

2

Strategic Alignment

2.1 Corporate Strategy

Strategic planning has been pondered since before Sun Tzu wrote about it over 2,000 years ago in *The Art of War*. He wrote about how an army general in ancient China should best plan to achieve an objective. In some cases, the objective may be conquering an enemy, and in other cases it could be an efficient retreat. The combination of all of these objectives (or microstrategies) may comprise the overriding strategy of a campaign. Different situations require different tactics, but these tactics all need to be connected to one overriding strategy. He explained that strategy is not a competitive game with a goal of “doing more, better, faster.” “It does not seek confrontations; instead, it seeks to achieve the objectives with minimum combat” [1]. In recent times, we can see how corporations have adopted or ignored some of these oldest of approaches in developing strategies.

One glaring digression from adopting well-rounded strategies has been the push for quality since the early 1980s. The corporate world began focusing more on improving business and customer-facing quality better and faster than the competitor. Corporate cultures were

drastically changed to ensure the smooth rollout and implementation of TQM and Six Sigma programs. Where TQM focuses on improvements in “individual operations with unrelated processes,” Six Sigma focuses “on making improvements in all operations within a process” [2]. It was easy to adopt these companywide changes as the overriding strategy of the organization. However, “quality programs help organizations do things right, strategy is about doing the right things” [3].

The strategy is the grand purpose of the organization. Executives first understand the markets they want to attack, then they list out the parts of a strategy that will allow their company to succeed financially. They can follow high-level business paradigms such as just-in-time inventory control, supply-chain management processes, and segmented marketing approaches. Or they can implement classic financial microstrategies through product pricing variations, salary level changes, and capital structure approaches. But the overriding strategy usually follows a combination of two directions: growth and survival [4]. Alternatively, companies have “two basic strategies for driving their financial performance: growth and productivity” [3]. For example, while some focus more on growth by increasing revenue and attacking new markets, others focus more on improving productivity by lowering cost and increasing output. All microstrategies, business objectives, and tactics derive from some combination of these two grand purposes.

No matter what strategy a company chooses, today’s volatile high-tech business world can make the strategy obsolete fairly quickly. As the speed of information becomes faster, so does the speed of change in the various marketplaces. To avoid instability, companies must quickly adjust their strategies to accommodate these rapid fluctuations; they need to “be nimble and quick to market” [5]. Moreover, to help reduce complacency during the good times, executives should regularly review the links that bind their corporate strategy with the market. That is, when not moving constantly to stay on top of market shifts, executives must stay vigilant to potential changes. In short, “they must be able to react quickly, innovate ceaselessly, pursue alliances, and handle change continually” [5].

Because advances in economic theory and information technology haven’t prevented marketplace upheavals from blindsiding businesses,

strategic flexibility continues to be a necessity. However, a company’s strategy can only change frequently if the company’s culture is flexible enough to support such constant redirection. To both support a flexing market and to create a flexible culture, the leading competitors in the world are moving toward creating “a strategy of flexibility” [6]. The high-level strategy needs to be able to *bend* to marketplace pressures, and the supporting microstrategies need to *negotiate* with less flexible IT projects nearing completion. And, to link these two, the microstrategies need to be written such that they can *accommodate shifts* in the high-level strategy (see Figure 2.1). Keep these plans simple and clear,

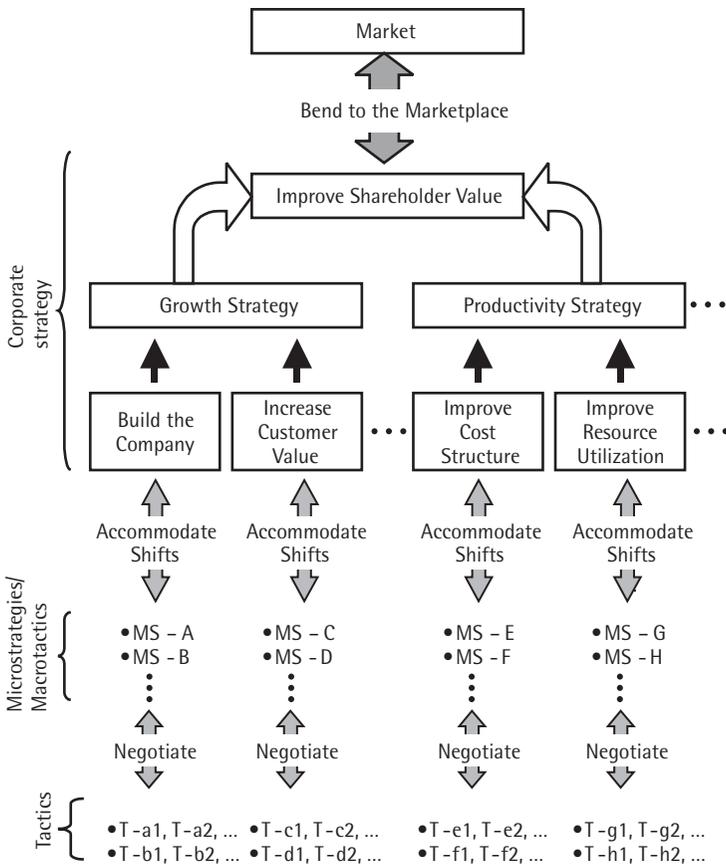


Figure 2.1 Linking market shifts to flexibility in low-level corporate tactics.

however, because “the more sophisticated the planning process becomes, the harder it is to introduce flexibility” [2]. Without such flexibility planned into the various levels of a strategy, the market blindsides will feel more like a baseball bats to the forehead rather than encouraging nudges.

To balance this concept of flexibility, certain aspects of the strategy need to be kept fairly constant. While parts of the strategy can change to accommodate unforeseen events (e.g., war, new government regulations, and natural disasters), others should stay stable to maintain identity with the customer (e.g., company name, core product suite, and quality of salesmanship). Changes in the latter can cause complete redesign of all microstrategies and cancellation of any supporting projects. In summary “the art of leadership is to delicately balance the tension between stability and change” [3]. By developing a corporate strategy that supports both of these, the executive team is on its way to guiding a company to success.

2.1.1 Problems

When a particular industry experiences rapid growth, companies see the productivity (growth per hours worked) of their competitors increase faster than usual. To ensure they maintain their market share, companies tend to invest this increased revenue stream in productivity-enhancing technology initiatives. Business units in a company scramble to get their technical initiatives funded so they won't be left in their competitor's dust. For example, human resources departments may scream for online recruiting sites and payroll systems tied to changing local laws; marketing departments may insist on GPS information system (GIS)-based demographics and campaigns linked to call center graphical user interfaces (GUIs); and manufacturing departments may beg for business to business (B2B) design extranets and robotic inventory control systems. In short, a whirlwind of IT-based project chaos can whip through companies mesmerized by sudden growth numbers.

There can be some bad side effects, however, from such a rapid spread of IT-based business initiatives in a company. As Scott McLagan, a partner at Intergistic Solutions Consulting, put it, such “growth can

wallpaper over efficiency.” For example, inefficiency during rapid growth can be seen in the positive business cycle of the late 1990s. The IT project chaos during this growth period had executives gunning to get to the Web yesterday. Executive teams were even “leaving CIO’s and the IS department out of the loop altogether” [5] and were instead relying more on IT outsourcers. By leaving out internal technicians who knew the strategy best, IT initiatives became generalized across industries. As a result, commercial off-the-shelf (COTS) packages pushed companies towards generic business models. Services companies pushed industry-standard business processes to allow for quicker implementations. And complex, custom software implementations had countless ways to diverge from a stakeholder’s vision. These programs and projects that everyone thought were perfectly consistent with strategic, tactical, and operational business objectives were, in fact, the tail that was wagging the corporate dog.

As a business cycle starts downhill, executives start feeling that their return on IT investment isn’t up to snuff. New market demands require that they start slashing outlays for expensive technical initiatives. However, in order to do so without damaging the forward growth of the company, they need an ability to prioritize all of the proposed and ongoing initiatives. This proves difficult because what they find out is that business units have been implementing technical initiatives independently and without IT governance or support. Ultimately, because different business units are approving and running initiatives differently, there are no consistent ways to measure initiative health between business units. So, without a consistent way to compare initiatives, management is forced to clean up the project chaos created by the IT spending explosion of the business cycle upslope.

2.1.2 Solutions

This feeling of lost control can come about if there aren’t any links in place to ensure continual alignment between the executives’ strategy and the IT project implementations. Some have established these links (and a new corporate culture) by implementing a Balanced Scorecard [3]. Others have just cleaned house and started over. As an analogy, imagine how many households choose to put off deciding whether to

keep a piece of junk or throw it out. It isn't until they move to another location that they have to address the "pile of junk in the garage." This is similar to the popular BPR business fad of the 1990s. By not ensuring continued alignment of their IT initiatives, executives feel forced to implement sweeping garage cleanings or BPR initiatives. BPR efforts are referred to as corporatewide innovations that cause radical changes in the business processes. The problem with BPRs, is that "many BPR projects have failed because those involved in the business or the environment objected to the radical changes" [7]. Such organizational resistance coupled with poorly designed business processes ensured many BPR failures.

While many continue to engage in BPR initiatives, others have chosen to take less risky, iterative approaches. One example, known as the business process improvement (BPI) approach, introduces business process changes in increments. For example, if an ERP system such as SAP or Oracle Financials were introduced to end users in pieces, it would be following a BPI approach. If, on the other hand, all departments switch over to such a system at the same time, the organizational backlash typical of BPR initiatives could result. The benefit of BPI is that by establishing a culture receptive to continuous change, it can be easier to get the organizational support for change that is critical to success. BPI allows for constant communication and *buy in* to set expectations before each business process change. "When an opportunity for improvement is identified, a new business model is produced to demonstrate how the business should look after those changes are implemented" [7]. A BPI process supported by a complete IT PMO can ensure that the portfolio of business initiatives follow the lead of the corporate strategy and not the other way around.

2.2 IT Projects

2.2.1 Changing Directions

While business units strive to make organizational strategy a reality by implementing business initiatives, they may, in fact, be leading the company astray. These initiatives, such as increasing a sales force, building a bridge, or distributing disaster relief, have concrete deliverables.

Management can see, in real time, how things are going and whether the intermediate project results are in line with the goals of the company. However, projects that require IT implementations are more difficult to track; their intermediate deliverables can be much less concrete. By forcing projects to have intermediate deliverables that map to auditable project methodologies, a central auditing group can prove real progress. Without such rigor, misaligned IT projects can continue to fly below the radar. This, in turn, will force the sponsoring business unit's microstrategies to accommodate the IT projects rather than the other way around.

2.2.2 Vector Analysis

Figure 2.2 illustrates that while uncertainties in the market can mold the high-level strategy of a company, uncertainties in IT-based projects can affect the low-level microstrategies. That is, because so many factors can

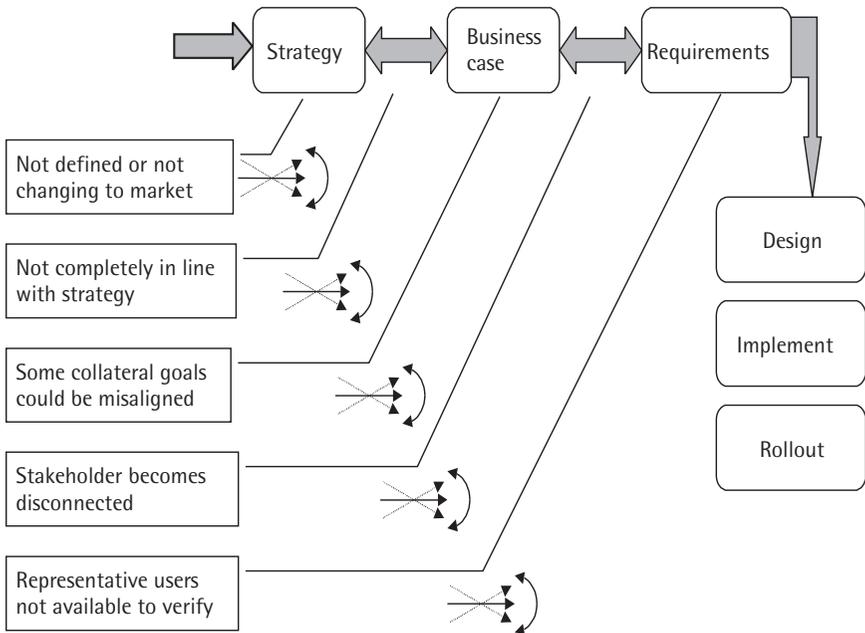


Figure 2.2 Various problems that can misdirect a project from its original strategy.

affect the outcome of an IT-based project, the final deliverable may have changed from what the stakeholder originally and ultimately envisioned. Figure 2.2 shows some of the events that can alter the original goals of a technical business initiative. The central of the three arrows for each event represents the path to take to product delivery as envisioned by the stakeholder. The two other dotted lines for each event represent digressions that could put the project off course. In this example, we see that a strategy that is not well defined or that hasn't kept pace with the market can be a reason that any project goes off course. "It is a business fundamental that the strategy must be correct for the tactics to succeed" [2]. Then, if the business case for an initiative isn't properly aligned with a well-maintained strategy, the final project deliverable may not be what the company needs. And many times, project sponsors will put some unaligned functionality into their project that doesn't align with the strategy. From kickoff to rollout, there are even more issues that can cause an IT-based project to become misaligned with what a company actually needs. The auditing tasks of an IT PMO can ensure continued alignment of the IT portfolio and help projects avoid taking these wrong turns.

In describing how projects progress, the vectors (time and scope) in Figure 2.3 represent the general goals (or directions) of a corporate strategy and those of an IT-based project. We can see that when the strategy changes direction during a project, it can require a little more effort to realign the project vector. Figure 2.3(a) shows how a project with one iteration (requirements gathering, design, implementation, testing, rollout) and a constant strategy can stray off course. Figure 2.3(b) shows a project with multiple iterations (or functional releases: F1, F2, ...) doing the same thing. And finally, Figure 2.3(c) shows this with a corporate strategy that is flexing appropriately to the market place. This latter example can cause the most problems for a portfolio of projects that all started with the goal of supporting the original strategy. Not only does the PM and project sponsor need to keep the project from straying, they need to be able to realign projects to new corporate directions. "The most dangerous time for an organization is when the old strategies are discarded and new ones are developed to respond to competitive opportunities" [6].

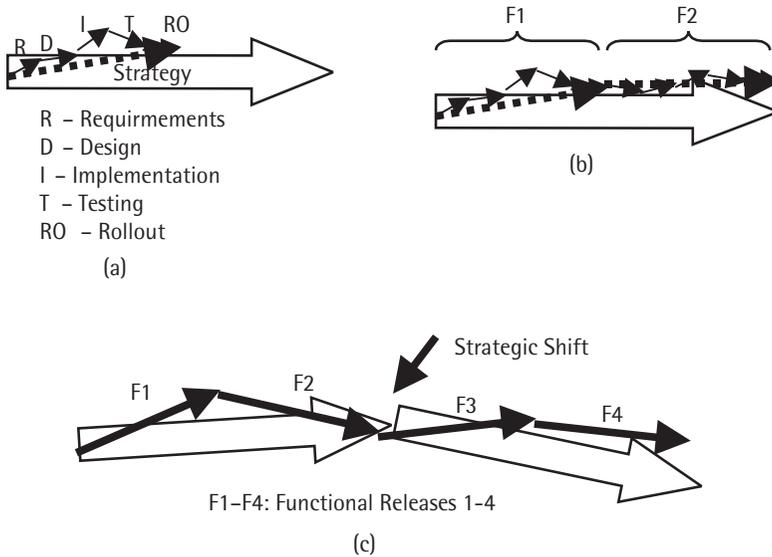


Figure 2.3 Project directions versus corporate strategic directions: (a) project with one release (five phases); (b) project with a second release to realign the corporate strategy; and (c) project with multiple releases and shifting corporate strategies.

Because this vector analysis approach can only explain things so far, let's look at some real-world examples. The following two examples of projects undertaken at Joe's Telecommunications will show two different ways a company can react to imperfect project deliverables and shifting corporate strategies. The figures from these next few sections can be further reviewed from a different perspective in the strategic alignment PowerPoint presentation in the accompanying CD-ROM.

2.2.3 Project A—Growth

Joe's Telecommunications is a provider of long-distance phone service. Because gaining and keeping customers is cutthroat in this business, the executive staff decides to develop a strategic goal of having the marketing department react quickly to customer losses (see S1 in Figure 2.4). To help with this, they commission an IT project to track customer loss rates by geography. After the new PM gets approval for his design, the project is released two months later (F1). Unfortunately, the reports can

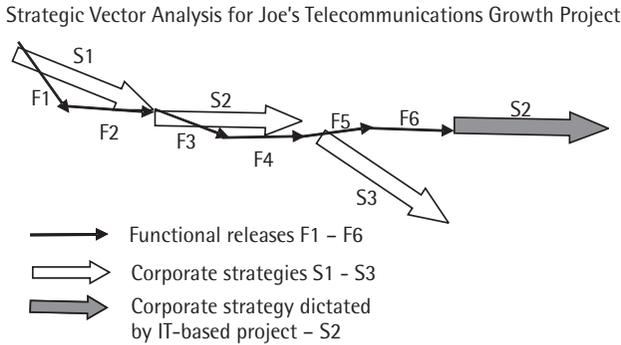


Figure 2.4 Corporate strategy being guided by misaligned projects.

only be run on the weekends so as not to affect the performance of the database. So a second iteration of the project completes three months later. This iteration includes a GUI that accesses real-time customer loss data off of a replicated database (F2). The problem with this release is that the marketing department has old PCs that can't support the new GUI. Only the vice president of marketing has a new computer. Even though the staff can only get its data when this computer is free, the project's functionality is becoming more in line with the executive's original strategy.

As the third iteration (F3) begins, the executive staff announces an updated strategy that they have been considering for a while: regain lost customers more actively (S2). The PM decides to finish F3 before designing new functionality to support the new strategy. While F3 finally gets the project in line with the original strategy by rolling out new computers to the necessary marketing personnel, the deliverables are now out of alignment with the updated strategy. With additional funding, the PM designs, implements, and rolls out new functionality (F4) that passes lost customer data to the call center. The PM has also lobbied for and received approval for call center agents and supervisors to receive commissions when they successfully win back lost customers. Unfortunately, the PM didn't realize the need for the call centers to hire and train new outbound calling agents.

As the PM is working with the call center managers to complete this last phase of the project (F5), the executive staff decides to partner with smaller competitors to create long-distance boutiques in shopping

malls to better compete against the nationwide long-distance firms (S3). Unknown to the PM, this strategic shift will put the output of the project at great odds with the goals of upper management. As the agents get online, they quickly learn to work with their supervisors to increase the commissions by engaging in slamming, or winning back a customer against their will. The fact that the new partners are losing their customers to Joe's in such a way causes the partnership to enter rough water. The PM tries to resolve this problem by setting up regular feeds from the partners that reconcile Joe's lost customers with the partners' customers. This multicompany integration effort winds up taking so long that the executives decide that S2 is more important than S3 and dissolve the partnership.

2.2.4 Project B—Productivity

Joe's Telecommunications also has a local digital subscriber line (DSL) service in three metropolitan areas. As this service has been expanding, Joe's has had to hire more field service representatives. A new strategy to improve productivity has been announced (see Figure 2.5) that requires field reps to increase the number of appointments from three to four per day (S1). The director of field operations responds to this by requesting and then getting funding for a new IT project. The PM decides to roll the project out in two iterations. Iteration one (F1) would allow field reps to keep their trucks at home and be assigned appointments daily over the phone. Truck restocking would occur after

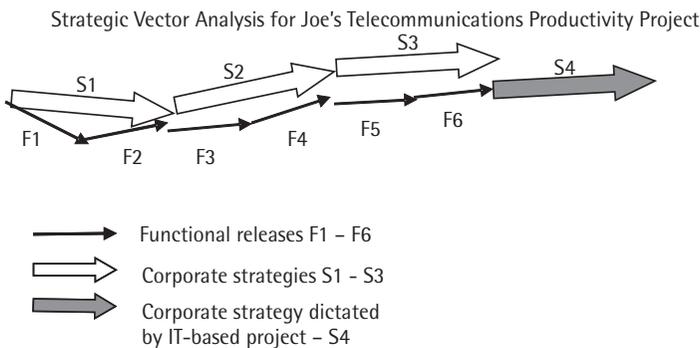


Figure 2.5 Small corporate strategy accommodation to misaligned project.

the biweekly staff meetings. Iteration 2 (F2) would decrease call center agent responsibilities by rolling out mobile devices to the reps. This requires a GUI development effort for the devices and a long-term, discounted contract with the wireless signal providers (carriers).

As F2 is being developed, Joe's wins bids on a couple of mom-and-pop cable companies in the metropolitan areas in which Joe's offers DSL. As a result, this growth strategy forces executives to modify one of their productivity strategies by requiring field reps to service not just more appointments per day, but also more types of appointments per day (S2). With more funding, the PM designs, implements, and rolls out an updated GUI for the mobile devices that includes repair and installation manuals for the cable modems as well as the DSL modems (F3). Unfortunately, with field reps still learning the new system, scrolling through the manuals while on site slows their productivity, and appointments per day fall to an average of 3.25. This forces the PM to successfully lobby for more funding for the call centers to hire and train agents to be on call for technical assistance for the field reps (F4).

As the appointment rate starts climbing back up to four per day, Joe's expands DSL service to two more metropolitan areas (S3). Unfortunately, these cities are areas in which the mobile carrier is piloting a new communications protocol. And the mobile device company won't support this new protocol for another year. To make matters worse, the long-term contract requires continued hardware purchases or the 50% discount will be voided and Joe's will owe on past discounts. The alternative is for the field reps in these new areas to upload from the network intranet daily (F5). But due to security issues and the mobile device's lack of phone modems, the field reps are forced to drive in for data uplinks. This causes a small shift in strategy for the next year. Basically allowing three appointments per day for two areas while still requiring four per day in Joe's original areas (S4).

2.2.5 Lessons

Strategies, like project plans, are road maps to successfully deliver on goals. But when obstacles are met, both need to be agile enough to change course in midstream [5]. How quickly the course changes occur is another matter. For example, a PM knows well the need to manage

scope creep. Because there is so much ramp-up work to get a project moving in a certain direction, midcourse changes can be difficult. To combat this, Joe's Telecommunications uses iterative development methodologies that allow for direction (scope) changes during the lifetime of the project. "[Y]ou must mount a sort of ongoing rescue of your project to return it to the place you believe it should be heading" [8]. However, if the end point doesn't match with new strategies, the final project deliverable can still adversely affect the corporate goals. If only the PM was kept more aware of pending strategy shifts, he may have been able to adjust his next iteration's deliverables more efficiently. This would have allowed the strategic direction of Joe's Telecommunications to not be dictated by some IT project that couldn't keep up with the new desires of the executive staff. An IT PMO would have bridged the gap between the project and strategy road maps to ensure aligned deliverables.

The Royal Caribbean case study at the end of this chapter shows how project priorities can change on a dime when the corporate strategy changes. In this case, the new strategy focused not on growth or productivity increases, but rather on the survivability of the organization. Rather than writing off canceled projects, microstrategies were developed to rephase in projects that were tabled due to the new strategy.

2.3 Strategic Frameworks

2.3.1 Alignment

David P. Norton, coauthor of *The Strategy-Focused Organization*, [3], introduced the balanced scorecard as a way to efficiently propagate a corporate strategy throughout an organization. By starting with a vision and then recursively developing microstrategies and macrotactics (or, as D. W. McDavid, author of "A Standard for Business Architecture Description," calls them, business functions [9]), a company can establish links all the way down to the business activities. Figure 1.7 showed that the corporate strategy is made up of a list of high-level strategic goals. Then microstrategies or macrotactics are derived to support these goals. "Strategies at any level are the tactics of the next lower level

in the chain of command” [2]. Figure 2.6 shows that if one strategic element is to increase customer value, then a microstrategy would be to react quickly to customer needs. Because the goals of such activities can be based on subjective views of the corporate strategy, it is important to be as explicit as possible when partitioning the strategy into subelements [9]. A strategic map, clearly traced to tactics at the business unit level, can help these units present well-aligned initiatives for review by the IT PMO.

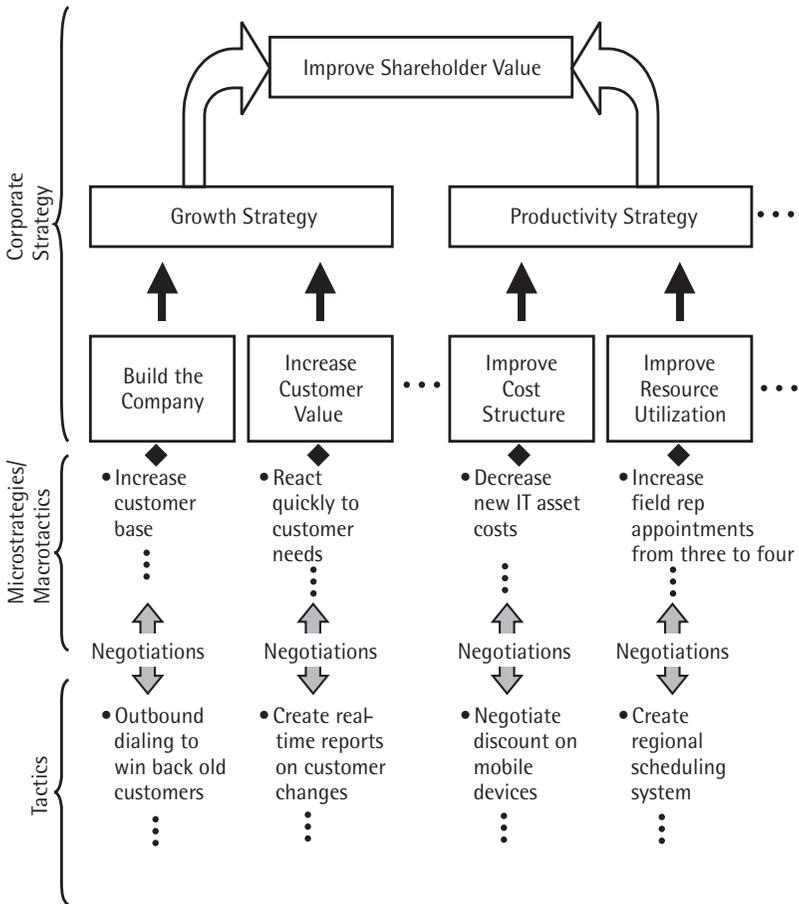


Figure 2.6 Financial perspective of Balanced Scorecard for Joe's Telecommunications.

These initiatives that make up the IT project portfolio also define the lower part of a Balanced Scorecard called the tactical implementation. “The tactical implementation plan is as important as the strategic plan because it takes the vision and strategy to the point of contact” [2]. If this lower level has been kept aligned and flexible, problems can be kept from percolating up and disrupting the higher-level goals of the executives. Figure 2.6 shows the financial perspective of a Balanced Scorecard that Joe’s Telecommunications could have developed. The tactical implementation plan is at the bottom, and the high-level strategy is at the top. At Joe’s, we saw how the project deliverables changed between iterations to accommodate changing microstrategies. And we saw how some microstrategies needed to accommodate inflexible technical barriers. If a good strategy map is developed, negotiations between ongoing projects and strategy can be kept at the microstrategy level.

“Ongoing software projects usually have little standalone value unless they are linked by a suite of micro-strategies” [3]. These strategies, in turn, need to be a part of one large strategic architecture that can flex rapidly to changing market conditions. When initiatives are first introduced for review by an IT PMO, they are scrutinized for their alignment with the corporate strategy. If a good strategy map has been developed and maintained, such initiatives can align with microstrategies, as shown in Figure 2.6. This is an example of how to make the upper levels of the corporate strategy align with the underlying IT tactics (or projects). As initiatives turn into projects, either the projects can stray off course or the microstrategies can shift. Either way, compromises at this level can be made to be transparent to the executives and to the general, desired course of the company.

2.3.2 Portfolio Selection and Tracking

After initiatives are checked for alignment and then approved, they need to be tracked by the PMO for continued alignment through the lifetime of the project. Too often, IT projects are graded only on a standard set of metrics tied to the project triad shown in Chapter 1: Is the project on time, on budget, and meeting the goals of the stakeholder? If these key performance indicators (KPIs) are not linked to a central

strategy in the business case, then project health can be a “dangerous illusion...Both KPI and stakeholder scorecards omit the linkages for driving breakthroughs higher up in the strategy map” [3] (i.e., for customers and internal stakeholders). The project may look like a real winner to the business unit when it delivers, but if the greater company doesn’t need it after all, it can be a loser. A PMO that continually prioritizes the IT initiative pipeline and IT project portfolio can help alleviate this.

Mapped microstrategies can also act as a guideline for business units when designing their initiatives. To help business units know where the corporate priorities lay, at Northwestern Mutual Life Insurance they prioritized the microstrategies” in terms of desired application of resources” [10]. This not only kept the initiative pipeline in line with the goals of the company (thus making for an easier approval process), but it also kept the business units from pursuing as many dead-end ideas. Such early-stage prioritization of microstrategies forces the PMO and the business units into a real-time state of alignment.

Finally, mapped microstrategies can ensure that middle managers avoid strategic siloing. For example, few companies are successful at creating a portfolio of aligned projects. “Instead, projects are selected in a more-or-less political fashion, as the business units with the most influence win the budget dollars and the IT resources to pursue their pet initiatives” [11]. It is common for middle managers to take corporate goals “and transform them into little pieces of power” [12]. When, or if, messages of strategic importance even reach “the front line, it is less a datum of information and more a means of control” [12]. An IT PMO can enforce the *strategic architecture* through initiative reviews and project audits. Because of the potential for organizational backlash, the IT PMOs approach should not be via top-down direction; rather, it should be via “top-down communication” [3]. This is why a PMO needs to achieve absolute executive support from the beginning. Authority over projects, as well as accountability for the health of the portfolio, need to be core elements of the office. If microstrategies are well mapped up to the desires of the executives, then the IT PMO can educate middle management when they fail to act in the best interest of the company.

2.4 Reengineering Cumulative Digression

Considering that Joe's may have several projects ongoing, the aggregate digression of IT projects from their original goals can send companies in less than ideal directions. That is, projects that look like they are on track (program C) may have collateral deliverables that have nothing to do with the corporate strategy. This usually results from having more money than needed for the original business case and then taking the approach of "build it first, then sell it." The diagram in Figure 2.7 shows project A as part of a larger program and project B as an independent project. Many times there is a discontinuity between the organization's strategic direction and the organization expressed as the sum of its projects [8]. As more projects digress from the corporate strategy, the cumulative digression of the portfolio can be unwieldy. If such digressions from strategic goals are allowed to persist, balance and maximization of the portfolio will also spiral out of control.

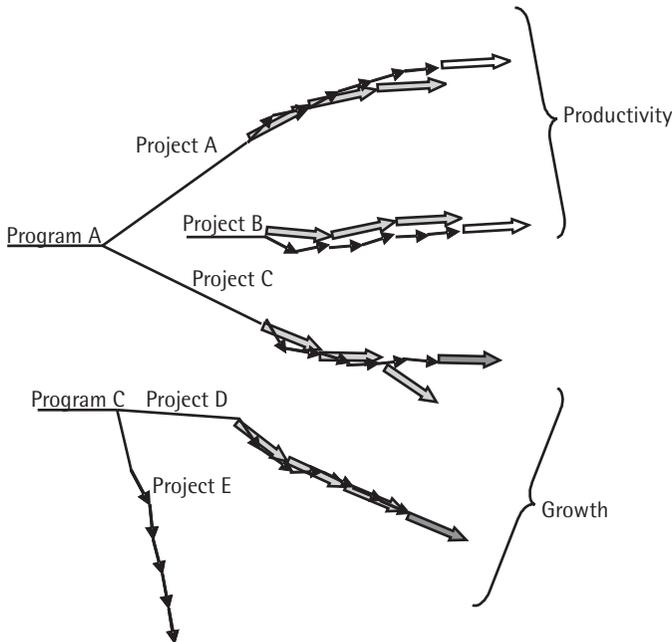


Figure 2.7 Results of cumulative digression of projects from corporate strategic directions.

With nonconcrete intermediates that software projects produce, it is easier for greater digressions from the strategy to occur. The result is that the company is led by the leash of rogue software projects rather than the other way around. Every once in a while, an unaligned initiative will prove so successful that upper management will alter the corporate strategy to accommodate the initiative deliverable (an optimist's view of project E). But this is rare. In most cases executives are left with one of three choices for undesirable initiative results:

1. Scuttle projects and start new ones that are realigned with the updated strategy.
2. Try to salvage IT solutions that are misaligned. This tends to force users to use IT in ways for which it wasn't developed. This, in turn, involves more overhead for the users (i.e., more inefficiencies and less productivity).
3. Change the corporate strategy to fit the capabilities of the delivered IT solution.

To save face on expenditures while still controlling the ever-changing marketplace strategy map, leaders will many times opt for the second choice. This approach usually rears its head under the guise of *reengineering business*. "Most management time is spent on restructuring and reengineering, which have more to do with shoring up today's businesses than creating tomorrow's industries" [13]. But if technical projects aren't tracked for their alignment with shifting strategies, then a company can get mired in this cycle of reengineering. In summary, this second choice will cause companies to be more focused on improving present problems rather than on achieving future opportunities.

As the executive teams become more nimble in their reaction speed to market changes, how confident are they that their ship will change course and speed quickly? Many times they'll just publish a new strategy, impose restructuring processes across the board, and require results from the business units. "In her book *The Seven Deadly Sins of Business*, Eileen Shapiro lists as one of the 'sins of strategy,' organizations that make the mistake of creating a vision but not giving any clear

direction as to how that vision is to be achieved. The result is that the organization often develops in ways that the strategists hadn't intended" [8]. This chapter shows how aligning the corporate strategy needs to flex to forces from the top (the market) and the bottom (IT tactics). The next chapter will show how IT tactical implementations can flex to changing strategic forces. The combination of these two chapters provides a foundation from which an IT PMO can instill confidence in the executive staff that the IT project portfolio's direction is following the lead of the corporate strategy.

2.5 Summary

Before IT PPM can be effective, the executive team needs to first create a strategy that will flex to the changes in the marketplace and then communicate any strategic shifts as they occur. With this foundation, the business units can develop microstrategies and then business initiatives that will support the strategy. These lower levels of the strategy need to be just as flexible as the core strategy is to the marketplace. Otherwise, companies can end up being led not by their goals and desires, but by misaligned and costly IT projects. To combat this, IT PMOs can ensure that the projects in the portfolio are kept aware of any changes in the strategic layers. While business units ultimately decide how aligned their IT projects will be kept, IT PMOs can increase the risk ratings and thus lower the priority of those projects that don't change course with the strategy. Such prioritized lists of projects then help executive teams determine which projects to keep funding and which ones to drop. Where IT PMO authority over projects rests in how the executives leverage such prioritization lists, IT PMO accountability rests in how accurately their projections of project success match with reality. And, as will be shown, further accountability rests in how healthy the IT PMO can keep the portfolio of projects.

References

- [1] Michaelson, Gerald A., *The Art of War for Managers*, Avon, MA: Adams Media Corporation, 2000.

- [2] Harry, Mikel, and Richard Schroeder, *Six Sigma*, New York: Currency Doubleday, 2000.
- [3] Norton, David P., and Robert S. Kaplan, *The Strategy-Focused Organization*, Boston, MA: Harvard Business School Press, 2001.
- [4] Sommer, Renee, "Portfolio Management for Projects: A New Paradigm," in *Project Portfolio Management*, Lowell D. Dye and James S. Pennypacker, (eds.), West Chester, PA: Center for Business Practices, 2000, pp. 55–60.
- [5] Reifer, Donald J., *Making the Software Business Case: Improvement by the Numbers*, Reading, MA: Addison-Wesley, 2002.
- [6] Cleland, David, "The Strategic Context of Projects," in *Project Portfolio Management*, Lowell D. Dye and James S. Pennypacker, (eds.), West Chester, PA: Center for Business Practices, 1999, pp. 3–22.
- [7] Penker, Magnus, and Hans-Erik Eriksson, *Business Modeling with UML*, Needham, MA: OMG Press, 2000.
- [8] O'Connell, Fergus, *Successful High-Tech Project-Based Organizations*, Norwood, MA: Artech House, 2000.
- [9] McDavid, D. W., "A Standard for Business Architecture Description," *IBM Systems Journal*, October 7, 1998 (electronic version).
- [10] Combe, Margaret W., "Project Prioritization in a Large Functional Organization," in *Project Portfolio Management*, Lowell D. Dye and James S. Pennypacker, (eds.), West Chester, PA: Center for Business Practices, 1999, pp. 363–370.
- [11] Meta Group, "Centralizing Management of Project Portfolios," *Meta Group*, January 29, 2002, http://www.umt.com/site/Documents/IT_World_-_Leading_Organisation_Centralize_Management_of_Project_Portfolios_-_29Jan02.pdf (last accessed on January 15, 2004).
- [12] Larkin, T. J., and Sandar Larkin, *Communicating Change: Winning Employee Support for New Business Goals*, New York: McGraw-Hill, 1994.
- [13] Englund, Randall, and Robert Graham, *Creating an Environment for Successful Projects*, San Francisco, CA: Jossey-Bass, 1998.
- [14] Margulius, David L., "Overachiever—IT Payback," *CIO Magazine*, November 1, 2004, <http://www.cio.com/archive/110102/overachiever.html> (last accessed on January 15, 2004).
- [15] Hughes, Laura Q., "Case Study: Royal Caribbean Cruises and Microstrategies," *CIO Insight*, January 1, 2002, <http://www.cioinsight.com/article2/0,1397,566231,00.asp> (last accessed on January 15, 2004).

Appendix 2A: Case Study—Royal Caribbean Cruises—Microstrategies

In March 1999, Royal Caribbean Cruises Ltd. Chief Executive Officer (CEO) Richard Fain and President Jack Williams asked Tom Murphy to come on board as the new chief information officer (CIO). With a plan to expand the number of employees from 17,000 to 40,000 and the fleet from 17 ships to 29, the executives needed a well-planned IT strategy framework to support such growth. Tom Murphy went right to work developing several substrategies which, when grouped together, comprised the LeapFrog program. His plans included a new digital reservations network to replace 12 problematic systems, a new supply-chain management system to cut costs, and a new human resources system to better support the planned hiring of 23,000 new employees. Also, each additional \$350-million vessel would carry \$10 million in IT systems.

Unfortunately, the following day, 9/11 put a screeching halt to the corporate strategy and, thus, Tom Murphy's suite of substrategies. Royal Caribbean CEO Richard Fain asked all department heads to cut their budgets by 25% to account for the 50% reduction in passenger reservations. CIO Tom Murphy immediately saw his aggressive IT build-out plan get tabled. To accommodate this drastic shift in the corporate strategy, Murphy instituted a different series of microstrategies. Instead of leading the IT department down an inflexible path of cost reductions, Murphy maintained an open view on both long-term growth and short-term cost reduction. He did this by implementing a *survive and thrive* strategy followed by a *back to basics* strategy and ending with a *restart* strategy. With the survive and thrive microstrategy, only those projects that supported survivability were allowed to continue at first. Then, when the back to basics microstrategy was introduced, other projects that supported infrastructure, e-mail, Web sites, and telephony were given more attention. Finally, projects that were tabled in the beginning were reviewed for start-up potential in the restart phase. According to Murphy, "There are things that are optional and things that are not optional, and microstrategy helps to make the mandatory happen, one way or another, amid rapidly changing circumstances." Since the post-9/11 turmoil, Royal Caribbean has managed to maintain stability and then grow back to pre-9/11 levels [14, 15].

A company that has IT-oriented projects distributed around the organization and managed by the various business units would be able to react to such dramatic strategy shifts more efficiently if an IT PMO were in place. In this case, we see that the CIO had a firm grasp of the project portfolio under his wing. Did the other business units have the same control over their IT-oriented projects? Or did all IT-oriented projects fall under the management of the CIO? An IT PMO allows the IT department to stay in a support role, business units to have the freedom to manage their IT-oriented projects, and the IT project portfolio to react efficiently to quick strategy shifts.