The Research Seeds for Industry-Academia Collaboration

Team innovation management

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■Research Fields / Themes for Joint Research
- Collaborative expertise systems
- Team innovation management
- Knowledge management

■Keywords
- Team innovation
- Team performance

Background and Objectives
While teams have long been recognized as key mechanisms of organizational innovation, we know surprisingly little about social processes that hinder or facilitate team innovation. To understand more about social processes of team innovation, my research has focused on cognitive systems called transactive memory systems (TMS) that enable teams to develop and maintain a cognitive division of labor that exceeds the sum of individual knowledge systems of individual team members.

Selling Points
Team innovation and performance management is important in all companies. Transactive memory concept enables to simplify team innovation processes with a few parsimonious concepts. Information about team social processes enables companies to design environment and systems that enable teams to utilize their creative and innovative potential.

Messages to Companies
My research on transactive memory systems in teams has aroused interest among various knowledge-intensive companies in Western countries. Through collaborative research, these companies have wanted to acquire more information about the influence of team leadership and social processes on team performance and innovation. The information from my previous studies has been used to develop, for example, team leadership training and reward allocation systems in knowledge-intensive companies.
Outline

Teams are key mechanisms for innovation due to their efficiency in acquiring, creating, and processing knowledge. Knowledge embedded to individuals can be processed effectively only when individuals form transactive memory systems, based on knowing who knows what in teams. More specifically, transactive memory systems (TMS) refers to a set task information possessed by each team member combined with a shared awareness of who knows what within the team (Wegner, 1986). TMS formation starts when individuals learn something about the expertise and interests of other team members. Expertise inferences are formed through observations, task roles, communication, explicit expertise indicators, self-disclosure, stereotypes, and from third- party comments (Peltokorpi, 2004, 2008; in press; Peltokorpi & Hasu, 2011; Peltokorpi & Manka, 2008; Wegner, 1986). TMS can be formed because individuals accept responsibility for certain task expertise domains. Transactive retrieval occurs when two or more individuals collaborate to retrieve uniquely held task information. Individuals are able to retrieve task information by identifying a relevant domain expert through internally or externally held location information about who knows what (Wegner, 1986).

My previous studies show that well-functioning TMS enhance team performance and innovation in diverse settings, ranging from daycare centers to technology-intensive research teams (Peltokorpi, 2004, Peltokorpi & Hasu, 2011; Peltokorpi & Manka, 2008). For example, my research conducted in 33 daycare work groups shows that TMS foster team performance (Peltokorpi & Manka, 2008). In addition, my recent research conducted with 579 people in 124 technology-intensive research teams in one research institution shows that TMS have a positive influence on team innovation (Peltokorpi & Hasu, 2011). Team leaders with transformational leadership styles also had a positive moderating impact between TMS and team innovation because transformational leaders motivate team members to form and maintain expertise systems in which complementary task information items are combined in novel ways. In addition to showing that TMS facilitate team innovation, these findings open avenues for several new research areas with important implications for scholars and practitioners.

References


Prospect for the Future

In addition to the above findings, I expect TMS to have a mediating relationship between team training, team reward systems, and team innovation and performance. I am confident that collaborative research enables firms in various industry sectors to design effective human resource management systems and team leadership that help teams to gap their creative and innovative potential.