

## Reading List

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Emerging Knowledge  
by [Madanmohan Rao](#)  
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**[Knowledge Emergence: Social, Technical, and Evolutionary Dimensions of Knowledge Creation](#)**  
edited by Ikujiro Nonaka and Toshihiro Nishiguchi; 2001 Oxford University Press (303 pages)

This book provides a collection of diverse perspectives on knowledge activities ranging from creativity and technology infrastructure to cross-border knowledge creation and sectoral strategies in Asia.

The material is academic and well-researched; it covers 15 chapters from 19 contributors, most of them professors from US and Japanese universities. The book is the outcome of a KM conference sponsored by the Sasakawa Peace Foundation.

Ikujiro Nonaka is the author of "The Knowledge-Creating Company" and "Enabling Knowledge Creation." Toshihiro Nishiguchi is the author of "Strategic Industrial Sourcing" and "Managing Product Development."

A fundamental thread uniting these essays is the idea that knowledge must be "nurtured" rather than "managed," according to the editors.

### **Knowledge, Ba and Care**

The Japanese term ba refers to a space-time nexus, the physical and/or mental space shared by co-workers, whose nature defines the scale and scope of knowledge creation through its various phases like socialization (originating ba), externalization (dialoguing ba), combination (systematizing ba) and internalization (exercising ba).

Care is an important requisite for building trust for knowledge-sharing in an organization. There are four modes of knowledge creation, depending on whether there is low care (individuals are left to their own; employees therefore exchange explicit knowledge) or high care (individuals are supported by a strong social network; tacit knowledge is shared) and whether there is creation of individual or organizational knowledge.

Such humanistic models of knowledge emergence encompass "wandering inside and outside" the organization, and accommodate emotional facets like freedom, interest, commitment, charisma and safety. Notable examples include the Seven-Eleven chain in Japan (where field counselors to encourage dialogue and idea sharing) and Maekawa Seisakusho (through knowledge vision for building and energizing ba).

"Certain types of knowledge can be created and communicated only through sharing time and space together," according to the authors.

### **Technology and Cooperation**

The authors call for a blend of human-oriented as well as systematic-rationality-oriented approaches to KM. For instance, companies like Boeing resort to advanced computer networks as well as co-location of project members.

New IT platforms and tools, along with human-oriented approaches can help greatly in knowledge sharing processes: CAD/CAM/CAE (which improve the efficiency of product developers' inductive, deductive and abductive reasoning processes), simulation (to encourage experimentation), and prototyping (to refine solution models).

In industries like software ("the quintessential knowledge industry"), the knowledge component is nearly total. Companies like Microsoft use a "synch-and-stabilise" strategy (in contrast to a sequential "waterfall" model) where teams work in parallel, synchronise their activities and periodically stabilize the multiple releases.

### **Trans-national Knowledge Creation and Knowledge Transfer**

Cross-border knowledge creation within multinational companies involves IT platforms, identification of centers of excellence, customer/partner alliances, links with expert organization/universities/thinktanks, and a mix of short-, medium- and long-term movements of people across borders.

Dispersed innovation centers in countries around the globe are leading to joint knowledge creation at local and global levels in multinational corporations, which thus function as knowledge-creating networks. Nonaka identifies this cross-border synergistic process as "global knowledge creation" and sees it as the key process of globalisation.

Challenges can arise here in enabling knowledge transfers between cultures with differing levels of egalitarian work cultures, and in appointment of managers in foreign branches depending on variations in management style. According to research by Ronnie Lessem and Franz-Friedrich Neubauer, the Anglo-Saxon orientation to knowledge creation can be categorized as pragmatic, the French-Nordic as rational, Japanese as holistic, and Latin as humanistic.

### **Interorganisational Dynamics**

Symbiotic co-evolution of organizations can also create knowledge, as evinced in the Japanese aircraft and electronics industries and the South Korean chip company Samsung.

Cooperation across entire industrial sectors occurs with varying levels of intensity and collective benefits in different countries of the world. For instance, it may be the case that US companies are better at learning from and with competitors than Japanese companies.

Samsung leveraged a variety of techniques like "knowledge catch-up" mode (prevalent in many emerging economies), knowledge pioneering, knowledge exposure, co-opetition, absorptive capacity, migratory knowledge (from the Korean diaspora), M&As, and pro-actively creating internal crises to intensify the work pace and accelerate the process of knowledge conversion, according to Linsu Kim, author of "Imitation to Innovation: The Dynamics of Korea's Technological Learning."

Other cultural factors -- such as the extremely hard-working habits of the people of South Korea, its cramped and cold environment, memories of Japanese occupation, and a determination to out-compete Japan -- cannot be duplicated in other countries, according to Kim.

In sum, this is an informative and wide-ranging book that opens the door to many more research questions, working hypotheses and KM methodologies.

*Madanmohan Rao is the author of "The Asia-Pacific Internet Handbook" and can be reached at [madan@inomy.com](mailto:madan@inomy.com)*