### Research Article

# The Relevance of Knowledge Management and Intellectual Capital Research

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In recent years, there has been a growing pressure on business schools to make their research more useful to practitioners. Consequently, the AASCB International dedicated an entire report to the subject. In order to assess the relevance of knowledge management/intellectual capital (KM/IC) research, 12 semi-structured interviews were undertaken with KM/IC professionals. Based on the findings, a framework was constructed and eight implications were suggested. Overall, this study is the first documented attempt to empirically investigate the issue of relevance of KM/IC academic output. Copyright © 2008 John Wiley & Sons, Ltd.

### INTRODUCTION AND LITERATURE REVIEW

We all know based on our common sense and experience that at least 80% of all management research is useless.

Leif Edvinsson World's First Chief Knowledge Officer McMaster World Congress on Intellectual Capital and Innovation, January 21, 2005

The field of knowledge management/intellectual capital (KM/IC) is alluring to both practitioners and academics (Nonaka and Peltokorpi, 2006), but is it useful? The purpose of this paper is to assess the relevance of academic research in this field. In order to perform this assessment, the relevant literature was reviewed and semi-structured interviews were conducted with 12 KM/IC professionals.

The discussion of academic research relevance is a long-standing tradition in scientific circles

(Ruback and Innes, 1988). For business schools, the public debate can be identified as beginning in 1959 when the Ford and Carnegie reports triggered a fixation with rigorous research. Later, in 1990, a Business Week article questioned whether academic research meets the needs of practitioners (Byrne, 1990). This article captured the attention of the business community (Bennis and O'Toole, 2005) and even some renowned scholars started questioning the applicability of academic findings. This criticism of business academic research is mentioned in various business domains such as general management (Starkey and Madan, 2001), marketing (Ankers and Brennan, 2002; Varadarajan, 2003), strategy (Bailey and Ford, 1996; Gopinath and Hoffman, 1995; McGahan, 2007; Shrivastava, 1987), information systems (Anandarajan and Lippert, 2006; Baskerville and Wood-Harper, 1996; Benbasat and Zmud, 1999; Breu and Peppard, 2003), industrial and organizational psychology (Anderson et al., 2001; Rynes et al., 2001), and international business (Daniels, 1991). There have been special journal issues (e.g., see Baskerville and Myers, 2004; Gray, 2001; Lee, 2001) and conference panels (e.g.,

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see Kock *et al.*, 2002) that are totally devoted to this topic.

For business disciplines, the debate calls into question the purpose of business schools (Grey, 2001). If the difference between professional schools and disciplines based on pure sciences is in their output then the objective of business schools is to inform current practice and educate future managers. With regards to research, the goal is to create knowledge that managers may utilize to advance practice. There are claims that business schools are failing in both goals (Bennis and O'Toole, 2005; Ghoshal, 2005).

Only a small number of researchers have studied the relevance problem empirically. However, even these studies do not form a coherent program of inquiry. For example, Duncan (1974) discovered substantial disagreement between researchers and practitioners on the academic knowledge utilization process. Ankers and Brennan (2002) reported that marketing managers knew very little about the state of research and claimed that academics did not understand business realities. Pearson et al. (2005) observed that the academic field of information systems did not have much impact on the state of practice. At the same time, Baldridge et al. (2004) demonstrated that there is a positive relationship between the academic quality and practical relevance of academic publications which shows the possibility of producing rigorous and highly relevant research output. Therefore, there is a need for more empirically based research in the discussion of academic relevance.

Currently, KM/IC is in its embryonic stages of development but it grows at an accelerated rate (Bontis, 1999, 2001; Serenko and Bontis, 2004). It has a number of characteristics of a scientific field. For example, it can boast its own journal ranking system (Serenko and Bontis, 2009), theories (Serenko et al., 2007), and scientometric studies (Gu, 2004a,b; Harman and Koohang, 2005; Ponzi, 2002). At the same time, KM/IC is a practice-driven discipline with many practitioners contributing to the body of knowledge and many academics actively participating in commercial and government projects. For instance, case studies are the most frequently employed methodology of KM/IC researchers. In KM/IC, the scholarly contribution of practitioners is higher than that in other management domains (Serenko et al., 2008). KM/IC is a very attractive subject for business students (Bontis et al., 2006, 2007). In the past, it has been demonstrated that the application of KM/IC practices has a positive impact on the performance of organizations (Bontis, 2002; Bontis and Serenko, 2007; Choo and Bontis, 2002) and their organizational learning capabilities (Bontis et al., 2002). Hence, it is crucial to form the

foundation for research outcomes that are aligned with the needs of practitioners.

After an extensive literature search of all major indices (e.g., ProQuest, ScienceDirect, Emerald, etc.), major conference proceedings and online resources, we found no study that empirically investigated this issue except for a brief discussion by Bailey and Clarke (2000, 2001), the theoretical insights by Andriessen (2004), and elaboration by Ferguson (2005). Overall, prior works concluded that it is important to empirically investigate the issue of the relevance of KM/IC academic output.

Before the problem of academic relevance can be solved, the problem has to be defined and root causes have to be identified. Yet, there is little agreement regarding how the relevance problem should be defined or framed. The problem has been viewed as a difference in culture between academics and practitioners (Barley et al., 1988), as a linking process among scholars (Daniels, 1991), as a knowledge transfer problem (Rynes et al., 2001), as theory-practice linkage issue (Tenkasi and Hay, 2004), and as a paradigm clash (Gulati, 2007). None of these perspectives have been embraced as the accepted standard. In this study, the "relevance problem" or the "managerial relevance of scholarly research" is defined as the degree to which academic theory influences industry practices. It is acknowledged that there are various definitions and conceptualizations of research processes and their effects on the society (Kuhn, 1962). In this project, we only concentrate on the extent to which scientific research in the KM/IC domain generates prescriptions, makes recommendations, offers solutions, and develops principles that are actually applied by KM/IC professionals. Throughout the project, the underlying objective is to clarify what we term the "relevance problem" and to empirically identify its root causes.

As a first attempt toward this goal, the purpose of this study is to develop a theoretical framework that explicates the phenomenon. In the future, this framework may be empirically tested through a survey of KM/IC practitioners by using quantitative methods that will allow formulating further practical recommendations for scholars, business professionals, and journal editors, who wish to develop, disseminate, and apply highly relevant academic research.

#### METHODOLOGY

In order to better define the relevance problem, 12 semi-structured interviews with KM/IC practitioners from public (eight participants) and private

(four participants) Canadian and US organizations were conducted. Interviews were undertaken over a 3-month period; eight were conducted face-to-face, three over the phone, and one electronically. An initial list of interviewees was obtained by conducting a search on the Government of Canada's employee directory utilizing the job title "knowledge." Google was employed using variations of search terms such as "knowledge management" and "consultant." Researchers also approached several KM/IC managers they knew personally. A snowballing sampling method was then employed; early interviewees were asked to recommend their colleagues who could be potentially interviewed. Most of the approached professionals agreed to participate in the study; this produced the response rate of over 60%. Each interview lasted approximately 1 hour.

In order to develop a list of questions, a comprehensive literature review was conducted. We were unable to identify prior empirical studies of academic relevance in the field of KM/IC. However, a number of dimensions of relevance were identified from other management fields and a series of questions were devised to capture each dimension. The questions were reviewed by independent KM/IC experts, and their feedback was utilized to revise the initial instrument. After each interview, modifications to the questions were made based on the subjects' responses to better cover the phenomenon under investigation. For example, the researchers continuously incorporated comments made in previous interviews to expand on interesting or promising avenues of discussion. On one occasion, two interviewees were emailed additional questions and asked to comment on the insights gathered from a later interview.

Each interview was transcribed into NVivo and subjected to qualitative data analysis by two coders (Miles and Huberman, 1994). The interpretive paradigm was followed during the analysis process. The coding scheme evolved as the researchers analyzed the interviews. As patterns emerged, previous interviews were revisited and some nodes were recoded.

### FINDINGS AND SUGGESTED FRAMEWORK

One way of characterizing a problem is that it represents a gap between an actual and a desired state of affairs. While coding the interviews, we kept the goal of clarifying the problem of academic relevance in mind. As key themes evolved, the framework indicated below emerged. The framework describes how academic output is actually generated. It then outlines what practitioners need and expect from scientific research.

At the heart of this framework are two key players: researchers and practitioners. The researcher undertakes scientific investigations in order to create and validate theory. Practitioners seek to obtain competitive advantage through increased productivity. There is an expectation that researchers would produce knowledge that is directly useful to practitioners, but that is not what always happens. The framework provides a representation of the barriers to the effective production and dissemination of academic knowledge. The framework is presented in Figure 1.

In the following section the needs of practitioners will be contrasted with the attributes of academic publications. The differences that are revealed as a result of this comparison form the basis of our analysis of the "relevance problem." The researcher and factors that influence him/her are examined in order to clarify how research topics are chosen. Subsequently, knowledge dissemination processes are described and assumptions regarding these processes are examined.

#### Attributes of academic publications

In this section, we discuss the attributes of academic publications and the articulation of knowledge. We also report on those attributes and articulation processes from the practitioner perspective. The purpose is to identify a number of factors associated with academic publications and their distribution processes.

The key finding about the knowledge management practitioners is that they have an immense workload. As a result, they cannot afford the luxury of reading and interpreting lengthy academic publications. While scientists need to report their findings in meticulous detail, the respondents were unanimous in asserting that they do not have time to read extensive academic articles. The sentence and paper structure represent a problem. Some managers believed their organizations do not have a need for knowledge, whereas some just need a quick fix and a readily accessible solution:

"I just haven't got the... you know... I get hundreds of emails every day."

"No one has time to read! These are busy people. Do they have time to sit down and first of all find research that is relevant and read it? Absolutely not!"

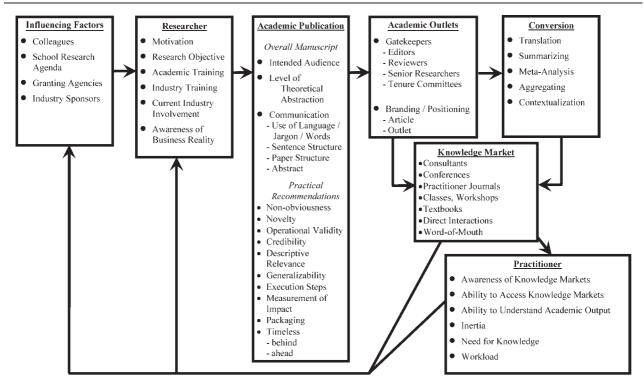


Figure 1 KM/IC research relevance framework

"I do think that there's another issue there in terms of the length of the articles."

In addition to paper length, the respondents indicated that they had problems with the style of academic thinking and writing. Academics are fixated with contributing to academic theory. They seek universal laws and conclusions with high *generalizability*. They *communicate* their findings at a high level of *theoretical abstraction*. Practitioners, in contrast, need information that is instruction based, concrete, customized, and context-specific (Aram and Salipante, 2003). As a result, most respondents reported a large gap between academic findings and their actual applications:

"There is a gap—at least in the KM field—between theory and practice. That gap needs to be filled."

"I'm constantly being told by practitioners that they are not interested in theory. I'm constantly being told by theorists that they are not really interested in the practice side."

"The academic research comes from a totally different context. So, trying to apply it into a different context... it may just not work. It is really, really tough for a regular practitioner to take the stuff and convert it into something useful for the organization."

"But it has also got to be taken with some context and it has got to be used with care because it is not necessarily going to be grounded in insights that are going to be applicable to the new context."

Practitioners envision academic results presented in a format that is easy to read and interpret. This conflicts with academic needs. Academics need to be precise in their use of language. They speak in a specialized language of statistics, validity, reliability, and generalizability. In fact, the hallmark of a well-developed discipline is the existence of a proprietary language. The respondents stated that the use of language, jargon, or words was an issue in KM/IC research and described the research language as "exclusive," "dense," "obtuse," and "inaccessible." Most practitioners do not have the educational background or the ability to understand academic output:

"You often think 'this is written by a Ph.D. guy. Maybe I'm not supposed to understand it'."

"I see that very often around me where people don't understand a lot of the articles or the way that it is communicated."

"I don't think that it is necessarily hard to understand. I think that the problem in my view is that a lot of people don't have the background to understand it. So,

if you don't have the background, very often if you are reading something and you don't have some basic understanding of statistics or how things work then you won't understand it."

"There are some research pieces that I have intellectually been challenged very very much to try to understand because it is very scientific notation, and I know there is value there but again it is appropriating that value."

A large part of the relevance issue then is an issue of communication. The *intended audience* of academic publication is other academics. Researchers write to meet the needs of the academic community, not the needs of practitioners. What we have is a failure to communicate. Some practitioners feel academic works not geared toward industry professionals and ignore them:

"The readers of academic papers are academics."

"I realize that they write for other researchers, but they have to understand that there are tons and tons of people who are not researchers themselves who will be reading this. Do you really want to exclude them from that?"

However, the problem of academic relevance is more than just a communication issue. Although a number of factors influence the practitioners' assessments of academic conclusions, a few stand out. Academic findings must have *novelty* and *nonoviousness*. Practitioners favor research that challenges existing theory or practice (Baldridge *et al.*, 2004), provides counterintuitive insights (McGahan, 2007), or identifies emerging trends or structural changes (Benbasat and Zmud, 1999). Professionals do not value research findings that are trivial (Shrivastava, 1987).

That feature must be balanced against *credibility*. In this paper, we define credible research findings as being aligned with knowledge that practitioners have acquired through experience. It is useful for academic findings to challenge conventional wisdom, but they cannot depart entirely from the practitioner's general body of knowledge:

"The bottom line is a lot of them [academic articles] are about simple common sense. So, if you just stop to think about a knowledge issue in a very serious way for a period of time, then you are going to come to a lot of the same conclusions."

"I remember in some instances where I would read through the abstract and then say okay yeah, that seems to be interesting, there seems to be new information there that I would be interested in reading it, but in most cases it tended to be things I already knew."

We also inquired about operational validity. To be relevant, a practitioner needs to be able to take academic findings and apply them. Consistent with prior research (Ankers and Brennan, 2002), most respondents said that they could not translate academic recommendations into reality either because they included factors beyond their control or they ignored the constraints of real world settings. When asked if they ever successfully implemented an academic recommendation from a refereed article, the universal and adamant response was "no." In fact, many respondents laughed at this question. They also indicated that useful recommendations need to be expressed as a set of execution steps; this supports Breu and Peppard's (2003) suggestion that practitioners value procedural knowledge. Currently, very few academic recommendations can be directly used by practitioners:

"I can't think of any case where in a specific context where people have been guided by some specific set of [academic] recommendations."

"Very often in the research that I see real constraints are not taken into account."

"I hate to use the word naïve—but they're more simplistic—the recommendations. They are a bit idealistic. The reality is far from that, I'm afraid."

"I have been influenced by academic journals, but have I gone from reading an academic journal to launching a project to affect change? No."

"At the end of the day it is not necessarily about the research, it is about how I can apply it. So, very often, I would find myself in that position where I would read something and say yeah, what am I supposed to do with this? A lot of it also would just give you some big grandiose theory and not necessarily really give you any idea about the practical application of it."

It is also important for managers to be able to observe and measure the outcomes of their efforts. Ideally, results should be linked to financial outcomes. For those reasons, *impact measurement* is a feature of research topics that will be of interest to practitioners. The lack of procedural knowledge, and the lack of measurable outcomes linked to financial results make it hard to sell KM/IC research to practitioners:

"We are interested in outcomes. We are interested in how we are going to meet our goals and objectives. How does knowledge management affect the bottom line? What is the return on investment?"

"Justifying KM expenditure is a big issue."

"There is a tremendous push-back in the knowledge management field for these kinds of metrics, largely because it is very difficult to take what we do and connect it directly to the bottom line."

Another problem is that academics and practitioners work on different timeframes (Anandarajan and Lippert, 2006). Managerial issues are characterized by a sense of urgency. It is usually better for managers to make decisions quickly based on the information available at the time. Academic issues are governed by other priorities. Scholars rigorously examine phenomena, follow strict protocols, and seek accurate information. Discoveries that come too late are not helpful to practitioners and solutions to problems that have already been solved run the risk of being labeled as obvious. *Timeliness* of academic research affects relevance:

"It is often difficult to find something that is both relevant and current."

"So, if academia is going to think about anything to do with technology the rate has to be speeded up. Behaviorist issues would be different."

"We're dealing with an environment where change is the order of the day. You've got technology change, organizational change, operational change, market changes, all happening in tandem. So, the problem is that when an academic researcher, for example, writes a case or findings related to some research. Sometimes the problem that exists is like the driver looking in the rear-view-mirror."

Timing affects some topics more than others. Obsolescence is an issue for research that relates to technological issues such as information systems and KM software. However, research related to human conduct is timeless. So, the timeliness of knowledge management research can be divided into two categories: technological issues, and behavioral issues. The *longevity* of research is a factor of the topic covered. Articles that address topics of enduring interest to practitioners will be always well received (Benbasat and Zmud, 1999).

The academic timeline is different in other ways as well. Sometimes, academics address issues that have no immediate application. The application for the research may not be found for decades—well beyond the current business horizon (Weinberg, 2001):

"It might be something that they discover or formulate [something] that might not be applied for ten, fifteen or twenty years."

"Trade magazines give you something that has more immediate value . . .academic material may be longer-term material."

Timing affects relevance in another way. Every organization has a history and culture. People prefer to continue doing things the way that they have always done them. A young field such as KM/IC has to overcome a barrier of *inertia*. A few respondents indicated that there is a resistance to KM/IC research because it is difficult to change organizational management practices. Knowledge management researchers have to overcome this problem of inertia if their work is to be adopted by and become relevant to practitioners.

Another set of features that is worth consideration is the practitioner's awareness of knowledge markets. Many managers are only aware of books, trade publications, and some industry conferences. For those who know, the ability to access knowledge markets is limited to trade publications and conferences. Academic journals are expensive to access. Most businesses cannot justify the cost. Academic output may lose relevance by virtue of being inaccessible. Also, while journal titles add a tremendous weight to perceived credibility and impact of an article in academia, practitioners rarely pay attention to journal names. It may be a packaging issue. To practitioners, all journals look alike. Practitioners search for articles based on topics or keywords as they are needed. They generally never read specific academic journals on a regular basis:

"You want to know what the source was but once you knew it was a credible source you'd forget it."

"I'm more interested in the article than in the journal that it came from. So, I could have well seen material from those journals but it wouldn't click."

Despite these complaints, several interviewees discouraged academics from changing academic papers. Instead, there should be another version of each paper, or a meta-analysis article summarizing the key points, offering concrete recommendations and expressing the key ideas in a simple language. The key requirement is to contextualize the research and to turn it into something that is more actionable. A more common comment was to describe bridging mechanisms that translate academic works into a more comprehensible form. Currently, it is still rare for academics to write for both audiences and some

specific translation mechanisms should be established:

"It [academic writing style] is very appropriate for the academic world. I certainly would not dumb-down academic work. There just needs to be another version for those who aren't going to read the academic report but actually are the ones who need the information."

At the same time, despite their somewhat pessimistic tone when talking about the issue, respondents confirmed that the key factor that motivated them to read the literature was the search for "golden nuggets"—those novel ideas or key insights that challenge or change the way that they see things. In fact, most interviewees believed that the KM/IC academic body of knowledge is very useful in general, but it was simply difficult for them to access this knowledge by reading scientific articles:

"What I have found that there are those what I call nuggets—that is what I always look for is that nugget, that key insight that I as a reader can actually build upon... that nugget might be a conclusion or a different way of looking at things..."

#### Researcher and influencing factors

The *researcher* is the central component of the suggested framework. The *motivation* of researchers is to gain recognition of their research expertise within their own research communities. Academics want to be noticed and recognized by their academic peers, not by industry professionals, therefore, they neglect the practical impact of their research. Researchers attempt to gain respect, mobility, visibility, and bargaining power by demonstrating high-volume research output. The goal becomes to publish as much as possible on the topics and in outlets valued by other scholars:

"If an academic success is based on academic publications only, academia is missing the whole point."

"I think that in some respects may be the problem is that the emphasis is on publication."

"They [academics] need to get a number of papers because they want to make themselves look good."

Another objective is to be first to establish a theory or line of research:

"Part of the game in academia is to get published first. You want to be the first one out there with that idea. So, there is this whole thing to get recognized as the originator of the idea."

Related to motivation, and yet distinct from it, is the scholar's research objective. Some academics publish because they want to meet college/university requirements for tenure and promotion. In other circumstances, they are guided by the school research agenda, the priorities of granting agencies, or even the preferences of influential colleagues. At a more subtle level, the norms and conventions of academia and the power structures within universities influence the scholar's research objectives (Benbasat and Zmud, 1999). Academic recognition is often more important than the creation of business value:

"[Academic research is] geared for academic recognition vs. business value."

"Some of it is going to be really useful stuff and some of it is just going to be I need to get a book out to get some visibility, or I need to get a paper out so I can be visible."

Academic training, prior industry exposure, and current industry involvement form the awareness of business reality that, in turn, shape the direction of scholarly research. Several respondents stated that, in extreme cases, some researchers had strong scholarly training but little, if any, prior or current industry experience. As a result, their research was highly theoretical with no applicable managerial insights:

"Most academics have not worked in business so their lens of reality is less relevant and judgments to extrapolate context often missing."

Overall, the respondents' opinions diverged. On one hand, they indicated that there are many academics who have excellent industry experience, who understand the needs of practice and whose research has significant practical contributions. On the other hand, many said that academics often have little management experience, lack the tacit knowledge that can best be learned on-the-job, and many scholars' output has no merit whatsoever from their perspective.

#### Academic outlets

The primary channel for publishing the outcomes of academic research is peer-reviewed journals, books, book chapters, and conference proceedings. These channels are controlled by *gatekeepers* such as *editors* and *reviewers* who serve to legitimize academic output (Benbasat and Zmud, 1999) and label research as rigorous or non-rigorous (Gulati, 2007). Editors often constrain content or demand fundamental changes to papers (De Rond and

Miller, 2005). In some cases, *senior researchers* advise their junior colleagues on specific outlets. *Tenure and promotion committees* play an important role in some institutions by establishing a list of approved academic journals thereby forcing all faculty members to investigate topics favored by those outlets. Overall, by controlling critical resources, these powerful figures influence the direction that research takes more strongly than the curiosity of the researcher (Barley *et al.*, 1988).

## Knowledge market, contextualization, and conversion

In the literature, discussions of academic relevance have been based on a set of assumptions and implicit arguments. First, most practitioners do not read scientific papers. The implicit argument is that if practitioners do not read scientific papers then the research is not relevant. Second, it is assumed that the only channel of distribution for research findings is through academic publications. Several respondents challenged that position. They indicated that indirect channels of knowledge dissemination can often be more influential for practitioners. For example, academics present papers at conferences that practitioners attend. Consultants utilize academic knowledge in the tools and reports that they develop. Think tanks and policy research centers make use of it. New knowledge gets incorporated into classes, workshops, and textbooks. It disseminates through direct interaction between academics and practitioners. It can also disseminate through wordof-mouth discussion among practitioners. When something works, word gets around. Pearson et al. (2005) recommended that future researchers examine these indirect distribution channels when studying relevance. Therefore, the key "research relevance" question is not whether academic discoveries are getting disseminated to practitioners. The right question is how they are getting disseminated. The path of dissemination may not be based on direct causation but rather through indirect influence. Learning is a social process (Jensen, 2005). Scholars tend to favor direct causal relationships, but knowledge dissemination does not work like an assembly line. Instead, it is like an ecosystem diffusing knowledge at the societal level and delivering it to decision makers through the knowledge market. Also, prior work on relevance has assumed that it is the individual practitioner who utilizes research. In fact, it may be the learning organization, learning network (Kiely and Armistead, 2005), or community of practice that utilizes the research:

"But they [managers] are not going to go read the literature and that is what we really need to question is how managers access research, not if the research is relevant but how they access it."

"...the final product might not come from the academics... It might go through several intermediaries that take some of the ideas and adjust it for the clientele... So, it might have to go through that refinement process or productization process before it is actually finally usable."

"As well, the intermediaries, if any, in the dissemination process between researcher and end-customer are also ecosystems in their own right, as well as participants in a 'distribution' ecosystem with a complex set of interactions and influences from a wide variety of sources."

The knowledge created by researchers may be incompatible with the learning processes or knowledge stocks of practitioners (Mörk et al., 2008). A translation process is needed to make abstract theoretical material accessible. Often that involves summarizing long articles into a shorter version or aggregating the results of a line of research into a single narrative. Meta-analyses are useful because they aggregate entire research streams. They allow practitioners to understand research and its outcomes very quickly. Academic works may reach practitioners directly or through a conversion mechanism:

"There's the question of how we translate this [academic articles] into reality. I saw people struggling with it."

"That is where the translation is so enormously difficult."

"I think it would be important to not only just reduce the size of the paper to a quick read but also to translate into common knowledge so that it doesn't read like an academic paper."

"It is always a challenge to take that stuff and try to translate that into something that is actionable."

Contextualization appears to be an important part of the translation processes. Academic findings are reported as theoretical abstractions. Yet, it is the context that it is important to managers. Managers want real-world examples written for their industry. They need solutions, not abstractions. This relates to the need for procedural knowledge and practical execution steps mentioned earlier:

"Research is missing the context."

"So, it [research] is useful. But it has also got to be taken with some context."

"In order to affect the specific work, they are going to give them a context."

While discussing indirect channels, an idea of a knowledge market emerged. This market serves functions similar to the traditional market by matching buyers with sellers, facilitating the exchange of information, goods, services, and payments, and providing a regulatory framework (Yannis, 1998). The same roles are filled. There are providers of knowledge and users of knowledge. While academics can use academic output directly, market intermediaries serve familiar roles of matching, repackaging, and redistribution-making academic findings available to practitioners. Desouza et al.'s (2005) ideas about the knowledge market, and Easton's (2007) narrower view of a market for academic articles apply here. They have implications for the discussion of academic relevance:

"Somebody other than the academic needs to take this [task of synthesizing and translating] on."

It is important to remember that the knowledge market is a two-way street. Knowledge gets passed in both directions. Although practitioners can learn from direct interaction with academics, that relationship is probably of more value to the scholar. Many papers on relevance conclude by encouraging academics to seek out closer associations with practitioners. Closer interactions have been put forward as a way to break down the cultural barrier between academics and practitioners (Beyer, 1997). It has even been stated that unless academics interact with practitioners, there is no way their research can be relevant (Ankers and Brennan, 2002). Unsolicited comments in the interviews extolled the virtue of these interactions. Overall, it was concluded that translation mechanisms and functional knowledge markets are necessary.

#### Implications and conclusion

The purpose of this paper has been to assess the relevance of research in the knowledge management and intellectual capital fields, to clarify the relevance problem and to empirically identify its root causes. For this, 12 semi-structured interviews with industry professionals were conducted. Based on this, a framework explicating the relevance of KM/IC academic research was developed. Eight implications are offered:

Implication #1: There is a disconnect between KM/IC theory and practice

Currently, there is a substantial gap between the state of KM/IC theory and the practical applications of academic findings. Overall, this is similar to conclusions reached in other management fields (Ankers and Brennan, 2002; Anandarajan and Lippert, 2006; Kernick, 2005; Rynes *et al.*, 2001). In terms of a direct incorporation of scientific findings in everyday decision making processes, the situation within the KM/IC discipline is similar to those within other business domains. Currently, KM/IC practitioners rarely read papers in academic peerreviewed journals.

Implication #2: KM/IC practitioners perceive the scholarly body of knowledge as very useful

On one hand, practitioners believe that many academic publications have no merit whatsoever. Some academics have insufficient, if any, industry exposure. Their research objective is a publication itself rather than its practical contribution. To advance their careers, scholars often have to investigate topics favored by their senior colleagues, institutions, sponsors, or government granting agencies. Each paper needs to be approved by reviewers and editors who are mostly other academics rather than industry professionals. Overall, these factors dramatically reduce the value of the final manuscript to practitioners.

On the other hand, practitioners believe that the overall scholarly body of knowledge in KM/IC is very relevant, and it would have a significant impact on their practices if utilized effectively. For example, many of them frequently search through peer-reviewed publications looking for "golden nuggets"—bits and pieces of vital knowledge they can utilize in decision making. Overall, practitioners believe that there is current, relevant and useful knowledge in academic outlets; they just cannot find an efficient way to consume it. It is more of a communication gap than a relevance gap.

Implication #3: KM/IC academic articles are not in a form that is directly suitable for practitioners

One of the main objectives of this study was to clarify the problem of academic relevance. A large part of the problem resides in a communication gap between researchers and practitioners. The majority of works published in peer-reviewed journals are targeted to other academics. Papers are written in a specific scientific language, contain jargon, words, phrases, and are structured in a way that non-academics cannot quickly comprehend. Many of the problems that practitioners have with scientific papers is not with the ideas that are expressed, it is

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with the way that they are presented. Most academics offer a set of practical insights at the end of their manuscripts. However, this is not sufficient to allow industry professionals to directly consume the body of academic knowledge. As such, the direct knowledge distribution model, in which practitioners are supposed to read academic articles and utilize their practical insights, completely failed.

Implication #4: Indirect knowledge distribution channels have an important role to play in knowledge dissemination

The KM/IC academic body of knowledge should be delivered to practitioners through indirect distribution channels. During a conversion process, entire streams of research should be summarized and presented in a form that may be easily digested by a busy professional who does not have a scientific expertise in the area. Traditionally, researchers study phenomena meticulously and report their findings accurately. If an objective of research is to communicate findings directly to practitioners then that role is not being met. In fact, the purpose of academic publications has never been to communicate directly with practitioners. If scholarly research should be made available to nonacademic consumers, it needs to be transformed and delivered through indirect channels. It is believed that this is the most efficient approach to bridge the gap between academia and practice.

Implication #5: Knowledge markets can provide intermediation between academics and practitioners

Knowledge markets serve as an intermediary between academics and practitioners. They offer two types of knowledge: direct, such as academic publications, and indirect, such as transformed, aggregated, and translated material. The knowledge market may have various knowledge exchange facilitators, for example, consultants and academics, and instruments, such as books, conferences, and workshops. It is where practitioners may quickly find solutions to their problems, and those solutions may be based on academic research to some extent.

*Implication #6: There is a need for further research into knowledge distribution processes* 

In the past, the majority of projects concentrated on the issue of relevance of academic research. Instead, knowledge distribution channels and processes should be investigated. First, it is unlikely that academics are going the change the way they write scientific articles. In fact, they do not need to. Each peer-reviewed paper should be detailed

enough to encourage future inquiries. Second, the overall scholarly body of knowledge is useful but cannot be consumed directly. Therefore, the point is not *whether* academic research is relevant. Instead, the right question is *how* this knowledge is distributed.

Implication #7: Journal branding and positioning are not important for practitioners

Journal name is of high importance to academics who prefer to publish their works in the most highly ranked outlet available for the topic. More scholarly credibility is given to articles appearing in leading journals. In contrast, practitioners pay no attention to journal names. In fact, they search for steams of research and solutions. This fact needs to be considered by publishers in their journal promotion campaigns.

Implication #8: The provision of practical implementations steps and impact measurement approaches facilitates the transfer of knowledge from researchers to practitioners

As a short-term solution to improve the attractiveness of academic works to practitioners, it is suggested that researchers provide not only a set of practical recommendations, but also concrete implementation steps and impact measurement approaches. Managers have no time to think about the actual implementation of academic recommendations. They also need to be able to observe the outcomes to justify their investment; otherwise they are less likely to attempt to implement academic recommendations.

This project is the first attempt to empirically investigate the issue of the relevance of KM/IC research and to propose a framework explicating this phenomenon. Overall, it is concluded that the focus of future investigations should shift from the topic of research relevance to the issue of findings dissemination. Specifically, the role of indirect knowledge distribution channels should be explored in detail.

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