## Managing Flow: A Process Theory of the Knowledge-Based Firm

Ikujiro Nonaka, Ryoko Toyama, and Toru Hirata in collaboration with Susan J. Bigelow, Ayano Hirose, and Florian Kohlbacher. New York: Palgrave Macmillan, 2008. 252 + xix pages. US\$85.00.

In *Managing Flow*, the authors present a theoretical model to explain the "dynamic process of organizational knowledge creation and how it develops the creative capacity called *phronesis*" (p. 15, italics in original). This book provides a scholarly treatment of knowledge creation to actualize new product development that scales from the development team to the multinational enterprise.

In *Managing Flow*, knowledge is characterized as "not a self-contained substance waiting to be discovered and collected. Knowledge is created by people in their interactions with each other and the environment" (p. 7). The authors share how to create organizational knowledge in an interconnected global economy. The word *flow* in the book's title reveals the author's interest "in the process in which a firm creates its future by changing itself and its environment through knowledge creation" (p. xix, italics in original).

Phronesis, which may be defined as context-sensitive practical wisdom, was originally defined by Aristotle. It differs from other types of knowledge such as *episteme* (context-independent and objective knowledge) or *techne* (the practical skill required to be able to create). The concept of phronesis is defined as "the ability to determine and undertake the best action in a specific situation to serve the common good (p. 14). Phronesis is the knowledge-creating process in a specific environment that is acquired through the pursuit of excellence.

In Chapter 2, the SECI (socialization, externalization, combination, and internalization) model, which was introduced by Nonaka and Takeuchi (1995) in *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*, is reviewed. This model is used to illustrate the "continuous process of conversion between subjective, tacit knowledge and objective, explicit knowledge" (p. 18). One of the components of the SECI process is *ba*, the "shared context in motion, in which knowledge is shared, created, and utilized" (p. 34). Ba is more than a community of practice where learning occurs; it is a "place for knowledge creation" (p. 36) that has characteristics including the following (p. 37):

- Self-organization with a corresponding intention, objective, direction, and mission.
- Shared sense of purpose.
- Diversity of knowledge.
- · Open boundaries.
- Commitment of participants.

Chapter 3 explores *phronetic* leadership issues. Phronetic leadership is described as flexible, distributed, and determined by the context. "Knowledge leaders must be able to connect various *ba* both inside and outside the organization to form a self-organizing ecosystem of knowledge" (p. 58, italics in original). One specific characteristic is this: "Rather than seeking optimal balance between contradictions, they are synthesized in dialectical thinking that negates the dichotomy and yields knowledge" (p. 63). In a knowledge-creating company, phronesis consists of the following (pp. 55–65):

- Ability to judge goodness.
- Ability to share context with others to create ba.
- Ability to grasp the essence of particular situations.
- Ability to traverse between particulars and universals.
- Political power to implement concepts for the common good.
- Ability to build a resilient organization.

Discussions of how these principles were incorporated into the cultures of specific companies engaged in knowledge-based management are contained in Chapters 4 through 8.

Chapter 4 presents examples of visions and ideals for the future at Eisai, a mid-sized pharmaceutical company, and at Honda Motor Company. Eisai's goal is to improve products "to benefit patients, their families, and the population in general" (p. 73). Its hhc (human health care) vision "mobilizes the collective wisdom of all employees in knowledge-creating activities" (p. 29) and has enabled it to survive in a tough business environment.

The Three Joys concept of buying, selling, and creating was introduced in December 1951 and is still used to assess the value of the product Honda creates. The Honda philosophy of the knowledge-creating process inspires the organization to do more than focus on the competition or strive to be profitable.

Chapter 5 analyzes the concept of *ba* as "an essential enabling condition for deep business relationships and co-creation of knowledge and value, both within the organization and between firms" (p. 133). Mayekawa Manufacturing used the joint creation of knowledge to achieve sustainable competitive advantage. For example, Mayekawa drew upon its expertise in industrial refrigeration to improve the efficiency of a bread factory. Through knowledge co-creation, Mayekawa's role as supplier was upgraded to that of partner.

The KUMON Institute of Education story illustrates how instructors built trusting relationships in *ba* that prepared them to teach children according to level of ability. Even without an operational manual for the KUMON method, KUMON centers have expanded globally because the materials are designed to be customized, the quality of the instructors is high, and there is a system for continuous improvement of the service.

Chapter 6 illustrates leveraging organization dialectics at Seven-Eleven Japan. These convenience stores embrace two principles: "Adaptation to Change and Getting the Basics Right" (p. 141, italics in original). This enables stores to do item-by-item management by a daily practice of hypothesizing, testing, and verification at each store. Instead of

relying on point-of-sale data of historical patterns, the distributed leadership plus the human processes based on face-to-face interactions with customers enable each store to test insights about the future. This allowed stores to minimize losses from unrealized sales. In addition, distributed leadership facilitated collaboration with partners to develop new products in systemic ways.

A recurring principle in *Managing Flow* is that leadership fosters distributed excellence in organizations. In Chapter 8, which contained many stories that originated at Cannon and were retold to illustrate how to manage flow, one of the Cannon stories highlighted the contributions that individual employees can make to improve the cash flow of the entire company. Another story summarized the benefits of the cell product system, the value of which is that "it allows each worker to see his or her work in relation to the whole process and effectively utilizes each worker's knowledge, which continues to accumulate through experience" (p. 214).

The authors of this book advocate flexible and distributed leadership rather than fixed administrative control so that the organization may "respond actively to any kind of environmental change because they are engaged in the sustainable practice of turning knowledge into wisdom, aimed at actualizing the corporate vision in real time" (p. 67). The story in Chapter 8 of the Toyota Prius product development illustrated innovation, incorporation of new technologies, and an improved knowledge-creation process. This enabled the core product development team to use resources effectively and to connect with other *ba* to make the Prius project a success.

I found great value in *Managing Flow* because of segments such as the "Factors behind the Activating Knowledge Emergence in Ba" discussion (pp. 37–39). While many popular books on innovation and new product development may advocate the use crossfunctional teams working in an appropriate physical space, this section lists five features that must be present to activate knowledge emergence. A simple list of bullet points is inadequate to convey the insights. Results will not be achieved by following a 30-day plan or an executive mandate. Instead, the authors build on ideas from philosophers such as Aristotle and Alfred North Whitehead, insightful business leaders,

and innovators to convey complex principles that can be embodied in knowledge-based firms. The theoretical portions of the book expound the knowledge activation concepts, and the pragmatic chapters provide examples of successful implementations.

## Reference

Nonaka, I. and Takeuchi, H. (1995). The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation. New York: Oxford University Press.

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