

How is Knowledge Management Adopted and Diffused in the Life Insurance Business?

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Abstract

The topic of innovation adoption and diffusion has been discussed widely by researchers. However, few studies have been conducted viewing knowledge management (KM) as an innovation and exploring the adoption and diffusion of KM particularly in the life insurance industry. We extensively review the literature on innovation and technology management to develop a research model exploring how KM is adopted and diffused in the life insurance business. Further applications of the model and future research directions are also provided.

Keywords: Knowledge management (KM); adoption; innovation diffusion; life insurance

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How is Knowledge Management Adopted and Diffused in the Life Insurance Business?

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Abstract – The topic of innovation adoption and diffusion has been discussed widely by researchers. However, few studies have been conducted viewing knowledge management (KM) as an innovation and exploring the adoption and diffusion of KM particularly in the life insurance industry. We extensively review the literature on innovation and technology management to develop a research model exploring how KM is adopted and diffused in the life insurance business. Further applications of the model and future research directions are also provided.

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I. INTRODUCTION

Life insurance can be seen as an arrangement through which the risk of specific individuals can be shared by the general majority of people [1]. Different from other industries, the products sold by the life insurance business are comparatively “invisible” and “untouchable” [1]. “People” play an important role in conveying the knowledge and services to the customers in the life insurance industry. Besides, most of the life insurance contracts were long term and therefore the life insurance companies should provide lasting, sometimes lifelong, services for the customers. In other words, the life insurance industry simply sells “pieces of paper” which is composed of the obligation, image, service and knowledge of the companies. Knowledge management (KM) would be imperative for life insurance companies to enhance performance and gain a competitive edge [2]. Although KM has been employed in the business world for decades, its applications, involving recognition of knowledge, information system infrastructure and support of top management, have been just launched in Taiwan’s life insurance business recently. Innovation Diffusion (ID) has drawn much attention of researchers in several areas, e.g., new information technology, electronic data interchange and internet [3,4,5]. However, there is little literature found on the adoption and diffusion of KM, particularly in the life insurance domain. It is suggested by Yang [6] that Taiwan’s life insurance companies should adopt the concepts and applications of innovation in order to put KM into place to create more business value. Thus, this study lays emphasis on the adoption and diffusion of

innovation to develop a KM model identifying motivations and barriers among the employees who are important in undertaking KM activities among the life insurance companies. Our main concerns are as follows: (i) What are the employees’ perception regarding KM? (ii) What would motivate the employees to adopt and apply KM? and (iii) What should be done in having KM employed in the life insurance business?

II. THE NEED OF KM IN THE LIFE INSURANCE BUSINESS

Whilst the government has gradually released the limitation of capital investment for the life insurance industry in Taiwan, the Department of Insurance continues monitoring the life insurance business to disclose crucial information as to the public interests, have innovative products, and develop customer complaint filing systems [7]. Therefore, the life insurance companies are in great need of integrating information and relevant knowledge to meet the requirements of the government. The swift expansion of product varieties in the past few years also has a great impact on Taiwan’s life insurance companies in several aspects, such as the increase of paper usage, getting more complicated administration work and growing demands from the customers [2]. Wang [2] advocated that managing knowledge to enhance service quality and performance would be indispensable for life insurance companies to gain sustainable competitive advantages.

Knowledge can be the essential resources to create sustained competitive advantages since it is closely related to specific organizational structure and culture, and intrinsically difficult to imitate [8]. The individuals in an organization contribute their knowledge based on personal interpretations of information. Group interpretations of knowledge rely on the total members of the group. Moreover, organizational knowledge and its approaches to manage the knowledge are built on the unique history of the organization’s own experiences and accumulated expertise [9]. However, hoards of information or knowledge are of little worth. Both individual and organizational knowledge should be

identified, integrated and fully utilized to generate competitive advantages [10].

A hallmark of the new economy is the ability of organizations to realize the economic value from their collection of knowledge and the associated assets [11]. Despite the competitive necessity of becoming a knowledge-based organization, some managers have found it difficult to “transform” their firms via KM initiatives, especially when their organizations have long histories of development [11]. Although numerous companies have launched extensive KM efforts, many of their projects are simply information projects in reality. When these projects yield some consolidation of data but little innovation in products and services, the value of KM is cast in doubt [11]. Yang [6] indicated that the life insurance companies in Taiwan still had most emphases on information system (IT) development. The mission of the life insurance industry to move beyond information management and into KM is a multifaceted undertaking [11] that involves the development of structure and environment in which knowledge can be recognized, created, distributed and used efficiently.

Effective KM has been considered to be crucial for the success of contemporary organizations [12]. Even so, Davenport [13] argued that effective KM needs investment of money or labor. While knowledge is an asset to create business value, investment of others assets are unavoidable in many KM activities, such as knowledge creation, i.e., gathering documents and moving documents onto computer systems, knowledge distribution, which involves developing information technology infrastructures and applications, and knowledge utilization via educating employees to share and use knowledge. For the life insurance business, the benefits of KM are hardly shown immediately on the financial indicators, e.g., sales growth and market share [14]. If the managers perceive nothing valuable resulting from implementing KM, it is hard to launch KM initiatives in the life insurance companies.

In comparison with other business, the life insurance industry in Taiwan can be seen as in the infant stage of KM applications. Therefore, learning from others' experiences and realizing the potential obstacles would be valuable for the life insurance companies which attempt to commence KM in their organizations. Davenport [13] indicated that firms wishing to effectively manage knowledge needed a heavy dose of human labor. While computers and new technologies are good at capturing, transforming and distributing highly structured knowledge that changes rapidly, human beings are relatively proficient at certain knowledge skills, e.g., interpreting knowledge within a broader context, combining knowledge with other types of information and synthesizing various unstructured forms of knowledge [13]. Similarly, the employees play important roles in the life insurance business and their cooperation and attitude

would be crucial in determining whether their companies could successfully proceed KM projects or not. Accordingly, to realize why the managers and staff would or would not accept KM and how their attitudes affect KM practice would help to investigate the issue of KM from a different point of view, as well as provide managerial suggestions for those life insurance companies boarding on KM in Taiwan or elsewhere.

III. INNOVATION DIFFUSION AND OTHER THEORETICAL BACKGROUND

Rogers [15] depicts an innovation as an idea, practice, or object that is perceived as new by an individual or another unit of adoption. In this study, the innovation refers to KM for the life insurance companies and their employees [6]. The role of KM in the life insurance industry can thus be examined by five characteristics of innovations, including: (i) relative advantage: how KM is perceived as better than the idea it supersedes; (ii) compatibility: how KM is seen consistent with the values, experiences and need of potential adopters; (iii) complexity: the difficulty of understanding and using KM; (iv) trialability: the degree to which KM may be experimented with on a limited basis; and (v) observability: the ability to have the results of KM visible to others. Further, Rogers [15] suggests the diffusion of an innovation is “the process by which an innovation is communicated through certain channels over time among the members of a social system”. In this research, the social system, namely a set of interrelated units that are engaged in joint problem-solving to accomplish a common goal [15], refers to a life insurance company and its employees. Hence, KM adoption and practice refers to the process by which KM is communicated via certain channels over time among the employees of the life insurance enterprises.

The Theory of Reasoned Action (TRA), drawn from social psychology, has been proposed as a primary theoretical foundation and gone through rigorous testing in diverse disciplines predicting human behaviors [16,17,18]. Ajzen and Fishbein [16] suggested that a person's behavior is a function of the person's intention determined by the attitude toward the act and the beliefs about the expectations of others, namely social normative beliefs. The person's attitude toward the behavior is affected by the beliefs that the behavior will lead to certain outcomes and by his or her evaluation of the outcomes. The subjective norms are influenced by the beliefs that specific referents that the person should or should not perform the behavior and by the motivations to comply with the specific referents [16]. Extended from the TRA, TAM [19] proposes that a person's intention to use technology is determined by perceived usefulness (PU) and perceived ease of use (PEOU). PU refers to the degree to which a person believes that using a particular system would enhance his or her job performance, while PEOU refers to the degree to which a person believes that

using a particular system would be free of effort [20]. Davis et al. [21] expanded TAM to suggest that an individual's intention to use computers is influenced by extrinsic motivations, perceiving an activity to be instrumental in achieving valued outcomes, as well as intrinsic motivations, referring to the performance of an activity for no apparent reinforcement other than the process of performing the activity per se. TAM has been extensively used and accepted as a robust model to investigate IT acceptance and usage [18].

Although little work has been published utilizing the TRA and TAM on the research of KM, the TRA helps explaining why an employee would accept/apply KM. The suggestions of TAM can be applied in examining what benefits KM would bring to the employees in increasing their job performance and whether KM projects with relevant IT usage are easy or complicated for the employees. Yang [6] also reported that the life insurance enterprises in Taiwan put most of their efforts on IT in having KM into place. Therefore, the TRA and TAM are considered plausible to understand the adoption and diffusion of KM in Taiwan's life insurance business.

Alavi and Leidner [10] define KM as "a systemic and organizationally specified process for acquiring, organizing and communicating both tacit and explicit knowledge for employees so that other employees may make use of it to be more effective and productive at work". Duffy [23] describes KM as "a process capitalizing on organizational intellect and experience to drive innovations". The activities of KM include knowledge capture, documentation, retrieval and reuse, creation, transfer and sharing of its knowledge assets integrated in its operational and business processes [24]. In this study, KM is defined as "the process of identifying, managing and leveraging individual and collective knowledge to support the firm becoming more competitive" [9].

IV. CONCEPTUAL FRAMEWORK AND RESEARCH MODEL

This research, via an overview of literature on Innovation Diffusion, related theoretical background and KM studies, suggests that, employees' perceptions of KM will influence their attitudes toward KM adoption, and the attitudinal factor will have effects on the organization's KM practice via their activities pertaining to KM.

As stated earlier, adopting and applying KM is a relatively new phenomenon in Taiwan's life insurance business. The suggestions of ID [15] provide the foundation of the processes of KM adoption and diffusion involved at both individual and organizational levels. According to Rogers [15], KM adoption and practice in the life insurance business includes the innovation processes in organizations and the innovation-decision

process of individuals. Innovation-development process consists of all the decisions and activities, and their impact, that occur from recognition of a need or a problem, through research, development, and commercialization of an innovation, through diffusion and adoption by users, referring to the employees in this research, to its consequences [15]. Therefore, in having KM utilized in the life insurance business, it is generally initiated by the organizations by recognizing the needs or problems, having done some research, developing KM plans or projects, and transmitting the concept and value of KM. However, in adopting and diffusing KM, the organizations would need the employees to implement the activities and processes associated with KM. The TRA and TAM provide the theoretical framework to identify the perceptive factors that influence the applications of KM through attitudinal influences. Figure 1 present the research model that we propose based on the conceptual framework as described above.

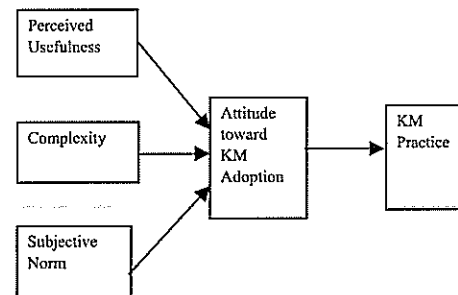


Fig. 1. Research Model of KM Adoption and Diffusion

A. Perceived Usefulness

Ajzen and Fishbein [16] in the TRA proposed that a person's beliefs that the behavior leads to certain outcome and his or her evaluation of the outcome would influence his or her attitude toward the behavior. Extended from TRA, Davis, et al. [20] in TAM defined PU as "the degree to which a person believes that using a particular system would enhance his or her job performance." This definition followed the meaning of usefulness, i.e., "capability of being used advantageously". Applying motivation theories into TAM and viewing perceive usefulness as an example of extrinsic motivation, Davis, et al. [21] referred extrinsic motivation to the performance of an activity because it was perceived to be instrumental in achieving valued outcomes that are distinct from the activity itself, such as improved job performance, pay, or promotions. Davis, et al. [21] indicated that PU was a major determinant of people's intention to use computer. Gefen and Straub [25] reported that PU played an essential role in the intended use and self-reported usage by stating that people's intentions to use computers in an