

**Project Management as a Strategic Asset:
What Does It Look Like and How Do Companies Get There?**

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In the global marketplace, companies are increasingly turning to project management as a way of work and the discipline is gaining ground as an important organizational asset. Strategic assets are vital to a firm's strategy and its competitive advantage position. Strategic assets are a firm's heterogeneous resource bundles that are valuable, rare, inimitable, and have an organizational focus. Although the connection between strategy and project management is relatively new, it is germane to many organizations from a competitive advantage perspective. Within the strategy literature, the Resource-Based View (RBV) of the firm focuses on a company's internal assets as sources of advantage. Project management is a knowledge-based organizational asset and most strategic assets are knowledge-based versus physical or financial.

Drawing from the findings of a mixed-methods multiple-case study, this paper explores project management as a strategic asset. The paper examines the characteristics of a strategic asset in project management and the processes companies use to develop and sustain the advantage. The paper begins with a brief overview on the RBV. Then, the paper focuses on the research questions and outlines the methodology used. Following the case study approach, the paper presents key findings and discusses them with a particular focus on what a strategic asset in project management looks like and how companies achieve it. The paper concludes with some insights from theoretical, research, and practical viewpoints.

Perspectives on Competitive Advantage

Project management can be defined as the tools, techniques, and knowledge based practices applied to achieve organizational goals. The discipline involves cultural, structural, practical, and inter-personal aspects (Cooke-Davies, 1990). Competitive pressures force companies to seriously consider using project management. Examples of such pressures include: increasing time to market pressures, rapid growth and progress within developing countries, customer and supplier demands, increasingly complex and technical products, and the growth of international competition (Cleland & Ireland, 2002; Pinto, 2001).

In project management, proponents of project management maturity (PMM) models claim that the models lead to a competitive advantage (ESI-International, 2001; Hartman & Skulmoski, 1998; MicroFrame, 2001; Pennypacker, 2001; Schlichter, 2000; Skulmoski, 2001). Most of the PMM models consist of five linear stages reflecting *project* processes and practices that are increasingly more defined and repeatable. The PMM models do not emphasize *organizational* processes and practices. The models address tangible (codified) assets but not intangible assets (knowledge assets). As the PMM models are not theoretically based and do not draw from the economic or strategy literature on competitive advantage, the arguments put forth towards winning in the marketplace with such models alone are weak at best (Jugdev & Thomas, 2002). How then can project management's value towards a company's competitive advantage be studied? One approach would be to use a theoretical framework that addresses both tangible and intangible assets, such as the RBV.

Resource Based View of the Firm

A crucial question in the strategy literature asks, "Why do firms differ?" Insights to this question focus on a company's internal assets to determine the sources of competitive advantage (profit) (Madhok, 2002). The RBV of the firm is a contemporary perspective that explains firm existence based on internal strategic assets that are scarce, difficult to trade, imitate, appropriate, and give a firm its competitive advantage (Amit & Schoemaker, 1993). The RBV emphasizes the creation, maintenance, and renewal of a competitive advantage through a firm's unique resources, their characteristics, and how they change over time (Foss, 1997; Schulze, 1994). The RBV is gaining interest as empirical studies emerge and over time, the perspective may evolve into a theory (Lopez, 2001; Wiggins & Ruefli, 2002; Zahra & Nielsen, 2002). As evident in the RBV, a perspective differs from a theory in that it involves issues of terminology and concept confusion whereas a theory has addressed these matters.

Although the literature predominantly uses the term RBV, some use the terms Resource-Based Perspective / Theory / Approach, Core Competence View, and Knowledge Based View (Amburgey & Rotman, 2001; Bowman & Ambrosini, 2000; Eisenhardt & Santos, 2000; Foss, 1998; Javidan, 1998; Kaplan, Schenkel, von Krogh, & Weber, 2001; Mintzberg, Ahlstrand, & Lampel, 1998; Oliveira & Santos, 2000; Peteraf, 1993; Thomas, Pollock, & Gorman, 1999). Such variations are not significant though as they essentially cover the RBV tenets (Eisenhardt & Santos, 2000). Just as there is no agreed to name for the RBV, there is also confusion on the use of terms within the perspective. In the RBV literature, the word "resource" is defined in narrow and broad terms. Examples of synonyms for the word "resource" included: bundles of heterogeneous resources (Penrose, 1959), endowments, inputs, primary resources, resource bundles, skills, stocks (Dierickx & Cool, 1989), and tangible and intangible

assets. Tangible resources refer to physical capital resources (plant, equipment, and finances) and intangible assets consist of human, organizational, and social capital (Coleman, 1988).

Some distinguish between resources and capabilities in that resources are tradable and generally tied to individuals but capabilities are not tradable and may be tied to individuals (Kaplan et al., 2001). Examples of synonyms for the word “capability” (Richardson, 1972) include capacity, combinative capability (Kogut & Zander, 1992), and invisible assets (Itami & Roehl, 1987). The distinctions between resources, capabilities, and competences are subtle. What is clear though is that these terms involve a knowledge dimension, skills, tacitness, and collective learnings of the firm. In addition, most strategic assets are knowledge-based.

Coined by Amit and Schoemaker, strategic assets are the “difficult to trade and imitate, scarce, appropriable, and specialized resources and capabilities that bestow the firm’s competitive advantage” (Amit & Schoemaker, 1993, p. 36). Examples of strategic assets include quality, reputation, managerial skills, brand recognition, patents, culture, technological capability, customer focus, and superior managerial skills (Barney & Zajac, 1994; Castanias & Helfat, 1991; Chakraborty, 1997; Hawawini, Subramanian, & Verdin, 2002; Kogut & Zander, 1993). The RBV literature involves many synonyms for strategic assets such as core competences (Prahalad & Hamel, 1990), distinctive competence (Selznick, 1957), dynamic capability (Teece, Pisano, & Shuen, 1997), dynamic routines (Collis, 1991), indivisible assets (Teece, D. J., 1980), integrative capabilities, implicit / social knowledge, meta capability (Kaplan et al., 2001), organizational architecture (Henderson & Cockburn, 1994), and organizational capability. Although the distinctions between these terms are not always obvious, a firm has more assets than strategic assets. A firm’s formal processes and production functions support strategic assets. Firms protect their assets through business practices and isolating mechanisms. Resource characteristics may also serve as protective mechanisms.

The above emphasizes key terms used in the literature, the amount of variation, overlap, and confusion between them, and the complexities of the RBV perspective. Such issues can be problematic in developing a common understanding, as researchers may not always consider the work others have done. It makes it difficult for researchers and readers to grasp how the terms relate to each other and can hinder theory development. Barney states, “although these distinctions among resources, capabilities, and competencies can be drawn in theory, it is likely that they will become badly blurred in practice” (Barney, 2001, p. 157). Nonetheless, the RBV would benefit from a classification system on resources and further work on the concepts. Although a classification system for the RBV does not exist, some resource frameworks are evident in the literature. Resource frameworks show preliminary groupings of elements in a logical order and depict how various components fit into an overall structure, for example, human (individual skills, knowledge), social (external relationships, networks), financial (personal wealth), physical, technology, and organizational (internal structures, processes, relationships) assets (Brush, Greene, Hart, & Haller, 2001).

In addition to the issue of terminology confusion, there is a lack of clarity within the RBV on resource characteristics that help develop versus sustain a competitive advantage (Amit & Schoemaker, 1993; Barney, 1991, 1998; Chakraborty, 1997; Collis & Montgomery, 1995; Grant, 1991; Mata, Fuerst, & Barney, 1995; Peteraf, 1993; Priem & Butler, 2001). To consolidate these different perspectives, the author used the breath of terms most commonly noted and developed the VRIO-LDN acronym (Jugdev, 2003). The acronym represents the RBV criteria - valuable (important), rare (unique), inimitable (difficult to copy), organizational focus (management support), low-tradable (“sticky” or embedded to the firm), durable (long lasting), and non-substitutable (irreplaceable). These terms represent a combination of firm practices and resource characteristics that interrelate to produce a sustained competitive advantage. The VRIO-LDN Framework served as the basis for the research methodology and guided the development of the instrument to explore the research questions.

To summarize, the RBV is a complex perspective and there are some areas of inconsistency in the literature. The RBV is appropriate to use in this study for several reasons. First, the RBV has a rich 20-year history. The RBV addresses knowledge and process assets and this fits with an exploration of project management as a strategic resource. Finally, one way of achieving theory status is with empirical studies with views in the theory construction stage.

Research Methodology

This exploratory study involved two research questions. “What characterizes project management when it is considered a strategic asset?” and “How do firms develop and sustain a competitive advantage in project management?” “How” and “why” questions are suited for qualitative analysis (Yin, 1994). A multiple-case

approach was deemed appropriate because it allows for breadth of input, between-case comparisons, and increases generalizability. The study primarily used case-study concepts supplemented by grounded theory techniques for coding and some analysis (Strauss & Corbin, 1998).

The study scope involved four international companies where senior managers, middle managers, and project managers were interviewed using a semi-structured instrument based on the researcher's VRIO-LDN Framework and surveyed with a PMM instrument from PM Solutions™. The four cases were selected through industry contacts using a non-probability purposive sampling technique (Bickman & Rog, 1998). Based on the North American Industry Classification System, the companies represented three industries – Financial and Insurance (Financial Institute), Manufacturing (Telecom and Manufacturer), and Utilities (Utility). The varied sample strengthened theory building about constant elements that may be present in companies developing / sustaining a competitive advantage in project management in terms of the VRIO-LDN Framework.

Data Sources, Data Management, and Chain of Evidence

Yin advocates the use of multiple data sources, a database, and maintaining a chain of evidence as principles of increasing information reliability (Yin, 1994). The use of interviews and surveys represented a mixed-methods approach and allowed for multiple sources of evidence gathering. In addition to pre-testing the interview instrument, different techniques were used to increase analytic generalizability, achieve consistent results with less systematic error, and reduce threats to validity and reliability. 67 semi-structured interviews were completed with 44 participants as some people were interviewed on several occasions. A range of strategies were used to allow for more effective data gathering at each interview, such as active listening, picking up on cues, using probes, identifying new ideas, using mirroring techniques, and paraphrasing. Reactivity to the researcher was managed with good procedural objectivity techniques. The PMM survey was used to support and triangulate findings and to see if there was a relationship between a strategic asset in project management and a high maturity level. The 44 survey questions represented the nine knowledge areas of *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* (Project Management Institute, 2000).

Although surveys and interviews can involve elements of a common method bias related to self-report, triangulation and verification with other sources of evidence help reduce this (Gray & Guppy, 1999; McLaughlin, 1999; Patton, 1990). Several secondary sources of data augmented the interviews and survey and helped triangulate and support findings. Reflexive field notes were kept throughout and included ideas, questions, and impressions. Data was managed with software (Microsoft Word® - version 9.0.3821 SR-1, Microsoft Excel® - version 9.0.3821 SR-1, SPSS® - version 10.0.7, and Atlas.ti® - version 4) and manual processes (Post it® notes).

Qualitative research is time-consuming, iterative, and reflexive (Bryman, 2000). The Atlas.ti case-study database was instrumental in organizing and analyzing the data (Yin, 1994). As data was gathered, the interview tapes were transcribed, coded thematically, and analyzed. The process involved importing each transcript into Atlas.ti and analyzing it line by line. The transcripts ranged from 800 to 3,000 lines of text, with an average of 1,000 lines. The initial data dictionary consisted of 146 micro-level codes and was developed by identifying key sentences in each transcript, coding each quote with a thematic phrase from the list of codes, and adding and removing codes over time and noting how new ones emerged. The coding process helped create category-level codes, also known as meta codes or super codes. The process led to data saturation (Strauss & Corbin, 1998).

Atlas.ti was also used to maintain a chain of evidence as it permitted citing documents by number, case, and line. This allows others to follow the evidence trail from the initial questions to study conclusions and determine if they would draw similar or different conclusions. Quantitative analyses were used on two sets of data - the PMM data of 28 completed surveys and interview results for 44 participants regarding questions on competitive advantage, reputation, and project management maturity. As the sample size was small and not normally distributed, non-parametric tests were appropriate to use. To summarize, the research methodology involved a multiple case approach, semi-structured interviews, and an intra-firm PMM survey.

Study Results

The four companies involved in the study were in North America and Europe. Financial Institute is over 200 years old. It is a well-established, international organization with approximately 81,000 employees and its primary business is to provide retail / commercial financial services and products in the most cost-efficient manner that optimizes shareholder value. Telecom is over 100 years old and it is a well-established, international organization with approximately 82,000 employees. Its primary business is to manufacture telecommunications products and

provide infrastructure services. Manufacturer is also over 100 years old, and it is a well established, privately held company of approximately 5,000 employees. It is a dominant player in its industry and an innovative user of technology. Established in the 1990s, Utility is a limited partnership with about 300 employees. It operates in a highly regulated environment involving the transportation of a commodity. Of the four companies, three have functional organizational structures and Telecom is a matrix. Financial Institute has used project management practices for the past 20 years, followed by Telecom and Manufacturer at 10 years each, and Utility at five years.

The within case analysis showed that Financial Institute had the strongest project management profile, followed by Telecom, Manufacturer, and Utility. In some project management areas, Telecom is more advanced than Financial Institute. Manufacturer and Utility place less emphasis on project management as compared to Financial Institute and Telecom. From its 2001 study, PM Solutions™ indicated that most organizations were at the bottom of the maturity ladder (Pennypacker, 2001).

“The results show that 88.9% of organizations are at Level 1 maturity, 6.3% at Level 2, 3.2% at Level 3, 0.8% at Level 4, and 0.8% at Level 5” (Pennypacker, 2001, p. 5).

Similarly in this study, Financial Institute was the most mature (PMM=2.67), followed by Telecom (PMM=2.40) and Manufacturer (PMM=1.93), and then Utility (PMM=1.72). The company sequence determined from the PMM results supported the sequence that emerged from the textual analysis. The composite profile of a strategic asset is presented next.

Discussion

Composite Profile of a Strategic Asset in Project Management

A polar case comparison and a between case analysis helped develop a composite profile of project management as a strategic asset. The composite profile was based on the meta codes as depicted in the first column in the following exhibit. These insights were gleaned primarily from Financial Institute and Telecom.

Major Themes	Preliminary Profile of a Strategic Asset in Project Management
<p>Causal Conditions and Triggers: antecedents, events, incidents, or occurrences</p>	<p>Organization-wide approach to project management. Develops project management over the years and builds on its strengths. Managers supporting project management historically continue to support it as they advanced within the company and achieved senior level positions. As per the RBV, history is an important consideration because it takes time to develop resources into advanced assets. History also contributes to causal ambiguity because the organizational and cultural practices and processes developed over the years cannot be readily copied.</p>
<p>Strategic Capital: how project management links to the firm's strategy, mission, and values</p>	<p>The board, CEO, and executive team support project management as a corporate initiative or one that enables corporate initiatives. Executives understand project management, have practiced it, and are aware of their roles and responsibilities as project sponsors. Consistent executive level support for project management (i.e., values, behaviours, and communiqués are aligned). Company uses project management to enact change within the organization. Company aligns project management to its strategy and mission. Company uses Balanced Score Card concepts and appreciates that corporate metrics should address tangible and intangible assets even though financial indicators do not cover intangible ones. Going beyond the iron triangle and project success, the company emphasizes project outcomes (benefits realization) of how project outputs enable business processes and practices. The organizational culture supports project management.</p>

Major Themes	Preliminary Profile of a Strategic Asset in Project Management
Human and Social Capital: investment in staff, group interactions, networking, teamwork, knowledge sharing, individual competences	<p>Middle and staff management level support project management as a corporate initiative or one that enables corporate initiatives.</p> <p>There is a career path for project managers.</p> <p>Individual project management competences reflect business and technical abilities with a focus on business skills.</p> <p>The project management culture can be readily described or characterized and it is a reflection of the company's organizational culture.</p> <p>There is evidence of teamwork and collaboration on projects, between projects, as well as between programs.</p> <p>Project management knowledge sharing practices are recognized for their value as intangible assets. Such practices are experiential, informal, and take time to share with others.</p> <p>Programs or practices allow knowledge sharing to occur and not all are overly formalized (i.e., communities of practice).</p> <p>Networking is encouraged and supported.</p>
Operational and Foundational Capital: tactical sponsorship, tangible project management assets, organizational routines and the use of technology	<p>There is a well-developed methodology that is scalable and flexible.</p> <p>Staff complies with the methodology and supports it.</p> <p>Staff recognizes the value and usefulness of the methodology.</p> <p>Integrated portfolio and program management practices are in place.</p> <p>There is knowledge management infrastructure and corporate intranet that supports project management.</p>
Intervening Conditions: external events, environmental scanning, bench marking, consultants	<p>Supports and undertakes regular benchmarking regarding project management practices.</p> <p>Uses the benchmarking findings to modify its own practices as part of continuous improvement.</p>
Areas for Improvement: what could be done better in project management	<p>Areas for Improvement in project management span the seven major themes and are not limited to Operational and Foundational Capital.</p> <p>Areas for Improvement span tangible and intangible assets.</p> <p>Company applies a continuous improvement approach to project management.</p> <p>Company allows for periods of stabilization so that project management practices can be embedded, become more durable, and less tradable.</p>
Actions and Interactions: decisions specific to project management	<p>Actions and Interactions are aligned with the company's Areas for Improvement.</p> <p>Corporate change initiatives drive the Actions and Interactions and the practices focus on achieving benefits and value from project management (efficiency, effectiveness, and innovation practices) versus simply doing projects quicker, better, or cheaper.</p> <p>Actions and Interactions address basic and advanced practices.</p>

Exhibit 1: Proposed Composite Profile of a Strategic Asset in Project Management

The above table reflects what project management entails when it is a strategic asset and the preliminary profile suggests the following points. A company with a strategic asset in project management makes a concerted, long-term investment in project management. Managerial leadership and support for project management is vital and it is evident at all levels of the organization. This leadership and support is also reflected in staff views on project

management and how the discipline is applied at the operational level. Initiatives occur at a company-wide level and are organized that way as opposed to being fragmented and rolled out in silos. Although explicit knowledge is important, a high PMM level is but one element of the above table. The company focuses on developing a balance of tangible and intangible assets. The company's approach to project management involves a scalable yet flexible methodology that is embraced and valued by staff. There is a theme of continuous improvement and integration woven throughout the project management program. The organization focuses on initiatives that span the breadth of seven conceptual themes and not just Operational and Foundational Capital. In addition, project management practices are linked to business initiatives.

This is a preliminary profile, as the study was exploratory and involved four cases. In addition, as the next section shows, the VRIO-LDN profile for Financial Institute was not high for all the characteristics, and the company did not have a very high PMM score. Next, the paper presents the Competitive Advantage Research Model and discusses other findings.

Competitive Advantage in Project Management

The detailed cross-case analysis resulted in the identification of 14 Organizational Elements and addressed the question "*How do firms develop and sustain a competitive advantage in project management?*"

1. *Leadership*: Managerial attention, commitment, and support for project management. Financial Institute provided constant and ongoing support in terms of resources, funding, and leadership on project management committees.
2. *History*: Project management evolves over the years. It takes time to embed practices and make them unique. Telecom and Financial Institute developed their project management programs 20 years ago and went "from strength to strength."
3. *Periods of stabilization*: Durations during which major changes do not occur to allow practices to gel as organizational routines. Financial Institute allowed for a few years after introducing new project initiatives where no further changes were made.
4. *Link organizational and project management culture*: There is alignment between the firm's culture and its project management culture. Telecom's culture was described as open, relaxed, and multi-cultural, as was its project management culture.
5. *Organization-wide project management program*: Telecom and Financial Institute had company-wide project, program, and portfolio management practices, thus reflecting how valued the discipline was and its wide-scale use.
6. *Trade-offs and integration points*: Managerial decisions weigh the pros and cons of actions and take implications into account. When Telecom scaled back its Project Management Office, it was aware of the negative implications to its business units.
7. *Social networking and knowledge-sharing practices*: Only Financial Institute seemed aware of the benefits of these practices and made a conscious effort to try them.
8. *Link project management to business outcomes*: Project management metrics go beyond time, cost, and scope, and involve benefits realization under which the value is related to the business unit gaining from the initiative.
9. *Causal ambiguity*: Most of the individuals interviewed acknowledged that their codified project management practices were easy to copy but not their informal, tacit practices used to exchange project management knowledge. They also indicated that tacit knowledge was not valued or invested in.
10. *Social complexity*: A firm's culture, relationships, and reputation are rooted in social capital and involve tacit knowledge. To various degrees, all four firms used informal social exchange practices but were unaware of its value.
11. *Continuous improvement*: Strong elements of quality improvement and benchmarking metrics are in place and integrated with project management.

12. *Staff embraces project management*: There is steadfast, historical support for project management at all levels of the firm. Project management is embraced and there is an excitement for it. “It’s our bible” (Telecom).
13. *Methodology*: A scalable, flexible project management methodology is in place and integrated with program, portfolio, and knowledge management practices.
14. *Alignment*: Alignment is a theme that is interwoven throughout the 14 elements.

The Organizational Elements refer to processes and practices that help companies develop and sustain project management as a strategic asset. The elements reflect a combination of organizational practices and resource characteristics. Some elements may be familiar to readers as project critical success factors. In this study, the elements are seen to be interwoven and aligned in companies that develop and sustain project management as a strategic asset as shown in the next exhibit.

Research Question: What characterizes project management when it is considered a strategic asset?



Project Management Asset Profile

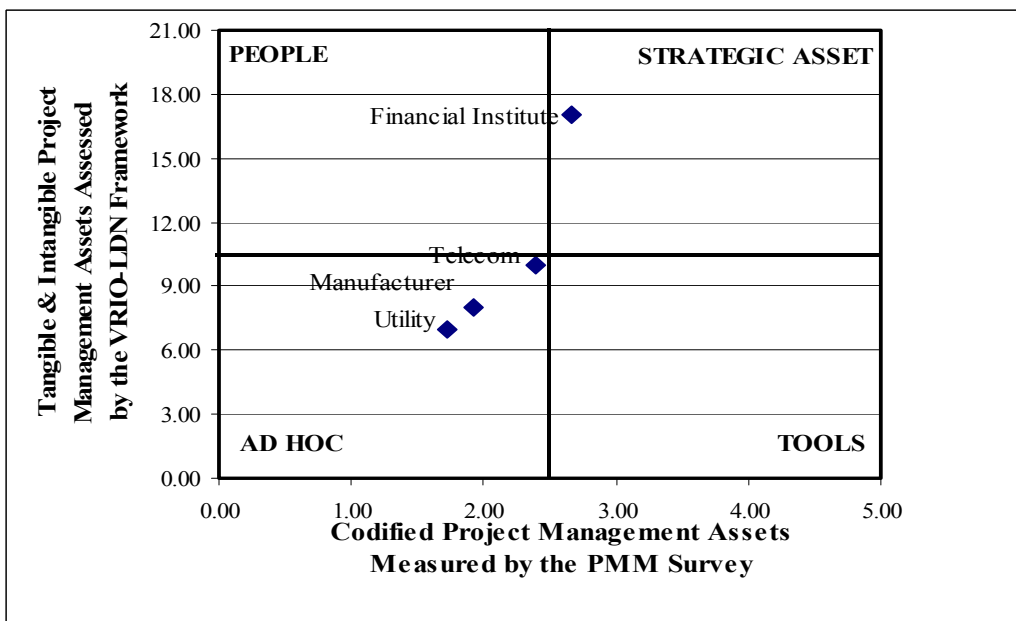


Exhibit 2: Competitive Advantage Research Model

A company that develops and sustains project management as a strategic asset exhibits a balance of the 14 Organizational Elements. In addition, it has a project management profile that places it in the “Strategic Asset” quadrant of the 2x2 matrix. The matrix was developed by comparing the PMM levels for the firms to their VRIO-LDN profiles. Each company was categorized as being superior, average, or poor for each characteristic in the VRIO-LDN Framework. The characteristics were then coded (1=poor, 2=average, 3=superior). As there were seven RBV characteristics (VRIO-LDN), a company could achieve a minimum of 7 in this scheme to a maximum of 21. The summated VRIO-LDN scores for the companies were plotted on the y-axis and their PMM scores plotted on the x-axis.

The lower-left quadrant is labeled “ad hoc” as per the PMM nomenclature for the lowest level (Dinsmore, 1998; Pennypacker, 2001). The upper-left quadrant is labeled “people” to reflect well-developed social capital assets, albeit not in an integrated manner. The lower-right quadrant is labeled “tools” to indicate well-developed codified, tangible practices in the discipline. The upper-right quadrant reflects the intersection of well-developed tangible and intangible assets in project management - a strategic asset.

Firms in the lower-left quadrants of the matrix were seen to exemplify ad-hoc and less mature codified project management practices and less developed VRIO-LDN profiles. Utility, Manufacturer, and Telecom fit this profile. In contrast, Financial Institute had a more highly developed VRIO-LDN profile in project management and more mature codified practices. The findings show Financial Institute to border the strategic asset quadrant. Financial Institute participants frequently referred to project management as a “change driver.”

These findings help shape part of the argument that maturity model results represent one aspect of capability but do not show the full picture of a competitive advantage. It is clear that an investment in project management connotes that it is valuable (V) and recognized as rare (R). Depending on the nature of the investment, it also denotes durability (D). Leadership and support reflect organizational focus (O). Developing tangible and intangible assets in project management through social complexity, history, and causal ambiguity allows the firm to cultivate its asset mix and focus on the blend of assets instead of simply tangible ones enhances inimitability (I). Ensuring that initiatives are corporate-wide and using a continuous improvement approach enable the company to address the low-tradable, durable, and non-substitutable characteristics (LDN) as these practices embed the processes and routines within the firm.

Conclusion

In the ever-competitive marketplace, companies are increasingly finding that their competitive advantages are elusive and that it is an ongoing struggle to “stay within the pack,” let alone “ahead of the pack.” This study developed a preliminary profile of a strategic asset by extrapolating findings from four companies and presenting a model depicting how companies attain a strategic asset in project management.

The study contributions can be grouped into research/theoretical ones and those that are more practical in nature. This study contributes to the RBV by synthesizing the literature and articulating a more complete framework (VRIO-LDN) with which to assess strategic asset characteristics. The study also contributes to the RBV and project management with the Competitive Advantage Research Model (Exhibit 2). The Organizational Elements constitute factors that can be studied further through the RBV and Organizational Theory lens.

Empirically, this study is one of the first to examine project management as a strategic asset and explore its intangible aspects. Many are familiar with the concept of communities of practice as a way of exchanging and sharing knowledge (Brown & Duguid, 1998). The concept of intangible assets in project management covers the expanse of practices that we know but cannot write down (Polanyi, 1966). The conceptual Competitive Advantage Research Model depicts how tangible and intangible project management assets are developed and sustained.

The study also involves some potential practical contributions. The study identifies organizational characteristics that foster a strategic asset in project management. The VRIO-LDN Framework is one that companies can use to assess their practices. An instrument can be developed from the VRIO-LDN Framework that is more granular than the one used here. Such an instrument would allow firms to identify areas of strengths and weaknesses. Companies can also assess their Organizational Elements in the context of project management. The degree of strength within each Organizational Element and alignment between the elements could allow firms improve practices. Coupled with a PMM survey, the above assessment tools enable firms to graph their positions on the Project Management Asset Profile and map their progress over time in the matrix.

Intangible assets are a potential source of competitive advantage as they are more likely to meet the VRIO-LDN criteria. These assets warrant an in-depth understanding of organizational support and practices as well as tacit knowledge sharing customs to ascertain what needs to be done differently and better. The process requires an understanding of organizational and project management culture and these are not facets that can be readily copied. This study bridges the project management literature to strategy by examining project management using the RBV lens. In doing so, it challenges some project management conceptions on competitive advantage and proposes some ways in which project management may be developed and sustained as a strategic asset.

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