THE PALGRAVE HANDBOOK OF KNOWLEDGE MANAGEMENT

Edited by Jawad Syed, Peter A. Murray, Donald Hislop and Yusra Mouzughi

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Introduction: Managing Knowledge in the Twenty-First Century

Jawad Syed, Peter A. Murray, Donald Hislop, and Yusra Mouzughi

The Historical, Social and Economic Context

The twentieth century was a period of great social, economic and political transformation. One of the most significant economic changes related to the growing importance and role of knowledge as a source of value for organizations. These developments have been such that the current century is arguably epitomized by a knowledge-based economy, where knowledge, information and ideas are the main source of economic growth (Cooke and Leydesdorff 2006). Due to this and other social and technological changes, such as advances and developments in computer and communication technologies, ongoing globalization, increased deregulation and so on, new patterns of work and business practices are being developed. Meanwhile, we are also deal-

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ing with new kinds of workers, with new and different skills and preferences. For example, owing to the rise of artificial intelligence, many traditional jobs, including those of managerial and professional workers, as well as manual workers, if they are not being eliminated, are being transformed into ones that require vastly different knowledge and experience to before (Arntz et al. 2016; Ford 2016; Minsky 2007; Susskind and Susskind 2015).

In view of rapid globalization, immigration and communication, the current era is characterized by change, not stability, and this reality confronts most organizations, societies and governments worldwide (Fuligni and Tsai 2015). The knowledge-based economy is reflected in an increasing emphasis on the dissemination and use of knowledge as a source of competitiveness for organizations and countries. This also relates to the issue of creativity. Robinson (2009) suggests that being creative is about making fresh connections so that we see things in new ways and from different perspectives. Particularly in the current digital era, there is a need for educational institutions and organizational structures capable of developing creative, innovative and problem-solving capacities which encourage interdisciplinarity and growth.

The Academic Domain of Knowledge Management

Since 1990s, knowledge management (KM) has emerged as a key discipline to explain how knowledge is created, developed, retained and applied in the workplace and how it enables organizational learning and innovation (Hislop 2010; Quintane et al. 2011; Soto-Acosta et al. 2014). In general, the literature treats KM as a set of practices related to the use of knowledge as a crucial factor to add or generate value (Cardoso et al. 2012; Mouzughi 2013).

It is now more than 20 years since interest in the topic of KM took off in the mid-1990s (Scarbrough and Swan 2001). The initial explosion of interest in the topic was argued by some to be indicative of it being a fad or fashion, with interest likely to not be sustainable in the long term (Hislop 2010). However, contemporary evidence suggests that this is not the case, that the topic is not a passing fad, and that interest in it has sustained itself consistently over the last two decades (Ragab and Arisha 2013; Serenko and Bontis 2013). Further, knowledge management (and the related topic of intellectual capital) has matured into a coherent academic discipline/domain. This is visible in various ways, such as in the number of annual conferences specifi-

cally examining KM-related issues, and also in the number of academic journals devoted to disseminating research on the area. Thus, there are currently about 20 specific journals exclusively covering the topics of knowledge management and intellectual capital.

While the field of KM shows evidence of developing into a coherent academic discipline, it is still relatively immature in this respect. First, it is still at pre-paradigmatic phase, with ongoing debate and a general lack of consensus on some core issues, such as the nature of worker's knowledge, how knowledge work and knowledge workers are conceptualized and so forth. Further, Serenko and Bontis' (2013) analysis suggests that the field of KM is progressing towards becoming what they categorize as a 'reference discipline', a discipline that has a strong theoretical and/or methodological impact on other fields. While KM is still a field which typically borrows, applies and develops concepts from other disciplines (such as management, psychology, information systems), there is increasing evidence that KM literature is being cited and utilized beyond the boundaries of its own discipline.

This Handbook illustrates the depth of research across disciplines. From a strategy perspective, in particular the micro-foundations literature (Barney and Felin 2013; Coff and Kryscynski 2011), scholars are increasingly becoming interested in how different subparts such as knowledge, skills, abilities and other characteristics, aggregate at the human capital resource (HCR) level (Ployhart and Moliterno 2011).

Several recent meta-reviews have called for more attention on the HCR as distinct from human capital (Ployhart et al. 2014; Nyberg et al. 2014). As part of intellectual capital, scholars are cognizant of the fact that human capital is a component of intellectual capital along with social capital and organization capital. However, recent reviews question whether there is much value in empirically examining human capital as an independent construct. Strategy scholars suggest that the complementarity and emergence of resources at the individual level makes it highly improbable that accurate measures can be obtained, such as the link between KSAOs (knowledge, skills and abilities and other skills) and performance in many prior studies. Instead, they indicate that multiple complementarities are required for complex tasks which are both causally related and interactive (Barney and Felin 2013; Nyberg et al. 2014), such that these resources aggregate at the unit level. Similarly, other strategy scholars point to the value of studying how knowledge accumulates to form dynamic capabilities (Eisenhardt and Martin 2000; Hsu and Wang 2012). Here, the emphasis shifts from only focusing on the HCR to understanding how dynamic capabilities are formed. Previous research suggests that as individual resources are aggregated up (Felin 2012), firms are able to build

on the level of embedded heterogeneity by turning multiple bundles of resources into dynamic capabilities (Barney and Felin 2013; Helfat 1997; Helfat and Peteraf 2003).

In this Handbook, the chapter by Murray explores in some detail many of these relationships, pointing to the value of many multidisciplinary approaches to intellectual capital. Finally, given that our focus in the Handbook is on exploring the theory–practice gap, a number of chapters explore the currency of high-performance work systems and the extent to which they support the transformation process from the HCR into valuable functional as well as use-able HR policies, with reference to many scholars (Boxall and Macky 2007; Boxall and Macky 2009; Jeong and Shin 2017). In analysing the contributions to KM from these and other disciplines, the Handbook addresses how these processes transform existing stocks of knowledge into new knowledge (Bontis et al. 2002; Lin 2007). However, as we note below, KM researchers have not always been explicit in translating theory to practice, to show how these links evolve.

One characteristic of literature in the KM field that appears to have declined over time is connections with, and impacts on, non-academic practitioners. One indicator of this is a decline in the number of non-academic authors of peer-reviewed KM publications (Serenko et al. 2010). This has led to some talking of a 'theory–practice gap' (Ragab and Arisha 2013), while Heisig et al. (2016) remark on the challenges that still remain in identifying the extent to which investments in KM have tangible and measurable impacts on business performance. This represents a challenge for the KM field, and is a topic that is developed more fully in the final chapter of this Handbook, which discusses (potential) future research directions that could be pursued.

Aims and Objectives of the Handbook of Knowledge Management

This Handbook brings together the latest original scholarship in the field of KM from a variety of disciplines. It provides conceptual and empirical studies from diverse geographical and organizational contexts and, in addition to classical or mainstream approaches, pays specific attention to non-mainstream and non-western approaches to knowledge and its management. The book addresses certain key areas that are relatively underexplored or underdeveloped in the field, such as the impact of KM on performance, the ethics of KM and sustainable KM.

Effective knowledge management is now recognized as an important source of competitive advantage and a key to organizational success. There are generally three core components of KM: people, processes and technology. Some KM approaches take an organizational focus in order to optimize organization design and workflows; some are techno-centric in their orientation, as a means to enhance knowledge integration and creation; some have an ecological focus, where the important aspects are related to people interaction, knowledge and environmental factors as a complex adaptive system similar to a natural ecosystem.

Despite an increasing interest in the competitive advantage that knowledge may provide for organizations and in the significance of knowledge workers and organizational competencies, it is a fact that the notion of knowledge is complex and its relevance to organization theory has been insufficiently developed (Blackler 1995). Approaches to knowledge and its management are also shaped by organizational and cultural contexts; hence, a universal definition may not be possible or appropriate.

This Handbook brings consists of up-to-date studies of the practical application of KM principles and practices as well as advances in KM theory and concepts, in order to catalyse more research in this area. Some of the unique features of the book are as follows: succinct introductions; authoritative reviews of literature and key theories and issues of KM; organizational examples; contextual information about company/industry or country (as appropriate); clear conclusions, and implications for theory and practice. Chapters have been written by well-known scholars, from a diverse range of academic disciplines and countries, reflecting the international and multidisciplinary nature of the topic.

Overall, this Handbook provides a valuable resource for scholars, practitioners and policy-makers involved in the study or/and operationalization of KM initiatives within and outside business organizations. It offers timely, international scholarship covering key topics, debates and issues in the field.

We are confident that the book will be a comprehensive reference work of value to anyone interested in the topic of knowledge management, including but not limited to academics, researchers, scholars, practitioners, managers and policy-makers working in various areas of KM such as management, HRM, technology, manufacturing, education, training, consultancy and public policy.

Structure and Content of the Handbook of Knowledge Management

The book is divided into three main parts: conceptual and theoretical foundations of knowledge management; knowledge management and boundary spanning; and knowledge management in practice. Part I focuses primarily on the conceptual foundations of the field, reviewing developments and debates related to core concepts. Part II gives space to KM activities in cross-boundary concepts, which are an increasingly common context for KM. Such contexts involve collaboration between people or groups with a separate sense of identity and distinctive knowledge bases, such as when collaborations span organizational, cultural, professional or language boundaries. While there are potentially significant benefits to collaborative KM activities in such contexts, the differences that exist between collaborators create challenges. Part III, the final section of the Handbook, has a central focus on the practical application and use of KM practices and concepts in a diverse array of organizational contexts. This part of the book is deliberately designed to be as significant in terms of size as the opening part, on KM concepts, in order to help address the theory–practice gap outlined earlier, and to highlight the potential practical value of the discipline.

It should be noted that while a couple of chapters in this book directly or indirectly deal with IT-related issues pertaining to knowledge management, we deliberately chose not to examine the role of IT in knowledge management activities in depth. This was because the relationship between IT and KM is so complex and extensive that there was insufficient space, even within a few chapters, to fully examine this topic adequately. Indicative of the extent and complexity of the relationship between IT and KM is that in 2016 and 2017, in the Journal of Knowledge Management, there were two separate special issues on the topic, containing more than 20 articles (with Volume 20, Issue 3 examining new ICT for knowledge management in organizations, and Volume 21, Issue 1 considering the relationship between big data and knowledge management). Part of the reason for the complexity of the relationship is the vast and heterogeneous range of technologies that can be utilized for managing knowledge. These include the employment of 'traditional' computer systems to create repositories for codified knowledge, the use of various IT systems, such as e-mail and video conferencing, to facilitate communication and informal knowledge-sharing, the use of various social media technologies (such as wikis) to facilitate the collaborative creation of knowledge resources, and the use of big data and data analytics to manage knowledge via

processes of data mining and analysis, to name but a few. The huge variety of technologies that can be utilized to help with the management of knowledge helps explain why there is such a diverse range of approaches via which information technology can be used to manage knowledge (Newell 2015). Thus, arguably, examining the relationship between IT and KM is something that is better addressed in a separate, specific book, where there would be adequate space to fully explore the topic.

Part I deals with conceptual and theoretical foundations in the field of knowledge management.

In their chapter, 'Critical evaluation of Nonaka's SECI model', Kahrens and Fruauff argue that the capability to create and utilize knowledge represent a company's sustainable competitive advantage. The authors note that organizational knowledge creation is the process of making available and amplifying knowledge created by individuals and connecting it with the KM system. The theory of organizational knowledge creation, first presented by Nonaka (1991), is a paradigm for managing the dynamic aspects of organizational knowledge creating processes. Its central theme is the socialization, externalization, combination and internalization (SECI) model as a knowledge creation process through a continuous dialogue between tacit and explicit knowledge. In their chapter, these authors offer a comprehensive introduction of Nonaka's SECI model as the core of his theory which remained relatively constant and unchanged, while Nonaka's knowledge creation theory has evolved. Furthermore, knowledge creation theory is explained while the SECI model is reviewed from several perspectives and critically evaluated regarding its practical implications.

In their chapter, 'Organizational learning and knowledge management: A prospective analysis based on the levels of consciousness', Chiva, Lapiedra, Alegre and Miralles propose to take into account the levels of consciousness which describe the different stages of human or social evolution. The authors argue that human beings and their social systems, like organizations, advance in stages, evolving by sudden transformations. Every stage represents a particular stadium with an increasing maturity, complexity and consciousness level. A level of consciousness represents a stadium in human and social evolution and implies a framework through which we interpret the world.

In her chapter, 'Knowledge management and unlearning/forgetting', Becker focuses on unlearning and argues that releasing prior knowledge, or at least acknowledging its presence and shortcomings, may hold the key to successful learning and KM, both at the individual and collective level. She clarifies the concept of unlearning and how it applies to individuals and organizations, describes the key theories and models that have been used to