institutions of one particular industry.

Competitive advantage: in the field of strategic management, it refers to an advantage that a firm has over other firms, which can be used to generate greater profits.

Contract research laboratory: specificity of the investigated cluster; university facility or research institution that is contracted by cluster management to provide services, facilities or equipment to cluster firms.

Drivers of social capital for knowledge development: a process or mechanism by which social capital impacts on knowledge and knowledge development to achieve competitive advantage.

Firm/institution spanning relationship: a relationship between two individuals associated with different firms or institutions.

Horizontal actor: supply the main product or service; are considered the core of the cluster. One of three actor categories of the value adding web framework.

Interpersonal relationship: a relationship between two individuals.

Knowledge based view of clusters: complements the resource based view of cluster. Assumes that close geographic proximity between cluster actors gives fosters knowledge exchange, spill-overs and transfer and implies that the most valuable resource for competitive advantage in clusters is knowledge.

Knowledge based view of the firm: complements the resource based view of the firm. Implies that the most valuable resource for competitive advantage is knowledge.

Knowledge development: a summary term describing various activities that relate to knowledge in clusters. For the purpose of this research, knowledge development refers to the collectivity of knowledge spill overs, knowledge transfer and new knowledge generation.

Lateral actor: a cluster actor not involved in the production of the cluster's main product, supporting other cluster actors by providing expertise, policy instruments and strategic oversight. One of three actor categories of the value adding web framework.

Relational view of the firm: complements the resource based view. Implies that relationships are of inherent value and can be leveraged for competitive advantage, i.e. relational rents.

Remote actors: firms that are not located in, or associated with the cluster; not cluster firms.

Resource based view of clusters: application of the resource based view of the firm to clusters. This perspective assumes that through the leverage of cluster specific resources

and capabilities that are not available to remote firms, cluster firms are presented with the opportunity to sustainably outperform other firms, i.e. realise competitive advantage.

Resource based view of the firm: a strategic management perspective that assumes that different firms have heterogeneous resources bases and distinctive capabilities, which, when leveraged effectively, can lead to sustainable competitive advantage.

Social capital: the sum of the actual and potential resources embedded within, available through and derived from the network of relationships possessed by an individual or social unit. Inherent in the relational view.

Value adding web: conceptualises clusters as a web made of the links between horizontal, vertical and lateral actors which are located in close geographic proximity, operating in one industry, whereas the relationships between the actors differ in strength of the link and quality (interdependencies). Assumes a resource oriented perspective on clusters.

Vertical actor: supply inputs to, or take product from, horizontal actors. One of three actor categories of the value adding web framework.