

## **Strategic Project Management:**

*from maturity model to star project leadership*

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## Introduction

Across the whole of management, there has been a trend to append the strategic label wherever possible and thereby transform the *vin ordinaire* of management into a *grand cru* (strategic) variety. We started with strategic planning, followed by strategic management, strategic marketing, strategic manufacturing, and strategic accounting and finance. So it is not surprising that the call is getting louder for the development of strategic project management (SPM). It sounds better, more important, more professional and, of course, more valuable. But what is the substance of this shift from the basic function to the enhanced model? What is signified by the addition of the word strategic to project management? And what exactly is SPM? Is it equivalent to PMI's (2003) OPM3 (project management maturity model) which, in the words of the PMI, bridges the gap between strategy and individual projects"? And how does SPM reflect developments within the strategic management paradigm from whence presumably, SPM draws its inspiration.

In this paper we attempt to shed light on these questions while deriving a model of SPM based on both on strategic management and the experience of companies who have experienced superior performance through their project management practice. We view strategic project management as the management of projects in such a way as to develop competencies and capabilities, which contribute to the firm's sustainable competitive advantage (Porter 1987, Prahalad and Hamel 1990; Stalk, Evans and Schulman 1992). Such competencies and capabilities reside less in knowledge of the formal protocols and processes of project management and more in what is often termed, the soft side of project management. Of particular importance here is leadership and its role in creating boundary-spanning knowledge, which is essential for competitive edge. This allows us to begin to address the lacuna, noted by Turner and Muller (2005:49-59), of the role of the project leader in project success as well as set the scene for an understanding of what a truly strategic project management might look like. We do this against a consideration of the project management protocol OPM3 that aspires to chart the territory for SPM. We believe, however, that a focus on leadership allows us to go well beyond OPM3 in seeing PM as a source of sustainable competitive advantage rather than a mere delivery mechanism for strategy and effective strategic positioning.

We have also found that there exists a distinctive type of project management professional prominent in companies which seem to bear the hallmark of SPM, people whom we refer to as star project leaders. These highly experienced people tend not to be afraid to operate outside the formal systems (when necessary). What enables them to contribute to sustainable competitive advantage, however, is their skill in managing relationships and an organizational willingness to foster these skills, leverage

them broadly throughout the organization, and learn from them how to manage people and relationships across organizational functions and boundaries. In our view, the organizational process, which encapsulates all of this, constitutes the agenda for Strategic Project Management.

The paper commences with a brief discussion of SPM before considering why OPM3 does not amount to SPM. Next, it is argued that for organizations to effect a transition from PM to SPM, much can be learned from considering the evolution of strategic planning into strategic management. Finally, some summary evidence is presented about the features of the managerial practices of companies who seem to be enjoying the benefits of SPM. The aim, throughout is to stimulate debate and inquiry, for when it comes to matters strategic, the important thing is to raise new questions and challenge old assumptions, not to enthrone new dogma.

### **The Nature of the Beast**

When one asks project managers what they think strategic project management is, they generally say that it involves consideration of the big picture, which determines an organization's project choices and priorities, and the use of projects to deliver the organization's chosen strategy. Some also see SPM as a coordinated approach which relies on multiple project management initiatives such as the project office; continuous improvement in project management methodology; project management training and software; and integrating project management into key company processes. Others see SPM as a way to extend the value of project management beyond financial performance and project/process outcomes (cost, scope, time quality), to measures of customer satisfaction, and learning and growth.

These views do incorporate strategic dimensions of project management. And organizations that fail to recognize them will be at a competitive disadvantage to those who do (and, a fortiori, to those who do not implement project management at all). But there is a general vagueness in all of this as to what constitutes SPM; the concept needs cutting down to size such that greater focus is achieved. Applying what we know in other management fields about strategy suggests that SPM elevates Project Management itself into a source of sustainable competitive advantage rather than being just an enabler or efficient way of allowing other sources of competitive advantage derived from say, marketing or manufacturing or IT to be realized. So why is this so and what does this entail?

### **OPM3**

One might be forgiven for thinking that OPM3 provides the solution. The OPM3 manual is littered with the strategy word, and the title on the back page is Translate Strategy into Success... Drive Business Improvement...Gain a Competitive Advantage. Surely this must signify the emergence of the Strategic rather than the common or garden variety Project Management. Unfortunately this is not the case. OPM3 falls short of SPM for a number of reasons. Nowhere in OPM3 is the term strategy formally defined. This leads to a certain generality about strategy and perhaps an outmoded view of it as the alignment of organizational processes and resources with desired objectives rather than the more current view of strategy as the pursuit of sustainable competitive advantage.

Accordingly, the OPM3 approach sees organizational project management as a process/methodology/technique for executing a pre-determined organizational strategy rather than as a strategic action in its own right.

“Projects help organizations deliver desired strategic changes in a changing world... OPM3 is designed to help organizations align diverse aspects of their operations with their overall business strategy”.

This leaves project management in the same category as accounting or marketing or human resources or a dozen other functional areas within the organization. These functions do not become strategic just because they are used to execute strategy or deliver strategic goals. In some respects, everything that is done within an organization has greater or lesser potential to affect the extent to which strategic intentions become realized in strategic outcomes. . Calling action strategic when it supports strategy and ordinary when it does not, adds little to our ability to discriminate how, when and why project management becomes truly strategic. An added problem is that we often don't know whether it is greater or lesser until after the event. We could equally as well say that when PM (or marketing or finance) helps deliver desired strategic changes then the firm is practicing good PM (or marketing or finance) and bad, when they don't. In other words, the use of the adjective strategic here is no more than a synonym for good or important. And SPM is more than just good project management.

Even when OPM3 aspires to something more than mere execution or delivery of strategy and focuses on PM's potential (as a collective capability) to become fully strategic, the failure to recognize what is required for sustainable competitive advantage leads to a formulation that lacks bite:

“While individual projects may be considered tactical, organizational project management [managing projects individually and collectively in alignment with strategic goals] is a strategic

advantage in a competitive economy... The concept of organizational project management is based on the idea that there is a correlation between an organization's capabilities in Project Management, Program Management, and portfolio management, and its effectiveness in implementing strategy”.

There is still an element here of a subordinate role for PM (implementing strategy) and of platitude (how could there not be a correlation between any aspect of 'good' management and effectiveness in implementing strategy). The focus on capabilities and on managing complexity does, however, move us in the right direction. But is it far enough for SPM? McGee, Thomas and Wilson (2005:252) summarise current thinking on the importance of creating a distinct set of capabilities that drive superior performance:

“Strategists are interested in those resources and capabilities that can earn rents (a surplus of revenue over cost). These collectively are known as strategic assets or core competencies and are a subset of but distinct from those other resources and capabilities that do not distinctively support the competitive advantage. The strategic task for the firm is to sustain these rent streams over time by creating and protecting the competitive advantage and the strategic assets that underpin them.”

The only way an organization can do this is by being unique and fostering unique resources and capabilities. This suggests that for SPM to occur, the project management capability must in some sense be unique or encourage uniqueness. More is also required; it must also meet the other criteria (similar to those stressed by Hamel and Prahalad (1990) in relation to competencies) of: difficult for competitors to imitate, make a significant contribution to the perceived customer benefits of the end products, and ideally provide potential access to a wide variety of markets.

The capability of managing a collection of projects is more complex than managing individual projects. It is, therefore, likely to require higher level skills which in turn makes organisational project management harder to develop and more valuable to the organisation. This does not, however, make it immune to imitation, especially when the very objective of OPM3 is to render this capability accessible (i.e. imitable) through creating best practices and key performance indicators which are: 'usable to organisations .. in a systematic and accessible manner'. Indeed, the moment the capability become accessible , the less chance it has of becoming a lasting sources of strategic advantage. Doing the same as others, however well one does it, cannot by definition lead to sustainable competitive advantage.

If a number of firms all follow the same PM Standard, there is little scope for one organization to outshine another over time, especially if the standard is elaborate and gives a detailed, step-by-step, logical approach, as is the case with OPM3. All of this makes it easier to apply and hence easier to imitate. While there are countless examples of companies such as AT&T or Boeing or Hewlett-Packard using PM to lower their own cost base or enhance new product launches (cf Toney, 2002), there are few examples of PM giving them continuing relative cost or market entry advantages over companies who have embraced the same standard. Doing well because others have done badly, (a reminder of Tolstoy's admonition that battles are not won through brilliant strategy but through making less mistakes than the enemy) is not nearly as impressive as doing better than others who are also doing well.

To be fair to OPM3, it does not call itself SPM1 even though it is clear from the emphasis on strategy throughout the Standard that such is its aspiration. What is required to justify the addition of the strategic label to OPM3, or for that matter, plain old PM, is to be able to show that the approach taken has the potential for the firm in question to create sustainable competitive advantage against like-minded firms. Virtually every large organization has project managers and utilizes some, if not all of the methodologies of project management. The discipline is attracting more attention, more acolytes and expanding at a faster rate than virtually any branch of management. Yet the downside is that as more and more companies embrace project management, the edge that it gives becomes ever smaller even when new approaches such as organizational project management arrive onto the scene. It is essential to recognize that this edge is unlikely to arise, except in the very short term, from the assiduous following of common standards.

Where it must come from, however, is in creating opportunities to differentiate the firm from others. To better consider what this entails, we take a step back in time and see how the transformation of strategic planning into strategic management points to what is needed for project management's journey towards SPM.

### **Strategic Planning**

In its early days in the 1960s, strategy was conceptualized as: "The determination of the long term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals." (Chandler 1963). Although this definition was refined and elaborated over the next two decades, the central concern with means and objectives stayed at the

forefront as in Andrews (1980): "Strategy is the pattern of objectives, purposes or goals and the major policies and plans for achieving these goals"; and Hofer and Schendel's: "Strategy is the match between an organization's resources and skills and the environmental opportunities and risks it faces and the purposes it wishes to accomplish." In line with this orientation, strategic planning was construed as an essentially analytical process focusing on the choice of long-term objectives and goals and the design of an appropriate organization structure and systems to implement them.

The belief (hope) was that intentional outcomes could be achieved through a mix of effective analysis of external and internal factors and focused, professional management to implement strategic choices. Although uncertainty could not be avoided, good planning provided the best way of minimizing the effects of uncertainty. The possibility was not entertained that: leaders or planners might be blind to new opportunities due to their personal history, capability or experience; that formulation and/or implementation of novel initiatives might be derailed by corporate culture, politics, or changing market circumstances; that planning encouraged hierarchy and top down decisions at the expense of bottom up knowledge and experience; and that planning encouraged allegiance to the plan, stifling flexibility and learning.

But as outcomes increasingly escaped intentions, as strategies failed to deliver the expected manna from heaven and as plans often became consigned to gathering dust on the top shelf, people began to re-examine the planning paradigm. Gradually, the recognition dawned that good strategic decisions and outcomes were rarely the result of formal planning and that the notion of aligning the internal aspects of an organisation to the external environment was too simplistic. It failed to recognise the extent to which internal organisation functions and sub cultures were loosely coupled, how conflict, chaos and difference are the best source of creative innovation and reinvention, how the external environment is as much enacted as given, and how continually responding to rapid change creates instability, unreasonable expectations and loss of core competence.

Three key ideas emerged to shape thinking about what was needed to address these failings in how the strategy process was conceptualised. The first was from Michael Porter (1980) who saw business strategy as about: superior performance; competitive positioning; sustainable competitive advantage; and commitment to a chosen path (cost reduction or differentiation). The second was from Henry Mintzberg who recognised that strategy was as much outcome as design, often emerging from the organization structure, culture and political system (including the leader's 'vision') or forming gradually over time as managers reacted to (perceived/ enacted/contested) pressures exerted by the external competitive environment (Mintzberg 1994, Mintzberg, H and Waters, J. 1985). The third was

from Hamel and Prahalad (1990) who saw core competencies and capabilities as the key to competitive advantage.

### **Strategic Management**

These ideas, much amplified and extended by later theorists and practitioners, remain at the heart of the strategic management paradigm. In contrast to strategic planning, strategic management recognizes the problematic nature of strategy formulation and implementation. It pays particular attention to the internal “soft” side of the organization recognising that what is required for sustainable competitive advantage is less to do with analytical skills than with effective leadership, adept cultural, political and people skills, a capacity to manage complexity, alongside the ability to coordinate diverse production skills and integrate multiple technology streams to create scarce, firm specific assets and resources.

Underpinning each of these skills and resources is a particular sort of learning or knowledge called tacit knowledge that is of critical importance. This knowledge is akin to the more general term know-how. Tacit knowledge tends to be unspoken, hard to articulate and often taken for granted, such as knowing how to ride a bicycle. Once you have this knowledge, it cannot be taken away from you (except through mental incapacitation). With some types of tacit knowledge, we are often unaware that we have it until we actually need it, for example when we are called upon to show diplomacy or judgement, or have to cope with novel and unique situations. With other types, such as knowing how to draw well or compose mellifluous music, we do not know where the knowledge comes from. All such attributes make such knowledge a highly valuable resource and in organisations, because it is very hard to imitate and to transfer from one person to another or from one organisation to another. Hence tacit knowledge is a more powerful source of sustainable competitive advantage than is explicit knowledge, which can be written down in manuals and files, or captured in standards, procedures and protocols.

The importance of knowledge for the firm’s competitive advantage is now a central tenet of the strategic management paradigm (Winter 1987, Toffler 1990, Drucker 1991, Reich 1991, Quinn 1992, Nonaka 1991). The organization’s role is to access, transfer and integrate that tacit knowledge within and throughout the organisation (Grant and Spender 1996).

### **Moving from PM to SPM**

This panoply of competitive advantage, strategic capabilities, and tacit knowledge management constitute the new lens through which we should envisage Strategic Project Management. This agenda is clearly easier said than done. Fortunately, we do have some examples of organisations that have transformed their project management capability into a strategic asset? From work done at the Institute of Project Management in Dublin over a twelve year period, it has become evident that in those few organisations where project management has become a source of superior performance, the knowledge management process referred to above by Grant, Spender and others, diverges from the rule bound approach typical of much project management. We see in such organisations, two features as key: the first is having senior project leaders who display a willingness to bend the rules and on occasion take maverick action to get things done. They are particularly good at managing relationships across organisational functions and boundaries to break through organisation inertia and bureaucracy. We have called them star project leaders because in a very real sense they act as stars. They are unique and they frequently add, lustre and brilliance to the project management process. And their organisations recognise and support them as stars, giving them greater latitude and exposure, and leveraging their capabilities across the organisation.

Interestingly, these project leaders tend to display a high level of what is now termed emotional intelligence: (Dulewicz and Herbert 1998, Dulewicz, V & Higgs, M (2000), Sparrow 2000), namely : sensitivity, self-awareness, resilience, social awareness, decisiveness, adaptability, energy, empathy and interpersonal skills. These attributes allow them to retain the loyalty of their team comrades, open closed doors and persuade others to action above and beyond the call of duty. In these companies, excellent project management leaders have created a lasting competitive edge. Surprisingly, these talents have not been afforded due recognition in the project management literature. As Turner and Muller (2005:59) have aptly observed:

“the literature on project success factors has largely ignored the impact of the project manager and his or her leadership style and competence on project success... [This] is in direct contrast to the general management literature which , which postulates that the leadership style of the manager has a direct and measurable impact on the performance of the organisation or business.”

While the omission of the attributes and importance of the project leader may be excused in formulations which privilege a rule based, standardised approach to project management, no such laxity is permissible when we come to consider strategic project management with its focus on difference and scarce resources – leadership possibly being the scarcest of all resources. To better

understand the attributes of star project leaders and the strategic organisational project management capabilities to which they give rise, we have reduced down to nine, the features which typify their leadership style, the organisational contexts which support them and the other factors that contribute to SPM– not because nine is a magic number but in order to focus attention on what we have found to be most important.

### **Star Project Leaders**

The striking attributes that we have seen in relation to star project leaders are:

- i. Long experience of managing projects and dealing with the problems that they entail which gives them an ability to see through complexity, and get to the heart of the matter
- ii. A desire to get things done, not out of a need for self aggrandisement or affirmation but out of a desire to accomplish something and make a contribution.
- iii. An ability to see through the eyes of others, and empathy for others while not tolerating underperformance or poor team contribution
- iv. Courage to break the rules, manage around the system, go the extra mile, if that is what it takes to get things done
- v. Break through organisation boundaries and silos through forcefulness, personal energy, passion and enthusiasm.
- vi. Excellent political and diplomatic skills and judgement
- vii. The courage to call things as they really are and avoid self-delusion and excessive narcissism in themselves and others
- viii. Optimism, little tolerance for negativity or lack of energy by project team players, see problems as opportunities
- ix. Win loyalty from others through courage, personal charisma and empathy not through people pleasing.

### **Organisational Capability**

The most striking attributes that we have witnessed in the companies that develop or foster such Project leaders are that they:

- i. Recognize and acknowledge the value of star project leaders
- ii. Celebrate their accomplishments as collective not just individual efforts
- iii. Support stars by granting them autonomy and resources
- iv. Appoint stars as mentors and advisors to others and give them cameo roles in training
- v. Encourage stars to critically review organisation project management approach
- vi. Place stars in senior management positions, e.g. in charge of project office or organisation project management process
- vii. Appoint star project leaders to general management positions
- viii. Abolish glass ceiling to promotion of project managers and reward them on a par with Marketing, HR and finance
- ix. Strongly promote cross functional contribution and good citizenship over single function allegiance

### **The Wider Agenda**

In addition to successfully growing and supporting their star project leaders skills, we have seen that organizations that embrace strategic project management: do various things to greater or lesser extent. They:

- i. Select projects on the basis of their contribution to competitive advantage, not just their financial returns
- ii. Not being risk averse and aiming for balance of projects both in terms of risk profiles and in terms of contributing immediate competitive benefits, medium terms benefits and longer term, new horizon benefits
- iii. Recognize that intangible benefits as important as tangible ones, favour projects which lead to new learning, involve innovative action and are multidisciplinary
- iv. Seek to avoid blame when things go wrong but do not tolerate buck passing or failure to accept responsibility (which thereby render redundant the need for blame)
- v. Encourage self reflection, personal development and collegiality and privilege same in project debriefs over technical considerations
- vi. See rules as means to ends, not as ends to be slavishly followed for their own sake or out of respect for custom and practice
- vii. Welcome complexity, though seek to break it down to manageable proportions

- viii. Take a holistic and integrative approach to project management and seek to apply lessons broadly throughout the organization
- ix. Celebrate difference, diversity, variety and innovation in projects, project teams and project management approaches.

### **Conclusion**

PM Standards, training and software are overwhelmingly rational and analytic. They seek to reduce uncertainty and risk and diminish the importance of the human factor. They do this by subjecting people to rules, procedures and systems which contain and stifle non-conformist, individualistic tendencies and which encourage systematic, standardised, human behaviour in pursuit of the execution of a common goal (project completion on time, within cost and to the quality laid down in the initial specification). This is probably why despite its success; project managers have suffered a glass ceiling as compared to other functional areas within organisations such as marketing, finance or law. Painting by numbers does not create great artists and when decisions can be based on a book of knowledge which is essentially a toolkit of procedures and rules, then there is no need for high level management, just a need for everyone to follow orders.

Some companies, however, are prepared or fortunate enough to go further. They do not merely see project management a la OPM3 as a tool or technique for executing pre-determined strategies or aligning organizational processes to strategic objectives. They create sustainable competitive advantage via project management through developing the scarce, firm specific resource of star project leaders and the tacit knowledge they help to create. These companies leverage their skills widely, and appreciate the value that these people bring through their judgement, experience, political nous and diplomacy as much as through their technical competence and assiduous following of procedures. They value highly the tacit knowledge gained from the management of complexity, and dealing with problems across functions and organisation boundaries. Building a factory, installing a new manufacturing process, launching a new product, entering a new market, opening up an overseas site, implementing a joint venture, some of the typical areas where project management excels, involve a myriad of tasks and the coordination of a diverse range of activities, skills, people, organizations and resources. The two great functions of management, differentiation – whereby tasks are divided into bite sized chunks – and integration – whereby these tasks are then integrated - is the very stuff of project management. It provides a systematic methodology for differentiation and integration, ensuring that nothing is forgotten, that the whole picture is considered and serves as a

guide to action. It allows managers to manage horizontally across the silos, thereby countering the negative impact of hierarchy and vertical information flows.

Effective management of differentiation and integration is critical to strategic success because as Gary Hamel and others have pointed out, the core competence and competitive advantage of the corporation reside not products or services but in the management of the diverse technologies or knowledge and learning that underpin products and services. And we see that increasingly, these diverse technology and knowledge streams are no respecter of organizational boundaries. Where project management becomes strategic is in recognising that the capabilities required to manage the network, the virtual organisation and the frequently multi-functional, multi-locational, multi-cultural and multi-organisational activities involved in executing projects, are dependent on the personal characteristics and management experience of people, on the tacit knowledge gained through managing diverse projects as much as on formal structures, systems and procedures. SPM recognizes these general management and leadership skills as scarce, firm specific, and highly valuable. Hence it promotes them and the tacit knowledge which they engender and encapsulate as key drivers of sustainable competitive advantage. That, combined with a landscape which privileges the potential competitive contribution of projects over the easier to calculate financial ones, constitute the defining features of a truly, Strategic `Project Management.

### **Bibliography**

Andrews, K (1980) *The Concept of Corporate Strategy*, Irwin, Homewood, IL.

Chandler, A (1963) *Strategy and Structure: Chapters in the History of the Industrial Enterprise*, MIT Press, Cambridge, MA

Drucker, P (1991) 'The new productivity challenge'. *Harvard Business Review*. November - December, pp. 69 - 79.

Dulewicz, V and Herbert, P (1998) 'Predicting advancement to senior management from competencies and personality data: a seven year follow-up study', *British Journal of Management*, 10, 1, pp.13-23

Dulewicz, V & Higgs, M (2000) 'Emotional intelligence: A review and evaluation study'. *Journal of Managerial Psychology*, 15 (4), pp 341-368

Grant, R and Spender, J (1996) 'Toward a knowledge-based theory of the firm'. *Strategic Management Journal*, 17, Special Issue, pp. 109 - 122.

- Hofer, C and Schendel, D *Strategy Formulation: Analytical Concepts*, The West Series in Business Policy and Planning, St. Paul, MN
- McGee, Thomas and Wilson (2005) *Strategy: Analysis and Practice*, McGraw Hill London:
- Minzberg, H (1994) *The Rise and Fall of Strategic Planning*, Prentice-Hall, Englewood Cliffs, NJ.
- Minzberg, H and Waters, J (1985) 'Of strategies deliberate and emergent', *Strategic Management Journal*, 6 pp 257-72
- Nonaka, I 1991 'The knowledge creating company'. *Harvard Business Review*, November - December, pp. 96 - 104.
- PMI (2003) *Organisational Project Management Maturity Model: Knowledge Foundation*, Project Management Institute, Pennsylvania
- Porter, M (1987) 'From competitive advantage to corporate strategy', *Harvard Business Review*, May-June pp 2-21.
- Porter, M (1980) *Competitive Strategy*, New York Free Press
- Prahalad, C and Hamel, G (1990) 'The core competencies of the organization', *Harvard Business Review*, May-June
- Quinn, J (1992). *Intelligent Enterprise: A Knowledge and Service Based Paradigm for Industry*. Free Press, New York.
- Reich R. B. (1991). *The Work of Nations*. Alfred A. Knopf, New York.
- Sparrow, P (2000) 'A world turned upside down', in P. Flood, T. Dromgoole, S. Carroll and L Gorman (eds) *Managing Strategy Implementation*, Blackwell Oxford
- Spender, J. C. (1993). 'Competitive advantage from tacit knowledge? Unpackaging the concept and its strategic implication'. In B Moingeon and A. Edmondson (eds), *Organisational Learning and Competitive Advantage*, Sage London, pp. 56 - 74.
- Spender, J. C. and R. Grant (1996). 'Knowledge and the firm: Overview'. *Strategic Management Journal*, 17, special issue, winter, pp. 5 - 11.
- Stalk, G., P. Evans and L. E. Schulman (1992). 'Competing on capabilities: The new rules of corporate strategy'. *Harvard Business Review*, March - April, pp. 57 - 69.
- Toney, F (2002) *The Superior Project Manager: Global Competency Standards and Best Practices* Marcel Dekker/Center for Business Practices, New York NY
- Toffler, A. (1990). *Powershift: Knowledge, Wealth and Violence at the Edge of the 21st Century*. Bantam Books, New York.
- Turner, J and Muller, R (2005) 'The project manager's leadership style as a success factor on projects: a literature review,' *Project Management Journal*, 36, no 2, June pp. 49-60

Winter, S. G. (1987). 'Knowledge and competence as strategic assets'. in D. Teece (ed.) *The Competitive Challenge*. Ballinger, Cambridge