15th TCI Global Conference

«Constructing Place-based Competitiveness in Times of Global Change»

Clusters from Strategic Management Perspective: The Role of Clusters for Firms’ Innovativeness

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**Keywords:** Cluster, strategic management, innovation, relational embeddedness, local-global-ties, collaboration, firm benefits, KBV, relational view, empirical analysis, structural equitation modelling.

Success stories of a few regions such as Silicon Valley indicate that regional clusters yield innovation. However, the empirical evidence on how firms acting in clusters may benefit in their innovation activities is scarce. This presentation contributes to the micro-foundation of cluster effects by examining characteristics and activities of clustered firms that are linked with firms’ innovation performance. I hypothesise that the interaction intensity within the cluster and the firms’ innovation-related cooperation experience (relational embeddedness) will be positively associated with the innovation output of the firms. The relationship between cluster-internal interaction and a firm’s innovation performance is expected to be moderated by its absorptive capacity. In addition, it is proposed that cluster-internal interactions need to be complemented with well-developed external cooperation to transfer critical knowledge beyond the cluster boundaries, and thus to reduce the risk of lock-in effects resulting from ‘cluster blindness’. I draw the data from a survey conducted in two regional ICT clusters located in Germany and Switzerland. Based on information received of 107 clustered firms, we employ Partial Least Square Regression Analysis (PLS) to test the structural relationships of the model.

The findings show that firms’ relational embeddedness in cluster-internal and ‑external innovation partnerships significantly enhances their innovative success which in turn has a positive impact on their overall performance. However, we find no empirical evidence for often suggested hypothesis that cluster-internal interaction enhances firms’ innovation performance per se. And although our findings indicate the existence of an indirect effect of firms’ absorptive capacity on the association between intensity of cluster interactions and innovative performance, this shows not to be significant.

Using micro-level data, this study contributes to providing firms with a better basis of decision-making for investments in cluster-specific activities. Also, policy makers and cluster management can benefit from a better understanding of cluster effects at firm-level.

Key messages

**«Bringing the Firm back to the Frontier»**

Distance and embeddedness are not enough to explain positive cluster effects. A deepened understanding of the effects of cluster at firm-level and its underlying mechanisms is a prerequisite for a target design of cluster policies and management striving to reap the benefits of clusters for fostering innovation.

**«Interactions require Strategic Orientation & Communication»**

High levels of interaction per se do not enhance firm’s innovation performance, but require some form of strategic orientation. This is especially true against the background of firms’ often not perceiving the value of untraded interdependencies (e.g., intended and unintended knowledge spillovers) for their innovation activities.

**«Quality as Key Ingredient for Substantial Cluster Benefits»**

In order to attain substantial cluster-benefits, entrepreneurs as well as cluster managers should focus on the quality of relations (e.g., innovation related joint activities) rather than on the quantity (e.g., frequency of meetings, events, etc.).

**«Cluster Manager as ‘Knowledge Boundary Spanners’»**

A lack of transparency in resources available within a cluster may partly explain the low impact of cluster-internal interactions of firms’ innovative performance. Cluster managers should act as «boundary spanners» respectively «knowledge brokers» channelling the resources (knowledge as well as competencies) among clustered firms.