# The Interaction of PKM with Communities and Enterprises

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**Abstract:** With the growing proliferation of information, there is an emerging trend to equip knowledge workers with personal knowledge management (PKM) skills and tools. In the PKM literature to date, most of the research papers emphasize the importance of knowledge management skills and tools at the individual level, especially for PKM models, that were developed in the last decade. While this is entirely logical and acceptable, increasingly the limitations of these models are being exposed. As knowledge is socially constructed, we propose a new PKM model that covers interaction with knowledge communities and knowledge enterprises. To support these interactions, the Individual-Community-Enterprise Connector (ICE Connector) model is proposed.

## 1 Introduction

In the 21st century, Individual Knowledge Workers (IKWs) encounter many chal-lenges in locating quality information and internalizing valuable information to be-come personal knowledge. To enhance the competency of IKWs, PKM skills and tools are needed to connect members in communities and enterprises. According to Polanyi [Po62], "A true transmission of knowledge stemming from conviviality takes place when an animal shares in the intelligent effort which another animal is making in its presence." That is to say, knowledge generation is not only about organizing our own thoughts, learning to use tools or developing individual competences, but is also about engaging in dialogues, community activities, and collaboration [Gr05]. It is in this sense that the authors propose a PKM model that incorporates interaction with com-munities and enterprises.

There are a number of factors driving the interactions amongst PKM, communities and enterprises. In particular, two factors, namely PKM skills and tools are conceptually investigated in Agnihotri & Troutt's PKM skills-tools fit framework [AM09]. This conceptual framework suggests that individuals should consider and assess technological tools in the context of how the tools align with specific PKM skills. By matching up tools and technology, the effectiveness and utilization of tools can be enhanced. With reference to the PKM skills-tools fit framework, the authors present the Individual-Community- Enterprise Connector (ICE Connector) model in the third part of this paper. This model not only inherits the techno-centric elements from Agnihotri & Troutt, but also addresses the importance of the soft-side elements (e.g. culture and reflection) and the interaction between personal knowledge spaces with those of communities and enterprises.

## 2 A PKM model with interaction with communities and enterprises

To emphasize the need to connect with people [Po05], a PKM model with interaction with communities and organizations has been developed, as shown in Figure 1. In the model, the circles and semi-circles represent knowledge spaces in three levels; personal, community, and enterprise levels. In this paper, instead of focusing on physical knowledge spaces, for example desktop and bookshelves, knowledge spaces are defined as the virtual workplaces where individuals can create, acquire, store, disseminate, exchange, and apply knowledge, using their computers. For instance, a personal knowledge space may comprise an individual's email folders, bookmarks, and folder directories; while a community knowledge space may consist of forums and wikis, and connections with other knowledge workers. A personal knowledge space can interact with the one or more community knowledge bases. An enterprise knowledge space can be an enterprise knowledge management system e.g. a portal supporting communications and storage of assets belonging to the various personal and community knowledge spaces.

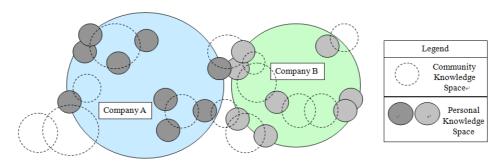


Figure 1: A PKM model incorporating interaction with communities and enterprises

The major implications of the above model are as follows.

- 1. In the context of enterprises, personal knowledge space, community knowledge space and enterprise knowledge space are always inter-related. [SS05] [Wr05] That is to say, effective personal knowledge management should be supported by a platform for both community interaction and organization interaction. This is indeed a true reflection of the real world situation where an individual is almost invariably involved in several communities and works for one or more organizations.
- 2. IKWs are usually involved in various communities, internal and external to the enterprise. This implies that an effective personal knowledge management system (PKMS) should support both internal communities and external ones [YH07]. Such PKMS feature, if available, provides enterprises with the opportunities to incorporate external knowledge with the enterprise knowledge space.
- 3. Very often, only part of an IKW's personal knowledge space contributes to their organization; the other part is used by IKWs for private/social purposes. Based on this property of personal knowledge space, a PKMS, therefore, should allow certain knowledge to be kept for self-use and self-use only. [KSH07]

After visualizing the characteristics of personal knowledge space, the authors have embedded the above framework into the PKM skills-tools fit model. [AM09]

# 3 Individual- Community- Enterprise Connector (ICE Connector)

With reference to the PKM skills-tools fit framework [AM09], a revised skills-tools fit model, named the Individual- Community- Enterprise Connector (ICE Connector) is suggested. The differences between the PKM skills-tools fit framework and the ICE Connector model are discussed below.

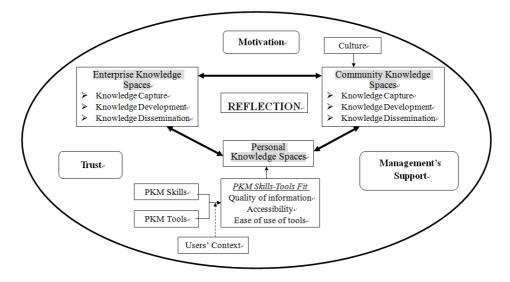


Figure 2: Individual- Community- Enterprise Connector (ICE Connector) model

- 1. To help individuals integrate enterprise and community knowledge into their personal space, and to facilitate knowledge dissemination from individuals to communities and enterprises, three entities (individuals, communities and enterprises) are organized in a triangular manner in the model, signifying their linkage with each other. In the original model, the effect of communities and enterprises is not considered. [SS05] [Wr05]
- 2. As each community has different characteristics (e.g. communication styles and technology literacy), cultural factors are crucial in determining the impact of PKM tools on communities and enterprises. [Zh09]
- 3. Reflection is added as a core element for all three levels (individuals, communities and enterprises) in the new skills-tools fit model. The aspects to be reflected upon can be any topic that is relevant to knowledge exchange. Example reflection topics include PKM tools used, communities involved and PKM skills enhanced by the new model. By reflection, IKWs can explore their experience. This will lead to effective learning and a new understanding and appreciation [BKW85]. They will not be bounded by single-loop learning, but will be actively adapting their PKM behaviors to changing the external environment through double-loop learning [ZS05].
- 4. Three key drivers for successful PKM activities are placed at the periphery of the model. They comprise the motivation of staff to utilize PKM tools, management's support for PKM activities and the trust between individuals, communities and enterprises. [Sm09]

The above model supports a high degree of flexibility due to the fact that the selection of PKM tools will be customized for each and every situation. The researchers who use the new model shall instantiate specific details of fields such as users' context, the impact of knowledge on communities and enterprises, and definitions of PKM skills and tools, so the model will be a fruitful aid to research.

### 4 Conclusion and Future Work

The PKM model suggested in part 2 of the paper provides a basis for other researchers who wish to introduce PKM into organizations. As for the new skills-tools fit model, it can be used to develop a methodology for the selection of PKM tools; these tools will progressively integrate part(s) of personal knowledge with the community knowledge space, and also to the enterprise knowledge space (e.g. Enterprise Knowledge Portal/Wiki/Blogs) with reflection as the core element.

Upon the completion of the development of these two models, the authors will proceed to apply them in a Hong Kong based public utility company. Questionnaires which can map PKM skills and suggest which tools are required will be designed. The PKM tools selected for the target company will enhance staff's PKM skills and their company's human capital. In the long run, the development and use of PKM tools will be one of the strategies for sustaining the growth of intellectual capital (IC) in the company

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