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# Knowledge-based view of corporate strategy

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## Abstract

This paper discusses a framework of the strategy-making process for executing and continuing both the building of a new, ongoing market position and the acquisition of new capabilities so that a corporation could achieve innovation in the future. This paper describes the case of high-tech corporations in the field of Information and Communication Technology which is undergoing intense change in Japan. This paper also would like to present a new viewpoint on knowledge-based theory of the firm based on data obtained from qualitative research into the time series strategy-making process over the past 11 years. These corporations successfully introduced new products and services to the market through a spiraling knowledge integrating approach through networked knowledge communities as a dynamic view of strategy aimed at deliberately and continually creating new markets.
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*Keywords:* Innovation; Knowledge integration; Boundary; Strategic community; Corporate strategy

## 1. Positioning of the research

Corporations naturally need to upgrade their capabilities in response to changes in their environment (market and technology). In the field of digital products for the consumer (large-screen LCD or plasma televisions, DVD recorders, digital cameras, etc.), for example, Japanese corporations such as Matsushita Electric, Canon, Sharp, and Sony have been upgrading their capabilities in the process of releasing new versions of products (two to three times a year on average) and expanding their product offerings. In recent years, these companies have been dominating the top three positions in global market share for this industry. These corporations have been able to maintain their competitive advantages in the digital products market due to the fact that they have been continually upgrading their technological capabilities (such as improving system LSI development, and adopting cell production methods aimed at cutting costs and improving quality) and process capabilities (building supply chains for global marketing, production, and support systems) while customer needs for digital products have been growing

more diverse (focusing on quality, price, functions, etc.), technology has been evolving (bringing in particular greater functionality, lower power consumption, and greater miniaturization due to the development of system LSIs), and the competitive environment has been changing (caused in part by cost competition from Korean and Chinese companies such as Samsung and Haier).

In the field of third-generation (3G) mobile phone services as well, in the Japanese market, NTT DoCoMo, KDDI, and Vodafone have been continually upgrading their technological and process capabilities and introducing new mobile phones and services to the market in their efforts to respond to changes in customer needs and advances in technology. Responding to this sort of environment by constantly and dynamically changing their own capabilities is vital for high-tech companies in the digital consumer product and mobile phone markets. This is also the dynamic capability approach that these companies need (Teece et al., 1997).

At the same time, these companies also possess capabilities to create an environment that spontaneously gives birth to new markets and technologies. Some examples of this are NTT DoCoMo's i-mode mobile Internet service, J-PHONE's (now Vodafone's) camera-equipped mobile phone, and the electronic money service

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for mobile phones that NTT DoCoMo and Sony started in spring 2004 through a strategic alliance. These developments did not occur so much as a result of responses to customer needs, technological advances or other changes in the external environment but as a deliberate effort of these companies to create new markets and technologies. Electronics manufacturers such as Matsushita Electric and Sharp in the fiercely competitive digital consumer products market mentioned above have each been crossing into other fields of technology and industries in a deliberate attempt to create new markets and technologies. Typical examples are the ubiquitous market that merges broadband and mobile multimedia, and the telematics market that merges electronics, IT, and automobile technologies.

An important issue facing corporations as they seek to achieve future innovation is not just to respond to changes in the environment but also to follow a process of creating an environment in which they can deliberately form a new market position. Particularly in the high-tech industry, where corporations must continue to introduce new products and services in the rapidly changing environment, corporations also need a dynamic view of strategy for creating their own changes in the environment as they respond to external environmental changes (Markides, 1997, 1999; Chakravarthy, 1997).

The positioning-based view that had been the representative theory of strategy until now is a framework that identifies attractive positions through structural analyses of the market (including analyses of competition structures and transaction structures) (Porter, 1980, 1985). On the other hand, there is also the approach of the resource-based view, which emphasizes that concepts explaining gaps in competitiveness and profitability among corporations are unique competences, resources, and capabilities possessed by the corporation (Barney, 1991; Prahalad and Hamel, 1990). Given conditions in which markets and organizations can be analyzed, these theories represent a theoretical framework that can be sufficiently applied in situations where the corporate environment is relatively stable and market structures can be understood or predicted (D'Aveni, 1994, 1995; Chakravarthy, 1997; Brown and Eisenhardt, 1998; Eisenhardt and Sull, 2001). Further, the dynamic capability approach representing a theoretical framework with a dynamic view of strategy is a concept that dynamically changes a company's own core capabilities in line with environmental changes (Teece et al., 1997). In the dynamic capability approach, however, path dependency and market positioning are given conditions, and represent an in–out concept (from the organization viewpoint to the market viewpoint) whereby market position is strengthened after a company's own capabilities are rebuilt by the ideas and actions of a practitioner.

If one considers the framework of the company's strategic process from the business experience of the author himself, however, does not it seem that in its activities, the company is actually forming and executing strategies while dynamically and mutually complementing and reinforcing

the company's own capabilities and market position the company should be aiming for? In other words, does not the essence of this strategy call for the company to take advantage of the view of strategy that dynamically synthesizes the internal (organization) and external (market) sides rather than allowing them to be in opposition to each other? Further, how should practitioners think and act in their efforts to cultivate new markets? What sort of strategy-making process is required of the company? These are the issues that this research addresses.

The strategy-making process that the company constantly uses to deliberately and spontaneously form new positioning (new products, new services, and new business models) beyond the company's own core capabilities especially under an environment of dramatic change and uncertainty is an issue of daily importance to practitioners. To that end, it is important for the company to continue working hard at creating the new capabilities it will need to establish a market position that will allow the company to deliberately create a new environment. Also important at the same time is a process that enables the company to establish a new competitive position as a goal through trial and error. In other words, a basic framework of dynamic ideas and action that simultaneously synthesizes the approach from the exterior (market viewpoint) to the interior (organization viewpoint) and the approach from the interior (organization viewpoint) to the exterior (market viewpoint) is important from the practical side.

As a research approach to the research questions mentioned above, the author believes that the knowledge of individuals, groups, and organizations within and outside the company, obtained from the author's business experience over the past 20 years (developing products and services, providing marketing and customer support, and launching new ventures in the fields of IT and info-communications), forms the basis of a framework for analyses aimed at dynamic strategy-making process.

Representative research results thus far, such as a knowledge-based view of the firm (Grant, 1996a, b), organizational knowledge creation (Nonaka, 1994), wellsprings of knowledge (Leonard-Barton, 1992, 1995). Intellectual capital (Stewart, 1997), working knowledge (Davenport and Prusak, 1998), knowledge workers (Fuller, 2001), and community of practice (Brown and Duguid, 1991), give us valuable insights into how companies can strategically create new knowledge and establish their target market position, from the viewpoint of corporate activities gained from the process of generating intangible assets known as knowledge. The author believes that networked knowledge communities (Kodama, 2005), as a means of obtaining knowledge required by the company to quickly establish its own position as an environment encompassing newer markets and technologies, represents a process of integrating diverse core knowledge inside and outside the company and of obtaining new knowledge in the form of new products and services, and is a vital element of the dynamic view of strategy.