Tracing the economics behind dynamic capabilities theory

Dynamic capabilities theory

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Abstract

Purpose – The purpose of this paper is to trace the evolution of dynamic capabilities theory in the primal theories of economics and strategic management. Then a comprehensive research framework is proposed to grapple with the dynamics of the contemporary global markets, incorporating the quintessential elements of the theory, i.e. absorptive capability, innovation capability and adoptive capability.

Design/methodology/approach – The paper is conceptual in nature. It tries to review various economic systems of the world since 1770s till the present era. It also evaluates various theories of international business against dynamic capabilities theory and thus proposes various propositions for future empirical testing.

Findings – The study has delineated various theories tracing in them the roots of dynamic capabilities. Capitalism, communism and socialism is explained to reach the present state of world economy. Various theories such as the theory of creative destruction, transaction-cost approach, resource-based view and knowledge-based view of the firm have been elaborated to identify their features and shortcomings. Finally, the contemporary theory of dynamic capabilities has been elucidated to integrate the shortcomings of the previous theories. A research framework has also been proposed to overcome the recent criticism of the dynamic capabilities theory of having under-specified constructs.

Originality/value – Very few studies have elaborated various economic systems and theories to trace the evolution of dynamic capabilities theory. Thus, this study is original in nature and the proposed research model is also novel which induces further empirical evidence as proposed by the authors.

Keywords Knowledge transfer, Dynamic capabilities, Innovation, Knowledge-based view, International strategic alliance, Theory of creative destruction.

Paper type Research paper

1. Introduction

Understanding the source of competitive advantage has enticed the attention of scholars and practitioners across the globe (Barney, 1991). Global business leaders agree to the fact that the ability to generate new ideas and to harness them via innovation is one of the top priorities of the firms to remain competitive (Porter and Millar, 1985; Sachneider and Spieth, 2013). The knowledge economy has led to a shift in global competition via knowledge replacing the traditional sources of competitiveness. The multitude of organizational forms like international strategic alliances in the present epoch is the causatum of the firms' attempt to strike a balance between co-operation and competition (Porter and Millar, 1985). In international business, intense competition due to rapid technological advances has led to the reckless development of new products and services in this dynamic world, thus making innovation the paramount source of competitiveness (Teece *et al.*, 1997; Wang *et al.*, 2018).

Based on an extensive review of various theories such as the transaction-cost theory, resource-based theory and knowledge-based theory, the dynamic capabilities theory has been elaborated (Barney, 1991; Teece, 1992, 2017). A comprehensive research framework has also been proposed in this study to highlight the elements of dynamic capabilities theory, i.e. organizational factors affecting knowledge transfer among international firms,



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which can, directly and indirectly, affect the innovation capability and performance of the firms. An important element of dynamic capabilities theory which is seldom studied in a holistic framework is also incorporated: absorptive capacity. This study proposes the empirical investigation of the proposed research model to check its applicability and generalization.

2. Background of various economic systems

The roots of various modern economic theories of international business can be traced in the book "The Wealth of Nations" by Adam Smith, which was written way back in the year 1776. This is considered one of the first treaties highlighting the role of free markets for efficient working of the world economy as a whole (Smith, 1776). He also gave the "theory of absolute advantage" in 1776 where he advocated the free exchange of goods and services across nations of the world can result in the import of goods at a lower price as compared to the price at which it can be locally produced (Schumacher, 2012). The ideology of Adam Smith inspired many others like Karl Marx who became one of the eminent economists after Adam Smith. Following is a brief explanation of various economic systems that prevailed in the world economy which led to the present-day era of mixed economic systems.

2.1 Capitalism

Adam Smith is known as the "father of Capitalism" as he was the first one to advocate the unequal distribution of wealth among nations (Bradshaw *et al.*, 1993). Capitalists tried to accumulate as much wealth as possible to increase their capital for further expanding the production of goods to expand their wealth even more. Capitalists did this to maximize their profits in the competitive market (Bradshaw *et al.*, 1993; Esping-Andersen and Poulantzas, 1976). But in this process, they did not hesitate to exploit workers. These exploitative conditions led to the evolution of an era of socialism as explained next.

2.2 Socialism

The system of socialism was noticed to be initiated in the year 1789 after the French Revolution (Newman, 2005; Szelenyi and Kornai, 1993). This system advocated the ownership of property and other means of production only in the hands of people, thus demanding equal distribution of wealth and income among people (Debray, 2007). But this system, by assigning the major role to the government, intervenes between the market forces of demand and supply which often results in market inefficiencies (Schumpeter, 2010).

2.3 Communism

Another economic system is communism which was expected to replace capitalism. This system was introduced in the book "The Communist Manifesto" in the year 1848 and was an economic-political philosophy characterized by various features similar to socialism (Newman, 2005). The primary goal of this system was to eliminate the economic gap between rich and poor to establish an equal society. The system is governed by the state/government in a totalitarian way (Szelenyi and Kornai, 1993). But in a pure communist society, various problems arise leading to inefficient mechanisms such as no free market forces, no incentives for working harder than others, forced collectivism (Schumpeter, 2010; Stouffer, 1955).

As seen above no particular system can result in efficient working of the market, most economies of the world today have adopted a mixed economic model where capitalists prevail in the economy but with the supervision and surveillance of government with major



welfare role played by government. Another economist whose work is much appreciated and forms the base of modern-day theories is Joseph Schumpeter as explained below in the theory of creative destruction.

2.4 Theory of creative destruction

After the downfall of complete capitalism and recognizing the disadvantages of other economic systems like socialism and communism, most economies of the world have adopted mixed models of economic development (Schumpeter, 2010). But these systems lend their characteristics to many modern-day theories. The theory which forms the basis of the "Dynamic Capabilities theory" (the base of the present study) is Schumpeter's theory of creative destruction (Scherer, 1986). Joseph Schumpeter came up with the view that innovation can replace the other sources of competition in the market which essentially was prices of goods and services at that point of time (Perelman, 1995). Thus, he became one of the first economists to recognize the new side of the economic life which is not static and thus termed as "dynamic", requiring a new cycle of innovation and development incessantly (Aghion *et al.*, 2001).

Schumpeter coined the term "creative destruction" in his book "Capitalism, Socialism, and Democracy" in 1942. He recognizes the process of industrial mutation as the one continuously demanding revolutionary economic structure via incessantly establishing a new one and replacing the old system (Schumpeter, 2010). This theory recognizes the dynamic structure of the market economy thus demanding unabating innovation to attain and sustain competitive advantage in the global market. Dynamic capabilities theory lays its principles on this basis only (Hanusch and Pyka, 2007). In the next section of this paper, this theory is explained in details along with the explanation of theories preceding it.

3. Theories of strategic efficiency in international business

This section of the paper explains various theories determining the firms' efficiency by combining the various economic and organizational theories to explain how firms in the contemporary world attain competitive advantage. This covers various approaches such as transaction-cost theory, resource-based view (RBV), knowledge-based view and finally the most nascent theory of dynamic capabilities which tries to grapple with the shortcomings of previous theories to explain how firms can achieve sustainable competitive advantage in the global market.

3.1 Transaction-cost theory

Ronald Coase, the forefather of transaction-cost theory, introduced it in his article "The Nature of the Firm" (1937), where he explained why firms exist and the inter-relationship between economic activities and the imperative costs associated with them (Coase, 1998; Coase, 1937). Adam Smith's theory of absolute advantage and David Ricardo's theory of relative advantage form the base of this theory as they advocate the use of goods and services produced by other firms to minimize the transaction costs (Williamson, 1981, 1998). Further, this theory was developed more succinctly in Oliver E. Williamson's book "Transaction Cost Economics" where he approached the firm as a governance structure and identified the characteristics of various particular transactions (Williamson and Masten, 1995). This theory borrows its principles from capitalism which witnessed the industrialists minimizing their costs to gain maximum profits (Gibbons, 2010; Zhao *et al.*, 2004). Hennart brought this theory in the field of international business where firms compete and co-operate



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with each other to attain competitive advantage (e.g. international strategic alliances) (Hennart, 2010). These types of organizations demand a high transaction cost like search and information cost, bargaining and decision cost and policing and enforcement cost. The theory has been broadly represented in Figure 1. This theory was criticized for overemphasizing the cost/price view and ignoring the importance of other resources as a source of competitive advantage (Teece, 2010b, 2017; Teece *et al.*, 1997) which led to the development of alternate views as explained below.

3.2 Resource-based view

The initial insights of this approach were provided by Penrose, but this theory was put forward by Wernefelt which was further popularized by Barney (Barney, 1991; Penrose, 1959: Wernerfelt, 1984). Edith Penrose's book "The Theory of the Growth of the Firm" is considered as the intellectual foundation of this approach as he was the first one who saw the firm as a unique bundle of tangible and intangible idiosyncratic resources which could form the provenance of competitive advantage, departing from the previous transaction-cost approach (Rugman and Verbeke, 2002; Wernerfelt, 1984). It built upon the assumption that growth, firm performance and competitive advantage are concomitant (Nason and Wiklund, 2015). Barney was of the opinion that the firms' performance differences build upon the premise of heterogeneous distribution of resources across the firms, i.e. VRIN resources: valuable, rare, inimitable and non-substitutable resources of a firm. Barney defined the firm's resources as the sum of all assets, organizational processes, attributes, capabilities, information, knowledge, etc., which can be acted upon to upsurge the efficiency and effectiveness (Barney, 1991). Graphical representation of this theory is given below in Figure 2. This was one of the first theories which adopted a view focusing on the factor conditions of the firm as part of the porter's diamond framework, i.e. resource-base of a firm (Conner and Prahalad, 1996). This theory was criticized as being static and adopting a completely inward-looking approach, ignoring the dynamism of external environment such as changes in political and legal framework, cultural and religious beliefs and economic conditions, which can drastically impact the firm (Helfat and Peteraf, 2003). This aspect is incorporated in the dynamic capabilities theory explained below following the knowledgebased view (Teece et al., 1997).

Figure 1.
Transaction cost theory



Figure 2. Resource-based theory





Robert Grant brought this concept as a theory of the firm (Grant, 1996). The main premise of this theory stemmed from the RBV of the firm, i.e. resource and capability-based competitive advantages (Conner and Prahalad, 1996). It differs from the RBV which categorized knowledge among the generic resources of the firm (Wu and Chen, 2014). As per this theory, the heterogeneous distribution of knowledge-base and the related capabilities are the main determinants of superior firm performance (Eisenhardt and Santos, 2002; Mowery et al., 1996). This theory has been broadly represented in the Figure 3. Firms can be seen as the bundle of both the explicit and tacit knowledge where knowledge is seen as the key source of differentiation and competitive advantage (Dyer and Singh, 1998; Nanoka, 2007; Nonaka and von Krogh, 2009). This theory is applied especially in the context of international business as organizations like international strategic alliances require a higher level of cooperation and coordination to transfer knowledge to gain competitive advantage, as compared to local firms (Simonin, 1999). But again this theory is static as it incorporates only the internal resources like knowledge while ignoring the importance of other dynamic resources and elements of the dynamic environment which is incorporated in the theory of dynamic capabilities (Teece, 2010c; Teece and Pisano, 1994; Winter, 2003).

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3.4 Dynamic capabilities theory

The RBV has been attacked for its failure to define mechanisms that explain how resources are transformed into a competitive advantage (Priem and Butler, 2001; Williamson, 1999). This contemporary theory tries to overcome the shortcomings of the previous theories and to cope with the dynamics of global markets (Teece, 2017). The theory was developed by David J. Teece by integrating various important aspects of the global economy today: competition, co-operation, and innovation. In his introductory article, he talked about the optimum level of competition and co-ordination required for a rapid technological process to deal with the dynamism of global markets and identified strategic alliances as an organizational form striking this balance in the modern economy (Teece, 1992). He highlighted that most of the eminent economists have recognized the crucial role played by technological progress: Adam Smith's renowned book "The Wealth of the Nations" talks about "improvements in machinery", Karl Marx's ideology of capitalist economy ascribes a central role to capital goods' technological innovation, Joseph Schumpeter's "theory of creative destruction" is all about new technological developments replacing the old systems to meet the changing demand (Schumpeter, 2010; Schumpeter, 1934; Teece and Pisano, 1994). The intellectual heritage of this theory lies in the RBV as resources and capabilities are at the heart of this theory (Cantwell and Narula, 2001).

Dynamic capabilities are identified as the tools for manipulating the resource structure, learning strategies, building trust culture, improving the technological resources, making the organizational structure and design more flexible, etc. (Eisenhardt and Martin, 2000; Teece and Pisano, 1994). A few studies have empirically tested this theory like Alves *et al.* (2017) has incorporated and linked development, operational, management and transaction capabilities of the firm to its innovation performance, but this study has also missed the important element of absorptive capacity which is incorporated in the present study. Other



Figure 3. Knowledge-based theory



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important studies have studied the "absorptive capacity" construct in detail and have tried to develop items to measure it (Zahra and George, 2002), but these studies have also not studied it in a holistic framework as proposed by the present study. A broad representation of this theory has been given below in Figure 4 and a detailed framework has also been proposed in the next section.

Knowledge management is considered as the first-order dynamic capability, which is incorporated in the framework (Teece, 2017). Absorptive capacity and innovation capability are among the main elements of this theory (Teece, 2010a). All these elements are considered important but are scattered in the literature of dynamic capabilities theory, thus this study tries to build a comprehensive model incorporating them in a single research framework (Aggarwal and Kapoor, 2018) (Table 1).

A graphical representation of the time duration when these theories were most popular is shown in Figure 5. The transaction-cost theory came into existence in 1930s and remained popular till 1990s. Resource-based theory has its origin in 1980s and remained popular till late 1990s when knowledge-based theory, which is an extension of resource-based theory only, came into existence at around 1996 and remained popular till 2009. The most nascent and still developing theory of dynamic capabilities was born in late 1990s and is still emerging as a prominent one to explain the sustainable competitive advantage, as it deals with the dynamism of present-day complexities. Figure 5 is just a rough estimation of the periods during which the theories were most popular.

4. Methodology

As the paper is conceptual in nature, it adopts a review approach. Paper takes into consideration the economic theories introduced as early as 1776 till the present day theory of dynamic capabilities. The study has briefly discussed various economic systems and then reviewed many research papers, articles, books, etc., on various theories of strategic efficiency. A tabular form of comparison between various theories is also provided. All these systems and theories are thoroughly studied to propose an integrated research framework for future empirical study. Propositions have also been proposed according to the relationships identified in the literature which are reflected in the framework.

5. Proposed research framework

This section proposes an integrated framework based on the theory of dynamic capabilities (Teece, 2010b). The model, presented below, studies the direct and indirect relationship of various organizational factors with the innovation performance. Absorptive capacity is incorporated in the framework to check for its mediating/moderating role in the relationship of knowledge transfer and innovation performance. Pictorial representation of the framework is given in Figure 6 and then each of its constructs is explained and the propositions proposed.

Figure 4. Dynamic capabilities theory





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Basis	Transaction cost theory	Resource-based theory	Knowledge-based theory	Dynamic capabilities theory
Origin time (Year) Main researchers	Around 1937 Ronald Coarse, Oliver E. Williamson	Around 1984 Wernerfelt; J. Barney; Edith Penrose	Around 1996 Robert Grant, Conner and Prabalad: Nanoka	Around 1997 David J. Teece; S. G. Winter: Gary Pisano
Orientation	Supply side and inward- looking approach	Supply side and inward- looking approach	Supply side and inward- looking approach	Holistic view
Unit of analysis	The costs associated with organization activities	The unique bundle of tangible and intangible idiosyncratic resources of the firm	Heterogeneous distribution of knowledge base among organizations	Competition, cooperation, and innovation
Key focus	To minimize the costs to maximize the profits	To minimize the costs to maximize the profits	To attain competitive advantage through the heterogeneous knowledge base	To integrate, build and reconfigure internal and external competencies to address rapidly changing environments.
Shortcomings	Was criticized for overemphasizing the cost/price view and ignoring the importance of resource-based	Was criticized for being static in nature with a complete inward-looking approach	Was criticized for ignoring the importance of other dynamic resources and dynamic environment	Recent criticism for having underdeveloped constructs and lacking empirical evidence

Table 1. Comparison among various above theories

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5.1 Organizational factors

This framework, adopting the principle of parsimony and to have detailed vision, has incorporated four important organizational factors: strategy, culture, structure and IT systems (Rhodes *et al.*, 2008).

5.1.1 Learning strategy. A broad framework developed by Schilke et al. (2018) in context of dynamic capabilities identified organizational strategy as a key antecedent of dynamic capabilities. Organizational strategy is a way to bridge the gap between organization's internal skills and resources and its external environmental opportunities and risks (Grant, 1991). These strategies are related to the choices of products, services, technologies, markets and processes which have a profound influence on their requirement of skills, capabilities, knowledge and other competencies for competing, sustaining and exceling in any industry or market (Zack, 1999).

Learning strategy is the strategy which provides a cohesive atmosphere to employees in a firm to share/exchange knowledge for improving the innovation performance (Baker and Sinkula, 1999). The research model focuses on this type of organizational strategy

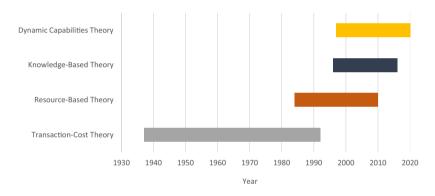


Figure 5.Time during which theories were most popular

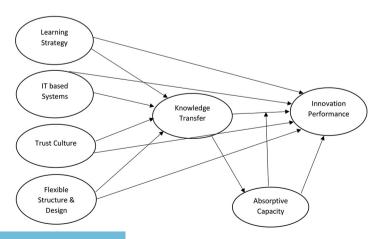


Figure 6. Proposed research framework



(Rhodes et al., 2008). Following propositions are proposed after analysing the relationships identified among these variables in the literature.

- P1a. Learning strategy has a significant positive influence on knowledge transfer.
- P1b. Learning strategy has a significant positive influence on innovation performance.
- P1c. Knowledge transfer mediates the relationship between learning strategy and innovation performance.
- 5.1.2 Information technology-based systems. Information technology accelerates information search, communication and retrieval of information, making it a powerful enabler of knowledge transfer (Yeh et al., 2006). Davenport elucidated IT's direct positive relationship with knowledge transfer and innovation performance (Davenport et al., 1998). IT is considered as a resource for attaining competitive advantage due to its growing importance especially in this globalized knowledge economy (Bharadwaj, 2000; Rhodes et al., 2008). Following propositions are proposed after analysing the relationships identified among these variables in the literature.
 - P2a. IT-based systems have a significant positive impact on knowledge transfer.
 - P2b. IT-based systems have a significant positive impact on innovation performance.
 - P2c. Knowledge transfer mediates the relationship between IT-based systems and innovation performance.
- 5.1.3 Trust culture. Culture is the sum total of values, beliefs, norms, etc. (Karidou, 2008). Culture is a crucial factor for better business performance (Yew Wong, 2005). Number of studies have been done on analysing the role of trust culture in international firms (Nooteboom et al., 1997). Trust scholars have argued that amount of information exchange increases as trust level increases because of increased co-operation thus reducing the cost of knowledge transfer (McEvily et al., 2003; Tsai and Ghoshal, 1998).

International firms combine the expertise of firms of different nations thus amplifying the importance of trust among employees for improved performance. Studies have shown that improved trust culture positively influences knowledge transfer which further improves innovation performance (Rhodes *et al.*, 2008). Following propositions are proposed after analysing the relationships identified among these variables in the literature.

- P3a. Trust culture has a significant positive impact on knowledge transfer.
- P3b. Trust culture has a significant positive impact on innovation performance.
- P3c. Knowledge transfer mediates the relationship between trust culture and innovation performance.
- 5.1.4 Flexible structure and design. Organizational structure and design is one of the key determinants of the effectiveness level of knowledge transfer in an organization (Grant, 1996). Structure of an organization refers to the arrangement of people and jobs for proper working. Due to dynamics of global business environment, a business firm may use various innovative kinds of structures and designs by combining traditional designs or forming cross-functional teams. This is due to the belief that centralized hierarchical structures act as a major barrier in knowledge transfer (Syed-Ikhsan and Rowland, 2004). Free flow of

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knowledge across various departments and levels of an organization not only facilitates knowledge transfer but also increases the speed of transfer for quick results (Tsai, 2001). Following propositions are proposed after analysing the relationships identified among these variables in the literature.

- P4a. Flexible organizational structure and design has a significant positive impact on knowledge transfer.
- P4b. Flexible organizational structure and design positively impacts the innovation performance.
- P4c. Knowledge transfer mediates the relationship between flexible organizational structure and design and innovation performance

5.2 Knowledge transfer and innovation performance

Knowledge is a dynamic human resource and an intangible asset, whose acquisition involves complex cognitive processes of perception, learning, communication, association and reasoning. Knowledge is the concept, skill, experience and vision that provides a framework for creating, evaluating and using the information (Qiu and Lv, 2014). Knowledge transfer is the process through which one entity learns from the experience of another entity. It is considered an important mechanism for performance improvement (Argote and Fahrenkopf, 2016).

In the globalized world, innovation has become necessary for business firms to sustain their competitiveness (Rhodes *et al.*, 2008). Global economic growth has been accelerated by the pace of technological advancements, shorter product lifecycles, high rates of new product development, improved strategies like adoption of TQM, six sigma, etc. (du Plessis, 2007). Innovation can be defined as the application of discoveries, inventions, processes and interventions for producing new commercially viable outcomes which can be in terms of products, services, systems, processes, etc. (Gloet and Terziovski, 2004). This implementation of discoveries/inventions is actually the application of knowledge to improve competitive advantage and to meet the dynamic needs of global markets (Hansen *et al.*, 2005).

Widespread literature is present which has studied the relationship between knowledge transfer and innovation performance in multi-national firms (Chang-feng and Peng, 2009; Phene and Almeida, 2008). Innovation capability of any business firm is determined by its ability to generate, transfer and apply knowledge. It can be concluded that for gaining innovative advantage, a firm has to make deliberate efforts to share/transfer/exchange information and knowledge through both formal and informal channels (Hansen et al., 2005).

P5. Knowledge transfer has a significant positive impact on innovation performance.

5.3 Absorptive capacity of the alliance

Absorptive capacity is the firm's ability to recognize the value of new internal/external knowledge to integrate, use, assimilate and apply it to gain competitive advantage (Cohen and Levinthal, 1990). Multinational firms like international strategic alliance, having foreign and local parents, needs to acquire and integrate resources from both the parents to apply them according to local market needs for better performance. Higher absorptive capacity has shown a positive association with the innovation growth of the firm by effectively absorbing the new knowledge (Tsai, 2001). Researchers have studied the moderating effect



of absorptive capacity on this relationship of knowledge transfer and innovation performance as proposed (Chang-feng and Peng. 2009; Kim et al., 2011).

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- P6a. Absorptive capacity has a significant positive impact on the innovation performance.
- P6b. Absorptive capacity mediates the relationship between knowledge transfer and innovation performance.
- P6c. Absorptive capacity moderates the relationship between knowledge transfer and IIV's innovation performance.

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6. Conclusion and future implications

This study focuses on the three important elements of dynamic capabilities theory, i.e. adaptive capability, absorptive capability and innovation capability in the context of multinations, which is considered a provenance of dynamic capabilities (Teece, 2010b). These constructs have been mainly studied in separation to each other or in a broad framework; thus, this study integrates these constructs with a focussed vision while choosing organizational form, and organizational factors (Aggarwal and Kapoor, 2018).

This study is an attempt to provide an insight to business managers how to grapple with the dynamism of the global markets. Business executives can look up to these specific variables to improve their innovation and overall performance. This study induces future empirical testing. As per literature, the international joint ventures can be the best organizational form among all types of multinationals for the empirical testing as it is the most sophisticated type of alliance and requires maximum co-operative knowledge transfer among organizations of different national origin, which if managed effectively, can lead to formation of dynamic capabilities for better innovation performance (Tong et al., 2015).

References

- Aggarwal, V. and Kapoor, M. (2018), "Innovation growth from knowledge transfer in international strategic alliances", Journal of Strategy and Management, Vol. 11 No. 4, pp. 483-496.
- Aghion, P., Harris, C., Howitt, P. and Vickers, J. (2001), "Competition, imitation and growth with stepby-step innovation", Review of Economic Studies, Vol. 68 No. 3, pp. 467-492, doi: 10.1111/1467-937X.00177.
- Alves, A.C., Barbieux, D., Reichert, F.M., Tello-Gamarra, J. and Zawislak, P.A. (2017), "Innovation and dynamic capabilities of the firm: defining an assessment model", Revista de Administração de Empresas, Vol. 57 No. 3, pp. 232-244, doi: 10.1590/s0034-759020170304.
- Argote, L. and Fahrenkopf, E. (2016), "Knowledge transfer in organizations: the roles of members, tasks, tools, and networks", Organizational Behavior and Human Decision Processes, Vol. 136 No. 1, pp. 146-159.
- Baker, W.E. and Sinkula, J.M. (1999), "The synergistic effect of market orientation and learning orientation on organizational performance, academy of marketing science", Journal of the Academy of Marketing Science, Vol. 27 No. 4, pp. 411-427.
- Barney, J. (1991), "Firm resources and sustained competitive advantage", Journal of Management, Vol. 17 No. 1, pp. 99-120.
- Bharadwaj, A.S. (2000), "A resource-based perspective on information technology capability and firm performance: an empirical investigation", Mis Quarterly, Vol. 24 No. 1, pp. 169-196.



- Bradshaw, Y.W., Rueschemeyer, D., Stephens, E.H. and Stephens, J.D. (1993), "Capitalist development and democracy", *Contemporary Sociology*, Vol. 22 No. 3, doi: 10.2307/2074523.
- Cantwell, J. and Narula, R. (2001), "The eclectic paradigm in the global economy", *International Journal of the Economics of Business*, Vol. 8 No. 2, pp. 155-172.
- Chang-Feng, W. and Peng, Z. (2009), "An empirical study on the relationship between properties of knowledge, network topology and corporation innovation performance", in *International Conference on Management Science and Engineering – 16th Annual Conference Proceedings*, ICMSE 2009, pp. 1230-1237.
- Coase, R. (1998), "The new institutional economics", The American Economic Review, Vol. 88 No. 2, pp. 72-74.
- Coase, R.H. (1937), "The nature of the firm", *Economica*, Vol. 4 No. 16, pp. 386-405.
- Cohen, W.M. and Levinthal, D.A. (1990), "Absorptive capacity: a new perspective on learning and innovation", *Administrative Science Quarterly*, Vol. 35 No. 1, pp. 128-152.
- Conner, K.R. and Prahalad, C.K. (1996), "A resource-based theory of the firm: knowledge versus opportunism", *Organization Science*, Vol. 7 No. 5, pp. 477-501.
- Davenport, T.H., De Long, D.W. and Beers, M.C. (1998), "Building successful knowledge management projects", *Sloan Management Review*, Vol. 39, pp. 43-57.
- Debray, R. (2007), Socialism: A life-cycle. na.
- Dyer, J.H. and Singh, H. (1998), "The relational view: cooperative strategy and sources of interorganizational competitive advantage", *The Academy of Management Review*, Vol. 23 No. 4, pp. 660-679.
- Du Plessis, M. (2007), "The role of knowledge management in innovation", *Journal of Knowledge Management*, Vol. 11 No. 4, pp. 20-29.
- Eisenhardt, K.M. and Martin, J.A. (2000), "Dynamic capabilities: what are they?", *Strategic Management Journal*, Vol. 21 Nos 10/11, pp. 1105-1121.
- Eisenhardt, K.M. and Santos, F.M. (2002), "Knowledge-based view: a new theory of strategy?", Handbook of Strategy and Management, Vol. 1 No. 1, pp. 139-164.
- Esping-Andersen, G. and Poulantzas, N. (1976), "Classes in contemporary capitalism", *Contemporary Sociology*, Vol. 5 No. 6, doi: 10.2307/2063170.
- Gibbons, R. (2010), "Transaction-Cost economics: past, present, and future?", *The Scandinavian Journal of Economics*, Vol. 112 No. 2, pp. 263-288.
- Gloet, M. and Terziovski, M. (2004), "Exploring the relationship between knowledge management practices and innovation performance", *Journal of Manufacturing Technology Management*, Vol. 15 No. 5, pp. 402-409.
- Grant, R.M. (1991), "The resource-based theory of competitive advantage: implications for strategy formulation", *California Management Review*, Vol. 33 No. 3, pp. 114-135.
- Grant, R.M. (1996), "Toward a knowledge-based theory of the firm", *Strategic Management Journal*, Vol. 17 No. 2, pp. 109-122.
- Hansen, M.T., Mors, M.L. and Lovas, B. (2005), "Knowledge sharing in organizations: multiple networks", Academy of Management Journal, Vol. 48 No. 5, pp. 776-793.
- Hanusch, H. and Pyka, A. (2007), "Principles of neo-schumpeterian economics", Cambridge Journal of Economics, Vol. 31 No. 2, pp. 275-289, doi: 10.1093/cje/bel018.
- Helfat, C.E. and Peteraf, M.A. (2003), "The dynamic resource-based view: capability lifecycles", Strategic Management Journal, Vol. 24 No. 10, pp. 997-1010.
- Hennart, J.F. (2010), "Transaction cost theory and international business", Journal of Retailing, Vol. 86 No. 3, pp. 257-269.
- Karidou, E. (2008), "Knowledge management enabler factors and firm performance".



- Kim, C., Zhan, W. and Krishna Erramilli, M. (2011), "Resources and performance of international joint ventures: the moderating role of absorptive capacity", *Journal of Asia Business Studies*, Vol. 5 No. 2, pp. 145-160.
- McEvily, B., Perrone, V. and Zaheer, A. (2003), "Trust as an organizing principle", *Organization Science*, Vol. 14 No. 1, pp. 91-103.
- Mowery, D.C., Oxley, J.E. and Silverman, B. (1996), "Strategic alliances and interfirm knowledge transfer", *Strategic Management Journal*, Vol. 17 No. 2, pp. 77-91.
- Nanoka, I. (2007), "The Knowledge-Creating company", Harvard Business Review, pp. 1-18.
- Nason, R.S. and Wiklund, J. (2015), "An assessment of resource-based theorizing on firm growth and suggestions for the future", *Journal of Management*, Vol. 44 No. 1, pp. 32-60.
- Newman, M. (2005), Socialism: A Very Short Introduction, Oxford University Press, doi: 10.1093/actrade/9780192804310.001.0001.
- Nonaka, I. and von Krogh, G. (2009), "Tacit knowledge and knowledge conversion: controversy and advancement in organizational knowledge creation theory", *Organization Science*, Vol. 20 No. 3, pp. 635-652.
- Nooteboom, B., Berger, H. and Noorderhaven, N.G. (1997), "Effects of trust and governance on relational risk", *The Academy of Management Journal*, Vol. 40 No. 2, pp. 308-338.
- Penrose, E.T. (1959), "The theory of the growth of the firm".
- Perelman, M. (1995), "Retrospectives: Schumpeter, David Wells, and creative destruction", *Journal of Economic Perspectives*, Vol. 9 No. 3, pp. 189-197.
- Phene, A. and Almeida, P. (2008), "Innovation in multinational subsidiaries: the role of knowledge assimilation and subsidiary capabilities", *Journal of International Business Studies*, Vol. 39 No. 5, pp. 901-919.
- Porter, M.E. and Millar, V.E. (1985), "How information gives you competitive advantage", *Harvard Business Review*, Vol. 63 No. 4, pp. 149-160.
- Priem, R.L. and Butler, J.E. (2001), "Tautology in the resource-based view and the implications of externally determined resource value", *The Academy of Management Review*, Vol. 26 No. 1, pp. 57-66.
- Qiu, J. and Lv, H. (2014), "An overview of knowledge management research viewed through the web of science (1993-2012)", *Aslib Journal of Information Management*, Vol. 66 No. 4, pp. 424-442.
- Rhodes, J., Hung, R., Lok, P., Ya-Hui Lien, B.W. and Wu, C. (2008), "Factors influencing organizational knowledge transfer: implication for corporate performance", *Journal of Knowledge Management*, Vol. 12 No. 3, pp. 84-100.
- Rugman, A.M. and Verbeke, A. (2002), "Edith Penrose's contribution to the resource-based view of strategic management", *Strategic Management Journal*, Vol. 23 No. 8, pp. 769-780.
- Sachneider, S. and Spieth, P. (2013), "Business model innovation: towards an integrated future research agenda", *International Journal of Innovation Management*, Vol. 17 No. 1, pp. 1340001.
- Scherer, F.M. (1986), Innovation and Growth: Schumpeterian Perspectives, MIT Press Books.
- Schilke, O., Hu, S. and Helfat, C.E. (2018), "Quo vadis, dynamic capabilities? A content-analytic review of the current state of knowledge and recommendations for future research", *Academy of Management Annals*, Vol. 12 No. 1, pp. 390-439.
- Schumacher, R. (2012), "Adam smith's theory of absolute advantage and the use of doxography in the history of economics", *Erasmus Journal for Philosophy and Economics*, Vol. 5 No. 2, p. 54, doi: 10.23941/ejpe.v5i2.105.
- Schumpeter, J.A. (1934), The Theory of Economic Development, Harvard University Press.
- Schumpeter, J.A. (2010), Capitalism, Socialism and Democracy, Routledge.



- Simonin, B.L. (1999), "Transfer of marketing know-how in international strategic alliances: an empirical investigation of the role and antecedents of knowledge ambiguity", *Journal of International Business Studies*, Vol. 30 No. 3, pp. 463-490.
- Smith, A. (1776), "Wealth of nations", 10.1002/9781118011690.ch9.
- Stouffer, S.A. (1955), Communism, Conformity, and Civil Liberties: A Cross-Section of the Nation Speaks Its Mind, Transaction Publishers.
- Syed-Ikhsan, S.O.S. and Rowland, F. (2004), "Knowledge management in a public organization: a study on the relationship between organizational elements and the performance of knowledge transfer", Journal of Knowledge Management, Vol. 8 No. 2, pp. 95-111.
- Szelenyi, I. and Kornai, J. (1993), The Socialist System: The Political Economy of Communism, Oxford University Press, doi: 10.2307/2074971.
- Teece, D.J. (1992), "Competition, cooperation, and innovation, organizational arrangements for regimes of rapid technological progress", *Journal of Economic Behavior and Organization*, Vol. 18 No. 1, pp. 1-25.
- Teece, D.J. (2010a), "Business models, business strategy and innovation", Long Range Planning, Vol. 43 Nos 2/3, pp. 172-194.
- Teece, D.J. (2010b), "Forward integration and innovation: transaction costs and beyond", *Journal of Retailing*, Vol. 86 No. 3, pp. 277-283.
- Teece, D.J. (2010c), "Technological innovation and the theory of the firm: the role of enterprise-level knowledge, complementarities, and (dynamic) capabilities", *Handbook of the Economics of Innovation*, Vol. 1, Elsevier B.V.
- Teece, D.J. (2017), "A capability theory of the firm: an economics and (strategic) management perspective", New Zealand Economic Papers, Vol. 53 No. 1, pp. 1-43.
- Teece, D. and Pisano, G. (1994), "The dynamic capabilities of firms: an introduction".
- Teece, D.J., Pisano, G. and Shuen, A. (1997), "Dynamic capabilities and strategic management", Strategic Management Journal, Vol. 18 No. 7, pp. 509-533.
- Tong, T.W., Reuer, J.J., Tyler, B.B. and Zhang, S. (2015), "Host country executives' assessments of international joint ventures and disvestitures: an experimental approach", *Strategic Management Journal*, Vol. 36 No. 2, pp. 254-275.
- Tsai, W. (2001), "Knowledge transfer in intraorganizational networks: Effects of network position and absorptive capacity on business unit innovation and performance, The", Academy of Management Journal, Vol. 44 No. 5, pp. 996-1004.
- Tsai, W. and Ghoshal, S. (1998), "Social capital and value creation: the role of intrafirm networks, The", Academy of Management Journal, Vol. 41 No. 4, pp. 464-476.
- Wang, M.C., Chen, P.C. and Fang, S.C. (2018), "A critical view of knowledge networks and innovation performance: the mediation role of firms' knowledge integration capability", *Journal of Business Research*, Vol. 88, pp. 222-233.
- Wernerfelt, B. (1984), "A resource-based view of the firm", Strategic Management Journal, Vol. 5 No. 2, pp. 171-180.
- Williamson, O.E. (1981), "The economics of organization: the transaction cost approach", American Journal of Sociology, Vol. 87 No. 3, pp. 548-577.
- Williamson, O.E. (1998), "Transaction cost economics: how it works; where it is headed", De Economist, Vol. 146 No. 1, pp. 23-58.
- Williamson, O.E. (1999), "Strategy research: governance and competence perspectives", Strategic Management Journal, Vol. 20 No. 12, pp. 1087-1108.
- Williamson, O. and Masten, S. (1995), Transaction Cost Economics, Edward Elgar Publishing.
- Winter, S.G. (2003), "Understanding dynamic capabilities", Strategic Management Journal, Vol. 24 No. 10, pp. 991-995.



Wu, I.-L. and Chen, J.-L. (2014), "Knowledge management driven firm performance: the roles of business process capabilities and organizational learning", *Journal of Knowledge Management*, Vol. 18 No. 6, pp. 1141-1164. Dynamic capabilities theory

Yeh, Y.-J., Lai, S.-Q. and Ho, C.-T. (2006), "Knowledge management enablers: a case study", *Industrial Management and Data Systems*, Vol. 106 No. 6, pp. 793-810.

Yew Wong, K. (2005), "Critical success factors for implementing knowledge management in small and medium enterprises", *Industrial Management and Data Systems*, Vol. 105 No. 3, pp. 261-279.

Zack, M.H. (1999), "Developing a knowledge strategy", California Management Review, Vol. 41 No. 3, pp. 125-145.

Zahra, S.A. and George, G. (2002), "Absorptive capacity: a review, reconceptualization, and extension, The", *Academy of Management Review*, Vol. 27 No. 2, pp. 185-203.

Zhao, H., Luo, Y. and Suh, T. (2004), "Transaction cost determinants and ownership-based entry mode choice: a Meta-analytical review", *Journal of International Business Studies*, Vol. 35 No. 6, pp. 524-544.

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