

# Resource Based View, Core Competence and Innovation: A Research on Turkish Manufacturing Industry

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**Abstract-** The importance of organizational resources and capabilities are realized by business practitioners and researchers as they support organizational performance and competitive advantage. However, what exactly core competence is not clearly understood since terms such as resource, capability and competence are used interchangeably by researchers. From this point forth, this article provides a framework for separating organization's core competencies from resource and capability. According to the research and analysis framework, the first step is to explain the relations and interactions among resource, capability and competence. Second we propose three empirical determiners such as uniqueness, inimitability and extendibility to the research model. Third, the proposed core competence framework serves as a tool for assessing the relationship between core competencies and innovation.

**IndexTerms**—Core Competence Determiners, Innovation, Resource-based view

## I. INTRODUCTION

Since innovation is so crucial in sustaining competitive advantage, many studies have investigated the innovation process (Maidque, 1980; Damanpour, 1988; Zirger and Maidique 1990; Dougherty and Hardy, 1996). Although there are number of innovation models, few have examined the relationship between innovation and core competence. The majority of studies have examined the significant effects of competences on firm performance or competitive advantage (Wernerfelt, 1984; Hitt and Ireland, 1983; Barney, 1991; Rumelt, 1991; Amit ve Schoemaker, 1993; Peteraf, 1993; Hafeez et al., 2002). So, it seems that there is a need in the literature on measuring the impact of core competence on innovation. We believe that since innovation and also core competence is complex subjects and characterized by low levels of understanding, the more empirically examined it in different industries and countries, the more easily it can be understood and applied by managers in organizations.

The paper is organized as follows. Aiming to contribute a better understanding, the first section presents a brief review of resource based view and core competence. In the second section, sounding concepts core competence and innovation is discussed by suggesting that core competence boost innovation. Section three deals with the summary of results obtained and concludes with future directions of work.

## II. LITERATURE REVIEW AND HYPOTHESES

### A. Resources-Based View

Resource-Based View and related concepts take place in many strategy formulation theories. Terms such as "strategic resources" (Barney 1986, Dierickx and Cool 1989), "distinctive competence" (Selznick 1957; Snow and Hrenibiniak, 1980), "core competence" (Prahalad and Hamel 1990), "invisible assets" (Itami and Numagani, 1992), "dynamic capabilities" (Teece, Pisano, and Shuen, 1997) are used interchangeably by researchers that contributed to related literature. The well beloved researchers described resources and competence concept close and parallel to their opinions. Although they expressed in different words and ways, they basically tried to explain why some competitors are more succesful than others even they acquire equal stocks of resources.

First of all, we try to describe and discriminate resources and capabilities by reviewing the literature before discussing why some enterprises are more succesful than others even they have nearly the same kind of resources. Grant define resources as the inputs into the firm's value creating process. Similarly, Thompson and Strickland (1999) affirm that "resources are inputs into a firm's production process such as capital equipment, the skills of individual employees, patents, finance and talented managers" (p. 91). They may include employee skills and experiences which a firm could employ though not "owned by a firm". So, it can be concluded that resource includes all those assets which a firm could employ or acquire in order to achieve its goals (Hafeez et.al, 2007, 3594).

Hafeez et.al (2007), classify resources into three sub-categories, namely as physical assets, intellectual assets and cultural assets. On the other hand, Grant identifies six categories of resources; financial, physical, human, technological, reputation and organizational. Barney (1991) Amit and Schoemaker (1993) claim that strategic assets have four attributes in order to create sustainable competitive advantage, valuable, rare among the firms current and potential competitors, imperfectly imitable and no strategically equivalent substitutes exist. From these explanations one can exclude that resources can be both physical and intangible (Collis and Montgomery, 2008; 142). However, RBT emphasizes the latter are more likely to be a source of sustained competitive advantage since global competition requires more knowledge integrated capabilities.

The second concept to be defined is capability after mentioning the common definitions about resources in the literature. According to Helfat and Peteraf (2003; 999) "An organizational capability refers to the ability of an organization to perform a coordinated set of tasks, utilizing organizational resources, for the purpose of achieving a particular end result". In other words, capabilities are emerged by the application of resources (Grant, 1991: 122). While resources exist on their own, capabilities are implanted in organizational routines, practices and operational procedures of an organisation (Nanda 1996; Hafeez et al; 2002). Grant suggests that to understand a firm's ability to acquire competitive advantage, theorists need to make distinction between resources and capabilities. He claimed that instead of resources, capabilities which are the result of bundles of resources working together may give an enterprise competitive advantage.

Capabilities which are the building blocks of core competencies, include process and product design, product development, operations, value chain integration, all aspects of marketing and customer service, and organization design (Miller, Eisenstat and Foote, 2002: 44). Many researchers agree that capabilities can be formed by using the tangible and intangible value generating assets and resources (Amit and Schoemaker, 1993; Dierickx and Cool, 1989; Grant, 1991; Teece, Pisano, and Shuen; 1997; Miller, Eisenstat and Foote, 2002). In line with the majority of the above mentioned definitions, it could simply be deduced that a firm capabilities result from distinctive combination of resources with experiential knowledge of the firm's personnel. So, capability could be practically defined as all the routines generally involved when realizing a corporate's goal with the interaction of resources including collective learning and experience.

However, resources and capabilities are complementary, neither resources nor capabilities alone will sustain competitive advantage. Both of these capabilities have a unique function and when treated in an integrative approach enhance the effectiveness and efficiency of the firm in achieving its performance objectives (O'Cass and Sok, 2012; p.346). According to RBT competitive advantage occurs when an enterprise differently combine physical and intangible resources and capabilities. No two companies are alike in their resources since they don't have the same tangible and intangible assets, set of experiences or organizational culture. Differences in combining company's resources and capabilities can explain inter-firm differences in the competition. These resources and capabilities determine how efficiently and effectively an enterprise performs its functional abilities. (Snow ve Hrebiniak, 1980; Hitt ve Ireland, 1983; Teece et al., 1997; Hafeez, Zhang ve Malak 2002; 2007).

### *B. Core Competence Based View*

The core competence concept, evolved from the resource based view and sometimes called by different names such as organizational competencies, distinctive capabilities or dynamic capabilities, has been widely studied by researchers (Selznick 1957; Andrews, 1971; Barney 1986; Dierickx and Cool 1989; Itami and Numagami, 1992; Teece et al, 1997 ) especially since the publication of Prahalad and Hamel's (1990) well-known article, "The Core Competence of the Corporation." Although studied widely by the researchers, there isn't an agreement among them in a standard definition of core competence since it is an umbrella term which covers resources and capabilities. However, it is possible to find some key determiners in the literature that researchers emphasize in describing the core competencies. For instance, Mooney defines core competence as a capability that is central to a firm's value generating activities instead of only ownership of a resource (2007, p.112). Pitt and Clarke define core competence as assets and skills that are knowledge based, distinctive, firm specific and difficult to imitate and they added that they can be formed by using the tangible and intangible value generating assets and resources (1999, p.302).

Hamel and Prahalad, suggests the term core competence and defined it as " the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies" (Hamel and Prahalad, 1994: 1999). These collective learning or coordination skills behind the firm's product lines are the source of its competitive advantage and enable the firm to introduce a new array of products and services. By focusing on their core competencies, firms get competitive advantage since they do those things at which they are the best (Srivastava, 2005, p.51).

Organizations have many competencies and capabilities, however only a few of them are combined and integrated in such way that they can be considered core competencies. So if a business manager mentions 40-50 core competencies of a medium-sized enterprise, he probably refers to capabilities rather than core competencies (Hamel and Prahalad, 1996, p.262) An other important point is that if the competencies do not create products or services that are exceptionally different or if they are imitated easily

they are most probably not core. Some assume that core competencies are the backbones of competitive advantage which change more slowly than products and markets (Hamel and Prahalad 1990; Hafeez et al.;2002, Gupta et al.; 2009)

Since the concept is not conceived easily, Hamel and Prahalad suggest three criteria that distinguishes a core competence from a competence; a core competence must contribute significantly to customer benefit from a product, a core competence should be competitively unique, must be difficult for competitors to imitate and finally , a core competence should provide potential access to a wide variety of markets (Prahalad and Hamel, 1990; Hamel and Prahalad, 1994). Similarly, according to Kak, a capability must meet three terms to be estimated as a core competence; customer value, competitor differentiation and extendibility (Kak, 2002; 1).

Accordingly, in this paper, a competence satisfies the above three criteria is taken as a core competence. Competitively uniqueness refers to the range to which a capability is distinctive among competitors (Hafeez, 2007: 3595). Capabilities possessed by many firms or can be imitated easily are doubtfully to be a source of competitive advantage. The durability of a firm's competitive advantage is partly a function of how successfully other firms are able to imitate the focal firm's technological competence. Valuable capabilities make possible to develop and implement strategies that create value for customers (Thompson and Strickland, 1999: 99). Hamel and Prahalad suggest that customers are the final judge of whether something is a core competence or not (1994: 225). Finally, a core competence should give permission to the firm to enter new markets and products developed from this core competence could be used to a larger extent in the company (Ljungquist, 2007: 241).

In conclusion, capabilities are formed by the integration of resources whereas core competencies are formed by the integration of capabilities. Core competencies are firm specific, built up over time and not subject the sudden change. They should be identified with the objective in mind to bring the greatest value to the end customer. In order to mention core competences a firm should have unique resources. Having unique resources is the first step, unless they are performed repeatedly and effectively to create customer value, competitive advantage over others will be very difficult. The highly important step is to integrate these unique resources and capabilities among all parts of the corporation effectively. Therefore, the combination of above criteria is an important means of developing core competences.

### *C. Innovation*

The business competitive environment is getting tougher by limited resources, local and global competition, fast and intensive technological change. Innovation by adding value to the company increases the chance of passing ahead of the competition.. For that reason, managers and scholars have been very interested in understanding the innovation process in organizations. Many studies and reviews suggest that innovation is complex and context sensitive. Understanding of innovative behaviour in organizations is still not clear as the results of organizational innovation research have been unconvincing and incompatible. Consequently, it can be concluded that a deep understanding of innovation cannot reach an agreement without perception into the personal, organizational, technological and environmental contexts (Damanpour, 1988; Wolfe, 1994; Leifer et al., 2000).

Many researchers who are interested in innovation subject defined it generally in similar despite some little differences. Gopalakrishnan and Damanpour defined innovation as “programs, policies, systems, equipment, service, product, behavior or idea which is newly adapted to organization” ( Shanthi and Fariborz, 2000: 15). Innovation stand for the development of a completely new product, service, category, or production system(Damanpour, 1988; Wolfe, 1994; Christensen and Raynor, 2003).

Many researchers have emphasized the relationship between competences and innovation and asserts that a firm's core competences enhances its ability to innovate. For instance, Zirger and Maidique who are famous for their efforts on innovation research tried to determine the key factors that affect product innovation. According to this research findings, two of the five most important factors affecting product innovations are the product's value to the customer and the synergy of the new product with the firm's existing competences (Zirger and Maidique, 1990: 867). There are many researches which suggest that innovations with a closer fit to firm competences tended to be more succesful (Cooper and De Brentani, 1991; Cooper and Kleinschmidt, 1993; Kleinschmidt and Cooper, 1991; Song ve Parry, 1997a; 1997b; Zirger ve Maidique, 1990). Existing competences may be used as leverage points to add new competences, which is indeed having low risk and utilizing slack resource.

Since this creates opportunities with low conflicts, Hamel and Prahalad (1994) suggested leveraging core competences, too. They argued that in order to leverage core competences, managers need to avoid a product-centric view of their firm and examine the capabilities on which their main products are established on. According to Hamel and Prahalad (1994: 227) ‘. . . in defining core competencies, managers must work very hard to abstract away from the particular product configuration in which the competence is currently embedded, and imagine how the competence might be applied in new product areas.’ They claimed (1994: 227) that one product may comprise several competences, and one competence may create different products. Despite this potential and useful interchange, competences are not fully utilized by organizations and not all possible value is extracted from them.

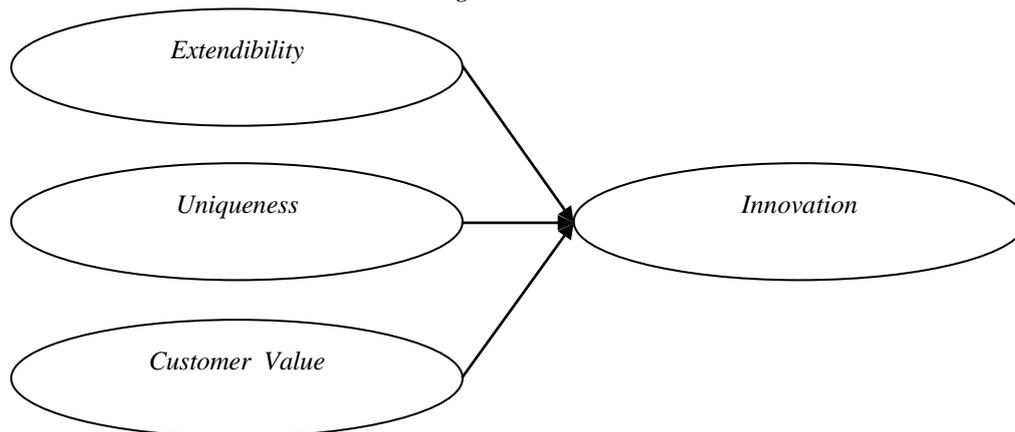
Knowledge-based theory emphasizes that most innovations are incremental in nature, building on already existing knowledge and capabilities of firms. In general, innovations are the result of new combinations of existing knowledge and incremental learning as Schumpeter (1968) claimed. Firms like individuals may acquire and apply the external knowledge relevant to their prior knowledge. A firm is better able to recognize and exploit new information relevant to an existing firm knowledge. This valuable experience provides the firm with the background necessary both to recognize the value of and implement new methods or processes since the growth of knowledge is experiential. Therefore, a firm's absorptive capacity, the learning that occurs through absorption of external knowledge is a critical concept in understanding competence building and innovation (Cohen & Levinthal, 1990; Kogut & Zander, 1992; Pitt and Clarke).

On the other hand, the scenerio can be reversed, what Leonard-Barton (1992) calls "core rigidities." Core rigidities may result from the institutionalization of knowledge and routines in a way that new approaches and information are not supported that leads to a gap between current environmental requirements and a corporation's core capabilities. Yet, accumulated firm knowledge is the most superior ingredient in competence development and innovation, firms may exaggerate the value of their competencies and try to develop solutions with inappropriate sets of knowledge. In conclusion, innovations with a closer fit to firm core competences tended to be more succesful unless these core competences become core rigidities Existing competences may be used as leverage points to add new competences, which is indeed having low risk and utilizing slack resource.

#### D. Conceptual Framework and Hypotheses Development

This paper suggests core competence to be significant determinant of innovation and hypothesize core competence as a multi-dimensional construct consisting of three dimensions: uniqueness, customer value, and extendibility. The proposed conceptual model guiding this research is inspired from the study of Hamel and Prahalad (1990;1994) depicted in Figure 1.

Fig.1 Research Model



Consequently, to examine these relationships we developed three research hypotheses:

- H1: A positive correlation exists between uniqueness and innovation.*
- H2: A positive correlation exists between customer value and innovation.*
- H3: A positive correlation exists between extendibility and innovation.*

### III. METHODOLOGY

#### A. Research Goal

The primary aim of this study is to measure the impact of core competencies on innovation. This article doesn't provide a framework for describing and evaluating an organization's core competencies since the difficulty of focusing on different core competencies of firms that operate in more than one sector. We mainly try to answer if core competencies boost innovation in manufacturing sector.

#### B. Sample and Data Collection

The study is empirically based on the primary data collected from 145 medium and large sized organizations that are registered in Kocaeli Chamber of Industry, operating in Kocaeli, one of the most important industrial cities in Turkey. The reason why

medium and large sized organizations are selected for the survey is the expectation that core-competence can be frequently seen in medium and large-scale organizations according to the results of the examination of relevant literature and empirical studies.

Participation was optional for all respondents. Data was collected according to the preferences of managers; face to face interactions or electronic mail. A majority of the respondents (87,4%) were male. As to the educational qualification, 72,2% had obtained a university degree, and (8,9%) held a postgraduate degree. 54,7% of the participants were aged between (31 – 45) years and the majority of the participants (53,2%) with job experience between (1– 5) years .

*C. Scale and Measurement*

Two sections of the questionnaire are important for the present study; core competencies and innovation. There are 12 questions in core competencies scale that are developed from the study of Hamel and Prahalad (1994) and they are including three dimensions named as uniqueness, customer value, and extendibility. Sample items were “The association between inputs and outputs, and actions and outcomes related to our capabilities is not easily understood” and “Customers gets more value from offering than in the past”. On the other hand, there are 10 questions in innovation scale which are developed from the works Prajogo and Ahmed (2006), Alegre and Chiva (2007), Hansen and Birkinshaw (2007). Sample items were “Risk-taking is encouraged in this organization” and “ The number of new products and services introduced to the market is increased in the last 5 years”.

*D. Analyses and Results*

Scale items were pre tested for relevance, interpretation and readability with a number of 15 senior executives and 60 business and management students in Kocaeli University. Some modifications and slight changes in wording were made according to the suggestions. As the first step in analysis of the scale, internal reliability for the adapted scale was compared to that reported in the developmental literature. The results of the reliability test is shown in Table 1.

Table 1: Reliability Test Results

	<b><i>α</i></b>	<b><i>n</i></b>
<b>Core-Competence Determiners</b>	0,905	12
<b>Innovation</b>	0,913	10

As can be seen in Table 1 Cronbach alpha reliability coefficients are at acceptable levels and fall between 0,905 for the core-competence determiners scale and 0,913 for innovation, which is higher than Nunnally (1978) indicated 0.7 to be an acceptable reliability coefficient.

In order to perform factor analysis the sample adequacy were checked and examined. For this evaluation the Kaiser-Meyer-Olkin (KMO) and the results of Bartlett tests are examined. In order to claim that correlations are significant the significance level of Bartlett's test values should be less than 0.05. As it can be seen in Table 2, the KMO and Bartlett's tests results are ; "Core competence determiners" (0.912) and "Innovation " (0.871). These values indicates that data is distributed appropriately and is highly suitable for factor analysis. Bartlett's Test "Chi-Square" values confirm that factor analysis results are valid; "Core competence determiners" 1500,641 (p=0,000<0.05), "Innovation "1341, 131p=0,000<0.05).

Table 2: Sample Adequacy Test Results

	<b>Core Competence Determiners</b>	<b>Innovation</b>
<b>Kaiser-Meyer-Olkin (KMO) Sampling Adequacy</b>	0,912	0,871
<b>Degrees of freedom</b>	74	49
<b>Bartlett Testi (<math>\chi^2</math>)</b>	1500,641	1341, 131
<b>Significance</b>	0,000	0,000

The exploratory factor analysis of all scale items for core competence determiners variable displayed three-factor structure as below:

Table 3 Factor Analysis Results

	Factor Weight
<b>Uniqueness</b>	0,824
	0,775
	0,716
	0,542
	0,509
<b>Extendibility</b>	0,830
	0,779
	0,751
<b>Customer Value</b>	0,735
	0,688
	0,683
	0,615
<b>Innovation</b>	0,805
	0,779
	0,763
	0,741
	0,714
	0,640
	0,621
	0,577
	0,567
	0,543

The correlation coefficients between core competence determiners and innovation show a significant and positive relationship. Uniqueness indicates the highest correlation coefficient between core competence determiners and innovation (0.685).

Table 4: Correlation Analysis Results

		Uniqueness	Extendibility	Customer Value	Innovation
<b>Uniqueness</b>	Pearson Correlation	1	,680(**)	,604(**)	,703(**)
	Sig. (2-tailed)	.	,000	,000	,000
	N	192	192	192	192
<b>Extendibility</b>	Pearson Correlation	,680(**)	1	,725(**)	,667(**)
	Sig. (2-tailed)	,000	.	,000	,000
	N	192	192	192	192
<b>Customer Value</b>	Pearson Correlation	,604(**)	,725(**)	1	,653(**)
	Sig. (2-tailed)	,000	,000	.	,000
	N	192	192	192	192
<b>Innovation</b>	Pearson Correlation	,703(**)	,667(**)	,653(**)	1
	Sig. (2-tailed)	,000	,000	,000	.
	N	192	192	192	192

\*\* Correlation is significant at the 0.01 level (2-tailed).

In order to test hypothesis, a multiple regression analysis was conducted using innovation as the dependent variable, and the various components of core competence: uniqueness, extendibility and customer value as the predicting variables. Table 4 present the regression results of the variables.

Table 5: Regression Analysis Results

	Unstandardized Coefficients		Standardized Coefficients	
	B	Sd.	Beta	t p
<b>(Constant)</b>	997	,190		5,252 ,000
<b>Uniqueness</b>	,326	,048	,409	6,782 ,000
<b>Extendibility</b>	,189	,066	,200	2,862 ,005
<b>Customer Value</b>	,265	,065	,261	4,052 ,000

As it can be seen in Table 5, all of core competence dimensions are significant in explaining innovation in. These finding supports H1, H2, H3 which predicted that core competence determiners : Uniqueness; Extendibility; Customer Value have significant positive effect on innovation.

#### IV. CONCLUSION

This study provides initial empirical evidence of the relationship between core competences and innovation. The findings of the many researches show that core competences have positive impacts on innovation and its success (Cooper and De Brentani, 1991; Cooper and Kleinschmidt, 1993; Kleinschmidt and Cooper, 1991; Song ve Parry, 1997a; 1997b; Zirger ve Maidique, 1990). Similarly, in this study, it is found that core competences have a positive and significant effect on innovation. Therefore, generating and maintaining a good fit between core competences and new product development is critic on the success of innovation.

Research results indicated that all three dimensions of core competence; uniqueness, extendibility and customer value; are significant in explaining innovation. From the results of Pearson’s correlation analysis, the correlation coefficients between the innovation and core competence determiners are (0.703), (0.667) and (0.653) respectively. Therefore, H1, H2, H3 can be accepted. To remain competitive, managers can try to enhance innovation by managing each dimension of core competence; uniqueness, extendibility and customer value.

Maybe it would be more practical to choose one sector since core competences are frequently discussed for one or a few individual companies in which firm-specific lists of competences are generated that might be relevant in the context of each individual case (Hamel & Heene, 1994). However, a wider group of general indicators of core competences seems necessary to improve our understanding of the role that core competences play in innovation process. On the other hand, it would be beneficial for a future study to investigate the impact of firm-specific competences on innovation, organizational performance or competitive advantage.

This study leads us to the conclusion that for stimulating innovation firms need to think about their core competences. However, while, performing the questionnaire survey on firms to prove our hypothesized research model, we see that managers are not fairly clear about the meaning of core competence. More emprical research is needed to increase awareness of managers and scholars about core competences that can boost innovation. Although it is not a simple task, the firms should determine carefully their core competences by considering our suggested determiners; uniqueness, extendibility and customer value and manage them leading to innovation

#### REFERENCES

- [1] Andrews, K. (1971). The conceptof corporate strategy. Homewood, III.: Dow Jones-Irwin.
- [2] Amit Raphael and Schoemaker J. Paul (1993). Strategic Assets and Organizational Rent. *Strategic Management Journal*, V:14, No:1
- [3] Alegrea Joaquin ve Chivab Ricardo (2008). Assessing the impact of organizational learning capability on product innovation performance: An empirical test, *Technovation*, 28.
- [4] Aron O’Cass and Phyra Sok (2012). Examining the role of within functional area resource–capability complementarity in achieving customer and product-based performance outcomes, *Journal of Strategic Marketing*, Vol. 20, No. 4, July 2012, 345–363.
- [5] Barney Jay (1991). Firm Resources and Sustained Competitive Advantage, *Journal Of Management*, Vol. 17, No 1, 99-120.
- [6] Barney, J. B. (1986). Types of Competetion and The Theory of Strategy: Toward an Intergrative Framework, *Academy of Management Review*, 11.
- [7] Bruce Kogut And Udo Zander (1992). Knowledge of The Firm, Combinative Capabilities, and The Replication of Technology, *Organization Science*, Vol. 3, No. 3, August.

- [8] Cohen M.Wesley ve Levinthal A. Daniel (1990). Absorptive Capacity: A New Perspective on Learning and Innovation , *Administrative Science Quarterly*, C:35, No:1, March.
- [9] Collis David ve Montgomery A. Cynthia (1995). Competing On Resources: Strategy In The 1990s, *Harvard Business Review*, July-August.
- [10] Cooper, Robert G.; De Brentani, Ulricke (1991). New Industrial Financial Services: What Distinguishes the Winners, *Journal of Product Innovation Management*, 8(2) June.
- [11] Cooper, Robert G.; Kleinschmidt, Elko J. (1993). Stage Gate Systems for New Product Success, *Marketing Management*, 1(4).
- [12] Kleinschmidt, E. J.; Cooper, R. G. (1991). The Impact of Product Innovativeness on Performance, *Journal of Product Innovation Management*, Dec, Vol. 8 Issue 4, p240-251.
- [13] Christensen, Clayton M.; Raynor, Michael E.; Anthony, Scott D. (2003). Six Keys to Creating New Growth Business, *Harvard Management Update*, Jan. 8(1).
- [14] Damanpour Fariborz et al. (1988). The Relationship Between Types of Innovation and Organizational Performance, *Journal of Management Studies*, 26(6).
- [15] Diericks, I., Cool, K., & Barney, J.B. (1989), Asset Stock Accumulation and Sustainability of Competitive Advantage, *Management Science*, 35(12).
- [16] Dougherty Deborah ve Hardy Cynthia (1996). Sustained Product Innovation In Large, Mature Organizations: Overcoming Innovation-to-Organization Problems, *The Academy of Management Journal*, 39/5.
- [17] Grant M.Robert, 1991. The Resource-Based Theory Of Competitive Advantage: Implication For Strategy Formulation, *California Management Review*, Spring.
- [18] Gupta Samir, Woodside Arch, Dubelaara Chris, Bradmore Don (2009). Diffusing Knowledge-Based Core Competencies For Leveraging Innovation Strategies: Modelling Outsourcing To Knowledge Process Organizations (KPOs) in pharmaceutical networks, *Industrial Marketing Management*, 38 (2), February, pp. 219–227.
- [19] Hafeez K., Zhang Y. ve Malak N. (2002). Core Capabilities for Sustainable Competitive Advantage: A Structured Methodology for Identifying Core Capabilities, *IEEE Transactions on Engineering Management*, 49-1.
- [20] Hafeez Khalid Hafeez ve Essmail Ali, 2007. Evaluating Organisation Core Competences And Associated Personal Competencies Using Analytical Hierarchy Process, *Management Research News*, (30)8.
- [21] Hafeez K., Zhang Y. ve Malak N. (2002). Core Capabilities for Sustainable Competitive Advantage: A Structured Methodology for Identifying Core Capabilities, *IEEE Transactions on Engineering Management*, 49-1.
- [22] Hafeez K., Zhang Y. ve Malak N. (2007). Outsourcing non-core assets and competences of a firm using analytic hierarchy process, December, 34(12), pp. 3592–3608
- [23] Hamel Gary and Prahalad C.K. July-1994. Competing For The Future, Harvard Business School Press Books.
- [24] Hansen T. Morten ve Birkinshaw Julian, The Innovation Value Chain, *Harvard Business Review*, Haziran, 2007.
- [25] Hitt A. Michael, Ireland R. Duane, Keats W. Barbara ve Vianna Antonio (1983). Measuring Subunit Effectiveness, *Decision Sciences*, V:14, No:1.
- [26] Helfat Constance E. and Peteraf Margaret A. (2003). The Dynamic Resource-Based View: Capability Lifecycles, *Strategic Management Journal*, Volume 24, Issue 10, pp.889–1068
- [27] Itami, Hirovuki; Numagami, Tsuyoshi (1992). Dynamic Interaction Between Strategy and Technology, *Strategic Management Journal*, Special Issue, Vol. 13
- [28] Kak Anjana, 2002. Sustainable Competitive Advantage with Core Competence, A review, *Global Journal of Flexible Systems Management*, 3(4).
- [29] Leifer R., McDermott, C., O'Connor, G., Peters, L., Rice, M., & Veryzer, R. 2000. Radical Innovation: How Mature Companies Can Outsmart Upstarts, Boston: Harvard Press.
- [30] Leonard-Barton Dorothy, Core Capabilities, Core Rigidities: A Paradox In Managing New Product Development, *Strategic Management Journal*, Yaz Özel Sayı, 13, 1992.
- [31] Ljungquist Urban, 2007. Core Competence Beyond Identification: Presentation Of A Model, *Management Decision*, 45(3).
- [32] Maidque, M.A. 1980. Entrepreneurs, Champions & Technological Innovation, *Sloan Management Review*, 2(59).
- [33] Miller, Danny; Eisenstat, Russell; Foote, Nathaniel. (Spring-2002). Strategy From The Inside Out: Building Capability-Creating Organizations. *California Management Review*. 44 (3).
- [34] Martyn Pitt & Ken Clarke (1999). Competing on Competence: A Knowledge Perspective on the Management of Strategic Innovation, *Technology Analysis & Strategic Management*, Vol. 11, No. 3.
- [35] Money Ann (2007). Core Competence, Distinctive Competence, and Competitive Advantage: What Is The Difference?, *Journal Of Education For Business*, V:83 N:2
- [36] Nanda, A. (1996) Resources, capabilities and competencies. In *Organizational Learning and Competitive Advantage*, eds B. Moingeon and A. Edmondson. Sage, London. Nov-Dec, p110-115.
- [37] Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14, 179–192.
- [38] Prahalad C.K. and Hamel Gary (1990). The Core Competence Of The Corporation, *Harvard Business Review*, May-June.
- [39] Prajogo Daniel ve Ahmed Pervaiz K., Relationships Between Innovation Stimulus, Innovation Capacity, And Innovation Performance, *R&D Management*. V:36, N:5, 2006
- [40] Rumelt P. Richard (1991). How much does industry matter?, *Strategic Management Journal*, 12(3), pp.167-185.
- [41] Selznick, P.1957. Leadership and Administration, New York, Harper and Row.
- [42] Shanthi Gopalakrishnan and Damanpour, F. (2000), The impact of organizational context on innovation adoption in commercial banks, *Engineering Management, IEEE Transactions*, Feb., Volume: 47 , Issue: 1 , p 14 – 25.

- [43] Schumpeter, J.A. (1968). *The Theory of Economic Development*, Harvard University Press, Cambridge, MA.
- [44] Snow, C.C. & Hrebiniak, L. G. 1980. Strategy, Distinctive Competence and Organizational Performance, *Administrative Science Quarterly*, 25.
- [45] Song, X. Michael; Parry, Mark E. Sep97. Teamwork Barriers in Japanese High-Technology Firms: The Sociocultural Differences Between R&D and Marketing Managers, *Journal of Product Innovation Management*, 14(5)
- [46] Srivastava C. Shirish (2005). Managing Core Competence of The Organization, *Vikalpa*, October – December, V:30, No:4
- [47] Teece D.J., Pisano G., ve Shuen A., Dynamic Capabilities and Strategic Management, *Strategic Management Journal*, C:18, No:7, 1997.
- [48] Thompson Arthur A., Strickland A. Alonzo, *Strategic Management: Concepts and Cases*, McGraw-Hill Comp. Inc., 11. Edt., Singapore, 1999.
- [49] Zirger B. J. ve Maidique M. A. 1990. A Model of New Product Development: An Empirical Test, *Management Science*, 36(7).
- [50] Wernerfelt, Birger (1984). A Resource Based View of The Firm, *Strategic Management Journal*, Vol. 5 Issue 2.
- [51] Wolfe R. 1994. Innovation Review, Critique and Suggested Research Directions, *Journal of Management Studies*, 3(3).