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Core competence: From a strategic human resource management perspective

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Core competence has become the prevailing term in strategic management (SM) and human resource management (HRM) literature. However, the exact meaning of the "core" term has been ambiguous to researchers, educators, and practitioners. This article addresses the interpretations of "core" in SM and HRM literature and adopts the Strategic Human Resource Management (SHRM) perspective to redefine core competence and human competence as organizational and individual capabilities that create organizational competitive advantage. We build a conceptual framework to show the relationship between core competence and human competence, and provide business and management implications.

Key words: Core competence, human competence, competitive advantage.

INTRODUCTION

Core competence has become a popular term in business discipline, however, the meaning of the "core" term is still unclear because it is loosely used in a variety of ways (Lahti, 1999). For example, strategic management (SM) scholars apply "core competence" to the organizational capabilities of a firm for competitive advantage, while Human Resource Management (HRM) scholars refer to "core competence" as human capabilities related to superior job performance. Therefore, the meaning of core competence remains ambiguous and confusing.

Unclear understandings of core competence have confused business researchers, practitioners, and educators, and have the potential to obstruct future research. The SM rendering of "core" represents "firm- specific" attributes in contrast to "generic" attributes by HRM. However,

in practice, the fallacy that "firm-specific" competitive advantage derives from "generic" competence exists. Several cases have encountered the controversy between perspective and approach (for example, analyzing core competence in adopting the SM perspective, but conducting a HRM approach). For example, Clardy (2008) questioned the effectiveness of traditional competence assessment techniques on organizational performance, which conducts a bottom-up approach to investigate a generic or universal set of behavioral characteristics in a job family across organizations. Such generic competences contribute to less than fifty percent of managerial effectiveness (Hamlin, 1990). These generic human characteristics provide less uniqueness for firms and can be appropriated and used by other firms (Clardy, 2008).

However, the SM and HRM perspectives on core competence are not exclusive. strategic human resource management (SHRM) synthesized the SM and HRM perspectives and redefined "core competence" and "human

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competence" as macro- and micro-level capabilities that collectively define competitive advantage for firms. Based on the SHRM perspective, this article argues that core competence and human competence are complementary in the way that core competence strategically directs human competence, which makes core competence "whole." This article begins by reviewing the concept of core competence in SM and HRM literature, analyzes the meaning of "core" competence in the aspects of benefits, approaches, and attributes. We propose a SHRM conceptual framework showing the interplay of core competence, human competence, organizational context, and competitive advantage. Finally, we suggest theoretical and business education implications.

LITERATURE REVIEW

Core competence from the strategic management perspective

During the 1980s and 1990s, firms increasingly confronted novel and unexpected external pressure and internal challenge (Drejer, 2002). To compete in flexible and prompt response and concentrate on customer demand, firms adopted the market-positioning approach of strategic management (Porter, 1980), which argues that sustained competitive advantage of firms derives from the product, production, and marketing posture relative to its competitors (Clardy, 2008). Strategic business units (SBUs), which focus on decentralization and independent management, were perceived as an effective program (Unland and Kleiner, 1996). However, an entirely "new competitive landscape" arose in the 1990s, in which technology rapidly altered the nature of competition (Bettis and Hitt, 1995). Technological life cycles in certain industries decreased, and customer awareness of product demand dramatically rose (Drejer, 2002). The market-positioning approach, which focuses more on analyzing external opportunity and threats in the competitive environment, cannot compete in a fiercely dynamic market (Drejer, 2002), therefore, scholars attempted to address organizational competitive advantage more from the perspective of the internal resources of firms, the so-called resource-based view (RBV).

Through observing the phenomenon of Japanese companies (for example, Sony, Honda, NEC, etc.) outperforming American companies across many industries, Prahalad and Hamel (1990) attributed the overwhelming success of Japanese companies to their internal sources, termed "core competence," rather than

to external sources. They explored core competence using comparative cases: NEC (Nippon Electric Corporation) versus GTE (General Telephone and Electronics Corporation). In the early 1980s, GTE was a major player in the information technology industry in the United States. In the late 1980s, due to lacking communication and effective integration and synergies between SBUs, the Japanese company, NEC surpassed GTE by coordinating and multiplying internal resources across individual businesses. Using these comparative case studies, Prahalad and Hamel (1990) argued giving precedence to "core competence" over SBUs, by focusing on the integration of resources and realizing potential synergies among SBUs. Therefore, the strategic focus has transferred from outside the organization to inside, especially on organizational capabilities. Core competence manifests the ability of an organization to advantageously integrate, reconfigure, gain, and release internal resources to match or even create market change, leading to organizational competitive advantage (Eisenhardt and Martin, 2000).

The development of core competence is central to organizational learning (Lei et al., 1996; Murray, 2003; Petts, 1997) and organizational culture (Barney, 1986; Håland and Tjora, 2006; Lawler, 1994). Instead of a static stock of knowledge (Simpson, 2002), core competence develops from "collective learning in the organization" (Prahalad and Hamel, 1990: 82) generating a set of problem-defining and problem-solving insights to create competitive advantage (Lei et al., 1996) and acting as a vehicle for SBUs to find common interests, problems, capabilities or opportunities (Javidan, 1998). Organizational culture undergoes change in the development of core competence. The values, beliefs, and norms of organizational culture make it possible to control the interactions of organizational members with external stakeholders and strategically guide their behaviors toward organizational goals (Chen and Chang, 2010).

Core competence from the HRM perspective

Core competence conceptualized in HRM has been termed "competence" without "core" (Clardy, 2008), an evolution that traces back to the American behavioral psychologists Robert White and David C. McClelland (Dubois and Rothwell, 2004). White (1959) introduced the term "competence" to describe those personality characteristics associated with superior performance and high motivation (Delamare Le Diest and Winterton, 2005). The behavioral psychology perspective was established

Table 1. Core Competence from strategic management and HRM perspective.

Perspective	Strategic management	HRM
Definition	Organizational capabilities that advantageously integrate, reconfigure, gain and release internal resources to match or even create market change and lead to organizational competitive advantage	A generic knowledge, motive, trait, self-image, social role, or skill of a person that is causally related to superior performance on a job
Level	Organizational	Individual
Benefit	Organizational performance	Job performance
Approach	Top-down	Bottom-up
Attribute	Firm-specific	Generic

by Harvard psychologist David McClelland (1973), raising the question about the reliability of intelligence and the aptitude test as a predictor of job success, and believing other personal characteristics predict performance more significantly than intelligence.

The insights of McClelland affected the competence modeling movement launched by McBer and Company and the American Management Association (AMA) in the late 1970s.

The AMA was the first study to define competence as the characteristics that underpin superior job performance by the Behavioral Event Interview *(BEI),* which investigated the differences between exemplary and superior performers (Rothwell and Lindholm, 1999). The AMA identified the psychological configuration of competence as "a generic knowledge, motive, trait, self-image, social role, or skill of a person that is causally related to superior performance on a job" (Hayes, 1979). Boyatzis (1982) and colleagues at McBer initiated competence modeling by studying over 2000 managers to derive the characteristics of managers relative to effective performance across management jobs and organizations. The definition and methodology of competence by the AMA and Boyatzis have widely affected the following theoretical developments and applications.

Spencer and Spencer (1993) matured the competence modeling work. Their investigation covers more than two hundred jobs, categorized by five job families, including technical/professional, salespeople, helping and human service workers, managers, and entrepreneurs. Querying superior performers among different levels of each job family. For example, the five main competence models of the database produces "generic competence models" by conducting the BEI to find similar behavioral patterns of managers include behaviors of impact and influence, achievement orientation, teamwork and cooperation,

analytical thinking, and initiative (Spencer and Spencer, 1993).

Under the philosophy of Spencer and Spencer (1993), Lahti (1999) proposed that "core competence" exists at the individual level and affects HRM. Such "core competence" models derived from a survey of superior job performers that demonstrated a generic or universal set of behavioral characteristics to accomplish similar job tasks, so these "generic" characteristics are deemed "core" in this job class (Clardy, 2008). Competence modeling underlying human characteristics rather than job elements is anticipated to become the basis of HRM functions such as recruitment and selection, compensation, performance appraisal, and training and development (Dubois and Rothwell, 2004; McLagan, 1980; Sanchez and Levine, 2009; Soderquist et al., 2010).

COMPARING THE PERSPECTIVES OF STRATEGIC MANAGEMENT AND HRM ON CORE COMPETENCE

According to the literature, SM and HRM respectively proposed the core competence term, however their definitions of core competence differ. Table 1 shows that SM and HRM define core competence as organization- and individual-level capabilities related to organizational competitive advantage and job performance. The following section further details the SM and HRM interpretations of "core" in aspects of benefits, approaches, and attributes (Table 1).

Benefits: Organizational competitive advantage versus job performance

Referring to the aforementioned definitions of core competence, "organizational competitive advantage" and

"job performance" are the benefits of core competence pursued by SM and HRM. As mentioned above, core competence in terms of SM means the capability of a firm effectively deploying its resources. The ambiguity of the action and result for deploying resources creates barriers for competitors to imitate, and thus builds the unique position and organizational competitive advantage of a firm in the market (Reed and Defillippi, 1990). Core competence in terms of HRM derives from job analysis, and identifying personal characteristics, mostly behaviorally described, related to superior job performance. In this way, employees can demonstrate competent behaviors or proficiently execute their tasks while they learn core competence derived from superior performers (Chen and Chang, 2010).

Approaches: Top-down versus bottom-up

The approach to assess core competence has been a controversial issue. SM and HRM conduct core competence through two different analytical approaches: a strategically oriented top-down approach, and an empirically oriented bottom-up approach (Capaldo et al., 2006; Schaper, 2004). The strategically oriented top-down approach from the SM perspective explains the development of core competence from the planning of strategic workshops organized by the top and upper management downward to all members of the organization (Schaper, 2004). This approach expects core competence to convey the organizational mission and strategic intent (including sense of direction, sense of discovery, and sense of destiny to all members) (Hamel and Prahalad, 1989), direct organizational members as to what needs to be done in the future (Cardy and Selvarajan, 2006), and explicate how to fulfill strategic goals and deploy organizational resources (Clardy, 2008; Lado and Wilson, 1994; Schaper, 2004).

Core competence in terms of HRM, derived from the philosophy of Spencer and Spencer, is an empirically oriented bottom-up approach. This approach surveys the characteristics of superior performers in certain job families and elicits a set of generic definitions and profiles of competence models. The bottom-up approach focuses on the actual state of relevant job competence (Schaper, 2004) and attempts to standardize the scales and profiles of competence models to apply across various contexts and work situations (Capaldo et al., 2006). However, in light of high survey costs, HRM practitioners apply the bottom-up approach in a deductive sense (Capaldo et al., 2006). That is, the competence models of firms are mainly adapted from competence codebooks (Spencer and Spencer's competence modeling).

Attributes: Firm-specific versus generic

According to the various definitions, benefits, and approaches of core competence, SM and HRM describe "core" competence essentially mean "firm-specific" and "generic." Because core competence in terms of SM is deeply embedded in organizational culture (Barney, 1986) and socially complex interactions (Barney, 1991), core competence demonstrates distinctive, value-creating, firm-specific, and inimitable characteristics in the competitive market (Capaldo et al., 2006). The four noted criteria, VRIS, valuable, rare, difficult to imitate, and difficult to substitute screen the capabilities qua core competence (Ambrosini and Bowman, 2009; Eisenhardt and Martin, 2000; Teece et al., 1997). While meeting the VRIS criteria, core competence can create competitive advantage for firms.

Labeling competence as "core" in terms of HRM lies in competence modeling garnered from the generic characteristics of superior workers who proficiently execute job tasks. Competence profiles represent a standard professional figure common to a set of performers in a job class and independent from the organizational context (Capaldo et al., 2006); competence can appear across organizations in terms of person-job match. Therefore, "core" in terms of HRM implies "generic" or "universal" behavioral characteristics.

A CONCEPTUAL FRAMEWORK OF THE RELATIONSHIPS AMONG HUMAN COMPETENCE, CORE COMPETENCE, AND COMPETITIVE ADVANTAGE

Although, SM and HRM treat "core" competence differently, SHRM synthesizes their insights to analyze macro- and micro-level capabilities. Under the motif of SHRM regarding how organizations can effectively utilize their human resources and how human resources can help organizations to create and sustain competitive advantage, SHRM scholars have redefined "core competence" at the organizational level as organizational capability and "human competence" at the individual level as people capability (Bergenhenegouwen et al., 1996; Cardy and Selvarajan, 2006; Garavan and McGuire, 2001; Lahti, 1999). Similar to the SM perspective, SHRM scholars treat "core" competence with "firm-specific" attributes to create competitive advantage for firms
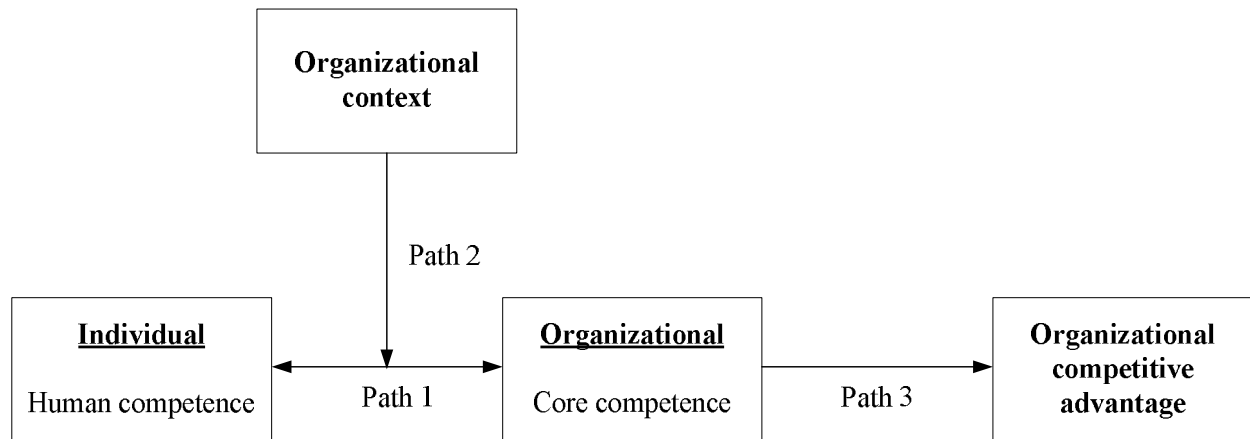
Figure 1. A conceptual framework of the relationships among human competence, core competence, and competitive advantage.

(Lopez-Cabrales et al., 2006, wherein human competence of intellectual capital was presume as the most critical element creating core competence (Chen and Chang, 2010). Figure 1 proposes a conceptual framework not only showing the relationship of core competence and human competence but also how these concepts interact within the organizational context and affect organizational competitive advantage.

Previous researches have discussed the symbiotic relationship between core competence and human competence; however few scholars have pointed out the form of this linkage (Chen and Chang, 2010). This article proposes that core competence reciprocally interacts with human competence, shown as Path 1 in Figure 1. However, the synthesis of core competence on the strategies, missions, culture, and future strategic directions of the organization directs the development of human competence, and requires personnel with certain characteristics to "make whole" or complement it (Garavan and McGuire, 2001; Lahti, 1999). Core competence is typically detached in its requirements of human competence, referring to the discrete dimensions of the professional requirements of knowledge, skills, and abilities (KSAs) (Cardy and Selvarajan, 2006; Tovey, 1994), to match candidates whose KSAs characteristics fit these requirements. Thus, core competence bears a similar imprint to the psychological characteristics of human competence (KSAs) (Chen and Chang, 2010). Human competence on behalf of this type of intellectual capital, unlike tangible assets, creates the inimitable characteristics of core competence which are the main source of competitive

advantage (Clardy, 2008).

Organizational contexts moderate core competence and human competence (shown as Path 2 in the conceptual model). The relationship between human competence and core competence manifests in a person-to-organization adjustment (Chen and Chang, 2010), achieved within certain organizational contexts created by organizational culture, vision, mission, strategy, and values (Bergenhenegouwen et al., 1996; Håland and Tjora, 2006; Lahti, 1999). These organizational contexts facilitate the relationship between human competence and organizational core competence to reach the same base (Lahti, 1999). Chen and Chang (2010) proposed that shared values, mutual trust, and mutual investment manifest the organizational base and facilitate all members of organizations to share the same mindset in understanding and reaching the goals of an organization (Ulrich and Lake, 1990).

Path 3 shows core competence as the "proxy variable" of competitive advantage (Lopez-Cabrales et al., 2006). Leonard-Barton (1992) and Teece et al. (1997) explained this relation. However, Lopez-Cabrales, and Valle and Herrero (2006) further presumed that core competence and human competence could collectively define organizational competitive advantage. This presumption describes human competence as the source of competitive advantage if managers pay attention to developing organizational core competence that aligns with, building, deploying, and renewing employee competence in ways that other organizations cannot easily imitate. Lopez-Cabrales et al. (2006) further suggested human

competence relating to core competence for reinforcing organizational culture, strategic vision, obtaining employee potential, innovation, quality orientation, and company-customer loyalty.

DISCUSSION

Core competence has become the "buzz" word commonly used by scholars and practitioners. However, the definition of "core" has been contentious. The literature has presented various interpretations of "core" from SM and HRM perspectives. This article arrays the nuance of these two perspectives on "core" in aspects of benefits, approaches, and attributes. In terms of SM, core competence is a "firm-specific" capability to create competitive advantage for firms through the top-down approach. In terms of HRM, core competence is "generic" characteristics of superior job performers across firms investigated through a bottom-up approach.

In addition to clarifying core competence in terms of SM and HRM, this paper contributes to the competence concept from the SHRM perspective by redefining organizational "core competence" as organizational capability and "human competence" at the individual level as people capability. The study proposes a SHRM conceptual framework, illustrating the relationships among concepts of core competence, human competence, organizational context, and competitive advantage. This framework highlights the role of core competence and human competence to access core competence in the SHRM literature in following discussions.

Core competence, in addition to being the "proxy variable" of competitive advantage (Lopez-Cabrales et al., 2006), plays a pivotal role in SHRM. Core competence, built based on the mission and strategies of the organization, strategically directs the development of human competence in the organization. Human competence "makes whole" or complements core competence, both collectively defining competitive advantages for firms. The more deeply human competence meshes into core competence, the greater the possibility to achieve competitive advantage.

Organizational contexts also facilitate the connection between core competence and human competence. Organizational contexts such as organizational culture, vision, strategy, and mission provide a conceptual bridge between micro and macro levels of analysis and facilitate a person-to-organization adjustment (Chen and Chang, 2010). These interactive contexts not only connect core competence and human competence and develop human competence as firm-specific, but also facilitate all members of organizations to share mindsets in understanding and reaching organizational goals (Ulrich and Lake, 1990).

Based on the SHRM perspective relating human competence to core competence, the conceptualization of human competence has changed from "job context" to "organizational context" and its attribute has changed from "generic" to "firm specific." Because past competence assessment in adoption of traditional job analysis cannot react to a dynamic environment (Clardy, 2008), SHRM scholars attempted to conceptualize human competence from the job context to the organizational context. As mentioned earlier, human competence conceptualizes within the organizational context and aligns with core competence to develop as firm specific. Human competence developed in the organizational context demonstrates that employees share the same mindsets with the organization (Ulrich and Lake, 1990), create tacit knowledge to carry out job tasks, and thus, build imitation barriers to competitors. This argument is based on person-organization fit, manifesting that human competence is a characteristic not only of a person but also of a context (Delamare Le Diest and Winterton, 2005). In this regard, human competence varies according to organizational context. Human competence was endowed with strategic status, vertically integrating organizational strategies with HRM and affecting organizational sustained competitive advantage (Cardy and Selvarajan, 2006; Dubois and Rothwell, 2004; Lawler, 1994; Shippmann et al., 2000).

Referring to the previous discussion of the relationship between core competence and human competence, this article proposes that the top-down approach is adequate to access core competence. Clardy (2008) argued that the bottom-up approach is similar to the traditional KSAs identification analysis, job analysis of a specific job or task by assessing individual characteristics in relation to that job, regardless of organizational context and the specific needs of a firm. Therefore, "core" competence derived from the bottom-up approach actually means "generic" competence, which contributes to limited organizational performance. According to the conceptual framework, core competence embedded in organizational contexts directs employees toward future goals and facilitates a shared mindset between organization and employees. Human competence develops as firm-specific, meshes into core competence, and thus creates competitive advantage. In this regard, the presumption that core competence directs the development of human competence suggests a top-down approach. Tovey's

(1994) strategic approach to competence assessment presents the top-down approach, starting from the strategic review, the strategic areas of competence (core competence), the identification of competence require-ments (human competence), the application of human resource activities, and finally the job and business performance.

Implications

The issue regarding what "core" exactly means for core competence has confused researchers and practitioners. This article addressed this problem by reviewing the evolution of the concept of core competence in literature. The study found that SM and HRM perspectives on the meaning of "core" can be explained in aspects of benefit (competitive advantage versus job performance), approach (top-down versus bottom-up), and attribute (firm-specific versus generic). By analyzing the literature, this clarification can help researchers and practitioners avoid problems such as analyzing core competence in adopting an SM perspective but conducting a bottom-up approach.

SHRM scholars applying the insights of SM and HRM can redefine "core competence" in the organizational level as organizational capability and "human compe-tence" in individual level as people capability. The SHRM perspective presumes that human competence should align to core competence and collectively define com-petitive advantages for firms. In this regard, this article proposed a SHRM conceptual framework, which might help managers and business students to understand the relationship among human competence, core competence, and competitive advantage. For example, instructors might use this model in conjunction with case studies to demonstrate how human competence interacts with core competence and how this interaction leads to a firm's competitive advantage.

Finally, this article also provides the basis for future theoretical and empirical research. Regarding the conceptual model of the relationships among human competence, core competence, organizational contexts and competitive advantage, few researchers (Lopez-Cabrales et al., 2006) have explored the interaction effect of human competence and core competence on organizational competitive advantage. Researchers have conducted fewer investigations exploring the moderate role of organizational contexts (for example, organiza-tional culture, vision, mission, strategy, and values) in this relationship. Because previous studies analyzing human competence of "generic" attribute by job-based approach,

the effectiveness of this approach has often been questioned since it suffers from several conceptual and practical limitations (Capaldo et al., 2006). As such, this article proposes that human competence be firm- specific, conceptualized in an organizational context rather than in a job context. In this regard, future research could propose a competence-based approach manifesting the firm-specific attribute of human competence.

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