CHAPTER 1
INTRODUCTION

Research in the field of strategic management tries to answer the question: why does one firm outperform the other firms? Resource Based Theory has been developed in an attempt to answer this question. This theory succeeds the industrial organization (IO) view that developed through the works of Bain (1959) and Porter (1980). The IO view with its foundation in the S-C-P (Structure- Conduct-Performance) paradigm of the industrial organization economics (Collis and Montgomery, 1995) considers the performance of the firm dependent on the characteristics of the industry in which it operates and its position within that industry (Amit and Schoemaker, 1993). The focus of the IO view is external; it looks outside the firm to find reasons for the differential performance among firms. The IO view does not provide a complete reason for the difference that exists in performance among firms intra industry (Hawanini et al., 2003) and especially for the difference in performance among firms that operate in the same market position (Barnett et al., 1994). This approach fails to provide a complete picture since the reason for a firm outperforming the others in the same industry cannot be stated in terms of the products a firm offers. With the business, today, operating in dog years where nothing but change exists, where products are easily imitated, reverse engineered, cloned and surpassed (Mehra, 1996), a reason for a firm outperforming its peers cannot be the environment but rather the firm itself.

Thus to find the ‘holy grail’ of strategic management research it becomes imperative to look below the surface, to look inside rather than outside. This is achieved by the Resource Based Theory. The Resource Based Theory is not in conflict with the industrial analysis framework but it is complementary to it in understanding the reasons of intra industry performance differences. The Resource Based Theory holds that the reason a firm performs better than its competitors is that it has in its possession valuable, rare and inimitable resources which are in conformity with the industry requirements together with the firm’s distinctive competence to make better use of these resources (Amit and Schoemaker, 1993).
RESOURCE BASED THEORY

If Firm A outperforms Firm B (both in the same industry) then, according to Resource Based Theory, the reason for the same is that Firm A has in its possession certain resources idiosyncratic to it, which Firm B cannot purchase, imitate or substitute. Resource Based Theory sees an organization as a bundle of resources (Wernerfelt, 1984; Barney, 1986; Dierickx and Cool, 1989; Amit and Schoemaker, 1993) and this bundle of resources is distinctive to each firm leading to intra industry heterogeneity (Barney and Clark, 2007). The differences in a firms’ collection of resources exist as no two firms, through their lives, have gone through the same experience or have acquired the same kind of assets or have built the same cultures (Collis and Montgomery, 1995).

The Resource Based Theory has developed over a passage of time. The current form of the theory is a result of the works of various thinkers. Though Penrose’s book “The theory of the growth of the firm”, published in 1959 is considered as the inception point of Resource Based Theory, which proclaimed that a firm needs to be seen in terms of its resources. According to Penrose (1959) the growth of a firm is limited by the opportunities a firm can exploit which is dependent on the resources it controls and the administrative framework used to coordinate the use of these resources (Cited in Barney and Clark, 2007). In strategic management field, the theory spread its wings when Wernerfelt made the first attempt at formalizing Resource Based Theory (Newbert, 2007) and came up with the first formal Resource Based Theory publication in the strategic management field (Barney and Clark, 2007) by the name of “A resource-based view of the firm”. After that there have been consistent attempts to build the theory. Wernerfelt (1984) established resources and products as two sides of the same coin, where, with a given set of product-market activity of the firm one could estimate the minimum quantity of resources required and with a given resource base the optimal product market activity could be established. He developed the concept as a dual of industrial analysis framework, that being the reason he called it the resource based “view” of the firm since he was viewing the same problem as Porter (1980) from the viewpoint of the resources a firm controls (Barney and Clark, 2007). The publication of Barney (1986) marks the shift from a resource based view to a resource based theory.
The works of Dierickx and Cool (1989), Barney (1991), Mahoney and Pandian (1992), Amit and Schoemaker (1993), and the others over the years made Resource Based Theory as one of the most prominent and powerful theories for describing, explaining and predicting organizational relationships (Barney et al., 2011).

Over the years, the research has highlighted that in the purview of Resource Based Theory, competitive advantage will accrue to a firm having resources: a) with characteristics that make those resources impossible for others to copy, buy or substitute (Dierickx and Cool 1989, Barney, 1991); b) are in conformity with the industrial context (Amit and Schoemaker, 1993, Russo and Fouts, 1997); c) interact among themselves in unique configurations leading to synergistic effects (Eisenhardt and Martin, 2000; Song et al., 2005; Lin et al., 2006; Vorhies et al., 2009); d) are effectively deployed due to effective management and governance (Makadok, 2003; Kor and Mahoney, 2005).

RESOURCES AS A SOURCE OF COMPETITIVE ADVANTAGE

A resource at a given time could be defined as any asset that can be tied semi-permanently to the firm (Wernerfelt, 1984). Endorsing and further elaborating upon this definition Barney (1991) considers firm resources to include all assets, capabilities, organizational processes, firm attributes, information, knowledge etc. controlled by a firm that improves its efficiency and effectiveness. Thus, Barney (1991) and Wernerfelt (1984) simply call these assets resources, and do not divide them further into finer categories (Barney and Clark, 2007).

There have been researchers who have drawn distinctions among the type of resources. Amit and Schoemaker (1993) distinguish between resources and capabilities, and they call the sum of resources and capabilities, strategic assets. They define resources as the stocks of available factors that are owned or controlled by the firm, for example, patents and licenses, plant and equipment and human capital; and capabilities as a firm’s capacity to deploy resources, usually in combination using organizational processes, to affect the desired end, for example, highly reliable services, repeated processes, product innovation, manufacturing flexibility etc.
Further, there exists another finer category known as dynamic capabilities, the capabilities which build, integrate or reconfigure operational capabilities to enable a firm to respond to changing market conditions (Teece et al., 1997). Dynamic capabilities do not directly affect output of a firm but indirectly contribute to its output through an impact on the operational capabilities (Eisenhardt and Martin, 2000, Helfat and Peteraf, 2003).

Barney and Clark (2007) consider the distinctions drawn over the years by various researchers as a means to better understand the various categories of resources but they also point out its side effect. According to them anyone who describes a firm’s resource in a new way has called it a ‘new’ theory of persistent superior performance. They provide examples of such theories like; ‘resource-based theories of superior performance’; capabilities theories of superior firm performance’; dynamic capability theories of superior performance”; competence theories of superior performance”; and knowledge-based theories of superior performance.’ They advocate that each of these ‘theories’ share the same underlying theoretical structure though they characterize the resources in a slightly different manner.

Endorsing Barney and Clark (2007), in this research study the terms resources and capabilities will be used interchangeably and often in parallel as has been used by Barney and Clark (2007).

Resource Based Theory does not treat all the resources as equals, as not all the resources lead to economic rents. It is the presence of certain characteristics that make a resource strategic or in other words a source of competitive advantage (Barney, 1991). These characteristics are as follows:

**Valuable:** A resource will be valuable if it helps the organization exploit the opportunities and neutralize the threats (Barney and Clark, 2007).

**Rare:** A resource that is available to all will not lead to competitive advantage as it will make it possible for all to implement the same strategies (Barney and Clark, 2007). Thus, a resource needs to be scarce, that is, the one which is held by the firm only (Amit

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1 payment to an owner of the factor of production in excess of the minimum required to induce the factor into employment (Barney and Clark, 2007)
and Schoemaker, 1993). Though, it may be possible to gain a competitive advantage even if a small number of companies in the industry possess the same resource (Barney and Clark, 2007).

*Inimitable:* The flow of profits can be sustainable (Collis and Montgomery, 1995), if and only if a firm possesses resources which are inimitable. For a resource to be inimitable, it should have at least one of the following characteristics:

1) *Physical uniqueness:* A resource is physically unique if, by definition, it cannot be copied. For example a real estate location (Collis and Montgomery, 1995).

2) *Path dependency:* If the only way to imitate a resource is to follow the unique path that the firm in possession of the resource has followed over the years, then path dependency is said to exist for that resource (Dierickx and Cool, 1989; Collis and Montgomery, 1995). Path dependency makes it very difficult for the competitors to imitate the resource, as the firms without following that particular path, through resource’s history, cannot obtain the same resource that is necessary to successfully implement a particular strategy (Barney and Clark, 2007).

3) *Causal Ambiguity:* It means the link between the resource and competitive advantage is ambiguous to the extent that the firm that owns the resource or its competitors cannot figure out the causality (Barney and Clark, 2007). Making it therefore difficult to understand either what the resource is or how to recreate it, or both (Collis and Montgomery, 1995).

4) *Asset Mass Efficiencies:* This means that if sustainability of advantage is enhanced by certain resources which perform better if a firm already has in its possession high levels of the resource in question then it becomes difficult to imitate for others who have to accumulate the resource from scratch (Dierickx and Cool, 1989).

5) *Interconnectedness of Asset Stocks:* Some resources perform better in synergy with the firm’s other resources, to which its competitors do not have access. (Dierickx and Cool, 1989). This interconnectedness lends inimitability as the
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competitors may not be able to figure out the exact equation in which the resources form the synergistic effect, thereby providing advantage to the firm.

Non-substitutable: A resource is said to be substitutable if there exists another resource which serves the same purpose as the resource in question. To secure competitive advantage it is required that another resource should not be present which can be exploited to implement the same strategy (Barney, 1986) because if that is the case then it will render the original asset stock obsolete as it will no longer create value for the buyer (Dierickx and Cool, 1989).

Durable: In today’s dynamic environment that business operates, most of the resources have a limited life and will earn only temporary profits (Amit and Schoemaker, 1993). To be a source of competitive advantage it is important that the resource does not fail the test of time (Collis and Montgomery, 1995).

Organization: Barney and Clark (2007) consider the presence of formal reporting structures, explicit management control and compensation policies mandatory if a firm wants to exploit its resources to its advantage. Though these resources, in isolation, have limited ability to generate competitive advantage but in combination with other resources and capabilities they can enable a firm to realize its full value (Barney and Clark, 2007).

The above discussion elaborates and elucidates the characteristics, as defined by the resource based theorists, which will render a resource as a source of competitive advantage. Even though the theorists have provided a detailed account of the key characteristics, over the years it has been highlighted that for any firm, it is not an easy task to identify resources that possess the above characteristics. Researchers in the field have been trying to identify “the” resources. Identification will help the managers differentiate the valuable from the non-valuable (Peteraf, 1993). The valuable ones will thus get the attention they deserve as the firm protects them from being imitated, bid away to the competitors or rendered valueless as a substitution by other assets (Dierickx and Cool, 1989). Also, resources identified, using the resource based logic, provide an incentive and justification to the managers to obtain and exploit them (Newbert, 2007). Further, a firm which has identified the key resources will know whether the present
bundle of resources is enough, else the resources should be acquired or developed to have an advantage (Barney, 2011). Thus, the identification of resources is of significance as it helps the manager understand that, despite difficulty, they should consider further leveraging those resources. (Peteraf, 1993).

Human capital (Hatch and Dyer, 2004), technical engineering experience, knowledge of and capability to serve the needs of customers (Collis, 1991), information technology (Bharadwaj, 2000) internal and external learning (Schroeder et al., 2002), brand name reputation (Combs and Ketchen, 1999), management quality and depth, technology expertise, adequacy of capital base (Mehra, 1996), tangible and intangible sales and distribution resources (Gruber et al., 2010), service climate and managerial information-technology knowledge (Ray et al., 2004) are some of the resources that have been identified over the years in the Resource Based Theory research. Though there have been a range of resources identified as strategic, these have always been industry specific. In other words, even though a resource might possess the key characteristics, as discussed earlier, but whether it will be a source of competitive advantage also depends on if it is in conformity with the requirements of its industry.

RESOURCES AND INDUSTRY

Researchers have over the years found that the firm’s performance is affected to a higher degree by what lies within the firm than what lies outside it (Short et al., 2007). However, Resource Based theorists emphasize that even though the internal factors (firm effects) explain a higher percentage of firm performance than the external factors (industry effects), the external effects do matter and the complementarities between the internal and external aspects should be studied and not overlooked (Claver et al., 2002). Conforming this viewpoint, Collis and Montgomery (1994) hold that the value of a resource is determined in its interplay with the market forces. This is where the Resource Based Theory imbibes the IO view discussed earlier where it looks outside the firm to term resources as strategic which is a source of competitive advantage. A firm having a valuable resource may still not be able to add value as the industry in which it operates renders its relationship with performance of the firm as insignificant. Thus, this means that the resource to be a source of competitive advantage is dependent on the
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context in which the firm operates (Collis, 1994). For example, in soft drinks industry, competitive advantage is dependent on brand strength, while in the semi-conductors and disk drive industry, what matters is the capability to innovate faster and/or better than competitors (Collis, 1994).

Though, the Resource Based Theory developed as being complementary to the IO view and not in contradiction, the researchers have ignored this aspect while empirically testing the theory. The theorists in a drive to intricately build the internal view have left the role of the firm in relation to its external environment rather, vague (Russo and Fouts, 1997). Sirmon et al., (2007) advocate that the impact of firm’s external environment on managing resources needs to be examined to better explain the link between a firm’s resources and creation of firm value.

The industrial conditions are considered to have a predominant impact on the kind of managerial actions and strategies a firm will adopt (Porter, 1980). Therefore, it is required that the influence of industry level elements, which are its dynamism, concentration, growth and capital intensity on the resource management decisions which form the key policy decisions of a firm should be established.

Dynamism is the degree of uncertainty and change in a firm’s external environment (Lumpkin and Dess, 2001, Datta et al., 2005). This uncertainty in the environment stems from the change in customer preference, development of new products, new technology or the competition (Stoel and Muhanna, 2009). This degree of uncertainty which varies from industry to industry affects the value a resource holds for a firm (Sirmon et al., 2007). Thus, it can be reasonably argued that the resources that help a firm attain or maintain competitive advantage are affected by the degree of dynamism in the firm’s industry.

The key industry structure elements, viz. concentration, growth and capital intensity influence the industry scenario and thereby influence the firm behavior. Concentration is considered a measure of competition in an industry (Rajagopalan and Datta, 1996). An industry is considered to be highly concentrated when few players control its market share. An industry high on concentration has a more stable environment than an industry with low concentration. In a high growth industry the
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demand is stronger than supply, while, the competitive pressures are weak (Wernerfelt and Montgomery, 1986). A firm in such an industry will have access to greater opportunities than a firm in a low growth industry. The capital intensive industries are characterized by high fixed costs. Due to high investments, the scope for deviations tends to be low as mistakes can cost heavy, thus bringing in increased rigidity in these industries (Datta et al., 2005).

A firm seeking to attain or retain competitive advantage performs within the interplay of the industry elements discussed above. The strength of these characteristics, in an industry, is likely to influence the resources that will and will not help a firm attain competitive advantage. Thus, this issue which has not received much attention in the past requires to be addressed to better apply the Resource Based Theory.

RESOURCES AND INTERACTION

There are resources that interact among themselves, thereby forming unique configurations, providing synergistic effects. Synergistic effect means that a resource provides higher returns interacting with other resource, than it does in seclusion (Powell and Dent-Micalef, 1997). These configurations of resources in themselves become a resource that help the owners do better than their counterparts. Cho and Pucik (2005) find that the companies possess certain resources which vary from being poor to mediocre and to good, but when they interact they complement each other so as to become a formidable force. This is because the complementary resource integration reconfigures competencies, reduces resource deficiency and generates new applications from these resources (Song et al., 2005). These configurations which are achieved by resources acting among themselves are hard to decode, thus, making them difficult to copy, thereby providing a firm with an advantage over its competitors. It has long been proposed that such resource interaction which in themselves are valuable and rare are the key factor that leads a firm to competitive advantage (Vorhies et al., 2009).

RESOURCES AND DEPLOYMENT

A firm in possession of resources may not yield for itself better performance unless it also has a distinct competence in better deployment of these resources (Penrose, 1959; Mahoney and Pandian, 1992). Newbert (2007), in conformity to this view, argues that a
firm achieving competitive advantage remains doubtful unless it has the ability to alter the available resources to realize their full potential. A firm aspiring to achieve and/or maintain its competitive advantage needs to have the ability to fine-tune the resources with the changing scenarios that erode its value (Rumelt, 1984). Taking into consideration the above arguments, the resource based research today seeks to know not only how much is spent on resources but also how effectively the investments made to acquire these resources are deployed (Kor and Mahoney, 2005).

The value of a firm’s resources is fully realized when these are successfully deployed. Deployment means using capability configurations to support a chosen leveraging strategy (Sirmon et al., 2007). These capability configurations are largely held with the management of the firm. Kor and Mahoney (2005) while explaining the role of management in deployment of resources hold that the managers who have been with the firm for a long time gain firm specific knowledge not available to the new entrants, thus they can better assess the opportunity emerging in the market which fit with the company’s strengths and weaknesses. These managers know the resource to be exploited and by how much.

Though the deployment function of a firm is seen to be dependent on the management capabilities of a firm, the role of governance is also increasingly being recognized. Makadok (2003) emphasizes that extraordinary performance in a firm is seen to be repeatedly accompanied by the combination of both extraordinary competence and extraordinary governance. But he also highlights the fact that they are hardly ever studied together by strategy researchers even though competence and governance seem to go together in better performing organizations. He emphasizes that a firm can attain superior performance if it knows what is the right thing to do and also does that thing right. So while the governance addresses the issue of knowing the right thing, management helps in doing that right thing.

Sound governance practices protect the interests of both the shareholders and the employees, thus leading to competitive advantage. For shareholders, corporate governance takes care of the agency problems that might arise, thus ensuring that the managers deploy the resources to maximize shareholder wealth (Kor and Mahoney,
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A sound governance mechanism further protects the interests of employees and protects them from being exploited by the company, thus making them secure to develop firm specific skills without worrying about their impact on employability (Wang et al., 2009).

Thus, the above discussion on deployment brings forth its importance in a firm’s pursuit of attaining competitive advantage. It is also highlighted that the competence, together with effective governance, will be required for a firm seeking to better deploy its resources. As Makadok (2003) stresses that the relationship between competence and governance in explaining resource advantages is an uncharted territory, and considering their potential role in aiding a firm to achieve competitive advantage, the issue certainly warrants further exploration.

The above discussion on Resource Based Theory elaborates upon various facets of the theory developed over the years through the works of various researchers. The theory emphasizes that a firm looking to attain or maintain competitive advantage will need to have in its possession resources, together with the capability of making better utilization of these resources. These resources, which are termed ‘resources’ and ‘capabilities’ interchangeably, should be valuable, rare, inimitable, non-substitutable and durable in order to be a source of competitive advantage. Moreover these resources should be in conformity with the industry conditions as the external environment can have a decisive influence in rendering a resource as strategic or non-strategic. The resources with a firm also interact among themselves to form unique, difficult to codify configurations that produce synergistic effect and cause a firm to meet and beat its competition. A firm in possession of the key resources will not be able to enjoy the fruits of these resources, unless these are effectively deployed. Effective deployment of resources in a firm is carried out by means of the firm’s capabilities largely in the form of competence of top management teams and governance. While the competence helps the firms do the right thing, the governance helps the firm know what that right thing is.

Thus, while the identification, interactions and deployment of resources helps create competitive advantage, this task is no less than a challenge for any firm (Amit and Schoemaker, 1993). There is a need to carry out an in-depth study exploring these
issues and thereby helping the management in its quest to achieve competitive advantage aided by the Resource Based Theory.

**NEED FOR THE STUDY**

The Resource Based Theory has been applied by researchers to understand the reasons for differential performance among firms. The need for a new study arises for three reasons, though a number of research studies have been conducted in the past. Firstly, though the researchers have emphasized upon the need for integrating the external with the internal scenario, still the influence of industry is an under researched area. One does not find a comprehensive study taking into consideration a range of resources and also the various industry characteristics and testing the relation between them. The past research, as carried out by Stoel and Muhanna (2009), has largely been about establishing the influence of industrial characteristics on innovation and IT capabilities, while the rest of the resources have been ignored. Thus, by means of this study, we attempt to explore the impact of industry context on the relationship between investment in resources and competitive advantage of a firm.

The second reason is that as advocated by Barney *et al.*, (2011), the Resource Based Theory has reached a stagnant phase of its life-cycle and needs to be revitalized and, as pointed out by them, one of the ways the revitalization can begin is by exploring the processes of resource acquisition and development. In this theme, they highlight the need for researchers to delve into the processes underlying resource acquisition. In the past, some studies have tried to establish the role of a limited number of governance mechanisms on investments in R&D of a firm. A study taking into consideration a range of governance measures and their influence on various other resource investments in addition to R&D, is not found. By means of this study we explore this theme by establishing the role that strong governance mechanisms and management play in the effective deployment of resources investments.

The third reason is that, in spite of a wide array of research, there are only a few studies specifically catering to the Indian context. The studies in the past have identified resources that lead to competitive advantage, but the Indian context is some-how
missing in such studies. A need is therefore felt to intensively apply the resource based logic to the Indian scenario.

Thus, taking into consideration the above reasons we believe there is a need to carry out an intensive study that addresses all the concerns and applies the resource based theory to the Indian corporate sector.

**OBJECTIVES OF THE STUDY**

The specific objectives of the study are as follows:

1) To identify the resources that lead to competitive advantage in the Indian corporate sector. Specifically,
   a) To establish the resources that lead to competitive advantage for the Indian corporate sector, in general.
   b) To establish the interactions among the resources that lead to competitive advantage.
   c) To establish the resources that lead to competitive advantage in various business sectors.

2) To establish the impact of industry context on the relationship between investment in resources and competitive advantage of a firm.

3) To establish the effect of management competence and corporate governance on a firm’s competitive advantage.

4) To establish the relationship between management competence, corporate governance, resource investments and competitive advantage.

**ORGANIZATION OF THE STUDY**

The study is divided into nine chapters. The first chapter, that is, the current chapter provides an introduction to the topic, providing an explanation to the Resource Based Theory, the resources and their interactions as a source of competitive advantage, together with the role of industry and deployment. This chapter also includes the need for the study and the objectives of the study.

The second chapter provides a detailed review of literature related to the Resource Based Theory. The various studies have been grouped under the sub-headings
corresponding to the objectives of the study. Firstly, the studies that identify the resources, their interactions and establish relations with firm outcomes are reviewed. Secondly, the studies that establish the influence of industry environment on resources are reviewed. Thirdly, studies that examine the impact of corporate governance and management competence on firm performance are reviewed. Next, the studies that explore the influence of deployment of resources by means of management competence and governance on firm performance. Lastly, studies related to the Indian context have been reviewed.

The third chapter is the research methodology of the study. In this chapter the scope of the study, that is, the research question defining the aim of the study; the period for which the study has been conducted; the sources from where the data has been collected, an objective-wise description of the scheme of analysis and the details of the statistical tools and techniques for data analysis is provided. This chapter also presents the limitations of the study.

Chapters four through eight provide the theory and hypotheses and data analysis pertaining to the objectives of the study.

Fourth chapter details the theory and hypotheses and analysis of the identification and interaction of resources that lead to competitive advantage pertaining to the Indian corporate sector. This section first provides a general overview of the Indian corporate sector and then provides an intensive sector-wise analysis of the identification of resources that lead to competitive advantage in the Indian corporate sector.

The fifth chapter deals with the development of theory and hypotheses and analysis of the influence of industry context on the relationship between investment in resources and competitive advantage of a firm.

The sixth chapter concerns itself with the theory and hypotheses and analysis of the effect of management and corporate governance mechanisms on competitive advantage of a firm.
The seventh chapter provides theory and hypotheses and analysis of the impact of management and corporate governance on deployment of resources and further on competitive advantage.

The final chapter, that is, the eighth chapter provides summary and conclusions of the study and ends by providing recommendations to the managers and the academicians and the scope for future research.