An exploration of traditional perspectives and contemporary propositions regarding sustainable competitive advantage points to the conclusion that the locus of advantage is located specifically within organizational effects. The key issue emerges that research investigating sources of sustainable competitive advantage must be done not only on organizations but also in organizations. The fallout from this conclusion is, however, that the research methodologies traditionally used in strategy research will not unambiguously uncover these sources of sustainable advantage. Using organizational culture as an example of a possible source of sustainable advantage within a resource-based paradigm, a four-step research framework is suggested for isolating these organizational effects.

During the last two decades the emphasis in the strategic management literature has shifted from viewing competitive advantage as primarily determined by environmental (industry/market) factors to a resource-based view (RBV) (Wernerfelt, 1984) that highlights how the deployment of unique and idiosyncratic organizational resources and capabilities can result in sustained superior performance (Lado, Boyd, and Wright, 1992). Underlying this shift is a recognition that sustained competitive advantage grows out of those valuable, rent-generating, firm-specific resources and capabilities that cannot easily be imitated or substituted. The very nature of such variables suggests that large sample, multi-industry, single time-period samples using secondary sources of data will not help disentangle the key factors that may provide sustainable advantage. To overcome this limitation, we propose a general approach for revealing sources of sustained competitive advantage.
factors, to ‘fit’ perspectives, to internal elements—highlight the range of factors important to superior performance. Despite evidence that study of valuable resources is needed, few, if any, have been studied in detail from a sustainable competitive advantage perspective. Rumelt’s (1991) study, partitioning the variation in performance between industry, corporate, and business unit effects, emphasizes that research seeking to explain an important portion of the observed dispersion in business unit profit rates must use the business unit as the unit of analysis and must focus on the sources of heterogeneity within industries. Similarly, Hansen and Wernerfelt (1989) attribute over 30 percent of the total variation in 5-year average of return on assets to organizational factors, with industry-level factors explaining a substantially lower percentage. The most recent study of this kind, McGahan and Porter (1997), corroborates that there are significant stable business segment-specific effects (32% vs. 19% stable industry effects on firm profitability defined as ratio of operating income to identifiable assets). While these studies provide a broad direction for future research, they do not indicate or identify the specific organizational factors that account for the major variations of firm performance.

The focus of research in the RBV is probably best restricted to those differences between firms that competitors cannot (or do not) duplicate for whatever reason, or that competitors cannot duplicate closely enough to eliminate the advantage. Even with such a restricted focus, measurement of any competitive advantage remains problematic. As a result, the presence of competitive advantage is normally inferred from sustained periods of above-average performance. It is to firms with performance that is consistently above the industry average (Reed and DeFillippi, 1990) that strategists and scholars must look for the sources of sustainable competitive advantage. This selection criterion will, by definition, severely restrict sample sizes, which goes against the trend of mainstream strategy research.¹ Yet, as we shall argue below, this is precisely what must occur if researchers are to isolate the sources of sustainable advantage that are theoretically predicted by the RBV.

The strategic management literature has recently addressed the issue of competitive advantage by attempting to explain variation in firm performance by proposing a broad set of organizational factors that are intangible (Hall, 1993). Such factors are, by definition, difficult to assess. Furthermore, when the organizational factors considered by different researchers have closely matched the rent-generating resources and capabilities as described in the RBV, the studies have often not simultaneously accounted for the effects of strategy, industry, environment, or time that may interact with the complex of organization factors (e.g., Lawless, Bergh, and Wilsted, 1989; Powell, 1992a, 1992b). Indeed, the variety of conjectures, methods, and empirically tested models makes aggregation across studies difficult. The few studies that have drawn directly on the resource-based perspective have also tended to apply the prevalent research designs, measures, and methods.

Studies of competitive advantage using the RBV require a different approach. Firstly, since only firms with unique resources and competencies are assumed to have the potential for competitive advantages, the use of large-sample, cross-sectional analyses is unlikely to be able to disentangle the variety of effects associated with time, industry, environment, strategy, and the resource/capability of interest. Secondly, systematic methods for obtaining information are generally available to all competitors and new techniques diffuse rapidly (Barney, 1986a). Hence, most competitors are likely to react quickly to actions/resources/competencies discernible from secondary sources (annual reports, 10Ks, proxy statements, industry association newsletters, trade journals, etc.) and these could not form the basis of sustained advantage. Valuable but commonly

¹ Venkatraman and Grant (1986: 72) note that ‘although strategy researchers employ both qualitative and quantitative approaches, the trend appears to be toward the use of large sample, quantitatively-operationalized research designs’. A review of over 90 articles published in the Strategic Management Journal since January 1995 confirms this statement. First, more than 75 percent of these articles reported empirical results, but only about 10 percent of these were detailed case studies. Of the remainder, over 30 percent included multiple industries when the propositions being tested were at the firm or strategic group level of analysis. Only 25 percent assessed longitudinal changes in the tested relationships. Finally, approximately 30 percent utilized primary data sources to augment secondary data, with the majority of these data being collected from mail questionnaires vs. interviews.
held resources and capabilities are sources merely of competitive parity (Barney, 1995).

In summary, while strategic management research during the last two decades has shifted from a focus on environmental factors to intangible resource-based factors in the search for sources of sustainable superior performance, the dominant research approach has not changed significantly. It is unlikely that any conclusive findings on competitive advantage will emerge from large-sample studies that indiscriminately include low and typically average-performing firms which the competitive advantage literature and RBV of the firm suggest do not have any sustainable advantage. Other approaches are needed to isolate sustained sources of advantage.

METHODOLOGY

We propose an approach to stimulate and guide future studies of resource-based competitive advantage and sustainability issues that extends, complements, and builds upon methods that have dominated strategy research, but adds richness of detail with the potential to reveal the differences, strengths, and sources of sustainable competitive advantage. Such an approach, we maintain, would be needed to determine the comparative advantage from organizational factors (or synergistic combinations) predicted by the RBV to be advantage producers. One of those factors, and the example we use here for illustrative purposes, is organizational culture.

The framework begins with a four-step firm selection process. The first step involves the selection of an industry and generating performance data and rankings from secondary sources. The selection of a single industry is important (Miller, Greenwood, and Hinings, 1997). Firms within an industry share strategic factor markets (Barney, 1986a), and industry attributes affect strategy decisions (Mascarenhas and Aaker, 1989). Strategic groups must be validated, however, using more than one variable since groupings made on the basis of a single variable, such as size, or innovation and R&D, do not hold up when other variables are used in their place (Peteraf, 1993b). Cool and Schendel (1987) urge a multi-dimensional approach to strategic group construction and Zahra and Pearce (1990) recommend that scholars use secondary and primary data for validation of measures, consult industry experts, and make use of multiple data sources including primary sources. Indeed, Reger and Huff (1993) demonstrated that knowledgeable insiders cluster firms in subtle ways that reflect commonalities not captured in academic research. The third step in firm selection is to compare performance indices within strategic groups. The expectation is that firms within each strategic group will demonstrate performance variation (Cool and Schendel, 1988).

The final step in the selection process is to identify those firms within each strategic group that are the high and low performers. The procedure of selecting out the central cluster of firms (perhaps one or more standard deviations on either side of the mean) should allow a more stark comparison of differences between high and low performers. Pettigrew (1990) proposes this same decision rule for the study of change. These firms would be selected as research subjects using in-depth fieldwork or ethnographic study methods.

Theoretical foundations of the methodology

2 Parenthetically, we note that in some situations, where the firms of interest are diversified and encounter the same group of competitors across multiple and perhaps diverse markets, the use of a single industry (SIC) is not likely to be the most appropriate demarcation for identifying high and low-performing firms or strategic groups (which may be associated with competition in subsets of the multiple markets). When market commonality is an important determinant of competitive actions (Chen, 1996), a market-based procedure for identifying the set of competitors should be utilized.

Copyright © 1999 John Wiley & Sons, Ltd.

organization and its processes. Indeed, in fore-
shadowing much of what was to become the re-
source-based view of the firm, Penrose (1960) 
conducted research inside the Hercules Powder 
Company and used that more in-depth knowl-
dge to illustrate the main arguments of her 
*Theory of the Growth of the Firm* (Penrose, 
1959).

More recently, ethnographic and fieldwork 
methods have been successfully used for produc-
ing ‘thick descriptions’ (Geertz, 1973) and 
detailed analyses as part of organizational culture 
studies, and research in the anthropology of work 
(Baba, 1986; Burawoy, 1979). Ethnographic 
methods include those that range from low-
intrusion types such as semistructured and 
unstructured interviews, and unobtrusive obser-
vation, to high-intrusion methods such as partici-
participant observation (Bernard, 1994, provides a use-
ful introduction to these methods). Generally 
speaking, the higher the level of intrusion, 
involvement or participation in an organization, 
the higher the level of understanding, the greater 
the degree of sense-making, and the richer the 
descriptive and analytical possibilities for the 
data. Participant observation, because it permits 
trust relations to develop, allows the researcher 
to collect data that are different in kind and 
quality from data produced by any other method. 
It is hard to imagine survey respondents, for 
example, providing sensitive, confidential or 
highly consequential data. Similarly, interviewers 
who do not spend sufficient time within an 
an organization are unlikely to gain access to data 
that would be exchanged only among trusted 
insiders within the culture. Organizational cultures 
or subcultures within (and between) organizations 
can be so different that language—but most 
importantly, meanings—can differ in quite 
extreme ways (Rouse and Fleising, 1995). A 
period of participant observation allows 
researchers to tap into those meanings, it provides 
Improved access to better data, and an intuitive 
understanding of the organization, all of which 
extends the external and internal validity of those 
data. Evered and Louis (1981) clearly articulated 
not only the differences in data and data quality 
that obtain from research ‘inside’ as opposed to 
‘outside’ organizations, but also the differences 
in research dimensions and the role of the 
researcher. Finally, many of the elements of 
superior performance are predicted to be tacit 
in nature, which means that members of the 
anization cannot easily articulate what they 
are (Polanyi, 1967). In other cases, some mem-
ers will be unaware of which resources consti-
tute sources of advantage. In such cases, inter-
views or surveys would not and could not 
uncover these sources of advantage. The point is 
a deceptively simple one: sources of advantage 
buried in organizational effects can only be 
uncovered, and an integrated understanding can 
only be achieved, by doing research actually in 
anizations.

The following anecdotal example is illustrative 
of the quality, importance, and insight that obtain 
from doing research in the organization. A col-
league in the UK recently reported an experience 
with a linen supply company for whom he was 
employed as a consultant. The interesting feature 
of the case is that the firm in question was 
increasing its market share despite being in an 
industry driven by costs and this firm was actually 
at a cost disadvantage. Towards the end of the 
consultant’s contract the firm had decided to fol-
low the consultant’s advice and make a concerted 
effort to redress its cost disadvantages. Part of 
that program, the company decided, was going 
to be the outsourcing of its van delivery. Before 
that decision was taken, the consultant chanced 
on the key to the firm’s success. One day, he 
struck up a conversation with a delivery driver 
who suggested that the consultant should come 
with him on his route to see how the company 
actually operated ‘at the sharp end’ (the point of 
contact between company and customer). The 
consultant discovered something quite remarkable. 
The driver had developed relationships with his 
customers. The driver was friendly, sincere about 
quality of service, knew the customers by their 
first names, had quite detailed information about 
the customers’ business and, in some cases, per-
sonal life. The consultant went with other drivers 
and found much the same. Generally, drivers 
throughout the company had built relationships 
with ‘their’ customers.

To make the point about the value of what he 
had learned (as a result of chance participant 
observation), the consultant met with the directors

---

Footnote: Penrose (1960) was originally prepared for inclusion in the *The Theory of the Growth of the Firm* (1959), to illustrate the arguments of the theory. Due to space limitations it was omitted.
and had them list the key success factors in the industry and the core competencies claimed by the linen supply company. He then had them apply the VRIO framework (Barney, 1986b, 1997). Managers crossed off the list any competencies or success factors that were not Valuable, Rare, Inimitable (or very costly to imitate), or for which the firm was not Organized to leverage that factor or competency. The only item on the list that met all four VRIO criteria (nearly all others failed because they were easily or inexpensively imitable) was the item inserted by the consultant—the relationship between the company (through its drivers) and the customer. Unnoticed by the firm, they had retained (as a survival of its early, formative stage) an organizational culture that was people/customer centered. Ironically, their only source of competitive advantage was the very element of the value chain the firm had planned to outsource! Needless to say, the firm immediately cancelled its plans to outsource delivery. Instead, managers began to think about ways of investing in and enhancing their sole source of advantage while pursuing other ways to redress their cost disadvantages. Clearly this anecdote is an example of very simple exposure to an organization and is superficial, at best, as an example of organizational fieldwork. And yet there is a powerful message for researchers and practitioners—competitive advantage should not be left to chance.

The recently reported research of Powell and Dent-Micallef (1997) provides another example of where fieldwork-based research might yield important insights. Their rigorous research of information technology in the retail industry provides detailed analysis and explanation of why some firms do better than others, and why those technologies are dissipated rapidly through strategic factor markets. Their research (which controlled for industry effects) brings us a long way in understanding the limits of specific, technology-based, competitive advantages, but only suggests where ‘real’ advantages lie: complementarity of human resource factors, organizational climate, organizational culture, employee empowerment and participation, informal communication, etc. We are left convinced that competitive advantage must lie within organizational processes—but we do not know the what, how, when, why, or where of those advantages. Powell and Dent-Micallef (1997) rightly encourage others to continue to develop the program of research into competitive advantage to produce a more complete and useful synthesis. Grant (1996) demonstrates that knowledge integration may be an important element in such a synthesis, which is complemented by Nahapiet’s and Ghoshal’s (1998) discussion of social and intellectual capital for organizational advantage. These authors point to the need for ‘detailed study’ and ‘closer observation’ (Grant, 1996: 384) and the need for future research into those elements that are ‘. . . deeply embedded in social relations and in the structure of these [intellectual and social capital] relations’ (Nahapiet and Ghoshal, 1998: 260).

Strategy research has reached the point where detailed, comparative data about organizational processes, strategy and implementation are needed for a more integrative and useful understanding of competitive advantage. The purposive sample selection process described above would yield a relatively small number of performance-differentiated firms, that when compared and researched using proven fieldwork techniques would provide rich, contextualized data. This would then permit the identification of culturally based—and other resource-based—sources of competitive advantages. Aharoni (1993) suggests that researchers may find it rewarding to look for the unique, the statistical outlier, and the different rather than search for central tendencies in a population. Reed and DeFillippi (1990: 99) recommend confirming unaccounted variance by using ‘. . . case analyses in which high and low performance firms are compared’. A word of caution is, perhaps, necessary here. Simply to choose the best and worst performers in an industry for comparison would not, in our view, provide the analytical power needed to make strong empirically based advantage/source claims. Drawing on previous research insights, it would seem critical to follow the firm selection process outlined above to control for nested levels of shared cultural and other resources described by the literature. The failure to control for industry and strategic group commonalities could hopelessly confound results and confuse efforts to sort out any contextualized locus of advantage. Context is important for understanding and for applying advantage. Miller et al. (1997: 76) demonstrate that ‘we need to be much more precise in specifying the contexts in which our findings might apply’. Results that could specify contexts of
relevance would be of considerable theoretical and practical utility for strategists and other management scholars, but especially attractive and credible for managers and practitioners (Beyer, 1997).

CONCLUSION

Until now, only the lack of a theoretically appropriate research framework has prevented testing of culture/advantage (and other resource-based, complex, highly inimitable, firm-specific/advantage) relationships. In testing these relationships, the privileged use of large sample, multi-industry, single time-period samples using secondary data sources exacerbates the search for key factors, such as organizational culture, that may provide competitive advantage. The RBV is fundamentally an enactment-based view of strategy formation and implementation (Lado and Wilson, 1994) in which firms are seen to proactively manage and shape their environments and not simply to respond to exogenous uncontrollable forces. By shifting the focus from adapting, to leveraging and developing resources for sustainable advantage, managers can reconceptualize what their businesses are, do, and can be. Similarly, by restricting their data collection to external views of organizations, researchers cannot hope to disentangle the ways firms are trying to make and have made themselves different from their competitors. This can only occur from inside organizations using a detailed, fieldwork-based comparison of carefully selected firms. This change in research approach may necessitate a new tolerance for alternative formats of reporting research results (Beyer, 1997)—one that matches the change in theoretical perspective that has recently occurred in the strategy field.

Strategic management research has done an excellent job of sorting out a myriad of strategic variables, but an integrative perspective actualized in fieldwork-based or ethnographic-type research would, we think, point to valuable, strategically important factors and social synergies in organizations. Zahra and Pearce (1990) concur that in-depth case studies offer a promising approach to developing such perspectives. By combining the traditional methods and strengths of strategic management theory and research with the methods and insights of organizational culture, future research may establish the value of theoretically proposed resources and yield other important sources of sustainable competitive advantage. Building on the foundation of previous studies such as Collis (1991) and Henderson and Cockburn (1994), and the call from Mahoney (1995) to understand and develop the resources in RBV theory, the procedures prescribed above provide a model for the study of sources of superior performance highlighted by a resource-based view. This, in turn, may provide the empirical data needed to justify perceptions that the resource-based view has ‘... momentous potential as a paradigm in our field’ (Peteraf, 1993a: 179). As strategy scholars, we need only add to our proven methods of ‘inquiry from the outside’ those of ‘inquiry from the inside’ (Evered and Louis, 1981) that have the potential to help disentangle intraorganizational sources of superior performance. The message from the resource-based view is clear. Factors inside organizations are a primary source of sustainable advantage. The discovery and evaluations of those advantages must, therefore, be done in organizations.

ACKNOWLEDGEMENTS

The authors wish to thank the faculty and research students of the Faculty of Management at the University of Calgary, and Professor John Coyne and faculty who participated in the Department of Corporate Strategy’s research seminar at De Montfort University. The insightful discussion with these groups contributed to the development of this paper and is gratefully acknowledged. We also wish to thank two anonymous reviewers for their helpful comments.

REFERENCES


