Organizational Innovation and Its Facilitators: A Brief Overview of Work in Progress

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Abstract This paper presents four research projects on organizational innovation in the Netherlands. These projects are still in a design and theoretical investigation stage, but the authors find it useful to share their findings and insights with the research community in order to inspire them with their ideas and research agenda. In the paper four constructs are explored that focus on the human factor in organizations and that may have a positive influence on organizational innovation. Shared leadership: It is often thought that, for innovation, only one brillant mind with a break-through idea in a single flash of enlightenment is needed. Recent research, however, shows that most innovations are the result of team-flow and sharing and alternating leadership tasks.Social Capital: through leadership and decision making, by influencing trust, respect and commitment, the organization's social capital and thus its innovative power is increased.External consultancy: deployment of external consultants will add to knowledge and skills necessary for innovation.IT and workflow management: if handled correctly, the human factor can add substantial quality to the design and use of IT in organizations.The paper shows that the way these constructs are managed is crucial in influencing and motivating members of an organization to attribute to innovation and make use of the facilities that are offered to them.
Key words organizational innovation, facilitator, leadership

1 Introduction

This paper presents work in progress of the Research Group Organizational Innovation of the University of Applied Sciences in Utrecht, the Netherlands. It explores four facilitators of organizational innovation, sc. shared leadership, social capital, external consultancy and workflow management/IT. See Figure 1.

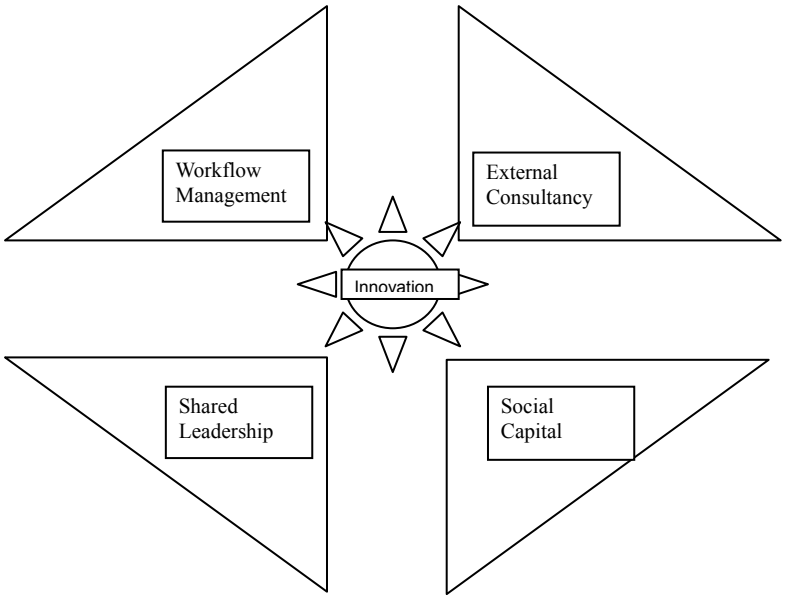

Figure 1 Four facilitators of organizational innovation

The definition of organizational innovation used in this paper is from Luecke and Katz (2003):

"Innovation (...) is generally understood as the successful introduction of a new thing or method (...) Innovation is the embodiment, combination, or synthesis of knowledge in original, relevant, valued new products, processes, or services".

Two different approaches of organizational innovation are distinguished in the literature:

1) Incremental innovation: by analyzing existing procedures, processes, logistics and systems, organizations find ways to improve these. This is also called renewal or adaptation. This approach is typical for the Theory of Constraints (TOC) as described by Goldratt (1984).

2) Generative innovation: this is about finding something really new, like new procedures, processes, products, services, logistics and ideas based on new knowledge. Generative innovation is more sophisticated, more expensive, more difficult and more demanding than incremental innovation, but it is also more promising in the competitive struggle to survive in a fast changing world. In this paper both types of innovation are studied. Generally spoken incremental innovation leads to success in the short run where generative innovation takes more time and more investment, but finally leads to a higher level of more sustainable success (Bolwijn and Kumpe, 1994).

The framework of our investigation has been developed in the discourse on how to facilitate innovation. See Table 1.

Table 1 Four facilitators of Organizational Innovation

	Skills + Tools	Knowledge
Process orientation	Workflow management	External consultancy
People orientation	Shared leadership	Social capital

2 Innovation and Shared Leadership

The first facilitator of organizational innovation is shared leadership or collaboration. One of the underlying frames of shared leadership is the so-called flow theory of Czíkszentmihályi: " (...) that people are most happy when they are in a state of flow— a state of concentration or complete absorption with the activity at hand and the situation. The flow state is an optimal state of intrinsic motivation where the person is fully immersed in what he or she is doing." (Czikszentmihalyi, 1990) This seems to be an ideal context for innovation. It means that highly motivated members of an organization are co-creating a state of team flow through communicating authentically and sharing leadership. Following the theory of Vinke (1996) we make no distinction between intrinsic and extrinsic *motivation* but we speak of intrinsic and extrinsic *stimuli* for motivation.

In the authors'opinion high-performance teams reach a higher level of collaboration and achieve outstanding results. These teams demonstrate synergy, and their way of collaboration is some kind of magic. For innovation and fundamental change these high-performance teams are needed.

Originally, the sources of inspiration in this search for synergy and magic in collaboration were Russell's 'Global Brain', Sheldrake's 'morphogenetic fields' and Csikszentmihalyi's concept of 'flow'. The final breakthrough in the development of this 'team flow' concept was the discovery of the collaboration patterns of the Rolling Stones. They formed a strong role model for a high-performance team.

The key elements of the team flow concept are: (1) authentic communication; (2) complementary qualities and habits; (3) shared leadership; (4) a common passion; (5) synergetic identity.

These elements have been distilled from the successful collaboration of The Rolling Stones and find further ground in Scharmer's U-Theory (2007), Belbin's concept of team roles (1981), the shared leadership approach by Pearce and Conger (2003) and theories of autonomous task forces (Amelsfoort, 1994).

altered situations other persons take the lead, but ideals or ideas can also be leading. In this understanding, leadership is not linked to certain persons but is the result of (inter-)actions (see Table 2).

Table 2 Comparing Classic and Shared Leadership (Rosi, 1997)

Classic leadership	Shared leadership
Depending upon a person's position in a group or hierarchy	Identified by the quality of people's interactions rather than their position
Valuation of leadership by the number of problems solved	Valuation of leadership by the extent of people's collaboration/ interaction
Leaders provide solutions and answers	All are geared towards enhancing the process and making it more fulfilling
Distinct differences between leaders and followers: character, skill, etc.	People are independent; all are active participants in the process of leadership
Communication is often formal	Communication is crucial with an emphasis on conversation
Often relies on secrecy, deception and payoffs	Values democratic processes, honesty and shared ethics; seeks the common good

To implement and develop shared leadership, it is necessary to have an attitude displaying these characteristics:

- ownership (individually and as a team)
- learning
- sharing.

In other words, it is important for team members to learn to take responsibility, to be proactive and to share information and ideas easily. For – formal and informal – leaders, the challenge is to learn to step aside, to share responsibility and to follow. Decentralizing leadership means decentralizing ownership too. Although teams have collective ownership, it is important to ensure that this collective ownership is divided in parts of personal ownership. A common pitfall in teamwork with a collective responsibility is that no one feels personally responsible. Shared leadership requires explicit individual ownership (Pearce and Conger, 2003), which enforces entrepreneurship too.

Each renewal (incremental) or change (generative) that results in improvement is called innovation. In business operation, innovation is about doing things better in order to achieve a higher turnover and higher profits. In innovation processes it is possible to distinguish (De Jong and Kerste, 2002):

- idea generation
- development
- implementation
- evaluation.

Although it is commonly held that, for innovation, only one brillant mind with a break-through idea in a single flash of enlightenment is needed, recent research in fact shows that most innovations are the result of:

- a multidisciplinary group process
- a process that can be planned and facilitated
- something that affects the entire organization (Sawyer, 2007).

3 Innovation and Social Capital

The ingredients of social capital (both as a result and as a source) are cooperation in a network of people sharing more or less the same values, goals, objectives passion and so on, working together without fear based on reciprocity in trust, respect and commitment (Oteman, 2008).

The American sociologist Robert Putnam (Field, 2003) defined social capital as features of social organization, such as trust, norms, and networks, which can improve the efficiency of society by facilitating coordinated action. His definition was based on his thoughts that social capital in the United States was diminishing. Putnam conducted a large scale research and found evidence that social capital in the United States had diminished (comparing the years 1950-1960 with 1980-1990) in terms of societal commitment and civic participation. According to Putnam this was due to increased mobility, increased technological possibilities (like telephone, television, the internet and media). Ten years earlier, after a research project in the Italian local government, Putnam came to the conclusion, that democracy in its effective functioning depends on social capital, mainly because working together within shared values is most profitable for all members and creates the most sense of well-being (Field, 2003).

Where Putnam looked at the effectiveness of social capital and did his research society-wide,

Bourdieu (1980) was more interested in the working of social capital and looked into social capital groups. He came to a different definition: "Le capital social est l'ensemble des resources actuelles ou potentielles qui sont liées à la possession d'un *réseau durable de relations* plus ou moins institutionalisées d'interconaissance et d'interreconaissance; ou, en autres termes, à l'appartenance à un group (…)." Bourdieu links social capital to being part of a group and describes social capital as the binding factor of a group and thus being part of creating an elite group (thus creating and conserving inequality and causing discrimination of non-members).

Coleman **(**Field, 2003**)** goes back to even smaller groups like families and finds the same elitarian aspects as does Bourdieu.

Fukuyama (1995) speaks in terms of social capital when he tries to explain differences in economical stability and development in countries around the world in the sense that the stability of a society has a positive influence on trust and economic development in this society.

Putting together the views of the most important authors and researchers in this field, being Bourdieu, Putnam, Fukuyama and Coleman, one can draw the conclusion that some elements are nearly always mentioned:

- it is about (formal or informal) networks
- it is about trust-based relationships
- it is about shared vales and norms
- it is about connectivity, binding and bonding.

Traditionally, social capital was not related to economic organizations but to societal organizations. But the keywords concerning social capital, like trust, networks and shared values, as important enablers of social capital do not suggest that there would be no room for social capital in economic organizations; on the contrary, it would seem logical that where trust, networks and shared values create value in society, they would also create value in economic organizations. In the view of the authors social capital is identical to innovative power.

This is represented in the conceptual model in Figure 2.

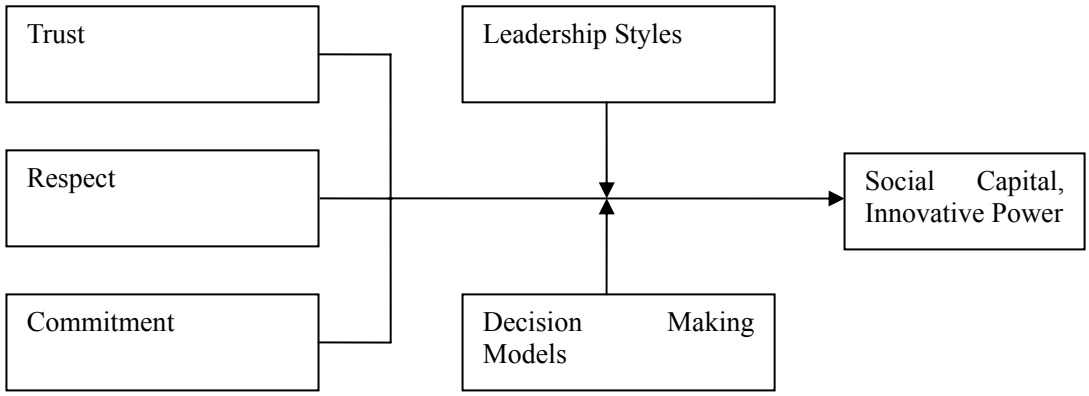

Figure 2 Conceptual Model of Social Capital

Therefore, it seems profitable for organizations to invest in leadership and decision making that embed, develop and support trust, respect and commitment, as it preserves and creates social capital of which organizations can profit. For the innovative power is going to grow and lead to successful innovations.

Social capital in an organization enables innovation in the following ways:

a. Leadership; participative and coaching leadership with little hierarchy allows for sharing of ideas throughout organizations and encourages innovation, both incremental and generative.

b. Participation; shared participation in decision making, contributions made by and, with general support, accepted from various members allow for innovation on what has been called the 'shop floor': those who implement and use the designs.

c. Culture; a culture that encourages risk-taking behavior, that can boost innovation, whereas socially destructive actions are dealt with swiftly though fairly.

d. Sustainability; defining and managing sustainability means building a cooperative group, developing an organizational memory and creating a future view, empowering the network to survive and thrive beyond the ups and downs that are natural in any social group.

4 Innovation and External Consultancy

Another facilitator for innovation is the influence of external consultants. Eight projects at the Research Group Organizational Innovation were carried out with bachelor students[39] acting as junior consultants of Small Business Enterprises (SME's). The SME's in the projects were small- and medium-sized regional enterprises, non profit organizations (mainly health care) and institutions for voluntary work.

To collect data on organizational context, project performance and interaction, three research techniques were applied: face-to-face interviews, panel discussions and questionnaires. Two student representatives of different consultancy projects were interviewed two times during the program. Individual students and members of the teaching staff filled out questionnaires at the end of the program. Eight clients filled out the same questionnaire and were interviewed. The research findings were as follows:

- interaction between client and student consultants can be characterized as open in most of the cases
- according to the students client behavior is influenced by mutual interaction
- in their own perception clients learn and this learning concerns new knowledge, a new attitude and new skills.

The student consultants, therefore, seem to attribute to an organization's innovative power, as they contribute new expertise and skills related to their task/project issue.

5 Innovation and Information Technology

Information Technology (IT) has a great impact on innovation. In literature many authors have emphasized what can be reached with IT and what impact IT has on individuals, organizations and society (Castells, 2000; Carr, 2003; Smith and Fingar, 2004; Friedman, 2005; Luftman, 2005). Gathering information through the internet, doing business (selling books, booking a holiday) or control complex business processes, all this is possible thanks to IT.

Despite these possibilities and successes of innovating an organization with IT (Fischer 2007), implementation of these solutions also raises many questions and problems, especially when human beings are involved in the use of IT (Moor, 2002, Küng, 2000). Humans have been found important factors for the success of IT innovations in organizations. To study this issue a program at the Research Group Organizational Innovation has been launched.

The connection between IT and an organization can be understood by Orlikowski's Structurational Model of Technology (1992, 2000). The key point in this model is 'the duality of technology', which means that "(…) (information) technology is physically constructed by actors working in a given social context, and technology is socially constructed by actors through the different meanings they attach to it and the various features they emphasize and use." (Orlikowski, 1992) The model consists of three components: human agents (designers, users and decision makers), technology (material artifacts mediating task execution in the workplace) and institution properties (structure, strategy, culture, control mechanism, procedures, and division of labor, as well as environmental pressures). These components and their interrelations are depicted in Figure 3.

Orlikowski states that technology is the product of human action, through two modes of interaction: the design mode and the use mode. In the design mode human agents (designers) build in their understanding of the work being automated (as arrow "a" in Figure 1). In the use mode, human agents (users) assign meaning to this technology, which will influence their task execution (arrow "b"). This influence can be restricted or enabled. What will dominate depends on many factors, such as "(…) actions and motives of designers and implementers, the institutional context in which technology is embedded, and the autonomy and capability of particular users." (Orlikowski, 1992) The outcome of these countervailing powers is crucial for the effects of IS/IT on the quality of work as perceived by users. Another interrelation is between institutional properties, human agents and technology. In her model Orlikowski is building on contingency and institutional theory, proposing that human action is shaped by organizational context (arrow "c"), while the deployed technology will affect institutional

[39] Our choice of student consultants was made for pragmatic reasons. As their strong learning orientation may differ from regular consultants; the findings may differ from what commercial consultants would have found.

properties as well (arrow "d"). Likewise, technology and human agents, technology and institutional properties are mutually shaped, i.e. through the acting of human agents.

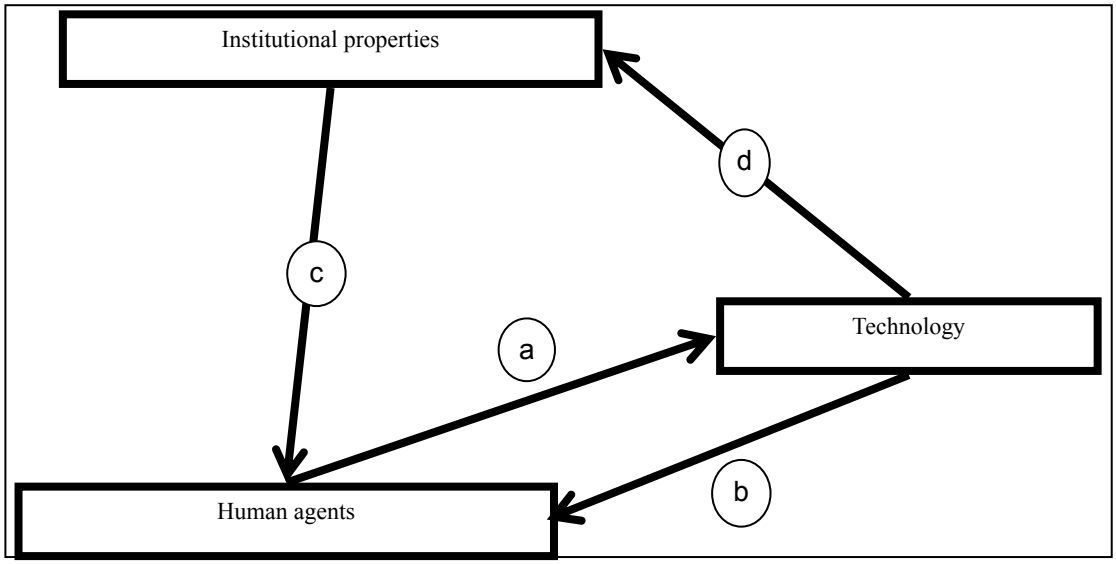

Figure 3 Structurational Model of Technology (from Orlikowski, 1992)

To investigate the process of mutual shaping between designers, users and technology (arrows a and b) a research program is conducted on the implementation of workflow management systems (WFM). The research model is based on DeLone's and McLean's Model of Information Systems Success (D&M Model) and the Behavioural-Attitudinal Theory of IS Success (Kappelman and McLean, 1991). The D&M Model was first developed in 1992 (DeLone and McLean, 1992) and updated in 2003 (DeLone and Mclean, 2003).

6 Conclusions

Of the four constructs of shared leadership, social capital, external consultancy and information technology described in this paper, each seams to have potential to influence organizational innovation positively. The paper shows that the way these constructs are managed is a decisive factor in stimulating and motivating organization members to attribute to innovation and to make use of the facilities offered to them, like consultancies and information technology. The constructs of shared leadership and social capital are promising in this regard.

The presented work in progress is explorative and still has a long way to go. The research agenda of the Research Group Organizational Innovation of the University of Applied Sciences includes action research projects in organizations on the implementation of shared leadership and on the influence of consultants on the innovative capabilities of SME organizations. Furthermore, questionnaire research will be carried out to investigate the relationship between social capital and the innovative capabilities of organizations and to study the human interface between technology and organizational innovation.

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