

Project Management: A Strategic Asset?

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WHAT IS STRATEGY?

“Winning isn’t everything, it’s the only thing.”
—Vince Lombardi (1913-1970)

“Strategy is a quest for profit.”¹ Developing and sustaining a competitive advantage is about winning in the marketplace and winning in the marketplace is about improved company performance as measured in financial terms.

In the ever more competitive marketplace, companies must deliver greater value to customers. The struggle to gain and sustain competitive advantage warrants that companies develop certain resource bundles that are fundamental to firm performance. More often than not, these assets are knowledge-based as opposed to physical assets, such as property and technology, or financial resources. The Resource-Based View examines competitive advantage in terms of a company’s internal assets. Increasingly, companies are turning to project management as part of their business strategy and project management can be viewed as a bundle of unique knowledge-based assets. Successful projects contribute to business performance, and this can translate into improved chances of firm survival.

Project management has not been extensively studied using the strategy lens, and the dimensions of the meta-capability remain to be understood. This is an important topic because it will help us understand the facets of project management that contribute to a competitive advantage so that companies can invest in the appropriate practices and develop those internal assets relevant to positioning project management strategically.

Background Information: A Look Back at Strategy

Greiner, Bhambri, and Cummings identified seven periods in the history of strategic management.²

1. *1940s: Budget extrapolation and financial goals.* In this decade, strategic plans consisted of financial forecasts.

2. *1950s: Long-range planning and formal models.* Detailed, top-down formal strategic plans addressed business strategy.

3. *1960s: Business idea and corporate identity.* The concept of a strengths, weaknesses, opportunities, and threats (SWOT) analysis and corporate identity took center stage as companies pondered what business they should be in.

4. *1970s: Competitive advantage analytics.* Analytic matrices such as scenario planning, experience curves, and growth share matrices emerged as companies focused on strategic management tools and techniques.

5. *1980s: Strategy implementation, capability, and alignment.* Disillusionment with earlier strategic planning practices set in as studies showed that industry factors were not able to fully account for inter-firm profit differentials. Companies turned to the Resource Based View of the firm and examined strategy in the context of the firm's internal assets.

6. *1990s: Strategic leadership and reengineering.* In this era, strategic management was embodied in the Chief Executive Officer as the heroic leader.

7. *2000: Continuous strategic renewal.* Strategic management is about human capital, knowledge management, and organizational learning.

Mintzberg's 1998 book *Strategy Safari: A Guided Tour Through the Wilds of Strategic Management* is an interesting read on the various schools of thought on strategy over the years.³ In his book, Mintzberg describes these schools of thought about strategy:

- ▶ Design school—strategy is a process of conception.
- ▶ Planning school—strategy formation is a formal process.
- ▶ Positioning school—strategy formation is an analytical process.
- ▶ Entrepreneurial school—strategy formation is a visionary process.
- ▶ Cognitive school—strategy formation is a mental process.
- ▶ Learning school—strategy formation is an emergent process.
- ▶ Power school—strategy formation is a process of negotiation.
- ▶ Cultural school—strategy formation is a collective process.
- ▶ Environmental school—strategy formation is a reactive process.
- ▶ Configurational school—strategy formation is a process of transformation.

Strategy is not just one of the above schools but a blend of them. Greiner, Bhambri, and Cummings offer a good synopsis of strategic management:

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- ▶ Strategic management is comprehensive and integrative.
 - ▶ All major business disciplines are relevant to strategy.
 - ▶ Strategic thinking and behavior are very dynamic.
 - ▶ Strategy is a constant search for a competitive edge with high returns.
 - ▶ Every firm is indeed unique in its strategic capabilities.
 - ▶ The firm's strategy and organizational context must align and reinforce each other.
 - ▶ Strategic management requires spontaneous thinking and doing.
 - ▶ Strategic change will happen frequently.

Mintzberg introduced us to the five Ps of strategy whereby strategy is a plan, pattern, position, perspective, and ploy. Whereas Mintzberg favors the concept of “crafting” strategy as an art, others, such as Grant, support a more systematic and analytic approach whereby strategy helps companies make decisions; it is a process for coordination and communication, and it involves a target (vision).⁴

It is clear that strategy is a dynamic and multi-faceted concept. Strategy is not about clear-cut answers. Strategy is more about *understanding* what is happening in the internal and external environment to better grasp the issues and complexities that impact a company. These different perspectives on strategy will help readers refine their understanding of business strategy—the topic of *how* companies compete.

BASIC PREMISE: COMPETITIVE CONVERGENCE AND COMPETITIVE ADVANTAGE

Both formally and informally, companies conduct internal assessments (strengths and weaknesses) and environmental assessments (opportunities and threats) to plan their market positions and strategies. Firms are primarily interested in improving financial returns and shareholder value to avoid situations of competitive convergence or parity (where no one firm has a distinct advantage). Competitive convergence takes place when companies try to do similar activities as their rivals with some variations in practice. Common strategies include operational effectiveness practices, such as quality improvement, empowerment, and outsourcing practices. These practices are a basic requirement of firm survival, but they do not lead to a sustained competitive advantage, though, because after a while, firms look alike and do the same things, and this leads to diminishing returns. In contrast, having a competitive advantage refers to doing different activities from rivals or similar activities differently. A competitive advantage connotes innovation, adaptation, and creativity.

Worldwide, firms are turning to project management as part of business practice. This is evident in the exponential increase of membership in project management associations, such as the Project Management Institute, as well as in the billions of dollars being invested in projects. Prior chapters of this book have examined project management in the context of the *PMBOK® Guide* knowledge areas. Although tangible resources enable a company to execute its business processes, it is the intangible ones—such as project management expertise—that are more likely to be sources of competitive advantage.⁵

However, at present, the project management literature emphasizes tangible and codified practices. In the 1970s and 1980s, the literature focused on various tools and techniques (software, work breakdown structures, Program Evaluation and Review Techniques, design-to-cost, lifecycle costing, risk management, cost and schedule control, and control systems). A review of

3,565 North American project management publications (1987–2001) also confirms the emphasis on operations research, cost engineering, business process reengineering, and infrastructure studies. 19,000 books on project management were published within the 1960–1999 timeframe and focused on normative advice on planning and managing projects from a systems approach, leading to the view that project management is simply a tactical tool.⁶

Industry and Firm-Level Effects on Company Performance

A crucial question in the strategy literature asks, “Why do firms differ and how does it matter?” Examining the external environment to help explain company performance is often called the Industry View in strategy. This approach helps firms look to the marketplace to determine the areas in which they want to compete. Discussions on the external environment entail the economic, social, political, and technological factors in the industry. The SWOT analysis and the five structural forces approach (consisting of threats of new entrants, bargaining power of suppliers, rivalry among existing competitors, bargaining power of buyers, and threats of substitute products or services) are useful techniques, but they are not strategy.⁸ The Industry View provides a good description of market conditions and allows firms to identify some of the conditions for making a profit, but this approach does not provide complete information on how to make above normal profits.⁹ The Industry View downplays sources of competitive advantage that stem from resource variations between companies.

According to the Resource-Based View, a competitive advantage is rooted in developing key resources that are *different*. In contrast to the Industry View that emphasizes the environment, the Resource-Based View explains firm existence based on internal assets that are valuable, rare, inimitable, and have an organizational focus (VRIO).¹⁰ Resources that meet the VRIO criteria contribute to a firm’s competitive advantage. As the Resource-Based View is a complex perspective, this chapter provides a preliminary introduction to the topic.

Most companies have many resources (both tangible and intangible), but few that are strategic in nature. Most strategic assets tend to be knowledge-based (i.e., intangible). Strategic assets involve a mix of explicit and tacit knowledge embedded in a company’s unique internal skills, knowledge, and resources.¹¹ Such strengths are difficult to purchase, let alone copy, so they can contribute to a firm’s ability to move beyond competitive convergence toward a competitive advantage. Examples of strategic assets include quality, reputation, brand recognition, patents, culture, technological capability, customer focus, and superior managerial skills.

The Resource-Based View is relevant to project management, because project management is a knowledge-based practice that emphasizes human and organizational assets based on explicit and tacit knowledge, skills, and know-how. In the context of project management, the term *meta-resource* seems more appropriate to use than strategic asset. The term *meta-resource* is appealing because it connotes the complexities of a set of resources that are an amalgam of tangible and intangible ones.

Research continues on both the individual and firm-level effects on company performance. Perhaps it is not a question of one approach being better at explaining company performance than the other as much as it is a question of the context in which industry and firm-level effects may predominate.¹²

VRIO FRAMEWORK

Next, we look at the four VRIO concepts in more detail and then discuss project management in this context.

Valuable?	Rare?	Difficult to Imitate?	Supported by Organization?	Competitive Implications	Performance
No	-	-		Competitive Disadvantage	Below Normal
Yes	No	-		Competitive Parity	Normal
Yes	Yes	No		Temporary Competitive Advantage	Above Normal
Yes	Yes	Yes		Sustained Competitive Advantage	Above Normal

Adapted from Barney, Jay B., *Gaining and Sustaining Competitive Advantage, Second Edition, 2002*.
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TABLE 20-1. THE VRIO FRAMEWORK

► **Valuable:** “Do a firm’s resources and capabilities enable the firm to respond to environmental threats or opportunities?”¹³ Valuable resources contribute to a firm’s efficiency and effectiveness. A resource has value when it exploits opportunities and neutralizes threats in the environment. In the Resource-Based View context, valuable resources are defined in economic terms—that is, they generate above-normal returns.

► **Rare:** “Is a resource currently controlled by only a small number of competing firms?”¹⁴ Common or generic resources are not sources of competitive advantage. At best, they are a source of competitive convergence or parity. However, rare resources can offer temporary competitive advantages and are sources of strength.¹⁵ Rareness, then, is necessary, but not the only resource characteristic for a competitive advantage.

► **Inimitable:** If resources can be easily copied, a firm stands to only achieve competitive parity through value and rareness. The question of inimitability that we should focus on is: “Do firms without a resource face a cost disadvantage in obtaining or developing it?” Inimitability means firms protect their resources so that competitors cannot easily copy them or find substitutes. For example, companies such as Southwest Airlines use extensive selection processes to hire individuals with spirit and spunk to serve and entertain customers.¹⁶ These characteristics are rewarded and encouraged by the company and are not easy for competitors to duplicate.

► **Organizational Focus:** Finally, in terms of the fourth question, Barney suggests that we also examine the organization. “Are a firm’s other policies and procedures organized to support the exploitation of its valuable, rare, and costly-to-imitate resources?”¹⁷ Organizational focus refers to integrated and aligned managerial practices, routines, and processes. Organizational focus also connotes managerial leadership and decisions that support key assets and how they are developed and sustained.

Within the VRIO framework, if a resource is only valuable, it leads to competitive parity. Both value and rarity are required for a temporary competitive advantage; and value, rarity, and inimitability are required for a sustained competitive advantage. An organizational focus is necessary to both develop a competitive advantage and sustain it. The VRIO concepts are presented in Table 20-1.

Analysis: Project Management as Examined Through the VRIO Lens

Using the VRIO framework, let's examine key project management practices to assess whether they contribute to a competitive advantage. Investments in physical, technological, and financial assets are valuable to a company. Project management involves the use of methodologies, bodies of knowledge, project management offices, and project management maturity models. Some tools and techniques are specific to planning (work breakdown structures) and scheduling (network techniques such as critical path methods, Gantt charts, and Program Evaluation and Review Techniques). Still other tools and techniques are used to address project finances, project monitoring and control, project audits, project termination, and resource allocation. Throughout the project, technology (including hardware and software) is often used as part of the project infrastructure to help improve information and knowledge flow and assist in the decision-making process (e.g., project management information systems, knowledge management systems, and executive decision tools.) The array of physical tools and techniques are readily available on the market so they are not rare. These assets are also readily imitable so they do not meet the VRIO criteria in full, even though they may reflect elements of an organizational focus—i.e., companies appreciate the merits of tools and techniques and invest in them.

An investment in project management methodologies helps companies understand the steps to be followed to achieve project success throughout the project lifecycle. Methodologies also provide guidelines and checklists to ensure that the practices are being followed properly and that the right outcomes are achieved before moving to the next step. Companies develop their own project management methodologies and many are based on the project management bodies of knowledge. Numerous companies, such as project management consulting firms and information technology firms, that use project management practices advertise and sell their own methodologies and related support services to clients. If such methodologies are readily available and imitable, they do not meet the VRIO criteria and are not sources of a sustained competitive advantage.

Worldwide, there are a number of project management associations to support project management (Association for Project Management, Australian Institute of Project Management, Japan Project Management Forum, and Project Management Institute). These associations have developed bodies of knowledge to guide practitioners. The bodies of knowledge are valuable and provide explicit standards on practice in the knowledge areas of time, cost, scope, quality, human resources, risk, communications, procurement, and integration. The guides represent codified knowledge and emphasize the rationalistic view of project management tools and techniques. The bodies of knowledge are important, but not rare. In fact, they are readily imitable as evident by how similar the bodies of knowledge are between countries. An underlying assumption is that these bodies of knowledge are meaningful regardless of industry or firm-level context.¹⁸ However, knowledge is inseparable from context and involves a tacit and experiential dimension. As the bodies of knowledge do not meet the VRIO criteria, they are not sources of competitive advantage.

These days, more and more companies are establishing project management offices to coordinate the use of tools, techniques, and technology to support projects, ensure consistency of use, and provide training and guidance, particularly on troubled projects. Project management offices may provide the project management methodology to be used, specific project templates, conduct project audits, and even serve as a reporting mechanism.

Some claim that project management offices help reduce project costs, decrease time to market for new products, increase corporate profits, improve practitioner competences, improve quality, and ensure project success.¹⁹ Project management offices reflect a coordinated and structured way of implementing tangible project management assets.

A key function of a project management office is to communicate information, and it could be argued that project management offices are conduits of knowledge. However, since project management offices are touted in the literature as offering tools and techniques, they are a vehicle for coordinating the use of tangible physical assets that helps improve project management processes. Further, efficient factor markets exist for project management offices. The tools, techniques, and practices can be readily purchased and are easily transferred between companies, particularly as people move from one organization to another. According to the Resource-Based View logic then, project management offices do not explain significant variation among companies.

In addition to project management offices, many companies have established program and portfolio management practices as well. Program management practices help companies group projects and manage them by department/division, whereas portfolio management is often described as managing diverse projects across departments/divisions. In some cases, program and portfolio management may also involve a more formal approval process whereby projects are stage-gated through the project lifecycles (e.g., projects are approved and funded, placed on hold, or cancelled). Unfortunately, program and portfolio management practices also do not meet the VRIO criteria. Program and portfolio management practices are valuable and reflect a stronger organizational focus than some of the earlier practices discussed in this section, but they are not unique. These practices are easy to copy and many companies document their program and portfolio practices as well as place them on intranets.

The emphasis on codified and tangible assets in project management is made clear with project management maturity models, which are promoted in the literature as sources of competitive advantage.²⁰ The project management maturity models are based on the Carnegie-Mellon Software Engineering Institute's Capability Maturity Model for software development.²¹ The models consist of five linear stages reflecting software processes and practices that are increasingly more defined and repeatable. The models use a technical, rational, and mechanistic view of organizations because they do not address the social aspects of companies.²²

Similarly, the project management maturity models address tangible assets but not intangible assets (knowledge assets). Maturity models have value because companies conduct maturity assessments, pay for the consultant fees, software licensing fees, provide staff training on the processes, and implement the processes. Some argue that firms with higher maturity scores perform better and achieve more savings than those with lower maturity scores.²³ However, at this writing, studies on the return on investment from the maturity models are incomplete.²⁴

It does not take long for rivals to mimic documented practices or institute project management maturity procedures for staff to follow. Project management maturity models involve codified knowledge that makes them transferable between firms. Tacit knowledge is not expounded on in the maturity model literature. In fact, the ability to imitate them is a feature that vendors highlight when they state that their models were created from best practice databases. The models do not emphasize *organizational* processes and practices. The models typically lack a connection between operations

management and strategy. Few project management models have been empirically tested and many are based on anecdotal material, case studies, or espoused best practices. A recent paper analyzed the project management maturity models to assess them against the VRIO framework and found that they did not meet the criteria.²⁵ In addition, as these models do not draw from the economic or strategy literature on competitive advantage, or meet the VRIO criteria, the arguments put forth towards winning in the marketplace with such models are weak at best.

As companies invest in project management, they primarily invest in components of project management as discussed above. When concrete practices are assessed with the VRIO framework, they do not meet all four criteria whereby the assets are valuable, rare, inimitable, and have an organizational focus. Sometimes, companies may even find themselves investing in processes such as project management that are *not* performing well. Poor performing processes may require increased investments but the quality of the product or service may not improve.²⁶ In addition, when companies invest in project management, they are not necessarily focusing on quality. An investment in tangible project management assets alone may not enhance the quality of another asset if it is not performing well. However, investments in physical and technological assets, such as methodologies, bodies of knowledge, and project management offices, can be beneficial and potentially lead to complementary assets, which means that they can enhance the development of other more complex assets.²⁷ These more complex assets could be viewed as intangible assets.

AREAS OF CHALLENGE: THE HIDDEN SOURCES OF COMPETITIVE ADVANTAGE IN PROJECT MANAGEMENT

Because projects are conducted in complex, dynamic environments and involve a strong knowledge-based component, they cannot continue to be assessed as sources of competitive advantage if they are only evaluated on the basis of concrete, codified practices. In order to assess project management's potential as a strategic resource, we should also examine the intangible dimensions of the discipline, such as knowledge-based assets, tacit knowledge, and social capital practices. This section provides a brief introduction to the concept of intangible assets in project management.

Deploying knowledge assets contributes to a firm's competitive advantage. Knowledge is about creating, acquiring, capturing, sharing, and using knowledge. The common thread between knowledge, data, and information is that they all involve a personal dimension. A useful way of looking at knowledge is with the iceberg analogy. The tip of the iceberg represents the explicit or visible body of knowledge, such as the knowledge developed and shared through the tangible project management practices discussed in this paper (e.g., project management office and methodologies). Explicit knowledge is more formal, codified, and transmitted systematically. Explicit knowledge is the "know-what" that can be documented. However, the larger component of the "iceberg" is ignored, submerged, and tacit.

Tacit knowledge is personal, experiential, context-specific, and rooted in action. Nonaka divides tacit knowledge into technical and cognitive dimensions.²⁸ The technical dimension covers informal personal skills and crafts and could be called "know-how." The cognitive dimension involves beliefs, ideals, values, and mental models. Tacit knowledge involves the ability to innovate, which can also be a source of competitive advantage.

Tacit knowledge has also been likened to the currency of the informal economy, yet little project management research has been done on this topic. Tacit knowledge is

shared through socialization. Social capital is an intangible attribute of the relationships among members of a social unit.²⁹ Project teams share what they know through communities of practice. Communities of practice have social capital underpinnings and social capital is based on making connections with others, promoting durable networks, enabling trust, and fostering cooperation.³⁰ (See Chapter 29 for further discussion of COPs in project management.)

An extensive literature review did not indicate that project management had been studied using the Resource-Based View lens, and few publications discussed project management in terms of core competencies.³¹ Further, few publications have addressed the social capital nature of project management. This is an emerging area of practice development for the discipline.

CONCLUSION

Can project management be a source of competitive advantage, and what is the strategic nature of the practice? Companies face many challenges in the 21st century. Some of these issues include the speed of technological change, international competition, and performance goals. Companies that turn to project management will place the discipline under increasing scrutiny to ensure that the investments are value-adding. These companies will also take with a grain of salt some of the publications that purport to offer “competitive advantages” through project management maturity models, program and portfolio management practices, software, hardware, etc., without providing a clear explanation of how these practices contribute to firm performance.

Project management practitioners should start thinking of project management as more than its tangible components. Companies need to view project management as a set of knowledge-based assets. The intangible elements are very important, albeit currently under-researched. Viewing project management as a source of competitive advantage or as a meta-resource is new to many in the field. However, companies that can begin to assess their project management assets using the frameworks from strategy may be better positioned to understand which aspects of project management they should focus on (e.g., tacit knowledge sharing practices, social capital, and knowledge-based assets.) Over time, we hope to achieve an improved appreciation of how tangible and intangible assets in project management are complementary.

DISCUSSION QUESTIONS

- 1 To what extent do you support the view that project management is a source of competitive advantage (versus competitive convergence) for your organization?
- 2 Based on your understanding of project management maturity models, present a case that these models meet the VRIO criteria and are a source of competitive advantage.
- 3 Discuss the three main topics that you think need to be addressed in the field of project management for the discipline to be recognized as a source of strategic advantage.

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