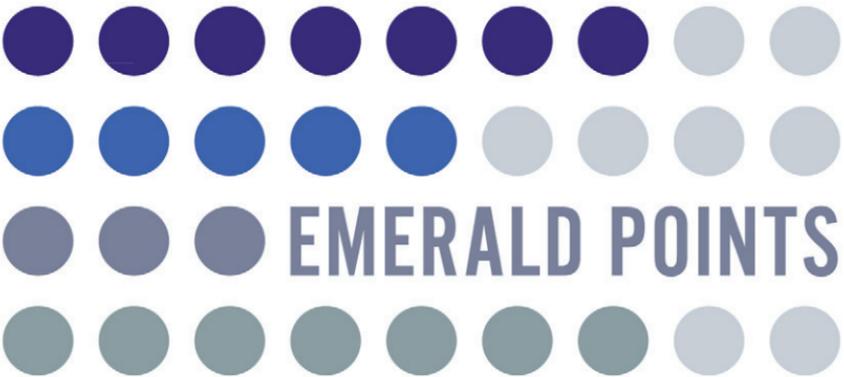


TECH DEVELOPMENT THROUGH HRM

Driving Innovation with
Knowledge-Based Cultures

Mert Gürlek



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Knowledge-Based Cultures

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Dedicated to my beloved parents and family

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INTRODUCTION

In the knowledge era, the whole free world has moved toward what is called the knowledge economy, characterized by rapidly rising turbulence and uncertainty. However, many organizations that resist or are not aware of this revolution continue to concentrate on creating value and innovation within the traditional models, systems, and managerial solutions of the old economy (Johannessen & Olsen, 2010). The needs of the knowledge age require new management methods and organizational solutions. The ability to create and utilize knowledge effectively is a crucial source for many organizations (Gölgeci & Kuivalainen, 2020; Pont & Werquin, 2001). Knowledge management (KM) should, therefore, be an integral part of new organizational solutions (Gürlek & Çemberci, 2020; Mothe, Gertler, Landry, Niosi, & Wolfe, 2000). In our day and time, innovation is the main driving force for sustainable competitive advantage. Researchers and practitioners who are aware of the new economic revolution seek answers to the question of how to improve innovation performance. It is difficult to respond to this question in the light of the management knowledge of the

industrial period. In this book, the question above is answered with a model consisting of knowledge-centered organizational culture, knowledge-oriented high-performance human resources practices, and KM processes, and the model is tested on technology firms. Besides, researchers have called for inquiring the effect of human resources management practices, organizational culture, and KM on firm innovation (Gürlek & Çemberci, 2020; Martín-de Castro, Lopez-Saez, & Delgado-Verde, 2011; Sanz-Valle, Naranjo-Valencia, Jiménez-Jiménez, & Perez-Caballero, 2011). At the same time, this book takes into consideration those calls from the researchers. The theoretical model is presented in Fig. 1.1.

I argue that organizations should build knowledge-centered organizational culture before launching a knowledge initiative and that organizational culture should be the focus of KM. Organizations attempting to launch a knowledge initiative

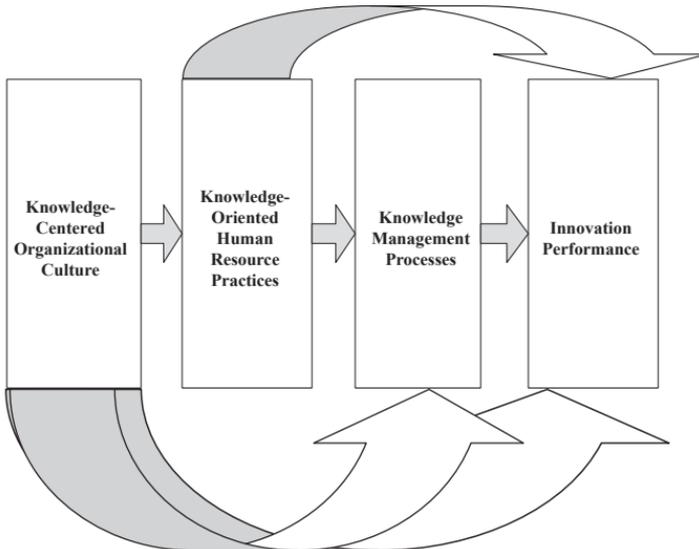


Fig. 1.1. Theoretical Model.

without cultural transformation will experience that the investment in KM will not provide any benefit (De Long & Fahey, 2000). For this reason, organizations in knowledge-intensive industries need to build a knowledge-centered organizational culture (Alavi & Leidner, 1999; De Long, 1997). Knowledge-centered organizational culture can guide managers and employees about human resource management (HRM) architecture, KM processes, and innovation practices (Walczak, 2005). The types of organizational culture characterized by traditional industrial economies may not meet the needs of the knowledge economy (Mabey, Kulich, & Lorenzi-Cioldi, 2012). The changing nature of organizational structures in the knowledge era requires the types of organizational culture to fit into the requirements of knowledge-intensive industries (Sun & Anderson, 2012). Therefore, the creation of context-specific culture types is essential for the long-term survival of firms. Knowledge-centered culture refers to values that reinforce and promote KM activities (Donate & Guadamillas, 2010). Knowledge-centered organizational culture includes “a set of organizational values, fundamental beliefs, norms, and social rules that serve as a common reference for employees while creating, sharing, and implementing knowledge” (Ferreira Peralta & Francisca Saldanha, 2014, p. 538). Knowledge-centered organizational culture, also called knowledge-friendly culture, is the basis for an effective KM (Davenport, De Long, & Beers, 1998). Despite the fact that knowledge-centered organizational culture is of vital importance for knowledge-based organizations, there exists a significant research gap on this matter (Gürlek & Çemberci, 2020).

I advocate that KM and HRM should be integrated. Recently, KM has become a central research field in the management literature. There is a growing interest in KM among researchers and practitioners (Edvardsson, 2006; Swart & Kinnie, 2013; Theriou & Chatzoglou, 2014). KM is

concerned with activities such as creating, sharing, and applying knowledge to defeat competitors in the competition battle (Edvardsson, 2008). The main driver of knowledge is the human being. For this reason, KM is contingent on human resources. It can even be said that “knowledge management is an evolved form of human resources management” (Yahya & Goh, 2002, p. 460).

Although the interest in KM has begun to appear prominently in the mid-1990s (Hislop, 2009), KM literature has often focused on technological matters and has neglected the role of human resources in KM (Hislop, 2003; Scarbrough, 2003). But nowadays, researchers endeavor more to integrate KM and human resources management (Ko & Ma, 2017; Mohammad Migdadi, 2009; Prieto Pastor, Perez Santana, & Martín Sierra, 2010). The integration of human resources management and KM is the design of HR practices that are compatible with KM (Lengnick-Hall & Lengnick-Hall, 2006). Researches have revealed that lack of integration between KM and human resources management leads to negative consequences (Currie & Kerrin, 2003; Oltra, 2005). For example, Currie and Kerrin (2003), in their research in the context of a pharmaceutical company, found that sales and marketing activities failed because HRM practices were not designed in accordance with the KM strategy.

Researchers have proposed knowledge-oriented high-performance HR practices to ensure integration between the KM and HR practices and to fulfill the strategic fit assumption of strategic HRM (Chiang & Shih, 2011; Chow & Gong, 2010; Chuang, Jackson, & Jiang, 2016; Inkinen, Kianto, & Vanhala, 2015). The logic underlying the high-performance HR practices is that the HR packages or bundles that incorporate HR practices that is aligned with each other improve organizational performance more than a single practice (Subramony, 2009). According to this logic,

internally consistent bundles of HR practices increase performance outcomes more than any individual practice does (Kehoe & Wright, 2013). Researchers have introduced different versions of high-performance HR practices. For example, researchers have introduced service-oriented high-performance HR practices for the service industry (Aryee, Walumbwa, Seidu, & Otaye, 2016; Gürlek, 2019), and innovation-oriented high-performance HR practices for the manufacturing industry (Agarwala, 2003; Ichniowski, Shaw, & Prennushi, 1997; Tannenbaum & Dupuree-Bruno, 1994). However, less attention has been paid to the knowledge-oriented version of the high-performance HR practices. Knowledge-oriented high-performance HR practices refer to “a system of internally coherent HR practices specifically designed to improve knowledge processes within an organization” (Kianto, Sáenz, & Aramburu, 2017, p. 12). Traditional recipes of high-performance HR practices are criticized for not covering knowledge processes (Minbaeva, Foss, & Snell, 2009). Firms in knowledge-intensive industries need to focus on knowledge-oriented HR practices rather than traditional HRM practices to enhance activities such as knowledge sharing, creation, and application (Chiang & Shih, 2011).

SHRM literature emphasizes that HR practices should be internally coherent and support each other (Boxall, 1996; Delery, 1998; Gürlek & Uygur, 2020; Kepes & Delery, 2007). Finding the most effective combination is both theoretically and statistically difficult (Gürlek, 2019; Murphy & Williams, 2010). In addition, there is no “clear consensus” on the “number” or types of practices that need to be included in the set of knowledge-oriented HR practices (Hartog & Verburg, 2004). Nevertheless, considering the industrial conditions, a bundle or set of HR practices close to the ideal can be designed. In the context of the current research, based on previous studies

(Andreeva, Vanhala, Sergeeva, Ritala, & Kianto, 2017; Chiang & Shih, 2011; Donate & Guadamillas, 2015; Inkinen et al., 2015), I design an internally consistent bundle of knowledge-oriented high-performance HR practices. This set or bundle consists of seven different practices: knowledge-oriented recruitment, knowledge-oriented-training, knowledge-oriented performance appraisal, knowledge-oriented compensation and reward, knowledge-oriented career system, knowledge-oriented work design, and knowledge-oriented work teams. Based on the internal fit and synergistic effect assumptions of SHRM (Delery & Doty, 1996), I claim that these HR practices will increase performance outcomes more than any individual practice when they are applied together.

HRM is closely associated with organizational culture. Organizational culture consistent with strategy and industry requirements is generally the key factor for success in many companies (Deal & Kennedy, 1982). For example, Gürlek and Tuna (2018) revealed that green organizational culture is a driver of environmental innovation and competitive advantage. Therefore, knowledge-centered organizational culture may facilitate the implementation of knowledge-oriented high-performance HR practices. On the other hand, knowledge-oriented HR architecture can increase the effectiveness of KM processes. KM includes the processes of knowledge acquisition, knowledge creation, knowledge sharing, and knowledge application and KM can be examined at both organizational and individual levels. In this study, knowledge acquisition, knowledge application, and knowledge sharing activities at the organizational level are conceptualized as the KM process (Byukusenge & Munene, 2017; Shamim, Cang, & Yu, 2019). KM process consists of three factors: acquisition, sharing, and application (Andreeva & Kianto, 2011; Darroch, 2003, 2005; Ferraresi, Quandt, dos Santos, & Frega, 2012; Gürlek & Çemberci, 2020). Knowledge acquisition refers to “acquiring

knowledge from the external environment and creating new knowledge based on existing knowledge within the organization” (Chen & Mohamed, 2010, p. 143). Knowledge sharing refers to a process in which knowledge is shared and ultimately causes to new understanding, idea, and knowledge (Valio Dominguez Gonzalez & Fernando Martins, 2014). Knowledge application refers to the “actual” implementation of knowledge acquired, created, and shared in the organization (Gold, Malhotra, & Segars, 2001; Gürlek & Çemberci, 2020). The key to competitive advantages is not knowledge itself but its application. The knowledge that is not put into practice does not create value for the organization. In other words, knowledge provides benefit when it is applied and used (Cepeda-Carrion, Martelo-Landroguez, Leal-Rodríguez, & Leal-Millán, 2017).

Knowledge-oriented practices of HRM can be the driving force behind success in KM processes. Knowledge-oriented HR practices may increase employees’ knowledge behaviors (Andreeva & Kianto, 2011), and thus, the effectiveness of management processes may increase. The HRM system plays an important role in shaping the knowledge process. When the content of HR practices is designed based on a knowledge-oriented perspective, employees may exhibit knowledge behaviors more (Fong, Ooi, Tan, Lee, & Yee-Loong Chong, 2011). For example, the inclusion of creativity, new ideas, and knowledge sharing into the performance appraisal criteria will increase the effectiveness of KM processes. Indeed, Lopez-Cabrerales, Pérez-Luño, and Cabrera (2009) found that the knowledge-oriented HRM system has a positive effect on knowledge-based outcomes. Therefore, knowledge-oriented HRM architecture can increase the effectiveness of KM. On the other hand, KM processes can also have a positive effect on innovation performance.

The knowledge-based view assumes that firms that effectively manage knowledge will exhibit relatively better

innovation performance than other firms (Grant, 1996). According to the knowledge-based view, a firm's innovation performance depends on its ability to acquire, utilize, share, and apply knowledge (Yli-Renko, Autio, & Sapienza, 2001). Innovation refers to the creation of new knowledge and ideas to develop commercial and viable solutions and the conversion of the existing knowledge or ideas into innovation within the firm (Du Plessis, 2007; Gürlek & Tuna, 2018). Nowadays, employees are not a passive actor of the production system, but rather a productive power that develops new and innovative ideas (Castells, 1996). Therefore, the capability of an organization to innovate depends on the effectiveness of KM (Carneiro, 2000). Effective KM can improve innovation performance by facilitating the creation, sharing, and application of knowledge needed in the innovation process (Chen & Huang, 2009).

The innovation lies at the root of economic analysis of Schumpeter (1942), who explains economic development with the term of creative destruction. Creative destruction represents “process of industrial mutation that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one” (Schumpeter, 1942, p. 83). The creative destruction approach emphasizes that the competitiveness of noninnovative firms and economies has decreased. According to the creative destruction approach, noninnovative firms face organizational collapse, while innovative firms become the driving force of economic progress (Gürlek & Tuna, 2018).

Schumpeter (1934), known as the godfather of innovation studies, proposed five types of innovation:

...new the introduction of a new products, the introduction of a new method of production (new processes), the opening of a new market, the