Revealing Trends in Knowledge Management Research: From 2010 to 2015

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ABSTRACT

The purpose of this research is to develop a list of Knowledge Management (KM) citation classics published in peer-reviewed journals and to analyze the key attributes and characteristics of the selected articles in order to understand the evolution and the current state of the KM discipline. The previous investigations into the evolution of the KM discipline, such as Serenko and Dumay (2015a,b), has been enlightened the KM discipline between 1997 and 2009. Following the studies of Serenko and Dumay (2015a), this study aims to answer the research questions about "what are the attributes of KM citation classics after 2009?" and update the KM citation classics. A review of the literature from 2010 through 2015 served as clarifying the current KM research trends. This study also serves as a resource for future study by shedding light on variations across publications years, research methods, article themes, theories used within selected articles, and contribution of different authors and countries. For this, the most cited 109 articles were selected from peer-reviewed journals according to their citation impact generated by Google Scholar. Specifically, the results of the study reveal scholars from Taiwan and United States have made the most significant impact on the development of the KM discipline. The empirical research methods has been increase during the investigation period.

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1. Introduction

The concept of KM is incrementally gaining importance in the field of business management, which is in parallel with the rapid change in the competitive environment (Chauvel and Despres, 2002). In addition, thorough literature review of KM concept has revealed that there has been a significant increase in the research on the relevant concept (Dwivedi et al., 2011). Despite the popularity of KM, there isn't one simple definition available in the literature (Yahyapour, Shamizanjani and Mosakhani, 2015). According to Stevens (2010), KM has been used across various fields and has been subjected to several different interpretations and meanings. von Krogh (1998) defines KM as identifying and leveraging the collective knowledge in an organization to help the competitiveness. KM refers "to the process in which organizations assess the data and information that exist within them, and is a response to the concern that people must be able to translate their learning into usable knowledge" (Aggestam, 2015, p. 296). McInerney (2002) defines KM as "an effort to increase useful knowledge within the organization. Ways to do this include encouraging communication, offering opportunities to learn, and promoting the sharing of appropriate knowledge artifacts" (p. 1014). Gephart et al. (1996) state that KM is related with the process of increasing organizations' performance and/or effectiveness by designing and implementing tools, process, systems, structures, and cultures to improve the creation, sharing and use of knowledge. Due to the effect of KM on organizational performance and/or effectiveness, it is crucial to have a clear understanding of the potential sources and outcomes of KM (Anantatmula, 2007; Yahyapour, Shamizanjani and Mosakhani, 2015). An investment in KM researches is intended to improve organizational performance; therefore, it is crucial to have a clear understanding of the potential outcomes and benefits of KM (Anantatmula, 2007; Yahyapour, Shamizanjani and Mosakhani, 2015). An inadequate understanding of KM researches might be an important barrier to implementation of KM (Kale and Karaman, 2011).

KM researches are related with various concepts, such as performance, learning and culture. Not only the researches about KM, but also the definitions of KM emphasize that KM has established itself as an academic discipline. In line with the extensive researches within the fields of KM, Heisig (2015) claimed that the KM field is multidisciplinary, including management information systems, information technology (IT), information science, human resources, strategy, marketing, organizational behavior, and sociology. In addition, Serenko and Dumay (2015a, p. 415) argue that "the KM discipline is at the pre-science stage, but it has been progressing towards normal science and academic maturity". Serenko and Dumay (2015b) also contention that KM research is still "embryonic" stage and there is still ample room to explore KM discipline. Therefore, understanding the KM research trends is essential for the contribution to the development of KM discipline. Accordingly, the purpose of this study is to update a list of citation classics about knowledge management (KM) and critically analyze how they have been utilized. The data set of this study is based on examining KM papers published in peer-reviewed journals from the years 2010 to 2015 in order to better understand the evolution and identity of KM discipline. Based on these arguments, the following research question is formulated:

RQ1: What are the current KM research trends as evidence by KM citation classics?

The rest of this article is organized as follows: Section 2 focuses on the theoretical background. Subsequently, the methodology and the results are presented. The last section reveals the conclusions as well as the limitations.

2. Theoretical Background

Measuring the research quality of academic publications and/or journals are becoming increasingly important (Mingers and Burrell, 2006; Hung and Wang, 2010). The citation data of academic publication is an important measure of the quality of research, thereby investigating the citation and the citation behavior require attention in scientific research (Santhanakarthikeyan et al, 1960; Cole and Cole, 1971; Narin, 1976; Seng and Willett, 1995; Nadarajah and Kotz, 2007). Citation is defined as the listing of a previously published article in the reference section of a current work (Craig et al., 2007) and represents the impact of scholars' research (Garfield, 1973). Accordingly, Serenko and Dumay (2015a) asserted that citations are an irrevocable part of scientific research in all disciplines.

The normative theory and the social constructivist view are the two competing theories of citation behavior. Both of them embodied in broader theories of science and generally explain the citing behavior (Small, 1998, 2004; Bornmann and Daniel, 2008; Serenko and Dumay, 2015a). Briefly, the normative theory, following Robert K. Merton's sociological theory of science

(Merton, 1973), states that scientists give credit to colleagues whose work they use by citing that work, thus citations represent intellectual or cognitive influence on scientific work (Small, 1998; Sivadas and Johnson, 2005; Bornmann and Daniel, 2008). In line with the normative theory of citation, citations indicate paths of knowledge transfer across researchers, journals, and disciplines (Sivadas and Johnson, 2005) and authors cite the works they most heavily use in their research (Serenko and Dumay, 2015a). Merton (1968, p. 622) also claimed that:

the reference serves both instrumental and symbolic functions in the transmission and enlargement of knowledge. Instrumentally, it tells us of work we may not have known before, some of which may hold further interest for us; symbolically, it registers in the enduring archives the intellectual property of the acknowledged source by providing a pellet of peer recognition of the knowledge claim, accepted or expressly rejected, that was made in that source.

The social constructivist view states that "scientific knowledge is socially constructed through the manipulation of political and financial resources and the use of rhetorical devices" (Baldi, 1998, p. 830). The social constructivists believe that the phenomenon of citation is related with the persuasion that is the major motivation for citing rather than giving credit (MacRoberts and MacRoberts, 1987; Nicolaisen, 2007). According to this view, successful scientists are those who persuade readers of the goodness of their claims (Latour and Woolgar, 1986; Nicolaisen, 2007). The social constructivist view is contrary to the normative theory of citing, has been much influenced by Gilbert's (1977, pp. 115-116) work, in which he claimed that:

A scientist who has obtained results which he believes to be true and important has to persuade the scientific community (or, more precisely, certain parts of that community) to share his opinions of the value of his work ... Accordingly, authors typically show how the results of their work represent an advance on previous research; they relate their particular findings to the current literature of their field; and they provide evidence and argument to persuade their audience that their work has not been vitiated by error, that appropriate and adequate techniques and theories have been employed, and that alternative, contradictory hypotheses have been examined and rejected.

Case and Miller (2011, p. 421) noted that some authors may cite documents which are generally relevant to their topic. In particular, authors cite an article which provides useful background information, and which acknowledges intellectual precedents (i.e., a normative theory of citation) (Case and Miller, 2011). Case and Miller (2011, p. 421) also pointed out that the other reason of citing another document is "guided by self-interest (e.g., Leopold, 1973), a tendency to cite documents supportive of their own conclusions (Ziman, 1968), and written by noted authorities (Kaplan, 1965)—a "persuasive" citation strategy (Gilbert, 1977)." Additionally, empirical evidence of the validity of these two theoretical approaches were undertaken by several researchers (e.g., Baldi, 1998; Stewart, 1983, 1990; White, 2004). The results of Baldi's (1998) study demonstrated that the cognitive content and quality of the article significantly affect the probability of citations (Baldi, 1998). In addition, the studies of Baldi (1998) and Stewart (1983, 1990) provided no support for citations are rhetorical tools of persuasion. White (2004) concluded, "the results are better explained by Robert K. Merton's norm of universalism, which holds that citers are rewarding use of relevant intellectual property, than by the constructivists' particularism, which holds that citers are trying to persuade through manipulative rhetoric" (White, 2004, p. 93). Cronin (2005) argued that the results of empirical studies identify that authors cite the others' works in agreement with normative theory of citation, in which citations perform a mutually intelligible communicative function. Robert van Braam (1991) had also demonstrated that the most important reason for citing is the operational information. Over the years, the issue of why authors cite one another has been studied and a variety of reasons for citation have been suggested by scholars (Case and Miller, 2011; Serenko and Dumay, 2015a). The following reasons for why authors cite one another are listed at below (Serenko and Dumay, 2015a, p. 404):

- providing historical background;
- describing previous findings;
- defining constructs, terms and concepts;
- developing theoretical arguments;
- paying due respect to the originators of classic or seminal studies;
- tracing the development of ideas over time;
- presenting alternative viewpoints;

- demonstrating knowledge of the literature to justify one's competence in the area of study;

- providing background reading;

- correct one's own work or the work of others;

- acknowledging the source of data;

- justifying methodology;

- drawing attention to the important yet unnoticed work;

- bridging a gap between different disciplines;

- identifying knowledge gaps;

- support conclusions;

- establishing legitimacy of the line of research;

- directing a reader to other sources to keep argument on track and avoid excessive length;

- critiquing, dispute or disclaim the works of others; and

- proposing avenues for future research.

Information about articles and the citations are collected in databases known as citation indexes (Craig et al, 2007). Reed (1995) defined a citation index as "an alphabetic list, by first author, of items cited in references from footnotes or bibliographies of a source article or document" (p. 503). When Eugene Garfield proposed citation indexing in 1955, systematic analyses with regard to research trends and the influence of scholarly works first became available (Reed, 1995; Uzunboylu, Eriş and Ozcinar, 2011). In particular, the use of citation analysis as a research tool began with the introduction of the Social Sciences Citation Index (SSCI), the Science Citation Index-Expanded (SCIE), the Arts and Humanities Citation Index (AHCI), and the Institute for Scientific Information (now Thomson Reuters) (Reed, 1995; Uzunboylu, Eriş and Ozcinar, 2011). Citation analysis of published articles in peer-reviewed journals has been used in the natural and social sciences for such purposes as investigating the research contributions of individuals, institutions and professional journals (Brown and Gardner; 1985; Uzunboylu, Eriş and Ozcinar, 2011). Citation analysis has been also applied to many research issues, including a particular subject (Dubin, Häfner and Arndt, 1993; Criscuolo, Narula and Verspagen, 2005), particular institution (Okiy, 2003), professional discipline (Kaplan, Mysiw and Pease, 1992), country (Camí et al, 197), journal title (Johnson and Wolinsky, 1990; Holsapple et al., 1993; Baumgartner and Pieters, 2003), medical decision making (Beck, Pyle and Lusted, 1984; Pyle, Lobel and Beck, 1988), comparisons of research output (Stossel and Stossel, 1990), impact of research funds (Borkowski, Berman and Moore, 1992), influence of new and original ideas on a discipline (Davis and Cunningham, 1990), most-cited titles from a specified journal title (Norris, 1989), most-cited journal titles or journal impact (Garfield, 1986), and most-cited author or author impact (Dixon, 1990). According to Crag et al. (2007), citation analysis is a core tool in the research discipline known as bibliometrics, defined as the quantitative analysis of the units of scientific communication (e.g. articles, book chapters, etc.) and the citations that connect them. Additionally, Leydesdorff (1998) pointed out that citation analysis has been a formative instrument of scientometrics as a subject of study for several decades. Hood and Wilson (2001) carried out a study pertaining to the literature of the terms of bibliometrics and scientometrics. The study had been asserted that these terms are closely related in which directly measuring knowledge. Sengupta (1992) argued that both terms are analogous rather than synonymous. Bibliometrics is the quantitative study of literatures as they are reflected in bibliographies (White and McCain, 1989; Gibson, Kehoe and Lee, 1994). Bibliometrics is also defined as "the organization, classification and quantitative evaluation of publication pattern of all macro and micro communications along with their authorship by mathematical and statistical calculus" (Sengupta 1990, as cited in Hazarika, Goswami and Das, 2003, p. 213). These definitions show some overlap with scientometrics. Scientometrics is defined as the measurement and analysis of science, as well as the application of bibliometric techniques in science to measure scientific publications (Behrens and Luksch, 2006; Vitzthum et al., 2010). van Meter and Turner (1994, p. 257) defined scientometrics as "the application of statistical methods to the study of quantitative economic, social, and bibliographic data concerning scientific development or scientific innovation". These definitions indicate that these terms have a considerable overlap (Sengupta, 1992; Hood and Wilson, 2001; Björneborn and Ingwersen, 2004). As illustrated in Figure 1, the relationship among scientometrics, bibliometrics and citation analysis, as well as either overlapping or differentiation of these terms can be seen. Olijnyk (2014) suggested that scientometrics uses bibliometric and other data to investigate the structure and behavior of science, however bibliometrics need not focus on analysis of science. Likewise, scientometrics does not have to use bibliometric data in its methodology.

Figure 1: An Illustration of the Relationship among Scientometrics, Bibliometrics and Citation Analysis. Reprinted from *Information Security: A Scientometric Study of the Profile, Structure, and Dynamics of an Emerging Scholarly Specialty* (Doctoral Dissertation), by Olijnyk, Nicholas Victor, 2014, p. 16.
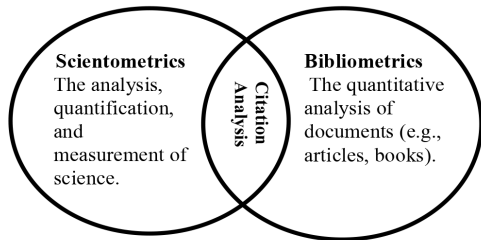
Scientometric studies are important in KM literature because these studies might support academic knowledge dissemination in the KM discipline with a realistic, valid description of the field to assist them in their decision-making and help them to adjust their actions in various areas, such as to measure, classify, and describe the output of scientific literature, to understand the dissemination of knowledge, to identify the theoretical and practical impact of academic studies, to comprehend the behavior of individual researchers, research teams, and institutions, to explore the nature of scientific outlets, to determine the most efficient allocation of resources to maximize research output and impact, as well as to propose recommendations for research policy development (Straub, 2006; Serenko and Dumay, 2015a).

3. Methodology

The research presented in this article employed a combination of bibliometric analysis and scientometric analysis, as a means of categorizing accumulated knowledge on KM research. The author conducts a search of the literature in order to identify the KM citation classics. The articles that were used in this study and their corresponding numbers of citations were extracted from peer-reviewed journals between 2010 and 2015. This time period was chosen because contemporary KM studies represent the most updated research on the KM fields. The other reason to choose that time period is to update the study of Serenko and Dumay (2015a). In Serenko and Dumay's (2015a) study, 100 citation classics were identified from seven KM-centric journals. However, in the current study, the articles were selected from peer-review journals in both KM-centric and non-KM-centric journals. The reason, to select the articles from peer-review journals in both KM-centric and non-KM-centric journals, is that KM is a multidisciplinary

field drawing from many subject areas and various studies were done by many scholars in different domain in the past years (Girard and Girard, 2015). Additionally, Serenko and Bontis (2013) argue that "peer-reviewed academic journals occupy a leading position in terms of credibility, acceptance, influence, and impact on authors' careers" (p. 307). Peer-review journals also refer to the most effective and efficient tool for the dissemination of academic discoveries (Serenko and Bontis, 2013).

Citation data in this study was obtained from Google Scholar as of September 20, 2016 by using Harzing's Publish or Perish software tool. Serenko and Dumay (2015a) advice to use Harzing's Publish or Perish software tool for obtaining citation data in that Google Scholar (similar to other citation indices) contains occasional duplicate or erroneous data.

KM was entered into the "the Phrase" field and check the "title words only" field of the Harzing's Publish or Perish software tool. Years were entered as between 2010 and 2015 in to the "Year of publication between" field. All disciplines were included (i.e. all boxes that restrict the results to particular scholarly disciplines were checked). The "Lookup Direct" function was employed to retrieve the latest results directly from Google Scholar. After articles and their corresponding numbers of citations were extracted from peer-reviewed journal by using Harzing's Publish or Perish software tool, the dataset was manually reviewed and the minimum cut-off citation count for citation classics was taken 50 as recommended by Garfield (1989, as cited in Serenko and Dumay, 2015a). In the present study, 109 articles using Google Scholar citation counts, were obtained. After the dataset was developed, 10 percentage of the dataset was proofread by one independent researcher (in order to check the author consistency). The author double checked the dataset to fix the minor mistakes and coded the articles. In the next stage, the collected data were analyzed and systematized by sorting, screening, summing, sub-totaling and ranking to identify patterns from the articles.

4. Results

Citation data was analyzed to identify the attributes of KM citation classics, such as the major publications, articles by year, research methods used, article theme, theories applied and scholars.

As demonstrated in Figure 2, the number of publications decreases with a very slow rate from 2010 to 2011, but there is a sudden significant decrease after 2011. This is

because the minimum cut-off citation count for citation classics was taken 50 and the older articles have longer period of time to be cited. Despite of the shorter period of time, newer articles have significant citations (i.e., considering that 32 articles appear after 2011, which is approximately 29% of entire sample).

Figure 2: Articles by Year
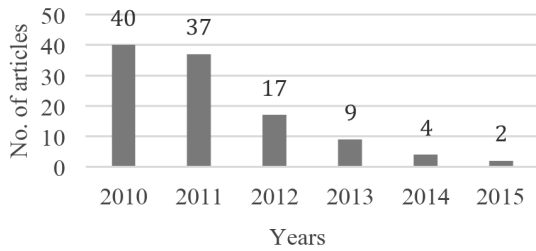
To investigate the trend of research methods of KM publications, Table 1 had been prepared to show the number of articles of the related research methods. 17 studies used multiple research methods; hence, the total of Table I exceeds 109. As shown in Table 1, survey is most prevalent research method followed by other qualitative (ethnography, focus group, interpretive study, etc.) and literature review. When the results of research methods are compared with the results reported by Serenko and Dumay's (2015a) study, there is a significant surge in the survey research method between 2010 and 2015.

Table 1: Research Methods Used

Research Methods	No. of Articles
Survey	50
Other qualitative	27
Literature review	21
Interview	10
Data mining	8
Case study	7
Action research	1
Meta-analysis	1
Modeling tools	2
Viewpoint	1
Total	128

The results presented in Figure 3 reveal that empirical research method represents the greatest percentage of citation classics articles from 2010 to 2014. Empirical research method is higher than literature review and viewpoint methods, which are the normative research methods. These results also support the study of Serenko and Dumay (2015a), since empirical research methods had higher percentage than normative research methods after 2007. Therefore, the trend over the last 10 years has a steady increase in empirical research methods, while normative research methods have declined. It is encouraging to see conversion of KM theories into practice. Nevertheless, there is a danger of over-dependence on empirical studies unsupported by theoretical underpinning (Guthrie, Ricceri and Dumay, 2012).

Figure 3: Percentage of Empirical Versus Normative Citation Classics in KM
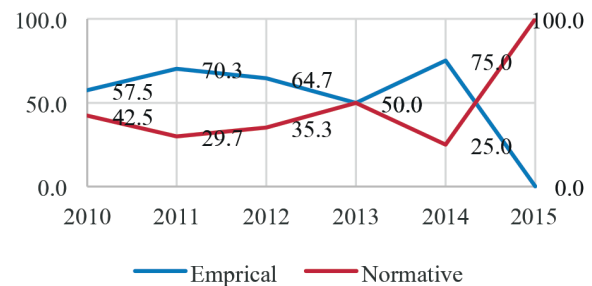
Further, the articles have been classified based on the article theme. As shown in Figure 4 (see page 10), performance is most predominant article theme, followed by IT. Table 2 also shows that, six dominant article themes are performance, IT, innovation, KM process, literature review (including bibliometrics and scientometrics) and organizational learning from 2010 to 2015. As demonstrated in Figure 5, there is significant decline in the theme of innovation after 2010. The themes of performance and KM process have a significant decrease after 2011. The themes of organizational learning and literature review are almost at the same level between 2010 and 2015. Interestingly, performance and organizational learning weren't in Serenko and Dumay's (2015a) list of article theme before 2010.
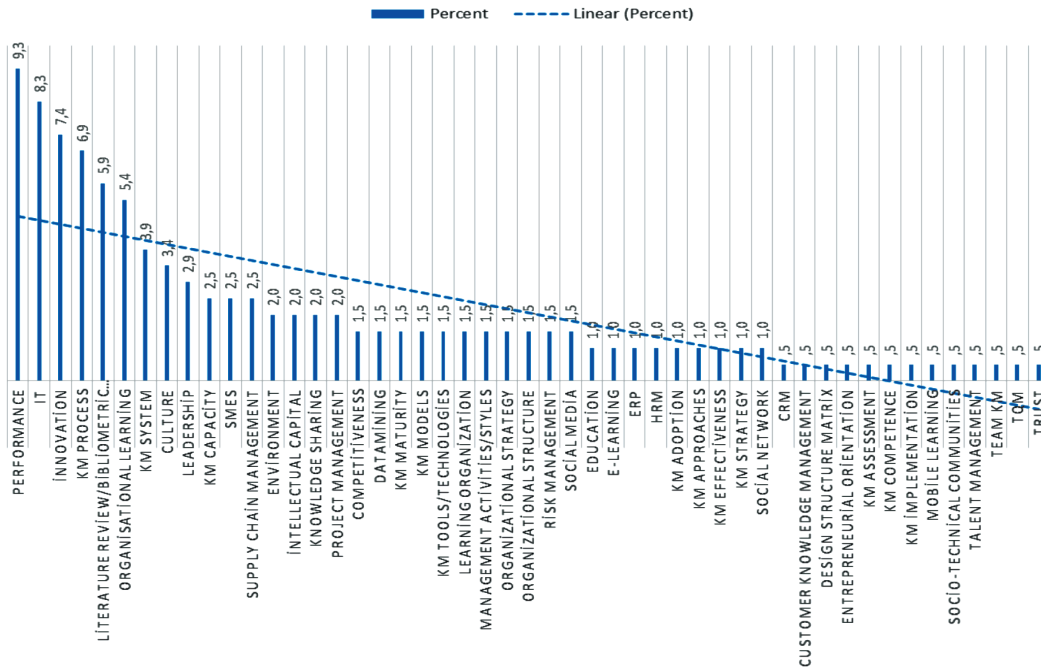
Figure 4: Percentage of Article Theme

Table 2: Most Dominant Article Theme

Article Theme	No. of articles
Performance	19
IT	17
Innovation	15
KM process	14
Literature review	12
Organizational learning	11

Note: Up to three article theme were recorded per article

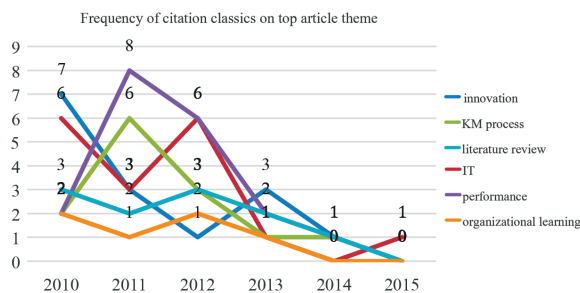**Figure 5:** Most Dominant Article Theme per Year

Table 3 considers the theories used within the selected articles. As shown in Table 3, the majority of articles used no theory at all, similar to the study of Serenko and Dumay (2015a). Resource-based view, knowledge-based view and Nonaka's dynamic theory of organizational knowledge creation are the dominating theories. Furthermore, these theories have almost the same percentage in KM publications.

Table 3: Theories Applied

Theory	No. of articles
None applied	89
Resource-based view	8
Other (the theory was used only one time)	7
Knowledge-based view	7
Nonaka's dynamic theory of organizational knowledge creation	6
Total	117

Note: Up to three theories were recorded per article

During the period under investigation (i.e., 2010-2015), 109 articles with the minimum 50 citation count were

published by 304 authors. Table 4 shows the number of authors per paper. As shown in Table 4, the majority of articles were written by two authors, followed by three authors.

Table 4: Number of Authors per Paper

No of authors	No. of articles
1	19
2	45
3	26
4	8
5	9
9	1
31	1
Total	109

Figure 6 shows the longitudinal authorship pattern analysis. The results of this analysis reveal that decreasing trend toward multi-authored articles. During the period 2010 and 2015, the trend toward multi-authored articles has a reverse situation of Serenko and Dumay's (2015a) study.

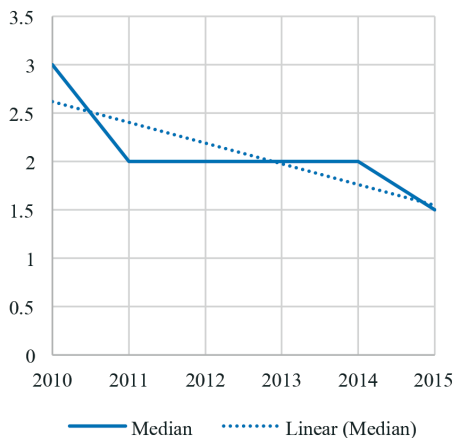**Figure 6:** Median number of authors per article (2010-2015)

Table 5 presents a list of the most productive authors (both academics and practitioners). As seen in Table 5, the authors, who published at least two papers during the period under investigation, were listed. The top KM contributor was Ming-Lang Tseng and he is the only author who has more than 2 papers between 2010 and 2015.

Table 5: Top KM Classics Authors

Name	No. of papers
Ming-Lang Tseng	3
Alexander Serenko	2
Bradley N. Doebbeling	2
Fa´tima Guadamillas	2
G. Bastin	2
Gary N. McLean	2
George O. Allen	2
H. Bigas	2
Maria R. Lee	2
Nick Bontis	2
Shu-Hui Chuang	2
Susanne Durst	2

In line with Serenko and Dumay's (2015a) calculations for institutional and country productivity, an equal credit method was used, whereby each institution/country receives the score of $1/N$, where N is the number of authors. Serenko and Dumay (2015a) states that the equal credit method was prefered because "it provides results highly comparable to those generated by a more complicated author position approach". Further, the articles had been classified based on their country of origin using authors' affiliation. When two affiliations were mentioned the first one was used, since it was assumed that authors tend to list their more relevant affiliation first. A list was created of all organizations who published articles with the minimum 50 citation count during the period of 2010-2015. As seen in Figure 7, the top ten organizations are:

- Ming-Dao University, Taiwan
- University of Castilla-La Mancha, Spain
- Islamic Azad University, Iran
- University of Tehran, Iran
- Griffith University, Australia
- University of Liechtenstein, Liechtenstein
- Tamkang University, Taiwan
- Universiti Sains Malaysia, Malaysia
- Asia University, Taiwan
- University of Limerick, Ireland

Figure 7: Top 10 Author Organizations of Origin (Equal Credit Method)
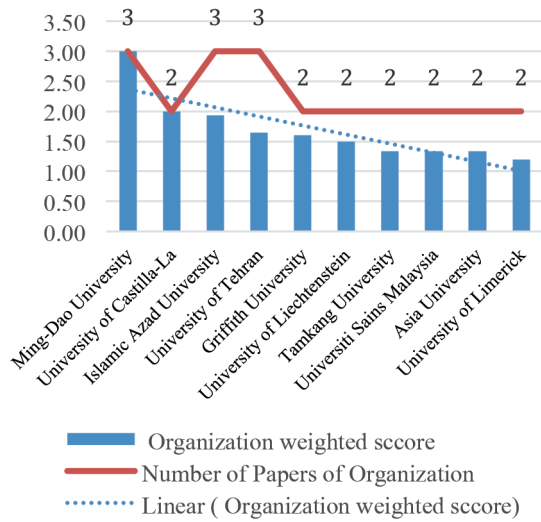
As reported in Figure 8 (see page 10) , countries such as Taiwan, United States (USA), United Kingdom (UK), Spain, Australia, Iran, India, Canada, Germany, Thailand, China and Ireland have the highest 12 scores of the articles. Taiwan and USA have the highest score of KM publications, respectively. Interestingly, Taiwan, India and Iran hadn't been in the list of Serenko and Dumay's (2015a) study. Accordingly, KM discipline has an increasing trend in developing countries, such as Taiwan, India and Iran.

5.   Conclusions

The results of the study indicate that the KM discipline is very diverse. KM discipline have been studied by 304 unique authors from 181 unique organizations in 43 different countries. There is no single university or person generating the most research in KM discipline. Instead, it is the cumulative contribution of a large variety of individuals from hundreds of academic and non-academic organizations that shape the current KM publications. Furthermore, KM publications have also pointed out different topics, such as performance, IT, innovation, KM process, literature review and organizational learning.

Serenko and Dumay (2015a) argued that the KM discipline is at the pre-science stage in that normative research methods, which include viewpoints and literature reviews, were the most prevalent in KM citation classics. However, the results of the present study revealed that

empirical research methods were the most prevalent in KM citation classics during the period under investigation (i.e., the conversion of KM theories into practice has been increase). Accordingly, it might come to conclusion that KM discipline has been more developed after 2009.

According to the comparison of most productive countries, organizations and authors with those reported by Serenko and Dumay (2015a), the most productive countries, organizations and authors have been changed after 2009. In Serenko and Dumay's (2015a) top 12 list, almost all of the top organizations in KM publications were from developed countries. However, the results of this study reveals that most of the productive organizations were from developing countries. Additionally, the most productive country is Taiwan, which wasn't in the list of Serenko and Dumay's (2015a) study. In the current study, Taiwan, Iran, India, Thailand, China and Ireland were included in the list of the top productive countries. In the present study, the Netherlands, Denmark, Sweden, Japan, New Zealand and Switzerland, which were in Serenko and Dumay's (2015a) top 12 list, did not appear in the top 12 productive countries list. Overall, this demonstrates that the selection time frame has an impact on national rankings', organizations' as well as authors' top lists.

6.   Limitations and Future Research Directions

The above interpretations must be viewed in light of several limitations. First, the pool of the peer-reviewed journals examined in this study did not represent all available publication outlets. Books, conference proceedings, and works published in professional journals were excluded from consideration. Serenko and Bontis (2013) acknowledge that peer-reviewed academic journals have high credibility, acceptance, influence, and impact on authors' careers, as well as ensuring high quality by means of a peer-review process thereby becoming very common in academia. However, further research is suggested to include books, conference proceedings, and works published in professional journals. Second, the search activities of KM publications were limited to the English language. Since the vast majority of important papers is available in English (Michel and Bettels, 2001), non-English sources might be used in the search activities. A further limitation is the research framework and the interpretation of both the dataset and the results were depend on the author's knowledge, nevertheless 10 percentage of the dataset was proofread by one independent researcher. For further research, it is recommended to expand dataset in order to make a better

Figure 8: Author Country of Origin (Equal Credit Method)
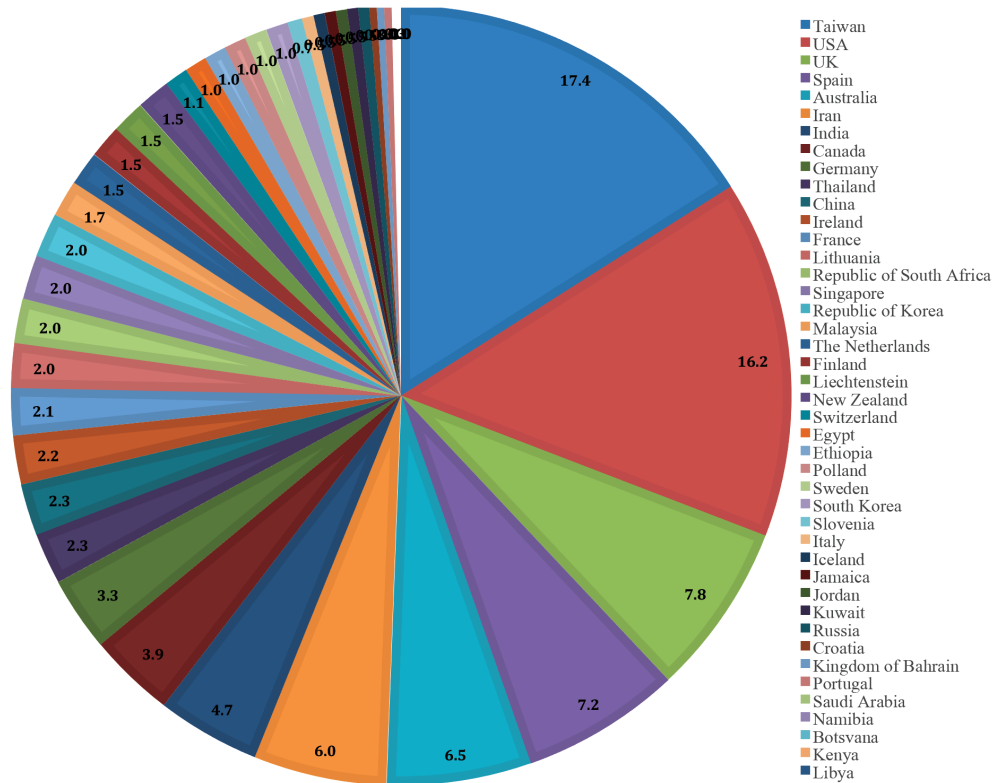
conclusion on the bigger picture of KM research trends. The other recommendation for further research is to provide a holistic KM framework drawing from the results of the present study in order to contribute a consensus of KM field. Additionally, performing a co-citation analysis and mapping the findings would facilitate researchers gaining a better understanding of the themes of KM.

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