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ADDED VALUE OF INTANGIBLES FOR ORGANIZATIONAL INNOVATION

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Abstract: *The purpose of this paper is to present the theoretical basis for a measurement and improvement system that will help organizations create a more innovative climate. The role of intangible assets in contributing to organizational innovativeness is clarified within six hypotheses on the basis of a cross-disciplinary literature review combining studies from psychology, human resources management, communication, information technology, and marketing. These factors range from the individual level to interaction with the environment surrounding the organization, and involve (a) individual psychological flexibility, (b) institutional and interpersonal trust, (c) diverse human resources, (d) strategic transformational leadership, (e) agile information and communication technology systems, and (f) coproduction of the brand with customers.*

The critical factors point out areas for organizational innovation, and we advocate a cross-disciplinary approach to ensure that diverse aspects of organizational life are considered. These hypotheses require testing in order to assist organizations in improving their innovativeness.

Keywords: *innovation, intangibles, flexibility, organizational trust, transformational leadership.*

INTRODUCTION

The importance of innovation and innovativeness for organizational survival has been noted in the literature (Nonaka & Takeuchi, 1995; Schumpeter, 1950; Subramanian & Nilakanta, 1996; Wang & Ahmed, 2004). The construct is dynamic because “innovativeness is a driver of growth, quality is a driver of profit, and both are drivers of market value” (Cho & Pucik, 2005, p. 569). How this innovativeness is achieved, however, has been less evident. Previous studies have confirmed factors such as organizational learning (March, 1991), organizational culture (Ahmed, 1998), institutional trust (Ellonen, Blomqvist, & Puumalainen, 2008), and absorptive capacity (Cohen & Levinthal, 1990) as central. However, understanding innovative behavior in organizations remains a challenge, partly due to the various definitions of innovation used in the field (Cho & Pucik, 2005) and partly due to the interdisciplinary nature of innovation.

We suggest in this paper that innovation in organizations is increasingly achieved by investments in intangibles (Lev, 2001). In line with the resource-based view (Penrose, 1959), we propose that sustainable competitive advantage results from intangible assets because they enable the accumulation of other types of assets. Intangible assets are inimitable, rare, and nontradable (Lev, 2001), and include brand, knowledge, flexible technology, personnel skills, contracts, and efficient procedures (Wernerfelt, 1984). We believe that understanding the role of intangible assets for organizational innovativeness needs a more thorough approach than has been attempted thus far, and consider intangible assets to matter inside the organization, but also within the organization’s relations with its external stakeholders. Intangible assets are seen particularly valuable for knowledge-intensive services and organizations (Koch & Strotmann, 2008), but aid innovation only if aligned with the organizational strategy (Kaplan & Norton, 2004). “Because resources and strategies required for the implementation of innovation and quality focus are different, a firm has to master how to allocate its limited resources in ways aligned with its strategic goals” (Cho & Pucik, 2005, p. 556).

Recently, fostering an innovative culture and furthering creativity have become goals for many organizations. Several studies have demonstrated that innovativeness requires specific conditions, an important one of which is organizational culture (Ahmed, 1998; e.g., Judge, Fryxell, & Dooley, 1997; Martins & Terblanche, 2003; Ulijn & Weggeman, 2001; Westwood & Low, 2003). Therefore, it can be argued that having an innovative culture within an organization has a strongly positive effect on organizational innovation because it motivates people working within the organization to deal with novelty, individual initiatives, and collective actions, while equally shaping their understandings and behaviors in regard to risks and opportunities (Kaasa & Vadi, 2008).

However, to become innovative demands more from an organization than simply debate and resources: It requires an organizational culture—both explicit and implicit—that guides the organization's members to strive constantly for innovation (Ahmed, 1998). We believe that more precision is required in seeking to understand the role of intangible assets: Several central areas of organizational innovation, such as the role of individuals in organizations—particularly their ability to adapt to new or changing conditions—have been overlooked (Georgsdottir & Gets, 2004). Although intangibles have been addressed in relation to specific fields, such as manufacturing (de Meyer, Miller, Nakane, & Ferdows, 1989) or information and communication technology (Chesbrough, 2003; Conboy & Fitzgerald, 2004), many issues remain unstudied.

By bringing critical factors for innovation together, we feel this paper contributes to interdisciplinary research through our developing performance indicators for measuring the contribution of intangibles for innovation, as inspired by Kaplan and Norton (2004). Our project aims at a better understanding of the role of intangibles and possibly increasing the value they add for organizational innovation. This cross-disciplinary paper delivers, as a first step, the critical factors found as hypotheses for further research.

The paper is organized as follows. First, we present a short introduction to intangible assets and their role in organizational innovativeness. Second, innovativeness in organizations is briefly defined. We then discuss the six hypotheses on how intangibles contribute to organizational innovativeness: a) individual psychological flexibility, b) institutional and interpersonal trust, c) diverse human resources, d) strategic transformational leadership, e) agile information and communication technology, and f) coproduction of the brand with customers. To conclude, we summarize and discuss our findings, present a model embodying the innovativeness values, and suggest considerations for future studies.

INTANGIBLE ASSETS

Intangible assets, or in short *intangibles*, refer to something indefinite and incapable of being perceived by the senses: Intangibles lack physical substance or intrinsic productive value, yet they are saleable, although not materially or physically (Diefenbach, 2006). Intangibles can be thought of as capital, like other forms of capital, in that organizations can invest in them. They consist of efforts and inputs that often take long periods of time to develop and become productive (Dean & Kretschmer, 2007). Although typically nonphysical, intangibles are long-lived and have measurable value. Examples of intangibles in the context of organizations include trust, ideas, skills, reputation, processes, established social networks, patents, trademarks, and brands (Contractor, 2000; Dean & Kretschmer, 2007; Gardberg & Fombrun, 2006; Kaplan & Norton, 2004; Petrick, Scherer, Brodzinski, Quinn, & Ainina, 1999). Each of these adds unique value to the organization, yet they often remain uncalculated and underappreciated, individually and collectively, due to their intangible nature.

Intangibles are central to innovativeness and renewal in organizations today, and they “surpass physical assets in most business enterprises, both in value and contribution to growth” (Lev, 2001, p. 7). Moreover, intangibles enable the accumulation of other types of capital and, as such, constitute a central resource for organizations. As Cho and Pucik (2005, p. 556) indicated, a firm's capability to be innovative while simultaneously delivering quality

products and services to its customers represents its intangible resource. When intangibles are discussed, concepts such as social capital, human capital, intellectual capital, communication capital, and trust capital take center stage. Gardberg and Fombrun (2006, p. 330) suggested that once intangibles, such as reputational capital, are well established, they protect the organization's success in the long run. Intangibles currently tend to remain off organizational balance sheets, even though "including intangibles [there] allows for a more accurate quantification of the sources of economic growth and of the dynamics of production and capital accumulation, and the aggregate empirical analysis of productivity and innovation is improved" (Corrado, 2009, as cited in Mackie, 2009, p. 25).

In sum, the basic assumption behind all intangibles is that they become capital only when they provide something useful and applicable. Even more vital, however, is that intangibles are valuable only when they align with the organization's strategic goals (Kaplan & Norton, 2004). Investments can be made in intangibles, but they typically yield results only over long periods of time (Lev, 2001). Moreover, the profitability of such investments is difficult to quantify accurately (Cinca, Molinero, & Queiroz, 2003; Rothstein & Stolle, 2003), despite the importance of intangibles for organizational innovativeness.

DEFINING ORGANIZATIONAL INNOVATIVENESS

Organizational innovativeness refers to the innovative abilities needed within an organization and among its employees. Innovativeness is "the overall internal receptivity to new ideas and innovation that is demonstrated through individuals, teams and management, and that enables the formation of an innovative culture" (Wang & Ahmed, 2004, p. 205). Innovativeness is based on the concept of innovation, the process of creating and delivering new customer value in the marketplace (Carlson & Wilmot, 2006).

Drucker (1993) viewed innovation as simply the application of knowledge to produce new knowledge, whereas Griffiths and Zammuto (2005) emphasized the role of continuous improvement. Hult, Hurley, and Knight (2004) have suggested innovation is a means for adapting an organization, whether as a response to changes occurring in its internal or external environment or as a preemptive move taken to influence that environment. Success in innovation results from naturalizing an innovation's novelty and managing expectations (Hargadon & Douglas, 2001).

Some suggest that the best innovations result from producing new customer value (e.g., Carlson & Wilmot, 2006), whereas others (e.g., Verganti, 2006) note that customers do not always know what they should or could want (Leonard-Barton & Doyle, 1996; von Hippel, 1988; Workman, 1993). Verganti (2006) argued for the need to see the full context of client demand and meanings, and that customer wants often reflect the symptoms of the situation more than actual needs. New sociocultural models should be established. For example, the model of a design-driven innovation (Verganti, 2006) embodies innovation as an aim to redefine the market, to require a culture of collaboration and the development of both internal and external teams, and to support flexibility as a means to monitor and act quickly on emerging trends. Such an innovation is argued to be sustainable because it is not dependent on factors such as technological development, but rather is focused around creating new meanings (Verganti, 2006).

Baregheg, Rowley, and Sambrook (2009) conducted a literature review on the definition of innovation, identifying 60 definitions of the concept. They synthesized, then, the main attributes of innovation as follows:

- *Nature of innovation* refers to the form of innovation as in something new or improved;
- *Type of innovation* refers to the kind of innovation, as in the type of output or the result of innovation (e.g., product or service);
- *Stages of innovation* refers to all the steps taken during an innovation process, which usually start from idea generation and end with commercialization;
- *Social context* refers to any social entity, system or group of people involved in the innovation process or environmental factors affecting it;
- *Means of innovation* refers to the necessary resources (e.g., technical, creative, financial) that need to be in place for innovation;
- *Aim of innovation* is the overall result that the organizations want to achieve through innovation. (Baregheg et al., 2009, p. 1331–1332)

Consequently, innovation is defined as a “multi-stage process whereby organizations transform ideas into new/improved products, services, or processes to advance, compete and differentiate themselves successfully in their marketplace” (Baregheg et al., 2009, p. 1334). Innovation, then, always relates to the ability of individuals to create and maintain connections to each other, both inside and outside an organization (Jansen, Van den Bosch, & Volberda, 2006).

Next, attention is turned toward how intangibles contribute to the goal of organizational innovativeness. Overall, intangible assets can enhance connectedness, which is needed to anticipate or react to emerging markets and changing customer needs. Moreover, intangible assets can have a positive impact on organizational innovation by enhancing flexibility (de Meyer et al., 1989), which is needed to implement change and renewal within organizations.

SIX HYPOTHESES FOR ORGANIZATIONAL INNOVATIVENESS

For this paper, the role of intangible assets in contributing to organizational innovativeness was studied through a cross-disciplinary investigation and analysis of existing literature. We combined studies from psychology, human resources management, communication, information technology, and marketing. Keyword searches were conducted within each discipline and their central journals, looking for key topics and reoccurring issues. Relevance was central, and those articles that showed a clear link between intangible assets and their contribution to innovativeness received the most attention. Several suggestions for key topics were surfaced within each discipline, and the topics were discussed within the research group. The topics were grouped onto different levels, from micro to macro. After the discussion, the most relevant hypotheses for intangibles that contribute to organizational innovativeness were identified: a) individual psychological flexibility, b) institutional and interpersonal trust, c) diverse human resources, d) strategic transformational leadership, e) agile information and communication technology, and f) coproduction of the brand with customers. These six hypotheses are now addressed individually.

Individual Psychological Flexibility

It is generally agreed that innovation is rooted in the contributions of flexible and open-minded individuals (Woodman, Sawyer, & Griffin, 1993). Organizations consist of individuals with a shared aim, and hence the capacity to develop and foster innovation within employees plays a crucial role in organizational development and success (Reuvers, Van Engen, Vinkenburg, & Wilson-Evered, 2008, p. 227–228). It has been argued that the key drivers enabling an organization to remain competitive are flexibility and willingness to change (Ståhle, Sotarauta, & Pöyhönen, 2004). As noted by Thurston & Runco (1999), flexible individuals are able to adapt to new, challenging circumstances. They have the ability to adopt new strategies to solve a problem; to redefine the problem in order to find a new solution (adaptive flexibility); or to find several solutions to a problem (spontaneous flexibility). Thus, flexibility could be regarded as an essential behavioral or cognitive ability for innovation, as well as for innovative actions in organizations. Psychological flexibility in individuals is a vital aspect for organizational learning that has been established as central to organizational innovativeness (e.g., Argyris & Schön, 1982; Cohen & Levinthal, 1990; Wang & Ahmed, 2004).

Psychological flexibility is not a static state but it can be influenced and increased in organizational settings (e.g., Bond & Bunce, 2000, 2003; Bond & Flaxman, 2006; Donaldson-Feilder & Bond, 2004) through, for example, acceptance and commitment therapy (ACT; Bond & Flaxman, 2006). The practical application of behavior analysis and ACT has led to new psychological interventions and training that increase individual psychological flexibility and, in turn, improve the overall health and creativity of organizations. A psychologically flexible individual is able to engage the present moment as a conscious human being, and to act in accord with his or her chosen values (Hayes, Bunting, Herbst, Bond, & Barnes-Holmes, 2006). This results in being conscious of one's own thoughts, and acting effectively through this consciousness. It enables individuals to persist in or to change their actions according to what they value as important, and decreases rigid thinking and behavior (Bond & Flaxman, 2006), all of which have been linked to organizational innovativeness.

According to ACT, psychological flexibility is established through six core processes within the individual: acceptance, cognitive defusion, contact with the present moment, self as a context, values, and committed actions. The processes can be divided into three stages: acceptance and defusion are about "opening up," that is, separating the individual from overpowering thoughts and feelings, and allowing matters to come and go without struggling with them. Contact with the present moment and self as a context are about being in the present moment, here and now, processes that increase one's skills at observing and attending to thoughts associated with innovative thinking. Values and committed actions involve clarifying one's values about what constitutes a meaningful life and taking effective action guided by those values (Bond & Flaxman, 2006). Committed action is linked to flexible action, and enables individuals to take action despite the possibility that their actions may evoke unpleasant emotional reactions and thoughts (e.g., when presenting new ideas to coworkers). It could be argued that all these skills may be crucial for developing individual as well as organizational innovativeness. Hence we advance Hypothesis 1: Individual psychological flexibility supports organizational innovativeness.

Institutional and Interpersonal Trust

Organizational trust is a positive attitude held by one organizational member toward another that assumes that the other party will act according to the rules of fair play and will not take advantage of one's vulnerability and dependence in a risky situation (Das & Teng, 1998; Lewis & Weigert, 1985; Rousseau, Sitkin, Burt, & Camerer, 1998). Trust may be felt toward individuals and organizations alike, though the underlying mechanisms in each case may differ. This confidence in the other party's benevolent behavior develops from the experience and belief that the trustee has earlier followed the same values and principles (Connell, Ferres, & Travaglione, 2003). Moreover, trust depends on organizational members' work morale and competence (Lämsä & Pučetaitė, 2006).

A high level of organizational trust is an important feature of an organizational culture that is innovative because trusting relationships provide a safe environment for people to take risks (Sztompka, 1997). According to Dovey (2009), organizational trust is one of the key factors in the creation of a social environment in which ideas are freely generated, honestly assessed and selected, and collectively transformed into profitable new products and services.

A study by Ellonen et al. (2008) addressed behavioral innovativeness, defined as "the overall internal receptivity to new ideas and innovation that is demonstrated through individuals, teams and management, and that enables the formation of an innovative culture" (Wang & Ahmed, 2004, p. 205). Behavioral innovativeness was most effectively enhanced by building institutional trust, which is understood as trust in organizational structures, processes, and policies supporting organizational interaction, and thus also social trust. The study explained that trust in the leader's reliability as a form of interpersonal trust in an organization was found to be critical in terms of providing the support needed for the reception of new ideas and innovations. Further, Wang and Ahmed's (2004) research attested to the importance of leaders as role models and initiators of organizational innovativeness. Organizations can adopt several managerial approaches, such as transparent, open, and understandable communication (Moenart, Caledries, Lievens, & Wauters, 2000), encouraging the participation of employees, and fair and just human relations management (HRM) practices to enhance organizational trust (Ellonen et al., 2008; Pučetaitė, Lämsä, & Novelskaite, 2010). Hence we advance Hypothesis 2: Institutional and interpersonal trust support organizational innovativeness.

Diverse Human Resources

The innovative capability of an organization (Wang & Ahmed, 2004) highlights the likelihood that an organization produces innovative outcomes. The more diverse the human resources are, the larger the pool of skills and perspectives available to the organization, the more creative and innovative this pool of individuals, and the higher the likelihood of generating peak levels of performance (Cox & Blake, 1991; Thomas, 1990). Most prior research and discussions have focused on the visible characteristics of diversity, such as sex and race (Foldy, 2002); more recent developments have extended the research domain to "invisible" diversity (Kirton & Greene, 2005).

Many recent studies have suggested that workforce diversity enhances organizational innovation (e.g., Miller & Triana, 2009; Mohamed, 2002; Rose-Anderssen & Allen, 2008). For example, Rose-Anderssen and Allen (2008) contended that organizations with a diversity of

employee behaviors have the capacity to exceed marginal or average improvements into more far-reaching performance improvements, therefore producing innovative, radical solutions. Additionally, Mohamed (2002) provided empirical evidence that effective and innovative groups have members who represent different demographic dimensions, and a study by Miller and Triana (2009) found that gender and racial diversity on organizational boards are positively related to innovation. The reasons for this may be that diverse groups engender more perspectives and external contacts, and that subgroups stimulate positive competition to enhance innovation. Cabrales, Medina, Lavado, and Cabrera (2008) stated that team diversity and the combined use of long- and short-term incentives are associated with incremental innovation; the development of risk-taking attitudes within the team is associated with radical innovation. To bring out the best in diverse team composition, attention to leadership modes is recommended (Zander & Butler, 2010). Consequently, diversity alone does not guarantee organizational innovation: Leadership must understand its value. Hence we advance Hypothesis 3: Diverse human resources support organizational innovativeness.

Strategic Transformational Leadership

Innovativeness should always be linked to what the organization expects for the future, its vision (Kaplan & Norton, 2004); organizational leadership plays a critical role in such achievements. A motivating vision, grounded in a sound understanding of the market, is established in internal communication, which then guides the business's competitive advantage efforts and sets the broad outlines for strategy development, with specific details to emerge later (Day, 1990; Hamel & Prahalad, 1994; Senge, 1990).

The leaders of organizations play a significant role in defining and shaping the organizational culture (Schein, 1985), and there is evidence that leadership style is an important determinant of innovation (Dess & Picken, 2000). In particular, transformational leadership has been shown to have a crucial, positive influence on organizational innovation (e.g., Gumusluoglu & Ilsev, 2009; Jung, Chow, & Wu, 2003; Sarros, Cooper, & Santora, 2008). Transformational leadership enhances coworkers' feeling of freedom to innovate (Jung et al., 2003), while also providing a meaningful focus for them through the processes of articulating a vision in internal communication and setting of high performance expectations and provisions of support (Sarros et al., 2008).

Bass and Avolio (1994) characterized transformational leadership as being composed of four unique but interrelated behavioral components: (a) charismatic role modeling, (b) individualized consideration, (c) inspirational motivation, and (d) intellectual stimulation. The first component refers to a leader's charisma, which inspires admiration and respect, and emphasizes the importance of a collective sense of mission and a shared vision, both of which have been associated with successful innovation processes, both reciprocally and longitudinally (e.g., Pearce & Ensley, 2004). Charismatic role modeling helps organizational members in experiencing and comprehending a meaningful focus in their roles and tasks in an organization that is not too detailed and constrained in its guiding principles. Moreover, one source of creative behavior is psychological empowerment, which can be increased by transformational leaders.

Taken together from the viewpoint of organizational innovativeness, it can be said that transformational leadership values a small power distance between leaders and employees.

Moreover, such leadership behavior also includes clear communication of the organization's strategic vision, which helps avoid potential chaos in an innovative culture. Hence we advance Hypothesis 4: Transformational leadership supports organizational innovativeness.

Agile Information and Communication Technology

In contemporary organizations, information and communication technologies (ICTs) pervade every aspect of an organization's value chain as a vast electronic network of interconnected applications and data (Kohli & Melville, 2009). Not only the organization's daily operations but also the very processes of innovation rely on ICTs, which makes ICT-related factors important as enablers or hinderers of organizational innovation. Innovativeness is related to change, which means that business processes need to be flexible and able to adapt to changing needs (MacKinnon, Grant, & Cray, 2008). The demand for connectedness and flexibility presents challenges for the organization's ICT infrastructure, as well as for the services provided by the information management function.

Connectedness becomes a key concept when discussing organizational innovativeness in the context of ICTs because it means enhancing interrelatedness and supporting interaction within the organization and between the organization and the environment. Connectedness is related to openness toward new ideas in that innovation requires people to combine ideas, capabilities, skills, and resources in new ways (Fagerberg, 2003). In practice this includes ensuring system integration and data transfer. Connectedness is especially emphasized in the early phases of an innovation because it is required for gathering knowledge about market needs, other companies, and new possibilities from innovation networks inside and outside the organization (Siebra, Filho, Silva, & Santos, 2008). A well-designed ICT architecture increases opportunities for informal interaction and accessibility to knowledge sources, and helps individuals to combine knowledge and to create new knowledge as well. Connectedness is essential for developing trust and cooperation among individuals so as to develop a deeper understanding that enables existing products, processes, and markets to be further refined and improved (Jansen et al., 2006).

Flexibility is emphasized in the later phases: The greater the innovation, the more it necessitates organizational changes and the more complicated it is to adopt (Chesbrough, 2003). A complex architecture of ICT systems should decrease the likelihood of flexibility becoming a hindrance to innovation. Flexibility is not merely the ability to adapt to changes in the environment, but also means embracing change. Thus, flexibility is a two-way process in which the organization not only reacts to change but also influences it (Conboy & Fitzgerald, 2004). ICT systems need to support organizations in adapting quickly to environmental changes. A related term, agility, refers to a combination of flexibility and speed (Conboy & Fitzgerald, 2004). Seo and La Paz (2008, p. 136) defined organizational agility as a set of processes that allow an organization to sense changes in the internal and external environment, to respond efficiently and effectively in a timely and cost-effective manner, and to learn from the experience to improve the competencies of the organization. Hence we advance Hypothesis 5: Agile information and communication technology supports organizational innovativeness.

Coproduction of the Brand with Customers

The competitive markets in which organizations operate have become a venue for proactive customer involvement (Prahalad & Ramaswamy, 2000). Competition no longer occurs at the core-product level but rather according to the added values that the brand represents (Simões & Dibb, 2001). A customer-oriented firm can be defined as a firm with the ability and the will to identify, analyze, understand, and answer user needs (Gatignon & Xuereb, 1997). Hunt and Morgan (1995) proposed market orientation as a kind of organizing framework that, if adopted and implemented, becomes culturally embedded in an organization over time.

Value can be created and innovativeness enhanced when customers are introduced into the production process. Customers are increasingly becoming active partners in the buying process, rather than just passive targets of product development and branding. Day (1994) argued that market-driven organizations are not just superior in market-sensing, but also excel in customer-linking capabilities, which require organizations to integrate the skills, abilities, and processes needed to achieve collaborative customer relationships. As such, much is demanded from the organization: transparent communication, high involvement, and commitment to working across organizational boundaries (Prahalad & Hamel, 1990).

Coproduction of the brand with customers means more than being consumer oriented; it also involves collaborating with and learning from customers, as well as being adaptive to their individual and dynamic needs. Relationships among marketing actors often have a continuous nature. In using a product, the customer advances the marketing, consumption, value-creation, and delivery processes, resulting in the consumer being viewed as a coproducer (Vargo & Lusch, 2004). Consumers will develop relationships with organizations that can provide them with an entire host of related services over an extended period (Rifkin, 2000). In fact, organizations benefit themselves, their customers, and society at large by increasing this service flow, or the customer defined “continuous flow of value” (Hawken, Lovins, & Lovins; 1999, pp. 125, 127). In the business-to-business environment, this process involves codeveloping products and services with lead clients (von Hippel, 1988); in consumer markets, brand communities cocreate brand meaning (Muniz & O’Guinn, 1995). To enable innovativeness from the coproduction process with customers, organizations should think in terms of self-reinforcing “value cycles,” rather than linear value chains (Day, 1990). Hence we advance Hypothesis 6: Coproduction of the brand with customers supports organizational innovativeness.

DISCUSSION AND CONCLUSIONS

The concept of innovation has become something of a cure-all for various organizational malaises. Previous studies have proven the importance of organizational innovation and renewal, yet have failed to identify how innovativeness could be measured or enhanced. To enable innovativeness in organizations, research and development functions are no longer enough to be able to compete successfully in a dynamic international market. All of the various organizational intangibles should be geared optimally toward innovativeness, and organizations should enable a culture of innovation by creating an internal atmosphere and relationships with stakeholders that foster flexibility for innovation and change. The most innovative organizations in the future will be those that do not simply focus energy on products or technical innovation, but also manage to

build enduring environments of human communities striving toward innovation through the creation of an appropriate organizational culture (Ahmed, 1998).

The role of intangibles for organizational innovativeness is timely because “innovations are created primarily by investment in intangibles” (Lev, 2001, p. 16). However, previous research has not yet adequately mapped the various intangibles influencing innovativeness in organizations. This paper provides one attempt to integrate cross-disciplinary knowledge on organizational innovativeness. By combining literature from communication studies, marketing, psychology, information technology, and human-resource management, we were able to identify six dimensions concerning the contribution of specific intangibles to innovativeness, ranging from individual level to the society at large. These are not exhaustive, but mainly highlight the most important areas where intangibles are related to organizational innovativeness.

As a result of our cross-disciplinary investigation and analysis, we put forward the following hypotheses for further research:

1. Individual psychological flexibility supports organizational innovativeness;
2. Institutional and interpersonal trust supports organizational innovativeness;
3. Diverse human resources support organizational innovativeness;
4. Transformational leadership supports organizational innovativeness;
5. Agile information and communication technology supports organizational innovativeness;
6. Coproduction of the brand with customers supports organizational innovativeness.

Hypothesis 1 highlights the important role of the individual in the innovation process: Organizations consist of individuals and hence ensuring individual well-being through nurturing psychological flexibility is the first step toward improved organizational innovativeness. Hypothesis 2 focuses on the innovative nature of the organizational culture and climate surrounding these individuals, and underlines the importance of trust on both the interpersonal and institutional levels. Hypothesis 3 focuses attention on the importance of the unique individuals who constitute the organization, that is, those who compose its diverse human resources. Individuals in organizations operate in unison only when led well, and thus Hypothesis 4 highlights the importance of formulating a strategic vision and the vital role of transformational leadership in communication. Hypothesis 5 concentrates on the organizational systems that both connect and restrict individuals in organizations, and emphasizes the importance of agile information and communication technology systems. Moving from the organizational context to the environment surrounding the organization, Hypothesis 6 takes account of how innovative organizations work in collaboration with, and listen to, those they aim to serve, as well as introduces the idea of coproduction of the brand with customers.

Figure 1 shows the critical factors identified in this paper, starting with the microlevel (lower portion of the figure) of the individuals inside organizations, then moving to the meso-level of organizations and organizational processes, and ending with the macrolevel of relations with the organization’s external stakeholders. None of these factors can be seen as independently producing organizational innovativeness, but they are related, and require innovation-friendly leadership that allows for employee empowerment (Pieterse, van Knippenberg, Schippers, & Stam, 2010). The hypotheses indicate vital enablers of organizational innovativeness.

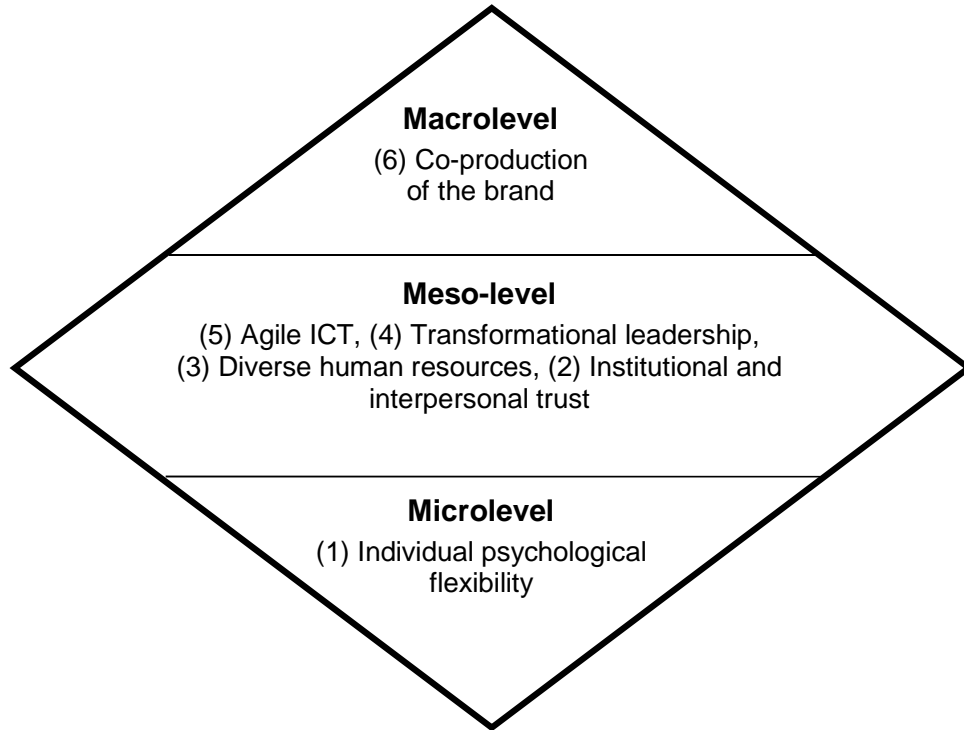


Figure 1. The Value-Diamond: Intangible assets support organizational innovation on different levels.

This paper is a first attempt to integrate cross-disciplinary knowledge on organizational innovativeness. Future research should test these hypotheses in a variety of contexts and industries. Our investigation has surfaced a multitude of research results from various disciplines in the literature that indicate the important contribution intangibles provide to organizational innovation. By testing these hypotheses, more insight can be gained into the role of intangibles for innovation. In this way, organizations may develop a better grasp on intangibles, the human factor in organizational innovativeness.

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