

KNOWLEDGE CREATION AND INNOVATION IN TEMPORARY REGIONAL NETWORKS

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Abstract

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The literature on the effect of trust and control on knowledge creation in networks is extensive and seems to be moving towards a consensus that both are necessary. Trust is necessary to create an open atmosphere to engage in knowledge creation while control acts as a safeguard against malfeasance. Networks that neglect either one factor are often found to create less knowledge and yield less knowledge creation outcomes, such as new skills and products. Temporary networks, however, may have to depend more on control than on trust since their temporary nature may reduce the opportunity to develop trust. This paper contributes to the literature on trust, control and knowledge creation by empirically examining these variables in temporary innovation networks in the Eindhoven region in the Netherlands. Previous research showed that these networks contribute to regional economic development. This paper explores the mechanism through which this happens.

Temporary innovation networks may lack trust in case the partners have not previously worked with one another. They may therefore rely more heavily on control. On the other hand, these networks are formed with a specific purpose and may have found mechanism to compensate for a lack of trust. So the research question of this paper is: How do trust and control affect knowledge creation outcomes of these networks?

Several factors that may affect the above causal relation will be taken into account:

- Previous relations among partners,
- Mutual dependency among partners,
- Level of agreement on project goals.

The data for this research were collected in 2005. The paper develops several theoretical patterns on how trust and control affect knowledge creation among the members of the temporary networks and how this yields knowledge creation outcomes. Different levels of trust and control have different effects on the willingness to share knowledge and the use of communication modes. Control encourages formal communication that emphasizes the exchange of codified knowledge, while trust encourages informal communication that emphasizes the exchange of tacit knowledge. Both are necessary to produce knowledge creation outcomes.

The paper develops several theoretical patterns that are matched to empirical patterns derived from a selection of networks (cases) in the Eindhoven region. The results show that a combination of moderate control and high levels of trust produce the highest levels of knowledge creation outcomes.