Knowledge transfer and organizational performance and business process: past, present and future researches

Introduction

The purpose of this special issue is to provide a contribution to the increasing interest in knowledge transfer (KT) and organizational performance and business process. In this perspective, past, present and future issues discussing the relationships between the transferability of knowledge and company performance management and outcomes emerged. Thus, the aim of this special issue is to advance existing theories in the field of KT.

The increasing trend in studying KT started at the beginning of the twenty-first century. KT became the hottest topic for several disciplines among which business, management and accounting studies. Searching for KT on the Scopus database (www.scopus.com), results are very impressive and significant for the academic community and practitioners. Over 11,000 documents results are found in which more than 3,100 documents in the field of business, management and accounting studies.

Major contributions on KT (until the first 15 universities affiliation on Scopus) resulted from Europe, Asia and Australia. Additionally, identifying documents by countries, Scopus results highlight the prominence of USA and UK at the top of the classification. However, journals publishing on KT are generalist and specialist scientific journals. Additionally, a search in Google Scholar (June 2018) on KT reveals that over 500,000 documents exist, recognizing a high level of citations.

The relevance of knowledge in obtaining high and positive results in the company system has been analyzed from several perspectives in the international literature: the knowledge creation and transfer in and between organizations have been covered in several studies (Argote and Guo, 2016; Gil and Carrillo, 2016). Although positive results by KT are in the increasing competitive advantages of the firms and organizational performance and improvement of business performance, KT is not always without critical issues (Argote and Ingram, 2000). However, the current knowledge economy highlights the relevance of understanding if knowledge is transferable as well as which are the variables influencing organizational performance in all types of companies, including start-ups companies requiring new forms of financial funds (Lombardi et al., 2016).

Thus, KT into the organization and business processes is relevant to achieve high performance, innovation processes and competitive advantages. Organizational performance needs to be managed (Jones and Mahon, 2018; Lombardi et al., 2014) and monitored in order to control, address, communicate companies’ outcomes: the improvement of organizational performance derives also from sharing target knowledge. In this direction, the proposition of adequate methods and conceptual models is strategically relevant for management and organizational purposes, as they permit to draw positive outcomes in organizations and competitive business processes. Thus, the current scenario led to new advanced knowledge and modern companies became competitive on the market through the sectorial and specific knowledge, determining their success, total value and performance in the long term.

This special issue is the results of collaborative activities with several people. First, the author would like to thank Professor Majed Al-Mashari, the Chief Editor of the journal, for having accepted this special issue proposal on a thrilling and interesting topic. Second, the author would like to express gratitude to the editorial team of BPMJ. Third, the author would like to thank all the authors and reviewers involved in this special issue for their valuable contributions supporting the aim to advance knowledge in the field of KT.
Thus, this special issue is mainly directed to propose advances on which are organizational performance and business process’s main issues in the past, present and future perspectives influenced by KT. Contributions of this special issue answer some questions such as: “What is the influence and the role of knowledge in organizational performance and business process?” and/or “What are the connections between knowledge transfer and organizational performance and business process?” and/or “What conditions, factors and contexts help knowledge to be transferable, for contemporary companies?” Overall, I point out that papers of this special issue are theoretical and empirical studies of high quality. Adopting several methods (qualitative, quantitative or mixed) to develop studies of this special issue, the authors analyzed relevant issues of KT and organizational performance and business process.

In presenting this special issue, I have chosen a logical order of the papers starting from some theoretical models to sectorial-based analysis (e.g. education, healthcare, food). In doing so, the papers of this special issue included articles focused on several main issues connected to KT. The first three papers propose, respectively, the curve of knowledge as a conceptual model on KT (De Luca and Cano Rubio, 2019), the literature review on KT in inter-organizational partnerships (Milagres and Bucharth, 2019) and emerging issue of KT and organizational performance (Trequattrini et al., 2019).

Further papers investigated the impact of patenting on the performance of academic spin-off firms (Ferri et al., 2019), the role of cultural intelligence in KT process performance (Vlajcic et al., 2019), key factors promoting knowledge-intensive business processes (Aureli et al., 2019) and KT and open innovation in the healthcare ecosystems (Secundo et al., 2019). The last four papers analyzed patterns of knowledge dissemination on Lean in the Italian National Healthcare Sector (D’Andreamatteo et al., 2019), the role of relational capital (RC) in university (Paoloni et al., 2019), network rents and KT (Pellegrini et al., 2019) and the role of the entrepreneur in the KT process of a start-up enterprise (Cardoni et al., 2019). The next sections present a synopsis of these papers.

Synopsis of the papers
The first paper by De Luca and Cano Rubio (2019) presents the knowledge transfer curve (KTC) as theoretical model able to evaluate KT process on the basis of its speed rather than the content of the knowledge to be transferred. Thus, the authors attribute to KT a key role in a firm’s capability to compete in the business over time. De Luca and Cano Rubio (2019) point out that one of the most relevant problems in KT is related to the definition and control of the main variables able to give effectiveness and efficiency to the entire process in the business systems. Thus, in the paper by De Luca and Cano Rubio (2019), the maximization of the effectiveness and efficiency of the KT process derives from the content of knowledge to be transferred (the complexity, quality and quantity of the information transferred within the firm), and the speed of the KT process (the time in which the KT can be realized). In this way, the authors summarized the paradigm of the theoretical model KTC as “for a defined level of knowledge to be transferred, the higher the speed of the process is, the higher the efficiency and effectiveness of the entire knowledge transfer process will be” (De Luca and Cano Rubio, 2019). Thus, De Luca and Cano Rubio (2019) provide a theoretical model measuring the effectiveness and efficiency of the entire KT process based mainly on its speed for a defined level of knowledge to be transferred.

Milagres and Bucharth (2019) in their study analyze KT in inter-organizational partnership proposing a thrilling literature review in 2000–2017, collecting information from top 10 journals referring to the fields of strategy and innovation studies. The paper by Milagres and Bucharth (2019) proposes advances on KT starting from the concept of “knowledge” and proposing main factors influencing KT in inter-organizational partnership in the light of macro-environmental (e.g. industrial policy, macroeconomic policies, intellectual property regime), inter-organizational (e.g. cost-sharing and synergy-seeking
motives), organizational (e.g. capabilities, intangible resources, behavioral aspects and internal processes) and individual levels (e.g. motivation, emotions, learning behavior, resistance). Thus, an original perspective in the paper by Milagres and Buchar (2019) derives from the proposition of a novel theoretical framework of KT based on antecedents, process and outcomes. Milagres and Buchar (2019) introduce the KT evaluation issue and propose suggestions for practitioners referred to the environment development for learning in the inter-organizational partnership.

The paper by Trequattrini et al. (2019) deepens the emerging issue of KT and organizational performance in the football industry. The paper aims to study the role of manager transfers in achieving greater organizations’ performance identifying which conditions, factors and contexts help knowledge to be transferred and to contribute to the organizations’ success. Trequattrini et al. (2019) employ a qualitative comparative analysis to analyze 41 cases of coaches that managed clubs competing in the major international leagues in the 2014–2015 season, and that moved to a new club over the past five seasons. Thus, the paper by Trequattrini et al. (2019) is interesting for both the methodology employed and the results obtained. Indeed, the paper integrates the best features of the case-oriented and variable-oriented approaches to show the combinations of variables required to achieve the managers’ skills transferability and performance improvement. Interestingly, findings build on previous studies providing a new perspective on the topic. The paper could be a useful tool to football clubs to understand what configuration of conditions promotes new coaches’ integration and KT.

The paper by Ferri et al. (2019) analyses the interaction among two KT mechanisms-patents and academic spin-off investigating what extent patents – viewed as the incorporation of knowledge transferred by the parent university and academic founders – and what affect the performance of academic spin-offs. Ferri et al. (2019) propose data from 132 academic spin-offs of 67 Italian universities tested through panel data models. Findings by Ferri et al. (2019) support the KT literature along three main ways and provide reflections for future research. First, the study by Ferri et al. (2019) should inform the research agenda of KT scholars by suggesting the opportunity to analyze, in a combined way, two different, but also typical, mechanisms adopted by the university to transfer knowledge: patents and spin-offs. Second, the paper by Ferri et al. (2019) confirms the role of patenting processes as a transfer mechanism of explicit knowledge in academic spin-offs. Third, the authors add a brick to other studies on the trade-off between external knowledge access and internal knowledge protection. Thus, findings shed light on the “dark side” of patenting by providing insights to dissolve the dilemma of academic spin-off founders: the patenting process is a positive driver of spin-offs’ performance. However, the results also push to warn academic entrepreneurs.

The paper by Vlajcic et al. (2019) aims to discover which is the role of cultural intelligence in KT processes analyzing the influence of the geographical distance between headquarters and subsidiaries in MNCs. In this perspective, the tripartite literature review included in the paper by Vlajcic et al. (2019) (KT regarded as a business process; MNC, geographical distance and KT; cultural intelligence and expatriate managers) is directed support the aims of this research explaining interesting research hypothesis. Thus, Vlajcic et al. (2019) propose a relevant analysis of 103 senior expatriate managers from Croatia collecting data through questionnaires and testing results through PLS. The paper by Vlajcic et al. (2019) opens up new research paths revealing the influence of geographical distance between headquarters and subsidiaries, and cultural intelligence assumes a fundamental role in the KT process performance.

In the paper by Aureli et al. (2019), I retrieve an analysis exploring key factors improving knowledge-intensive business processes. Aureli et al. (2019) propose the formulation of creative solutions to management problems through the process of creative problem solving. The study by Aureli et al. (2019) suggests that a fruitful approach to investigate the process of creative problem solving is to focus on the factors that may support and improve
the process itself. Thus, Aureli et al. (2019) propose a research model to examine the impact of selected variables of a firm’s KM infrastructure on creative problem solving. Practical contributions by Aureli et al. (2019) suggest that managers who support a well-structured creative problem-solving process positively affect the quality of decisions and these positively impact competitive performance. Theoretical contributions by Aureli et al. (2019) support the idea that research on BPM can move away from its operational roots when focused on IT systems for process support and aimed to understand how to improve organizational efficiency and efficacy in manufacturing processes.

The conceptual paper by Secundo et al. (2019) proposes an interesting analysis of open innovation at the inter-organizational level in the healthcare ecosystem by adopting a narrative literature review approach. Particularly, Secundo et al. (2019) investigate which is the way to transfer knowledge and what is the flow of KT among key players such as regulators, providers, payers, suppliers, patients by healthcare system supporting open innovation processes. However, the paper by Secundo et al. (2019) provides an innovative and illuminating interpretative framework of KT in open innovation in healthcare ecosystems based on the players’ categories, the exploration and exploitation stages of innovation, KT and flows according to categories of players, the players’ motivations and position for open innovation. Thus, the paper by Secundo et al. (2019) provides to managers and policy makers a theoretical support in defining organizational models directed to support open innovation in healthcare ecosystems.

In the next paper by D’Andreamatteo et al. (2019), I retrieve an interesting managerial approach to improve existing healthcare processes. D’Andreamatteo et al. (2019) propose an exploration of patterns of dissemination of knowledge on Lean in the Italian National Healthcare Sector, proposing three cases of analysis in the private and public healthcare organizations. The paper by D’Andreamatteo et al. (2019) suggests a range of economic, coercive, mimetic and normative pressures (Di Maggio and Powell, 1983) spreading the implementation of this business process improvement strategy, also proposing how prominent key actors prompted the adoption of Lean. The contribution of the paper by D’Andreamatteo et al. (2019) in the understanding of the transfer of knowledge of Lean from other sectors is two-fold. First, the study explores an under-investigated field and answers to the call of Di Maggio and Powell (1991) for “expanded institutionalism,” highlighting patterns of isomorphic change in the healthcare sector. Further, it reveals the pivotal role played by individuals in the institutionalization process (Dacin, 1997). Managers and policy makers can benefit from the understanding of such dynamics as well as possible modes of implementation as stemmed from the three cases proposed by D’Andreamatteo et al. (2019).

The paper by Paoloni et al. (2019) is directed to show the relevance of RC in university organizations emphasizing how it contributes to the promotion and the effectiveness of the university third mission. The original case study proposed by Paoloni et al. (2019) permits to understand how a new research observatory from an Italian university enhances RC. Additionally, the paper by Paoloni et al. (2019) demonstrates that the creation of relational capital (RC) for the host university represents the result supporting the knowledge transition and transfer of the observatory’s promoters’ relationships. Thus, the main research contribution proposed by Paoloni et al. (2019) is directed to understand how these organizations foster the development of RC analyzing it as a dynamic “path model” and inviting scholars, managers and politicians involved in the higher education to gain a greater understanding of this relevant and innovative topic.

The next paper by Pellegrini et al. (2019) explores the knowledge recombination rents in terms of KT and combination within and across the firm portfolio of inter-organizational relationships. By proposing what is KT and relational rents, Pellegrini et al. (2019) assume “relational rents are typically conceptualized at the level of the dyad and focus on the idiosyncratic matching of jointly owned resources, shared capabilities and the coordinated...
efforts of both organizations within a given relationship” (Dyer and Singh, 1998; Lavie, 2006). However, the authors propose both theoretical and practical contributions. First, Pellegrini et al. (2019) provide a theoretical holistic framework supporting knowledge recombination within the firm portfolio of relationships. Second, the authors recognize the holistic framework as “easy to use” tool composed of seven propositions (internal and external fits) supporting the strategic planning process by relationship managers.

The paper by Cardoni et al. (2019) proposes the analysis of the KT process in a craft brewery start-up. Cardoni et al. (2019) aim to identify the relevant knowledge and the transfer steps that led to successful results, investigating the role played by the entrepreneur in this process. Thus, framing the analysis on major literature on knowledge management and KT for SMEs, Cardoni et al. (2019) adopts the Liyanage et al. (2009) analytical approach to interpreting the KT as a social and interactive process based on several components and steps that have to be carefully disaggregated and managed. In the paper by Cardoni et al. (2019), I retrieve the case study of a craft brewery that in few times has achieved remarkable results in terms of turnover, customers and production capacity. Through an interview method, Cardoni et al. (2019) represents which are sources or receivers of the relevant knowledge. The paper by Cardoni et al. (2019) proposes that the right process management of KT is fundamental for the success of the company start-up, requiring the selection of forms of relevant knowledge, identifying the appropriate source(s)/receiver(s) and coordinating the process interaction. Thus, I retain results by Cardoni et al. (2019), which are useful to show the relevant role of the entrepreneur who acquires knowledge from the external sources and transfer knowledge within the business organization, acting as a passionate knowledge broker. However, the authors argue that, in the growth phase, the role of the entrepreneur must change becoming a controller of the organizational learning process.

The future of KT and organizational performance and business process’s studies

I would like to conclude my viewpoint reflecting on the aims and objectives of this special issue in light of previous valuable contributions by scholars of several countries. Thus, the KT topic and main connected issues are receiving great attention in the worldwide context referring also to several economic fields. However, many issues related to KT and organizational performance and business process remain to be resolved, such as the thorny problem of KT assessment and valuation.

Summarizing results of this special issue’s contributions, I would like to point out the relevance of KT for each type of organization starting from the role of the entrepreneur (Cardoni et al., 2019) in promoting KT and high organizational performance and continuing to the internal role of cultural intelligence in KT process performance (Caputo et al., 2019). Emerging issues of KT and organizational performance are analyzed in some relevant fields, such as football industry (Trequattrini et al., 2019), healthcare sector (D’Andreamatteo et al., 2019) and university system (Paoloni et al., 2019). Innovative models supporting KT are directed to study the curve of knowledge (De Luca and Cano Rubio, 2019) and knowledge recombination rents (Pellegrini et al., 2019).

If, on one hand, the literature review on KT in inter-organizational partnerships (Milagres and Bucharth, 2019) and key factors promoting knowledge-intensive business processes (Aureli et al., 2019) appears very useful to show the way in this issue, then, on the other hand, some topics such KT, patents and academic spin-off (Ferri et al., 2019) and KT and open innovation (Secundo et al., 2019) are hugging each other, proposing interesting insights.

Advances from original contributions of this special issue make me think about what is the future of KT organizational performance and business process’s research. Although many issues remain open and unexplored, I retain the future of KT and organizational
performance and business process’s research may be also directed to investigate promising and thrilling issues in the Internet of Things (IoT), Artificial Intelligence, Big Data, Analytics, Cyber-security, Simulations and Digital Integrations and overall Industry 4.0 environments (Bienhaus and Haddud, 2018; Müller et al., 2018; Schneider, 2018).

For example, the investigation of KT in the field of IoT seems to pervade all economic fields: the design of greenhouse monitoring system based on IoT (SSSIT, 2013), the Brain–Computer Interface system for quadriplegic patients (Kanagasabai et al., 2017), IoT for Supply Chain Management (Gustafson-Pearce and Grant, 2017), and smart and connected machines and products for agricultural sector and all economic sectors adopting IoT (Kellmereit and Obodovski, 2013; Porter and Heppelmann, 2014; Pye, 2014; Rifkin, 2014). Thus, the IoT is “a dynamic and global Internet-based architecture. It is based on standard communication protocols and has a self-configuring capability, with physical and virtual things having identities and being integrated within the information network (Sundmaeker et al., 2010). The IoT is a vision of the future of Internet that combines communication internet, energy internet and logistics internet (Rifkin, 2014)” (Trequattrini et al., 2016).

At this stage, there are few studies (source: Scopus, June 2018) in the field of business, management and accounting analyzing these innovative research perspectives connecting KT and IoT, Artificial Intelligence, Big Data, Analytics, Cyber-security, Simulations and Digital Integrations and overall Industry 4.0 environments. Additionally, privacy and data protection issues within the context of Industry 4.0 deserve a great attention by contemporary companies deputed to close decision-making processes (Lombardi et al., 2014) on which are their smart solutions by Industry 4.0 as well as their intangible assets (Cuozzo et al., 2017; Lombardi and Dumay, 2017) to compete in the worldwide scenario. Thus, the future research seems directed to discover these interesting streams of Industry 4.0 connected to KT issues through theoretical and practical forthcoming contributions, supporting new challenges of all companies.

Rosa Lombardi

Department of Law and Economics of Productive Activities,
Sapienza University of Rome, Rome, Italy

References


**Further reading**