Eurasian Journal of Business and Management, 6(4), 2018, 35-43
DOI: 10.15604/ejbm.2018.06.04.004

EURASIAN JOURNAL OF BUSINESS AND MANAGEMENT

www.eurasianpublications.com

EFFECTS OF OPEN INNOVATION AND VALUE NETWORK ON COMPETITIVE ADVANTAGE IN DESIGN MANAGEMENT: A MODEL PROPOSAL*

Cengiz Kastan
Istanbul Aydin University, Turkey
Email: ckastan@aydin.edu.tr

Akin Marsap
Istanbul Aydin University, Turkey
Email: akinmarsap@aydin.edu.tr

Abstract

The intense competitive environment does not allow non-innovative businesses to create sustainable competitive advantage. To survive, businesses must possess information-based assets that can not be imitated by their competitors, and they must restructure them to suit changing conditions of the day. In this study, businesses constantly communicate with other businesses, organizations and people in their environment and share information; all elements of the network co-ordinated to produce unique or significantly improved products and processes that can be marketed in a common objective; they create the highest value compared to their competitors so they are scrutinizing the codes of achieving sustainable competitive advantage. The increasing variability, uncertainty, and increasing cost of environmental conditions today require that innovation efforts not be limited within the enterprise. This situation; innovation efforts have led to the concept of open innovation, which is continued through the realization of communication and information sharing with other businesses and individuals. On the other hand, these conditions are for businesses to cooperate with each other; it also forces them to create value networks. Network organizations, virtual organizations, outsourcing from contemporary management approaches are examples of these collaborations. Especially one of the sources of product innovation is the design. Design has the potential to create unique products on the market as an important means of innovation. The need for effective and efficient use of design resources to unite the concepts of design and management in one pot and to contribute to the achievement of the enterprise's goals has led to the concept of design management. In the conclusion of the report, new perspectives for the future will be reflected and assessed in relation to more effective use and development of design management, open innovation and value networks in enterprises to create a competitive advantage.

Keywords: Open Innovation, Value Networks, Competitive Advantage, Design Based Innovation, Design Management.

* In the International EMI Social Sciences Congress held in Cyprus-Nicosia on 27-29 April 2018, a narrow form was presented under the title of 'Open Innovation and Value Networks in Design Management'.

1. Introduction

Today, competition in international markets is focused on innovation and creativity. There are new product inflation in international markets. The introduction of new products that will be successful among thousands of products makes it necessary to develop new approaches. In recent years, one of the concepts that are increasingly understood is design. In the traditional approach, while the design, keeping only the functionality of the product in the forefront and determining its form, also adds meaning to the product rather than utilitarian qualities in the postmodernist understanding that has developed since the 1980s (Heskett, 2005). One of the sources of product innovation is design. At the stage of the process, it determines the design, form and style of the process and enables the original products to be put on the market. Design is an important competitive tool. The effective management of this aspect of the concept has been discussed. Thus, the concept of design management has emerged.

As a result of factors such as increasing the need for continuous innovation in order to be competitive, increasing cost of R&D and development of communication technologies, innovation efforts started to be fed from outside environment besides the resources of the enterprise. Support from the outside world to innovation studies; the compilation of new ideas, products, processes and methods that can be offered to the market from other businesses and individuals constitutes the essence of open innovation. Thanks to this understanding, a large number of innovations can be realized at very low costs in a short time.

The fact that enterprises take the lead in competition depends on creating more value than their competitors. Businesses constitute other business, customers, suppliers, and even competitors and business ecosystems. These systems, also called value networks, are often seen as various networks, associations and partnerships. Among the contemporary management approaches, network organizations, virtual organizations and outsourcing are examples of these collaborations.

This study aims to explain the role of open innovation and value networks in achieving competitive advantage by creating the highest value within the framework of design management concept. In the literature, there are limited studies examining the effects of the three concepts mentioned above in a coordinated manner. Our study will contribute to the elimination of this deficiency. In order to realize this, firstly, the competitive advantage and the contents of the three concepts are given. The study presents a model that facilitates understanding of the contributions of design management, open innovation and value networks in the creation of value and the functioning of the system in next section. In the design studies, it is important to develop the innovation ecosystem throughout the country, to promote university-industry cooperation and studies that reflect the understanding the economic importance of design in enterprises in order to gain competitiveness through the successful management of open innovation and value networks. The study concludes in this context by ordering suggestions.

2. Conceptual Framework

2.1. Competitive Advantage

Competition is the struggle for superiority among competitors. B.C. The Chinese philosopher Tzu, who lived between the years of 400 and 320, describes the ideal competition as a way to win without fighting aiming to achieve maximum success with the minimum use of the forces in hand (Tzu, 2000, p. 5).

In recent years, Porter's (1998) five power models and a resource-based approach have been widely accepted in competition studies. Porter (1998) defines the company that has the competitive advantage as the highest yielding company compared to its competitors, provided that the investor has a set free market return. The concept of competitive advantage in a resource-based approach is often defined as the relative superiority that an enterprise gains in the market position as a result of having resources and capabilities that cannot be at the same time by its competitors or by creating a strategy that cannot be implemented simultaneously by its competitors (Peteraf and Barney, 2003).

Some researchers emphasize the concept of 'surplus value'; it states that the enterprise that creates the most residual value will have a competitive advantage. Hoopes *et al.* (2003) draw attention to heterogeneity in the competitive advantage. Researchers define value as the price that a consumer is willing to pay to goods and services that are not rival yet according to budgetary constraints and other purchasing opportunities. For the consumer, the value and price are the residual value of the difference between price and cost for the producer. The fact that the enterprise that has the highest residual value has a competitive advantage may explain the competitive advantage of enterprises with different performance even though they have similar resources and capabilities in the same industry.

In a certain period of time, seizing the competitive advantage is not enough for the business to survive successfully. The elements such as developments in global markets, technological advances, strategies of competitors, competition of substitute goods etc. are constantly continuing to change the current situation. In this context, the dynamic dimension of the subject, in other words; the concept of sustainable competitive advantage emerges.

The dynamic dimension of competition takes place in the Schumpeter (2003) approach with the concept of 'creative destruction'. Therefore, in order to maintain a sustainable competitive advantage, the enterprise should be prepared to develop its future in the best possible way and to prepare for any future developments in the future.

Halawi *et al.* (2005) state that sustainable knowledge is a form of knowledge management system formed by knowledge infrastructure and knowledge quality within the organizational environment and business environment. According to literature-based approach literature; competitive advantage can be created and sustained by the use of knowledge.

Several studies have been carried out by researchers on the criteria that determine competitiveness: Aaker (1989), Kotha and Nair (1995), Beal (2000) and Spanos and Lioukas (2001). In these studies, innovation is among the criteria of Beal (2000), who used 23 competitiveness measures under five headings in order to prepare factor analysis in a study of effective competition in small-scale enterprises. These main headings are; innovation, marketing, low cost leadership, quality and service derivatives.

2.2. Design Management

The design is a variant of the Latin word model "designare" (Mozota, 2003, p. 9), which is to think, imagine and model something in the brain, means to show and express in forms. At the same time, design, in essence, is a human-specific ability to serve our needs, and to add meaning to our lives by means of non-natural ways (Heskett, 2005). Design is a concept that has the capacity to compromise between industrial and technological universes and consumers (Mozota, 2003). Businesses achieve their goals through the successful marketing of the products they offer to the market. It gives the answer to the question of what we will produce. In this context, the design capabilities of the enterprise are too important to ignore and the concept of design management has established itself as an important approach in the competition race.

Design management is to develop an understanding of design to contribute to the realization of long-term business objectives and to coordinate design resources at all levels of business, and to apply design as a formal work program within a business (Mozota, 2003). The importance of design management can be explained in four different ways (Mozota, 2003): First of all, as knowledge deepens in understanding the role of design in innovation in every sector, businesses will differ more effectively from design management to their own business. They will look to be a powerful resource for innovations that will create superiority. Secondly, as consumers continue to be more determined to find options in the market and to improve their quality of life, they will only demand what better design management can achieve - better design. Third, the move from design management in attitudes to management for design will free the design potential. Fourthly, the role that design will play and the increasing importance of building a bridge between the economic and cultural aspects of the world and the world alone will open doors to the design that will have a significant contribution to healthy, balanced societies around the world.

The term design management was first used in the literature in 1964 (Emmitt, 2010). However, previous developments have led to the emergence of this statement. Early (front) efforts

include: The first design management practice to achieve a business goal was carried out in Munich in 1907. The aim of the work carried out by 12 architects and 12 enterprises was to integrate traditional handicrafts and mass production techniques. Thus, Germany could compete with England. The most important name of this period is the German designer and architect Peter Behrens, who is considered to be the world's first major industrial designer and father of corporate identity. Behrens is responsible for the visual identity of all of AEG's products and has formed the entire corporate identity (logo, product design, promotion, etc.) of the company (Heskett, 2005). In UK, the earliest contributions to industrial design and design management were made by Frank Pick in the 1930s. He redesigned London's transportation system (Liu, 2014). In the 1960s, this concept referred to the management of relations between a design agency and its customers. In 1966, Michael Farr observed the emergence of a new unit in businesses: The task of ensuring the smooth running of projects and maintaining good relations between the design agency and its customers. This was followed for the first time in England with the joint efforts of the London Royal College of Art and the London School of Management Design Management Department under the leadership of Peter Gorb. In 1975, he founded the Hill Hannon and the Design Management Institute (TYE) at the Massachusetts College of Art, Boston, USA (Mozota, 2003). TYE collaborates with Harvard Business School; the two organizations have prepared international projects together. In 1989, Design Management Journal, the leading publication in this field, has been published. Nowadays, there are some undergraduate courses and MBA programs in Design Management at a number of universities.

2.3. Open Innovation

Innovation work in creating value is one of the effective tools. Ahmed and Shepherd (2010) approach the concept of innovation from two perspectives: Innovation can first be considered as a process that creates added value. Innovation as a value-added action is an activity process. Second, innovation; a division is the ability to bring non-controlled elements into the form of a combination of the right combination and harmonization processes.

The first main element of innovation is doing new things and the second main element is creating economic / social value. Innovation, which is the first element of doing new things, also includes products or methods that have been significantly improved along with the original things created from scratch.

With the innovation studies, total cost can be reduced and / or different products can be put on the market. The benefits of innovation to improve competitiveness can be listed in more detail (Tomala and Senechal, 2004): To meet new consumer needs, to provide a wider range of products, to improve quality and reliability of existing products, to gain new markets, to reduce the damage to the environment, to comply with legislation and standards, improve production flexibility, reduce costs and improve the performance of various product-dependent services.

Since the late 1990s, an open (network) innovation model has been introduced. The concept of open innovation became popular after Chesbrough (2003) defines the concept as a paradigm, which assumes that enterprises have the ability to use external routes and external ideas as well as internal roads and internal ideas as well as the use of external ways to reach the market when they aim to achieve technological superiorities.

Applying open innovation requires a change in mentality and culture. Top management support is essential for employees to act in a way that encourages open innovation (InnovationManagement, 2014). With this concept, enterprises must create an innovation ecosystem.

Lichtenthaler and Lichtenthaler (2009) evaluate three information processes (information research, ownership and use) conducted within or outside the enterprise in capacity based open innovation studies. They explain their opinions with a six-cell matrix: Capacities of absorption, transformation, attachment, innovation and reflection. Capacity of the invention; the ability of the enterprise to discover the information within the body, the capacity to absorb; ability to discover external information, conversion capacity; the capacity to connect the information it produces within the body; the ability to maintain knowledge in interpersonal relations; capacity and capacity to make inventions that match the needs and needs of the market; it refers to the ability to use

external information to complement the internal information practices of the company's products. From another perspective, Huizing (2011) discusses the concept; in the context of open and closed innovation options, it presents a four-cell matrix comparing the innovation process and its outputs. In these cells, closed innovation, enterprise-specific open innovation, open to society innovation and open source innovation are introduced.

According to Baumgartner (2009a); there are four popular approaches to open innovation: Open proposal schemes, idea contests, outsourcing and publicly funded projects. Open recommendation schemes are new ideas, suggestions, suggestion boxes or public websites. Idea contests are award-winning competitions for an innovative solution to a problem. Outsource is the fact that the announcement of special business needs in an open forum leads to much more knowledge than an idea competition. Publicly funded projects; as the name suggests, the projects are financed by the public in this approach which is less well known but better constructed than other approaches.

In order to succeed by finding suitable partners in open innovation, an approach to succeed is want, find, get, manage (Dalton, 2009). Want; in the first stage, is clearly determined as what is expected from cooperation and what is the need. Find; at this stage, is about external solutions such as various networks, companies, universities etc. With a less hierarchical policy approach at the macro level, industry and science should be brought closer. The government should develop policies focusing on the relationship between businesses and universities (Becker and Eube, 2018). Get; in the third phase, is a rigorous elimination process established for the discussion and evaluation of the partners. Manage; that is, cooperation management is a complex endeavor. Tools, measurements and, most importantly, discipline are needed to manage cooperation.

The legal aspect of the open innovation mechanism constitutes intellectual property rights and conventions. Small businesses are often at risk from medium and large-scale enterprises because they do not have lawyers and experts (Baumgartner, 2009b).

Open innovation is included in value networks; one of the most important elements of networks.

2.4. Value Networks

Today, there are trends in value creation networks: From bilateral relationships (customers, suppliers, competitors) to business ecosystems (value networks), from closed / internal innovation to open innovation models / innovation networks, and to competition with unions, partnerships and networks. Thus, network-based work and network organizations; 'value networks' emerge. The main problem; management of networks. Naisbitt (1996) emphasizes the importance of networks: Global companies, which are active in many countries in the global economy, are members of small but large networks. The new type of magnitude will be very large networks from large master systems.

The areas of competition for value creation can be grouped under three headings:

• Competition in core value production (stable, well-defined value system); effective studies in value production in the current market. Example enterprises; DELL, IKEA, H & M, UPM, Toyota, Polarcup.

• Competition in increasing the value (creation of value system with incremental developments); market is used. Customer relations management and production developments. APPLE, IBM is an example of such work.

• Future-oriented competition (radical development and value system formation); the creation of new markets. Mobile services, such as the house of the future, nano jobs, the energy and materials of the future.

The actors of the value system are actors, resources and capabilities of a system that performs the value activities necessary to produce products, services and systems for the final consumers, and the actors who control and / or coordinate them, and the customers needed to create the value together.

Basic value systems and networks can be examined in more detail as follows (Möller and Svahn, 2003):

• Basic value generation systems consist of vertical supply-demand networks and horizontal market networks. In vertical supply-demand networks, excellence in efficiency, key roles (creating and achieving value), coordination management, competition, business model, organization and innovation management, the best result will be the value system innovation. In horizontal market networks, cooperation proposal for better customer value, management of owned resources and systems, greater market power, competition among coalitions, business model, organization and innovation management together constitute value system innovation.

• Value added systems are business renewal networks and customer solutions networks. In the business renewal networks, there are projects that involve many participants, oriented towards the aim, incremental innovation, new solutions and efforts to create knowledge. On the other hand; customer solutions include networks, customized solutions and market segments that require their presentation, industry structure, software and service solutions, artistic and cultural production.

• New value systems are application networks, design-based networks and innovation networks. Application networks, production, marketing, branding, competition in market expansion, customer service networks etc. subjects are studied. In design-based networks, the role of an enterprise in the network (potential orchestra conductor, radical innovator, proprietor of special knowledge / technology, etc.) focuses on mobility, presence of key players, design-based structuring. Innovation networks play an important role in the development of new technologies and business opportunities in the future competition. Kage *et al.* (2016) propose a four-stage method for designing value networks for innovation: (a) Determination of cooperation demand. At this stage, the content of the demand for cooperation is established. (b) Partner preselection. Potential partners are listed. (c) Partner evaluation. Relevant partners are selected. (d) Implementation planning. Action plan is prepared.

3. Model Proposal

By the way, we present a model proposal to explain how design management, open innovation and value networks provide a coordinated competitive advantage. Porter (1998) proposes three general competitive strategies: Total cost leadership, differentiation and focus. The total cost strategy meets the needs and expectations of the consumers from the level of the prices in the market, while minimizing the total cost in all operations of the enterprise. The differentiation is that the enterprise creates something unique from its competitors by differentiating its products. The focusing strategy is the implementation of the other two strategies, not for the whole market, but for a defined part. The globalizing world and technological developments make one of the competitive strategies, the fast-responding strategy. The ability to recognize and meet consumer needs from competitors before is called quick response.

It was previously explained that achieving competitive advantage is possible by creating higher value than competitors. Value-creating studies can be analyzed with ‘value chain analysis’ (Porter, 1998). In the value chain analysis, by analyzing each ring of the system in which the products flow towards the consumer, strong and weak points are determined and weak points are eliminated or strengthened. Studies that do not create added value in the process and which are not required for management are extracted.

The interdependence of value-creating activities is not limited to studies that create value only within the enterprise. The interaction of value-creating activities is also present among the value chain of the parent enterprise and the value-added activities of the suppliers and distribution companies.

Value-creating studies in the enterprise are the perception of the value of the standard product purchased by the customer. The value can be created in two ways: The customer believes that he has paid a price less than the standard product he buys. Or the customer believes that he / she buys a different product even if the price he / she paid is high. In this approach, the company can realize the value increase that will achieve competitive advantage in two ways: (1) The enterprise tries to provide cost advantage by decreasing its costs. The aim here is lower costs, to sell products with market price; to increase profit margin. The important thing is reducing costs while not compromising quality. Reducing costs at the same quality level depends on the

development and implementation of creative ideas. (2) The other way is to differentiate products. In this method the aim is to differentiate the product; to raise the price; to increase profit margin. In order to differentiate the product, R&D, design and creative ideas should be put on the market.

Businesses with a competitive position are not only interested in lowering their costs, but also in their customer value. In this context, the basic measure in determining the competitiveness of an enterprise is the level of customer satisfaction and customer satisfaction with innovative, original designed, customer-specific products that are the product of creative and innovative philosophy. Quality, which is the focal point of competition especially in 1980's, is an endless process which renews itself continuously and focuses on being flexible and innovative.

Considering these concepts within the framework of holistic approach; open innovation and value networks in enterprises that adopt the concept of design management, create higher value in comparison to opponents in the interaction. The creation of value is achieved by at least one of the ways of differentiation, cost leadership and quick response. The creation of high value brings competitive advantage (Figure 1).

The model refers to the balance between the internal and the external environment: While the design management practices are carried out within the enterprise, the open innovation and value networks are located in the external environment. The value is related to the external environment of the enterprise as well as its internal structure.

In the creation of value, there are products that are original and / or significantly improved, in other words, innovative products. Design makes it possible to present original products. A growing number of enterprises recognize the importance of design-based innovation. In design based innovation, the balance between technology, market and meaning is important (Utterback *et al.* 2006). Information about technological opportunities, user needs and product languages is transformed into original design by creating functionality and style to convey a message to the consumer.

Value networks, subcontractors, universities and research laboratories, trade associations, venture capital enterprises and various individuals are the sources of open innovation, created to benefit from advantages such as lowering costs, achieving the most benefits with limited resources, taking advantage of unqualified expertise and being flexible. This wide range of resources outside the business makes it easier to compile new ideas, unique designs that will be more successful in the marketplace than those of the company.

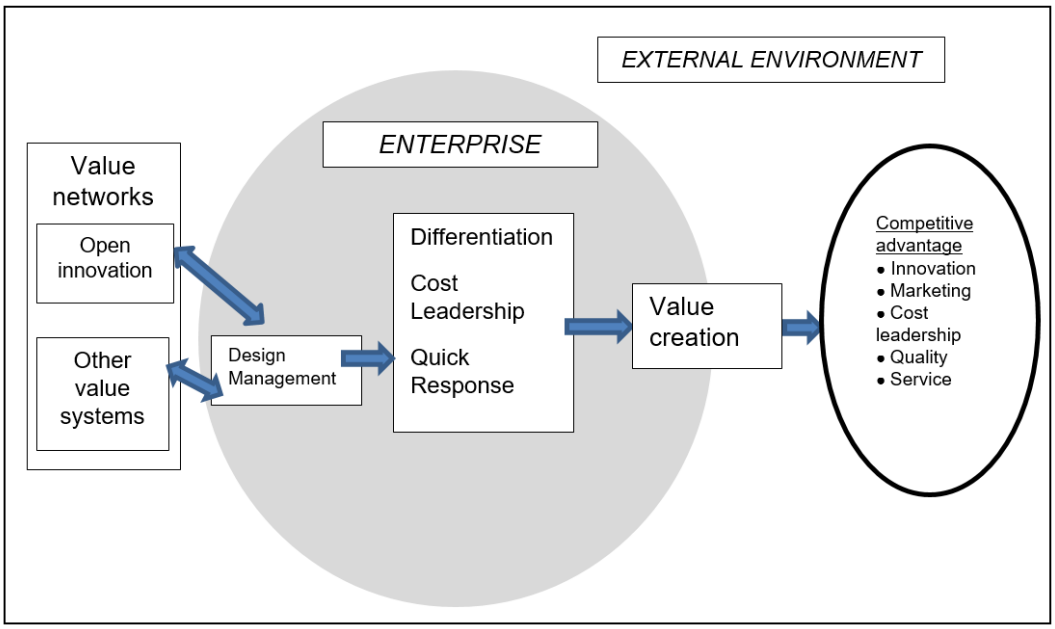

Figure 1. Competitive superiority in the perspective of design management, open innovation and value networks
Source: Kastan and Marsap (2018)

4. Conclusion and Recommendations

Design management, open innovation and value networks are important concepts for enterprises to gain competitive advantage. Productive and efficient management of networks that offer the ability to distribute risks, minimize costs and assess the full potential of human and technology, as well as original products / services with high market share can be developed. In order to evaluate these concepts in a way to create a synergy effect, the following studies can be carried out on the basis of higher education institutions and enterprises nationwide:

First, a suitable cultural environment should be created to support original studies. At this point, the ”lifelong talent management’ concept is important by developing the existing talents and adding new talents. This understanding can be applied at the scale of the enterprise or at the national level.

The importance of design management in terms of economics should be ensured in higher education programs by taking into consideration the contributions to be provided to the countries in international markets: Faculties that have business and design education should jointly develop Design Management training programs. Design Management course should be generalized in the curriculum of business schools. Master's degree programs in Design Management should be replicated. The institutes that will conduct research on this subject should be established.

Further education and training in the fields of industrial design and other fashion design, shoe design, jewellery design and graphic design should be further developed and expanded. Training programs should be opened in new design areas (bags, smart cities). Also, activities such as congresses and symposiums should be organized on design management and attention should be given to all concerned. Theoretical and practical studies should be encouraged.

Efforts should be made to improve university and industry cooperation. Efforts towards productive and efficient use of networks should also be supported. Businesses should develop original, aesthetic, mobile and customizable products. Finally, research and development units should be transformed into research-development-design (ART / AGT) form by adding the design to the work of both the universities and research institutions.

References

Aaker, D. A., 1989. Managing assets and skills: The key to a sustainable competitive advantage. *California Management Review,* 31(2), pp. 91- 106. https://doi.org/10.2307/41166561

Ahmed, P. K. and Shepherd C. D., 2010. *Innovation management context, strategies, systems and processes*. London: Pearson Education Limited.

Baumgartner, J., 2009a. The basics of open innovation. *InnovationManagement* [online]. Available at: <http://www.innovationtools.com/articles/enterprisedetails.asp?a=475> [Accessed on 12 January 2018].

Baumgartner, J., 2009b. The legal side of open innovation. *InnovationManagement* [online]. Available at: <http://www.innovationtools.com/articles/enterprisedetails.asp?a=463> [Accessed on 12 January 2018].

Beal, R. M., 2000. Competing effectively: environmental scanning, competitive strategy, and organizational performance in small manufacturing firms. *Journal of Small Business Management,* 38(1), pp. 27-47.

Becker, B. A. and E. C., 2018. Open innovation concept: Integrating universities and business in digital age. *Journal of Open Innovation: Technology, Market and Complexity,* 4(12), pp. 1- 16.

Chesbrough, H. W., 2003. *Open innovation: the new imperative for creating and profiting from technology*. Massachusetts: Harvard Business School Press.

Dalton, M. A., 2009. *Are you ready for open innovation?,* 14. 07. 2010, http://www.guidedinnovation.com/si/2009/11/13/are-you-ready-for-open-innovation/.

Emmitt, S., 2010. Design management in architecture, engineering and construction: origins and trends. *Gestão & Tecnologia de Projetos*, 5(3), pp. 27- 37. https://doi.org/10.4237/gtp.v5i3.173

Halawi, L. A., Aronson, J. E. and McCarthy, R. V., 2005. Resource-based view of knowledge management for competitive advantage. *The Electronic Journal of Knowledge Management,* 3(2), pp. 75-86.

Heskett, J., 2005. *Design a very short introduction*. Oxford: Oxford University Press. https://doi.org/10.1093/actrade/9780192854469.001.0001

Hoopes, D. G., Madsen, T. L. and Walker, G., 2003. Guest editors' introduction to the special issue: Why is there a resource-based view? Toward a theory of competitive heterogeneity. *Strategic Management Journal,* 24, pp. 889- 902. https://doi.org/10.1002/smj.356

Huizing, E. K. E. R., 2011. Open innovation: State of the art and future perspective. *Technovation*, 31(1), pp. 2-9. https://doi.org/10.1016/j.technovation.2010.10.002

InnovationManagement, 2014. *The role of top management in open innovation* [online.] Available at: <http://www.innovationmanagement.se/2014/02/19/the-role-of-top-management-in-open-innovation/> [Accessed on 11 September 2018].

Kastan, C. and Marsap, A., 2018. Open innovation and value networks in design management. *International EMI Social Sciences Congress*, Cyprus- Nicosia, 27- 29 April 2018.

Kage, M. Drewel, M., Gausemeier, J., and Schneider, M., 2016. Value network design for innovations: developing alternative value network drafts. *Technology Innovation Management Review,* 6(7), pp. 21- 33. https://doi.org/10.22215/timreview/1002

Kotha, S. and Nair, A., 1995. Strategy and environment as determinants of performance: Evidence from the Japanese machine tool industry. *Strategic Management Journal,* 16(7), pp. 497- 518. https://doi.org/10.1002/smj.4250160702

Lichtenthaler, U. and Lichtenthaler, E., 2009. A capability-based framework for open innovation: Complementing absorptive capacity. *Journal of Management Studies* 46(8), pp. 1315-1338. https://doi.org/10.1111/j.1467-6486.2009.00854.x

Liu, S. X., 2014. The evolution of design management: A comparison of the UK, US, and Japan. *International Journal of Cultural and Creative Industries,* 2(1), pp. 62- 78.

Mozota, B. B. D., 2003. *Design management: Using design to build brand value and corporate innovation.* New York: Allworth Press.

Möller, K. and Svahn, S., 2003. Managing strategic nets: A capability perspective. *Marketing Theory*, 3(2), pp. 201- 226. https://doi.org/10.1177/14705931030032002

Naisbitt, J., 1996. From nation states to networks. In: R. Gibson, ed. 1996. *Rethinking the future: Rethinking business, principles, competition, control and complexity, leadership, markets and the World.* London: Nicholas Brealey Publishing Ltd. pp. 212- 227.

Peteraf, M. A. and Barney, J. B., 2003. Unraveling the resource-based tangle. *Managerial and Decision Economics,* 24, pp. 309- 323. https://doi.org/10.1002/mde.1126

Porter, M. E., 1998. *Competitive advantage creating and sustaining superior performance.* New York: The Free Press.

Schumpeter, J. A., 2003. *Capitalism, socialism and democracy.* London and New York: Routledge.

Spanos, Y. E. and Lioukas, S., 2001. An examination into the causal logic of rent generation: Contrasting Porter's competitive strategy framework and the resource-based perspective. *Strategic Management Journal*, 22, pp. 907- 934. https://doi.org/10.1002/smj.174

Tomala, F. and Senechal, O., 2004. Innovation management: a synthesis of academic and industrial points of view. *International Journal of Project Management*, 22 (2), pp. 281-287. https://doi.org/10.1016/j.ijproman.2003.06.003

Tzu, S., 2000. *The art of war*. Translated by L. Giles. Leicester: Allandale Online Publishing.

Utterback, J. Vedin, B.-A., Alvarez, E., Ekman, S., Sanderson, S. W., Tether, B., and Verganti, R., 2006. *Design- inspired innovation*. Singapore: World Scientific Publishing Co. Pte. Ltd.