1A10 Champions of Collaboration in Technological Innovation Processes

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Abstract

Rapid technological change, increasing competition, globalization, and concerns about sustainability have changed the nature of technological innovation processes with the result that these activities are now less often confined to a single organization. Such changes prompt firms to engage in intra-organizational as well as inter-organizational collaboration in innovation processes. Some particular individuals -- who we call champions of collaboration -- foster collaboration in innovation processes. How do the champions of collaboration foster collaboration in technological innovation processes is briefly introduced in this paper.

Keywords: Champions of Collaboration, Demand Articulation, Sustainable Innovation, Knowledge Leader, Deai.

Introduction

I have always liked the old proverb "two heads are better than one" because for me it neatly expresses the essence of collaboration. My interests in the area of collaboration originated in Japan where I had the opportunity to observe the "two heads" approach in technological innovation processes in Japanese organizations. A Japanese film by Akira Kurosawa, "Seven Samurai" also had a great influence on my research interests. Specifically, how one samurai fostered collaboration among people inside and outside of a small Japanese village, protecting them from bandits, reminded me of the "two heads" approach in Japanese society in general. My affiliation with the research and development (R&D) planning unit of a major Japanese organization for several years also gave me the opportunity of learning by doing in the field. Now, I want to share my observations and enhance our understanding of an unexplored but critical role in innovation processes.

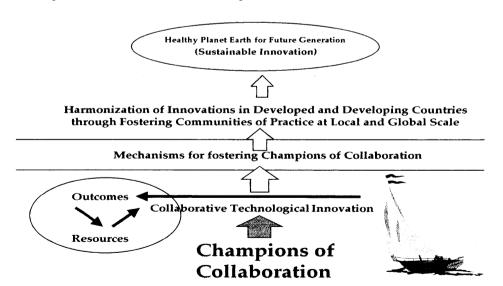


Figure 1: Outline of my research

Figure 1 shows the brief outline of my research with a long-term plan. At the beginning, I have explored the role of champions of collaboration (CoC) in technological innovation processes in Japanese firms. In this study, I have attempted to generate some hypotheses (H) about champions of collaboration (CoC), and advance our understanding of the way in which CoC foster collaboration in technological innovation processes. In the future, I am planning to work on designing some mechanisms for fostering CoC who may also contribute to sustainable innovation at the global scale.

Needed Roles in Innovation Processes

Scholars from different disciplines have contributed to the literature in this area of study. In this section, I have summarized the major existing literature on the needed roles in innovation processes. Rosenfeld and Servo describe innovation as a "relay race" (Rosenfeld & Servo, 1990). They point out that in most large organizations some individuals promote innovations through their informal roles, and those roles include champions, sponsors, technology gatekeepers, and entrepreneurs. Since this study is all about 'champions of

collaboration' I started looking at the earlier works on the topic of champions.

Donald A. Schön coined the terms, "champion" and "product champion" almost 40 years ago (Schön, 1963). Since that time, these terms have received tremendous attention from researchers and practitioners in different disciplines. Schön was interested in the role of individuals in the innovation process and he pointed out that radical innovation requires the emergence of a champion. Champions identify with an idea as if it were their own, and contribute to success of that idea by going far beyond their job requirements. Schön argued that product champions must know and know how to use the company's system of informal relationships. Their influence must cut across the many special ties (technology, marketing, production, and finance) that are essential to the product's or the process's developments. Schön concludes, "a new idea either finds a champion or dies." Following Schön many other people studied the role of champions or product champions in innovation processes. Roberts and Fusfeld identified and described the champions as possessing an informal but critical behavioral function in innovation (Roberts & Fusfeld, 1981). Robert Burgelman of Stanford extended the notion of champions still further in his study of "organizational champions." In his view, "organizational champions" support the product champions' contact with top management by keeping them informed about particular areas of development (Burgelman, 1983). Rosabeth Moss Kanter of Harvard also recently emphasized on the importance of champions (Kanter, 1999). According to Kanter, the "champions" for knowledge networks are senior managers and/or professionals.

Thomas Allen argues that "technological gatekeepers" keep colleagues connected with information sources (Allen, 1977). Michael Tushman sees the role of "boundary spanners" linking local colleagues with external information sources (Tushman, 1988). Akio Kameoka of Toshiba recently proposed the notion of a "techno-producer" (Kameoka, 1997). In his view, the techno-producers contribute to idea generation, strategy development, and coordination for development of new industries. Kameoka argues that "anyone can be techno-producer if he/she takes the leadership role in concept generation." As we have seen, the existing literature stresses the importance of the informal roles or behavioral functions of particular individuals in innovation processes. But, existing literature does not explain the informal but important role of some particular individuals who advance market awareness and initiate innovation projects; select partners by considering the goals and fit issues; set collaborative knowledge creation agendas; and motivate researchers and developers in collaborative technological innovation processes. In this study, I have examined the informal role of these particular individuals – champions of collaboration — in technological innovation processes

by using case study research strategy.

Champions of Collaboration in Major Japanese Firms

At the beginning, I have studied three prototype cases in a major Japanese firm and developed some propositions at the first step of this study program. Then, I studied a case in the same firm in great details that helped me to develop seven hypotheses. To make sure if the findings are confined to that single firm, I studied five other cases in five other major Japanese firms. The summary of the findings indicate that the champions of collaboration (CoC) in Japanese firms foster collaboration by contributing to:

- H 1: advance market awareness and initiating new project ("demand articulation" 1);
- H 2: idea generation and promotion;
- H3: scanning, acquiring, and integrating of internal and external resources (e.g., knowledge, capital);
- H4: findings sponsor(s) and colleague(s) to get their support to foster collaboration;
- H 5: selecting partner(s) considering goal for collaboration and fit (person-to-person), time, strategic, organizational, functional) issues;
- H 6: setting collaborative knowledge creation agenda(s); and
- H 7: motivating researcher(s) and developer(s).

Can the role of CoC be explained by the existing literature?

The answer is yes, but only partially. Hypotheses 2, 3, and 4 can be explained by a reasonable extension of some of the existing literature by Schön, Roberts and Fusfeld, Burgelman, Rogers, Allen, Tushman, Kanter, and Kameoka. But, the remaining roles of CoC can only be understood by the findings of this study. Although the focus of this study was not to explore the characteristics or the profiles of the CoC, the additional observations indicate that CoC are not necessarily the inventors or senior executives or formal leaders of firms; none of the CoC were senior managers/professionals during the time they contributed to foster collaboration; all of the CoC participated in communities of practice (CoPs); study/living experiences in overseas had some influences on their selection of foreign partners; CoC emerges and changes throughout the various stages of innovation processes and their personal characteristics attract others to collaborate with them; senkennomei (foresight), shinnen (conviction), passion, persistence, coordination, and negotiation skills of CoC help them to foster collaboration; matching of personality characteristics with overall environment (including task and organizational culture) is critical in emerging and thriving of a CoC; CoC do not work alone, they need sponsor(s) - people who provide psychological and/or financial supports to CoC; CoC need injuusairyouken (reasonable autonomy) and sometimes their encounter (deai) with key people as well as new knowledge within and/or outside of organizations are also critical in innovation processes; sometimes frustration in work-environment also plays a role in emerging of a CoC; CoC enjoy self-actualization and they generally feel comfortable to disclose their names and share information about their roles in innovation processes, but some individuals who play only some roles of CoC do not feel comfortable even to disclose their names.

Champions of Collaboration as Knowledge Leaders in the 21st Century

Scholars suggest that leaders of organizations should set direction by anticipating the future; mobilize individual commitment by engaging others; engender organizational capability by building teams, managing change; and demonstrate personal character (Ulrich, Zenger, & Smallwood, 1999). Peter Senge of MIT emphasizes "Leaders are people who walk ahead, people genuinely committed to deep changes in themselves and in their organizations. They naturally influence others through their credibility, capability and commitment. And they come in many shapes, sizes, and positions" (Senge, 1999). The champions of collaboration (CoC) may play the role of knowledge leaders in the 21st Century. They may not be always visible but foster collaboration in innovation processes even without announcing their presence until someone asks them to respond. They do not necessarily need to be the senior manager/professional or an expert of any specific technological field rather they need to be the "Jack of all trades."

What do I suggest to researchers and practitioners?

Give'em (CoC) a chance. I would like to suggest researchers and practitioners to make efforts to contribute to the field by developing mechanisms to find CoC (or those who have the potential to become a CoC) and facilitating (e.g., creating "ba²" for deai among CoC, sponsors and other critical people within and outside of organizations) them to foster collaboration; create a physical (e.g., well-designed office space, infrastructure) and psychological (e.g., granting people autonomy, opportunities for personal projects and open communication) environment³ where CoC can emerge and thrive; allow CoC to create,

¹ Fumio Kodama calls these activities "demand articulation" (Kodama, 1992).

² Ikujiro Nonaka and Noboru Konno proposed "ba" as the emerging foundation for knowledge creation (Nonaka & Konno, 1998).

³ Dorothy Leonard and Walter Swap indicated the importance of physical and psychological environment for igniting creativity in innovation processes (Leonard & Swap, 1999).

exploit, and sustain *ba* (shared spaces for collaborative knowledge creation) as well as communities of practice for generating/sharing of knowledge; and develop mechanisms for training/mentoring of individuals those who have the potentials to become CoC as well as sponsors.

In closing, I would also like to argue that innovation in the 21st Century has to be sustainable. To thrive, organizations in all nations have to make efforts in sustainable innovation – innovation that considers social, economic, and ecological imperatives. But it is impossible for a single individual or a single firm or a single industry or a single nation to achieve sustainable innovation. Collaboration – "two heads" approach – will become further more important and some particular individuals – champions of collaboration – need to foster collaboration in innovation processes. Their leadership in organizations of all sectors (private, government, academic, and non-profit organizations), and *deai* among CoC, sponsors, and creative people (in teams/communities of practice) as well as sustainable knowledge around the world will contribute to sustainable innovation. Further study in the area will contribute to create a healthy planet earth for future generation.

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