Theory into Practice: The Resource Value Chain and the Objective of the Optimally Configured Firm

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Drawing on resource-based theory, we develop a resource value chain framework. We then demonstrate how this framework can be used to solve the firm's various strategic and resource configuration problems. Since it is assumed that managers must constantly consider which new resources their firm needs to acquire, and which of its resources it needs to reinvest in or divest, our resource value chain will be of most use when innovating, embarking upon a major internal change or transformation initiative, or when altering the firm's boundaries through acquisition or devolution. It can also be used to explain why a firm may have adopted a particular mode of organisation, hierarchy or reward system, and if value has indeed accrued to the firm.

Keywords: resources, capabilities, value chain, value creation, value configuration, firm transformation

INTRODUCTION

This paper has three purposes. First, it explains why it is important to develop a resource value chain. Secondly, it describes the kind of resource[1] configuration problems our resource value chain is designed to solve. Lastly, by establishing that the resource investments made by a firm at different stages of its life can represent its evolution, this paper develops the idea that a firm will be more likely to achieve its objectives if its managers develop a consensus view of what constitutes their firm's resource value chain and how it can be applied to formulate and implement the firm's resource investment strategies.

In the first section of this paper, we describe how managers use their firm's budgeting and resource allocation processes to gain insight into the kind of resource investments that should be made on behalf of the firm. In the second section, we derive a typology of resources from the resource-based theory (RBT) literature and explain why managers need to constantly think about the way the firm's resources should be combined. This provides the conceptual background for the third section, where we develop a resource-based framework for analyzing the firm. In the fourth section, we briefly discuss Porter's (1985) generic value chain framework, and Stabell and Fjeldstad's (1998) value shop and value network frameworks to enable comparison between their value chain frameworks and our framework. We also explain how it is possible to use our resource value chain in conjunction with an activity-based value chain to identify what may be the optimal configuration for a firm, why it is important to think about the way a firm's owners might be paid, and whether a firm's resource value chain is at all shaped by the resource value chains of competitors, suppliers and customers. In the last section, we illustrate our ideas by discussing how a resource value chain can be used to solve different kinds of strategic planning problems, including the kind of problems that arise when attempting to create an environment at a firm that encourages innovation, transforming a large and complex organization's operations in a significant way, or assessing whether a

[1] The term 'resources' is defined as the include the unique combination of assets and capabilities that a firm possesses, and which can be used by the firm to implement its strategies and improve its overall performance,.

firm should acquire another business or devolve itself of one. We also show how the resource value chain can be used to understand the performance effects of investing in certain combinations of resources and why the firm may have adopted a particular mode of organisation, hierarchy or reward system. We conclude by discussing the benefits of using a resource value chain.

ACTIVITIES, RESOURCES AND THE FIRM'S BUDGETING PROCESSES

It is now generally believed in strategy field that if a firm is to be high performing its managers need to think about both the activities that the firm engages in and the resources that allow those activities to occur when formulating strategy (Barney, 2001; Mahoney, 2001). To be competitive, a firm will need to possess at least a few useful resources. Similarly, it will need to constantly engage in strategic activities if it is to have a long life (Spanos & Lioukas, 2001). The business processes that the firm ends up developing and using will need to coevolve with the assets and capabilities the firm is able to acquire, develop and deploy (Barney, 1991; Porter, 1991; Porter, 1987).

A number of studies have also found that a firm's annual and capital budgeting decisions are almost invariably based on whether the firm's different strategic objectives can be met (Bower, 1972; Burgelman, 1983; Christensen & Bower, 1996). This is usually a bottom-up process in which the firm's top management play a directing role only, preferring to limit their control to providing career incentives or disincentives and general guidelines to lower level managers. Top management articulate the firm's strategy, whereas the firm's lower-level managers identify how it should be operationalized. It is a firm's lower level managers who identify what combinations of resources, in particular, which capabilities will be important for the firm to develop and incorporate into its various business processes over different points in time and in the longer-term. The firm's lower level managers are also responsible for justifying and explaining to top management how different resource investments will support or enhance the firm's corporate-level strategy (Bartlett & Ghoshall, 1993). The various budgeting decision structures that develop at the firm will almost always be dependent on what has happened in the past, including the roles, responsibilities and budgets allotted to individual managers. The resource investment patterns to emerge will be determined by top management's perception of what parts of the firm's strategy have been effectively executed and the incentives paid to management. It will also be determined by the capacity of the firm's managers (Castanias &.Helfat, 2001; Pierce, et al., 2002), luck or accidentally combining useful combinations of resources (Barney, 1986), the path dependencies associated with the firm's past resource investment decisions (Teece, et al., 1997) and how difficult it might prove to access or develop some resources (Maritan, 2001). Ultimately, it is the firm's managers' collective view of what the firm can achieve through its resources that will determine the patterns of investment to emerge at a firm.

This indicates that rather than think of the firm as being made up of useful activities or batches of generic business processes, as in the generic value chain, managers often find it more useful to think of the firm as being made up of many closely interrelated and potentially productive resource investments. These will normally be categorized to reflect the firm's strategic objectives, with the notion of a resource investment necessarily incorporating the notion of a business process. This is because a resource investment and a business process are not the same thing, although this would be convenient if you were going to use a business process and its effectiveness as the dependent variable in a study (Ray, et al., 2004) or, by implication, in an internal review of the performance of the firm's business processes. A resource investment can be made up of many assets and capabilities, or more than one business process. Generally speaking, many managers with different duties and cost centres could be responsible for bringing a single business process into being and sharing its costs.

A TYPOLOGY OF RESOURCES

Long-term competitive advantage should be associated with the nature of a firm's resource configurations, not the firm's dynamic capabilities. This is consistent with research that shows that in extremely fastmoving environments the condition that a firms resources must be rare, valuable, inimitable and non-substitutable (Barney, 1991) will often break down (Eisenhardt & Martin, 2000). It may be more useful for managers to think about the advantages of investing in novel combinations of resources, as in the long-term there is not much about a firm that its competitors cannot imitate or improve upon (Galunic & Rodan, 1998).

All of this confirms that the term ‘resources’ should be used generically to describe all of the assets and capabilities that the firm has at its disposal to develop and deploy with the objective of producing and delivering potentially profitable products and services to its customers. The firm’s *assets* should be defined as the tangible and intangible financial, physical, human, technological and organizational inputs that a firm uses to develop, produce, modify, improve and deliver its products and services to its customers, and something that must be paid for first to be able to use. A firm’s *capabilities* can be either *operational* or *dynamic* in focus. They will also have a distinct life-cycle (Helfat & Peteraf, 2003). A firm’s *operational capabilities* should be defined as the firm’s capacity to combine, assemble and deploy its various *assets* using pre-determined protocols, activities, routines, processes, systems and the skills of its employees to make products and services that are a source of potential profits to the firm available to its customers, engage in strategic projects and/or meet the return expectations of those in charge of the firm. They too will have a life-cycle and they will be indirectly able to be related to the success or failure of a firm’s strategies. They will most likely include the firm’s more operationally-focused managerial, technical and marketing capabilities.[2]

A firm’s *dynamic capabilities* are defined as the firm’s capacity to combine and recombine the firm’s operational capabilities to respond to changes in the marketplace. A firm’s *competencies* are defined as the firm’s capacity for combining and recombining its dynamic capabilities to ensure the productive and

[2] We have used Spanos and Lioukas’ (2001) typology for a firm’s operational capabilities in this framework because it is consistent with RBT, testable and may reflect the firm in practice.

strategic use of all the firm's resources. The firm's *integrative capabilities* complement the firm's market-focused dynamic capabilities in how they enable the firm to meet the demands of the firm's markets. They make it possible for the firm to organize, develop internal efficiencies, manage the firm's knowledge and to ensure the firm grows in a measurable way.

A very important set of distinctions have been made here that explain how a firm's resources interrelate. A firm's capabilities deploy the firm's tangible and intangible assets, which includes its human-based and intangible or knowledge-based assets. A firm's capabilities can also be combined or recombined using a firm's dynamic capabilities. These can then evolve into a competency, which is a capacity of the firm to use a large portion or even all of its resources to develop a recognizable presence in the marketplace or a strategic advantage.

A RESOURCE-BASED VALUE CHAIN FRAMEWORK

Thus, the ability of some resources to significantly contribute to a firm's strategy will vary over the firm's life. By the same token, a firm's managers will divest the firm of those resources that are perceived by them as being no longer able to contribute to the firm's strategic efforts, even if their views prove to be flawed. It is for this reason that we believe that a firm can be described as being made up of *many closely interrelated and potentially productive resource investments*, with a *resource investment* being defined as the discrete number of resources that the firm's managers have chosen to develop or deploy to (1) produce and deliver a number of potentially profitable products and services to the marketplace, and/or (2) grow or contract the firm to be an increasingly market sensitive and efficient entity. As well as having the capacity to be associated with different strategic activities that a firm must undertake, as represented by a firm's activity-based value chain, this conceptualisation reminds us of the fact that firms engage in formal and capital budgeting exercises.

These are the ideas that make it possible for us to develop a resource value chain. As **Figure 1** shows, our framework is designed to help managers understand how firms invest in and develop the resources at their disposal, and how a firm's resources are normally accumulated and developed over time, enabling the firm to grow and compete in the marketplace. The resource value chain implies that a firm's more important activities and the many resources that populate the firm are jointly responsible for determining the firm's fortunes, which means that an individual resource investment will almost always need to be linked to a particular operational or strategic objective. It could also be configured to reflect the firm's primary or secondary strategic activities, as described in Porter's (1985) generic value chain framework. However, it could just as easily be configured to reflect the resource investment and budgeting structures that have developed at the firm. Figure 1 also shows that it can be applied to at least one budget cycle and may very well incorporate more than one. It can apply to the whole firm or just part of it.

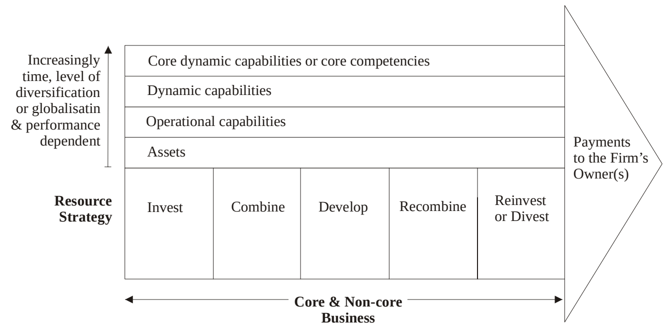

Figure 1: The Resource Investment Value Chain

From the point of inception, a firm's resource investments will have the capacity to explain the business that the firm is in or why it may have diversified into its core businesses. This means that not only can one represent and analyze the firm's core business, the firm's non-core business objectives can also be represented with a high level of granularity. Thus, a resource investment could also be a one-off, strategic project, for instance, a performance management programme, a software integration project, a new alliance, or a programme of acquisition. By combining and recombining the firm's various resources and capabilities, and ensuring they are matched to the specific strategic objectives of a firm at the points in time that this is most critical, a firm's managers can change the firm's focus and ensure that the firm takes advantage of the value and the potential inherent in the resources at its disposal. As **Figure 2** shows, one can identify which major resource investments and strategic initiatives are core business and which ones are not, including which initiatives needed to be developed in isolation from the rest of the business.

Firm over time. A resource value chain should be able to represent the different phases of the firm's life, including the way in which different resources will need to be introduced to the firm to ensure that it can continue to perform in the marketplace or even sustain a competitive advantage. This can be illustrated by showing how a firm's aggregated resource investments can be represented in six different ways to represent six distinct phases of the firm's life. Since capabilities deploy assets, it is highly likely that the firm's managers will acquire and develop assets on behalf of the firm that reflect the phase the firm is in presently. It follows that a firm's assets could be categorized as being either functional, architectural, network or acquisition directed: Functional assets allow the firm to organize itself, architectural assets allow the firm to grow itself, network assets allow the firm to work with external parties, and the assets that can be applied to acquisitions allow the firm to pursue opportunities to acquire major assets or even another firm.

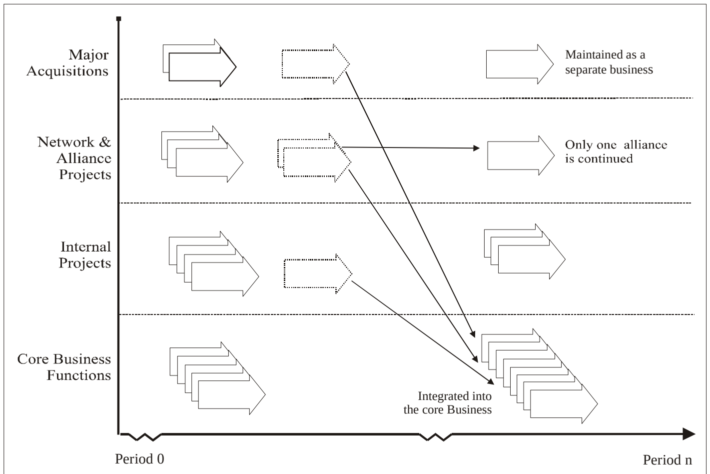

Figure 2: An Example of A Firm's Sequence of Resource Investments & Reinvestments

Stage of life-cycle. Because a firm's assets and its capabilities will need to be frequently developed to conform with the firm's stage in its life-cycle and in accordance with the performance objectives of the firm's owners, the framework can also show that distinct differences will exist between the resource investments of the firm at start-up or a small, single-business firm and a large, multi-business firm.

Owner's payments and the margin analogy. Underlying this discussion of firm's life-cycle is the assumption that the firm's owners' performance objectives will differ at different stages of a firm's life and this will have a bearing on the nature of the resource investments that the firm will make. For instance, just after a firm is created, it is likely that the firm's owners will invest in resources that have the capacity to facilitate firm growth, that is, they will invest in those resources that help the firm turn into a profitable concern quickly. In contrast, if the firm is going into irreversible decline, it is likely that the firm's owners will only invest in those resources that can ensure that the highest amount of value is appropriated for the firm's owners as the firm is broken up and individual resources are sold off. The fact that a firm's owners need to be paid even if only occasionally is depicted in Figure 1. The owners' willingness to invest in the firm is a resource of the firm of a particular kind. Even if the firm's owners are never paid by the firm, the promise that they may be paid may be enough to ensure their continued investment in the firm. As indicated by the four diagrams,[3] what is left over after paying the costs associated with having a certain resources on hand will belong to the firm's owners. This is analogous to Porter's (1985) generic value chain and the idea that if a firm is efficiently configured, then it will be profitable. This is the 'margin' that Porter identified in his generic value chain diagram. Thinking in resource value chain terms, if the firm's resources are efficiently and parsimoniously configured, then there is a high probability that value is accruing to the firm and it is less likely that this accrued value is being appropriated by unentitled parties. Under these circumstances, the firm's owners will be more inclined to reinvest in the firm.

THREE ACTIVITY-BASED VALUE CHAINS

The original value chain framework. The value chain is a method for representing the firm and decomposing it into functional units and then into the discrete strategic activities that the firm needs to engage in. The benefit of viewing the firm in value chain terms is that it becomes possible to better determine which activities the firm should engage in to more efficiently accommodate customers than competitors: *The value chain displays total value, and consists of value activities and margin. Value activities are the physically and technologically distinct activities a firm performs. These are the building*

[3] Only Figure 1 is included in this extended abstract.

blocks by which a firm creates a product valuable to its buyers (Porter 1985: 38). The activities that the firm can engage in can be further divided into whether they are a primary or support activity. Primary activities are directly involved in enabling the firm to produce and deliver valuable products and services to the firm's customers. Support activities, on the other hand, are those that indirectly permit the firm to produce and deliver its products and services. One of their more important objectives is to ensure that the firm exploits opportunities to improve the performance of its primary activities. The value chain also exemplifies the view that both a firm's primary and support activities can be reduced into generic categories that will be common to all firms, although they will not necessarily be the same as a firm's organizational functions. The value chain will also have the capacity to be shaped by the value chains of competitors, suppliers and customers and contribute to the shape of their respective value chains. To express this another way, the value chain framework is a logical extension of the argument that industry profits and, in turn, firm-level profits are affected by the differences in the bargaining power of suppliers, firms and buyers within the same industry. It is also a logical extension of Porter's five competitive forces framework, in particular, the argument that a firm's industry's profit potential is best measured in terms of the long-run return on invested capital. Thus, if a firm is able to identify the right kind of activities to engage in, it will be able to earn profits that are above the industry average (Porter, 1980).

The value shop and value network. To build on the idea that the firm's products are indeed the medium by which value is transferred to its customers, Stabell and Fjeldstad developed two other value chain configurations. These value configurations are the value shop and the value network. They too are activity-centric and a means by which the firm can be conceptually decomposed.

The coevolution of activities and resources. Thus, it is just as important for firms to engage in activities that involve it accumulating and developing resources, that is, the kind that can allow a firm to effectively compete in the marketplace and have a long life.

Combining the activity and resource-based frameworks. Since a firm cannot engage in strategic activities without possessing the sort of resources that will support them, there is a case to argue that a firm should be represented and analyzed by using both the firm's activity-based and resource-based value chains. This could lead to meaningful snapshots being taken of the kind of activities the firm engages in, what business processes should constitute the firm's strategic activities, divided into primary and support categories, and the firm's resource investments. This should give managers more scope to develop a much more comprehensive view of the firm and make it easier to understand how the firm's strategies might positively or adversely affect the firm. Moreover, it will be easier to identify when a particular divestment decision might stymie the firm's efforts to develop and lever off a major competency, meaning the 'baby may be thrown out with the bath water' (Prahalad & Hamel, 1990: 85). In terms of a firm's budgeting structures, the firm will have many resources investments that will be easy to measure and separate from each other. If a firm has been able to develop dynamic or integrative capabilities or a core competency, one should be able to observe some overlap between what would normally be disparate and relatively easy-to-measure resource investments. This should almost always be a positive thing for the firm, provided these shared higher level capabilities do not become core rigidities (Leonard-Barton, 1992).

Benefits of applying the logic of both kinds of value chains. Another major benefit of combining activity-based value chain analysis with resource investment analysis is that one can go beyond first-order analysis and second-order analysis of the firm's activities, and incorporate other stages of analysis that involve understanding and appreciating the value creating attributes of the firm's resources.

Competitors, suppliers and customers and the value chain concept. Since the resource value chain framework has the capacity to represent the firm at different stages of its life, it can also be used to understand whether firms at a similar stage of development or operating in comparable markets or which have performed in the same way will tend to display resource investments and a history of certain types of resource investments having been made that are fundamentally the same. The corollary of this is if there is a tendency for certain firms to develop similar resource investment structures, one should be able to discern a tendency for a firm's competitors, suppliers and customers to accumulate resources that reflect their interpretation of the opportunities that those structures represent for them. This tendency will affect individual firms' value chains.

THREE CONFIGURATION PROBLEMS

The resource value chain is especially useful when trying to understand how best to configure the firm when: (1) creating an environment that encourages innovation; (2) transforming the operations of a large and complex organization, and (3) acquiring a new business or devolving the firm. The most important fact to note here and it may even be the most critical point for managers researchers and practitioners to understand is that the resource value chain as described in Figure 1 can be drawn to represent a large number of firm configurations. These configurations will reflect the firm's commitment to develop certain assets and capabilities as they might pertain to an individual resource investment at the firm, that is, an internal investment. Most importantly, they will be in the form of resource investments that have been strung together in particular way to reflect the firm's objectives, its strategic plan and its resource overall investment strategy. In other words, the way in which the firm's resource investments (or bundles of resources) interrelate and support each other, change or are subsumed by each other, or even constitute sub-investments should provide insight into the way in which the firm has been able to capitalise off its various individual resource investments. The nature of these configurations will be of interest to researchers and practitioners because of their ability to provide insight into the firm's past and its plans for the future. We assume that it is possible to identify a number of generic resource investment configurations that build off our value chain, as depicted in Figure 1.

CONCLUSION

Although it may never be possible to identify the optimal configuration for a firm or, much less, make it a reality, it appears that managers must strive towards attaining this ideal wherever possible. With this in mind, we developed a resource value chain. We believe our resource value chain can be used to understand what might be the optimal resource configuration for a firm. The resource value chain can help to determine how changes in the configuration of a firm's value creating activities might affect the firm's resource structures. It can also provide an overview of how managers typically accumulate, combine and deploy their firm's resources to ensure the firm is able to succeed in the marketplace. One of the advantages of using our resource chain framework is that it can explain the firm over time, and how different resource investments and their cumulative effects have affected the firm's performance. In our resource value chain, activity-based logic is only applied in how the firm strategically directs its various resource investments, that is, how a particular area of the firm or manager is given a budget and the responsibility to advance a key part of the firm's strategy, which might include the task of building a competency within the firm.

Another advantage of our resource value chain is that one should be able to observe how the firm accrues value through its various resource investments and then uses this accrued value to accrue even more value. By focusing on different time-frames or by comparing the differences in the firm's aggregated resource investments at different points in time, it becomes easier to understand which firm-level resourcing behaviors were integral to the more positive aspects of the firm's evolution. One should also be able to understand the effects of the firm adopting a particular mode of organisation, hierarchical structure or a particular method for rewarding its managers. This framework can also be used to delve into the minutiae of each of its individual resource investments, and in a way that can exceed anything that activity-based analysis can do alone.

REFERENCES

Amit, R. & Schoemaker, P.J.H. 1993. Strategic assets and organizational rent. *Strategic Management Journal*, **14**, 33-46.

Barney, J.B. 1986. Strategic factor markets: Expectations, luck, and business strategy. *Management Science*, 32(10): 1231-1241.

Barney, J.B. 1991. Firm resources and sustained competitive advantage. *Journal of Management,* **17**, 99-120.

--- 2001. Is the resource-based "view" a useful perspective for strategic management research? Yes. *Academy of Management Review,* **15**, 41-56

Barney, J.B. & Arikan, A.M. 2001. The resource-based view: origins and implications. In Hitt, M.A., Freeman, R.E. & Harrison, J.S. *The Blackwell Handbook of Strategic Management*, 124-188. Oxford, UK: Blackwell Publishers.

Collis, D. 1994. How valuable are organizational capabilities? *Strategic Management Journal*, **15**, 143-152.

Denrell, J., Fang, C. & Winter, S.G. 2003. The economics of strategic opportunity. *Strategic Management Journal,* **24**, 977-990.

Eisenhardt, K.M. & Martin, J.A. 2000. Dynamic capabilities: What are they? *Strategic Management Journal*, **21**, 1105-1121.

Galunic, D.C. & Rodan, S. 1998. Resource recombinations in the firm: Knowledge structures and the potential for Schumpeterian innovation. *Strategic Management Journal*, **19**, 1193-1201.

Grant, R.M. (1996) Toward a knowledge-based theory of the firm. Strategic Management Journal, **17**, 109-122.

Gulati, R. & Singh, H. 1998. The architecture of cooperation: managing coordination costs and appropriation concerns in strategic alliances. *Administrative Science Quarterly,* **43**, 781-814.

Castanias, RP and Helfat, CE 2001. The managerial rents model: Theory and empirical analysis. Journal of Management, **27**, 661-678.

Helfat, C.E. & Peteraf, M.A. 2003. The dynamic resource-based view: Capability lifecycles. *Strategic*

Management Journal, **24**, 997-1010.

Henderson, R. & Cockburn, I. 1994. Measuring competence? Exploring firm effects in pharmaceutical research. *Strategic Management Journal*, **15**, 63-84.

Hinterhuber, A. 2002. Value chain orchestration in action and the case of the global agrochemical industry. *Long Range Planning*, **35**, 615-635.

Hoskisson, R.E., Hitt, M.A., Wan, W.P. & Yiu, D. 1999. Theory and research in strategic management: Swings of a pendulum. *Journal of Management*, **25**: 417-457.

Kogut, B. & Zander, U. 1992. Knowledge of the firm, combinative capabilities, and the replication of knowledge. *Organization Science*, **3**, 383-397.

Lei, D, Hitt, MA & Bettis, R. 1996. Dynamic core competences through meta-learning and strategic context. *Journal of Management*, **22**(4), 549-569.

Lippman, S.A. & Rumelt, R.P. 2003. The payments perspective: Micro-foundations of resource analysis. *Strategic Management Journal*, **24**, 903-927.

Mahoney, J.T. 2001. A resource-based theory of sustainable rents. *Journal of Management*, **27**, 651-660.

Makadok, R. 2001. Toward a synthesis of the resource-based and dynamic-capability views of rent creation. *Strategic Management Journal*, **22**, 387-401.

Oliver, C. 1997. Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal*, **18**, 697-713.

O'Sullivan, L. & Geringer, J.M. 1993. Harnessing the power of your value chain. *Long Range Planning*, **26**, 59-68.

Pavlovich, K. 2003. All that jazz. *Long Range Planning*, **36**, 441-458.

Peteraf, M.A. 1993. The cornerstones of competitive advantage: The resource-based view. *Strategic Management Journal*, **14**, 179-191.

Pierce, J.L., Boerner, C.S., & Teece, D.J. 2002. Dynamic capabilities, competence and the behavioral theory of the firm. In Augier, M. & March, J.G. *The Economics of Choice and Change*: 81-95. Northampton, USA, Edward Elgar.

Porter, M.E. 1980. *Competitive Strategy: Techniques for Analyzing Industries and Competitors.* New York: The Free Press.

--- 1985. *Competitive Advantage: Creating and Sustaining Superior Performance.* New York: The Free Press.

--- 1987. From competitive advantage to corporate strategy. *Harvard Business Review,* **65**, 43-59.

--- 1991. Towards a dynamic theory of strategy. *Strategic Management Journal,* **12**, 95-117.

Prahalad, C.K. & Hamel, G. 1990. The core competence of the corporation. *Harvard Business Review,* **68**, 79-92.

Ramirez, R. 1999. Value co-production: Intellectual origins and implications for practice and research. *Strategic Management Journal,* **20**, 49-65.

Ray, G, Barney, JB and Muhanna, WA. 2004. Capabilities, business processes, and competitive advantage: choosing the dependent variable in empircal tests of the resource-based view. Strategic Management Journal, **25**, 23-37.

Schoemaker, P.S.H. 1990. Strategy, complexity and economic rent. *Management Science*, **36**, 1178-1192.

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

Stabell, C.B. & Fjeldstad, O.D. 1998. Configuring value for competitive advantage: On chains, shops, and networks. *Strategic Management Journal,* **19**, 413-437.

Teece, D.J., Pisano, G. & Shuen, A. 1997. Dynamic capabilities and strategic management. *Strategic Management Journal,* **18**, 509-533.

Wernerfelt, B. 1984. A resource-based view of the firm. *Strategic Management Journal,* **5**, 171-180.

Winter, S.G. 2003. Understanding dynamic capabilities. *Strategic Management Journal,* **24**, 991-995.

Wirtz, B.W. 2001. Reconfiguration of value chains in converging media and communications markets. *Long Range Planning,* **34**, 489-506.