



Journal of Information Technology Management

ISSN #1042-1319

A Publication of the Association of Management

DEVELOPING INFORMATION TECHNOLOGY STRATEGY FOR BUSINESS VALUE

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ABSTRACT

Developing information technology (IT) strategy that supports and is supported by business strategy is critical for generating business value in today's organizations. In the face of rapidly changing business conditions and continuously evolving IT, however, organizations have yet to learn how to develop an effective IT strategy. To explore and understand the issue, we conducted a research using focus group methodology. The results from our research suggest that there are five critical success factors that organizations must consider. The research also identifies five practices and the challenges faced while developing an effective IT strategy.

Keywords: strategy development, IT strategy, IT alignment, IT planning, focus group

INTRODUCTION

Despite the ongoing debate about the strategic value of information technology (IT) [e.g., 4, 21, 23], the role of IT within organizations is evolving. Instead of being relegated to the backrooms of the enterprise, IT is now being invited to the boardrooms and is being expected to play a leading role in delivering top line value and business transformation [34]. Weiss and Anderson [37] in their research found that increasingly CIOs and IT professionals are assuming change and risk management roles. They are facing both internal and external pressures to solve both

business and technical problems. Gottshalk [13] found similar results too that IT leaders are assuming significant organizational roles including the role of a change leader and having the responsibility for strategic alignment of IT and business. With this augmentation in the critical responsibilities of IT's role, it can no longer be assumed that business strategy will naturally drive IT strategy as has traditionally been the case. Instead, different approaches to strategy development are desirable. The capabilities of emerging IT shape the strategic direction of a firm (e.g., e-business, wireless). It enables new competencies that make new business strategies possible (e.g., just-in-time

inventory). It allows new business governance options for how a firm works with other firms. (e.g., Wal-Mart or Dell Computer). However, whichever way IT strategy is developed, if IT is to deliver business value, IT strategy and business value must always be closely linked [2, 8]. For CIOs and other executives, it is one of the top business concern [19].

Ideally, therefore IT and business strategies should complement and support each other relative to the business environment. Strategy development should be a two-way process between IT and business. However, we have yet to learn how to do this. For instance, both in the alignment and the planning literatures we still see the evidence that achieving an effective alignment between IT and business strategies and doing an effective IT planning remain perennial problems [11, 16, 20, 27]. Research has already identified many organizational challenges to effective IT strategy development. If organizations strategy development processes are not compatible (e.g., if they take place at different times or involve different levels of business), it is unlikely that business and IT will be working towards the same goals at the same time [11].

With IT becoming so much more central to the development and delivery of business strategy, much more attention needs to be paid to IT strategy development than it has been paid in the past. What businesses want to accomplish with their IT and how IT shapes its own delivery strategy is increasingly vital to the success of an organization. To explore how organizations are working to improve IT strategy development, the authors convened a focus group of senior IT managers from a variety of industries.

This paper first describes the focus group methodology used in this research. Then, it looks at how our understanding of IT strategy has changed over time. Next, it discusses some critical success factors for IT strategy development, followed by how some organizations are beginning to evolve a more formal IT strategy development process. Finally, the paper examines some of the challenges organizations are facing in developing an effective IT strategy.

RESEARCH METHODOLOGY

Due to the exploratory nature of this research we decided to use focus group methodology. While focus group methodology can be used for both exploratory and confirmatory research [32], it is particularly well suited for exploratory research. The methodology is widely employed in various disciplines as a qualitative research technique [22]. It entails a process of obtaining possible ideas or solutions to a problem from a group of participants by discussing [32]. What constitutes focus group methodology

is still debated in the literature but “most researchers seem to agree on at least a few characteristics: they should consist of a relatively small group of people (usually 7-12), led by a moderator, discussing a particular topic for 90-120 min” [9, p.719]. The main advantage of the methodology is based on the kind of data it generates. Krippendorff [18] differentiates between *emic* data that which arises in a natural or indigenous form and *etic* data that which represents the researcher’s imposed view of the situation. While pure forms of data are rarely obtained in practice, focus group data is much more *emic*. As a result, focus groups are extremely useful in obtaining general background information about a topic, generating research hypotheses for further research, stimulating new ideas, learning what and why individuals think about the phenomenon of interest, and interpreting previously obtained quantitative results [1, 14].

Senior IT managers from 15 different organizations were invited to attend a full-day focus group. Focus group participants represented consulting, manufacturing, insurance, banking and financial, government, retail, telecommunication, automotive and pharmaceutical institutions. The managers were asked to describe the processes their organization uses to develop their IT strategies. In addition, they were asked to assess the relative importance of the strategic use of IT in their firm, how IT strategy is associated with business strategy and how well senior business managers include IT in the development of their business strategies.

The participants were also asked to bring any corporate documents which they considered relevant to the topic. The discussion was moderated by one of the authors while the others recorded the discussion independently. The authors actively pushed for clarification of discussion and prompted participants to share actual experiences of specific events within their organizations in order to make arguments and concepts as concrete as possible. The participants were forthcoming with examples to support their observations of organizational phenomena. The research also relied on data collected from the participating organizations’ Web sites. Further, while analyzing the data, e-mail and telephone communications were also conducted with a few participants in order to get more details and clarification on some of their responses. Our findings are based on an analysis of the focus group discussion in juxtaposition against the published literature on the topic. Our goal was to let practice inform theory and vice versa.

IT STRATEGY: PAST, PRESENT AND FUTURE

At the highest level, a strategy is an approach to doing business [12]. Traditionally, a competitive business strategy has involved performing different activities than competitors or performing similar activities in different ways [24]. Ideally, these activities were difficult or expensive for others to copy and therefore resulted in a long-term competitive advantage [12]. They thus enabled firms to charge a premium for their products and services.

In the past, the job of an IT function was to understand the business' strategy and then figure out a plan to support it. However, all too often, IT's strategic contribution was inhibited by IT managers' limited understanding of business strategy and by business managers' poor understanding of IT's potential. Therefore, most formal IT plans were focused on more tactical and tangible line of business needs or opportunities for operational integration rather than on supporting enterprise strategy [3]. And investment opportunities were selected largely on their basis to affect the short-term bottom line rather than on delivering long-term top line business value. As a result, instead of looking for ways to be different, in the last decade, much business strategy became a relentless race to compete on efficiencies with IT as the primary means of doing so [15, 24]. Companies' improved information processing capabilities were used to drive down transaction costs to near zero, threatening traditional value propositions and shaving profit margins.

In the present, IT is leading to considerable disruption as business models in many industries (i.e., the way companies add value) are under attack by new technology-enabled approaches to delivering products and services (e.g., the music industry, book-selling). Today "strategists [have to] honestly face the many weaknesses inherent in [the] industrial-age ways of doing things. They [must] redesign, build upon and reconfigure their components to radically transform the value proposition." [33]. Such new business strategies are inconceivable without the use of IT. Other factors, also facilitated by IT, are further influencing business strategy. Increasingly, globalization is altering the economic playing field. As countries and companies become more deeply interrelated, instability is amplified. Instead of being generals plotting out a structured campaign, business leaders are now more likely to be participating in guerilla warfare [10]. Flexibility, speed and innovation are therefore becoming the watchwords of competition and must therefore be incorporated into any business through IT [15, 30].

These new conditions have dramatically elevated business' attention to the value of IT strategy. Now,

business executives recognize that it is a mistake to consider IT related decisions to be solely the responsibility of IT [28]. There is a much greater understanding that business executives have to take a more prominent role in IT related decisions so that IT strategy shapes and/or complements business strategy [19]. At present, there is recognition among the top executives of most organizations that problems with IT strategy are largely the fault of leaders who "failed to realize that adopting ... systems posed a business -- not just a technological -- challenge" and didn't take responsibility for the organizational and process changes that would deliver business value [29]. This awareness among executives has elevated the importance of IT strategy. Many members of the focus group remarked that their executive team now understands the potential of IT to affect the top line. "IT recently added some new distribution channels and our business has just exploded," stated one manager. Others are finding that there is a much greater emphasis on IT's ability to grow revenues and this is being reflected in how IT budgets are allocated and investments prioritized. "Our executives have finally recognized that business strategy is not only enabled by IT but that it can provide new business opportunities as well," said an IT manager. This is reflected in the changing position of the CIO and IT leadership in most of the focus group organizations over the last decade. "Today, our CIO sits on the executive team and takes part in all business strategy discussions, because IT has credibility," said a focus group member. "Our executives now want to work closely with IT and understand the implications of technology decisions," said another "It's not the same as it was even five years ago." Today, CIOs are valued for their insights into business opportunities, their perspective across the entire organization and their ability to take the long-term view.

However, this does not mean that organizations have become good in developing an effective IT strategy. "There are many inconsistencies and problems with strategy development," said a participant. Organizations have to develop new strategy-making capabilities to cope in the future competitive environment. This will mean changing their current top-down method of formulating and implementing strategy. If there's one thing leading academics have agreed on, it is that future strategy development will have to become a more dynamic and continuous process [10, 17, 25, 26, 36]. Instead of business strategy being a well-crafted plan of action for the next 3-5 years, from which IT can devise an appropriate and supportive IT strategy, business strategy must become more and more evolutionary and interactive with IT. IT strategy development must therefore become more dynamic itself and focused on developing strategic capabilities that will support a variety of changing business objectives. Thus, in

the future, managers will participate in an organic strategy development process that will continually evolve IT and business plans in concert with each other [6, 25].

CRITICAL SUCCESS FACTORS FOR DEVELOPING IT STRATEGY

While each focus group member had a different approach to developing their IT strategy, there was broad general agreement that five factors had to be in place for strategic development to be effective.

Revisit your Business Model

Business models and strategies are often confused with each other [28]. A business model explains how the different pieces of a business fit together. It ensures that everyone in an organization is focused on the kind of value a company wants to create. Only when the business model is clear, strategies can be developed to articulate how a company will deliver that value in a unique way that others cannot easily imitate [28]. Thus, it is essential that all managers including IT and business managers completely understand how their business as a whole works. While this sounds like a truism, almost any IT manager can tell “war stories” of business managers who have very different visions of what they think their enterprise should look like.

The worlds of IT and business have traditionally been isolated from each other, leading to misaligned and sometimes conflicting strategies. Although there is now a greater willingness among business managers to understand the implications of technology in their world, it is still IT that must translate their ideas and concepts into business language. “IT must absolutely understand and focus on the business,” said an IT manager in the focus group.

Adopt Strategic Themes

IT strategy used to be about individual projects. Now it is about carefully crafted programs that focus on developing specific business capabilities. Each program consists of many smaller, inter-related businesses and IT initiatives that cut across several functional areas. These are designed to be adapted, reconfigured, accelerated or cancelled as the strategic program evolves. Themes give both business and IT managers a broad yet focused topic of interest that challenges them to move beyond current operations [17]. For example, one retail company decided it wanted to be “a great place to work”. A bank selected e-banking as critical differentiator. Both firms used a theme to engage the imaginations of their employees and mobilize a variety of ideas and actions around a broad strategic direction. By grouping IT and business programs around a

few key themes, managers find it easier to track and direct important strategic threads in an organization’s development and to visualize the synergies and interdependencies involved across a variety of programs spread out across the organization and over time.

Get the Right People Involved

One of the most important distinguishing factors between companies that get high IT business value and those that do not is that senior managers in high performing companies take a leadership role in IT decision-making. Abdication of this responsibility is a recipe for disaster [29]. “In the past, it was very hard to get the right people involved,” said a manager. “Now it’s easier,” another noted, “You don’t send a minion to an IT strategy meeting anymore; it’s just not done.” The managers in the focus group indicated that in their organizations, the CIO and other IT managers typically meet regularly with the President and senior business leaders to discuss both business and IT strategies.

Getting the right people involved also means getting line of business managers and other key stakeholders involved in IT strategy as well. To do this, several focus group organizations have established “account manager” positions in IT to work and learn about the business and suggest opportunities for using IT. Research shows that the best strategies often stem from grass-roots innovations and it is therefore critical that organizations take steps to ensure that good ideas are nurtured and not filtered out by different layers of management [17]. “We have two levels of strategy development in our organization,” said a focus group participant. “Our account managers work with functional managers and our CIO works with our business unit presidents on the IT Steering Committee.” This company also looks for cross-functional synergies and strategic dependencies by holding regular meetings of IT account managers and between account managers and infrastructure managers.

Work in Partnership with the Business

Successful strategy demands a true partnership between IT and business, not just use of the term. Strategy decisions are best made with input from both business and IT executives [29]. Focus group members agreed. “Our partnerships are key to our success,” stated a manager. “It’s not the same as it was five years ago. People now work very closely together.” Partnership is not just a matter of “involving” business leaders in IT strategy or vice versa or “aligning” business and IT strategy. Today, effective strategizing is about “continuous and dynamic synchronization of capabilities” [25]. “Our IT programs need synchronizing with business strategy – not only at a

high level but right down to the individual projects and the business changes that are necessary to implement them properly,” said a focus group participant.

Balancing IT Investment Opportunities

One of the many challenges of developing effective IT strategy is the fact that technology can be used in so many different ways. The opportunities are practically limitless. Unfortunately, the available resources are not. Thus, a key element of IT strategy is determining how best to allocate the IT budget. This issue is complicated by the fact that most businesses today require significant IT services just to operate. Utility and basic support costs eat up between 30 to 70% of the focus group members’ budgets. That’s just the cost of “keeping the lights on” – running existing applications, fixing problems, and dealing with mandatory changes (e.g., new legislation). IT strategy therefore must consider two important components: (1) how to do more with less, i.e., driving down fixed costs; and (2) how to allocate the remaining budget towards those IT investment opportunities that will support and further the organization’s business strategy.

In order to do more with little budget, with occasional exceptions, CIOs and their teams are mostly left alone to determine the most cost-effective way of providing the IT utility to their organizations. This has led to a variety of IT focused initiatives to save money including outsourcing, shared services, use of ASPs, and most recently, grid computing. However, it is the way that IT allocates the rest of its budget that has captured the attention of business strategists. “It used to be that every line of business had an IT budget and that we would work with each one to determine the most effective way to spend it,” said a focus group manager. “Now, there is much more recognition that the big opportunities are at the enterprise level and cut across lines of business.”

Focus group members explained they usually face five types of IT investment opportunities to further business strategy. Determining the balance between the opportunities is a significant component of how IT strategy delivers business value. In a way, organizations have to adopt a portfolio approach to IT investments [35]. Too much or too little focus on one type of investment can mean a failure to derive maximum value from a particular strategic business theme. The five investment opportunities (i.e., business improvement, business-enabling, business opportunities, opportunity leverage, and infrastructure) are described below.

Business Improvement. These are the re-engineering initiatives to help organizations to streamline their processes and save substantial amounts of money by eliminating unnecessary or duplicate activities or

empowering customers/suppliers to self-manage transactions with a company. Weil and Aral [35] refer to such investments as transactional investments. The IT investment in these initiatives is the easiest to agree on because they focus on relatively low risk investments with a tangible short to medium term payback. Easy to justify with a business case, these types of investments have traditionally formed the bulk of IT’s discretionary spending. “Cost reduction projects have and always will be important to our company,” stated one focus group manager. “However, it is important to balance what we do in this area with other types of equally-important projects that have often been given short shrift.”

Business-Enabling. The investment in business enabling initiatives can be considered informational investments [35]. The business enabling IT initiatives extend or transform how a company does business. As a result, they are more focused on the top-line or revenue-growing aspects of an enterprise. For example, a data warehouse could enable different parts of a company to “mine” transaction information to improve customer service, assist target marketing, better understand buying patterns, or identify new business opportunities. Adding a new web-based channel could make it easier for customers to buy more or attract new customers. A customer information file could make it easier for a customer to do business with a company (e.g., one address change) and also facilitate new ways of doing business. Often, the return on these types of investments is less clear and as a result, it has been harder to get them on the IT priority list. Yet, many of these initiatives represent the foundations on which future business strategy is built. For example, one CIO described the creation of a customer information file as “a key enabler for many different business units.... It has helped us build bench strength and move to a new level of service that other companies cannot match.” [31].

Business Opportunities. These are small scale, experimental initiatives designed to test the viability of new and emerging IT to support business. Given the rate at which IT evolves, it often makes currently available IT outdated, thus experimenting with new IT is extremely critical [5]. In the past, these types of investments have not received funding by traditional methods because of their high risk nature. Often, it has been left up to the CIO to scrounge money for such “skunkworks”. These days, there is a greater recognition of the potential value of strategic experiments in helping companies to learn about and prepare for the future. In some focus group companies, the CEO and CFO have freed up seed money to finance a number of these initiatives. However, while there is considerably more acceptance for such investments, there is still significant organizational resistance to financing

investments for which the end results are unpredictable [26]. In fact, it typically requires discipline to support and encourage experiments, which by definition, will have a high number of false starts and wrong moves [17]. The focus group agreed that the key to benefiting from experiments is to design them for learning, incorporate feedback from a variety of sources and make quick corrections of direction.

Opportunity Leverage. A neglected, but important type of IT investment is one that operationalizes, scales up, or leverages successful strategic experiments or prototypes. “We are having a great deal of success taking advantage of what we have learned earlier,” said one focus group manager. Coming up with a new strategic or technological idea needs a different set of skills than is required to take full advantage of it in the marketplace [7]. Some companies actually use their ability to leverage others’ ideas to their strategic advantage. “We can’t compete in coming up with new ideas,” said the manager of a medium-sized company, “but we can copy other peoples’ ideas and do them better.”

Infrastructure. This final type of IT investment is one that often falls between the cracks when IT and business strategies are developed. However, it is clear that the hardware, software, middleware, communications and data available will affect an organization’s capacity to build new capabilities and respond to change. A recent study found that most companies feel their legacy infrastructure can be an impediment to what they want to do [25]. Research also shows that leading companies have a framework for making targeted investments in their IT infrastructure that will further their overall strategic direction [36]. Unfortunately, investing in infrastructure is rarely seen as strategic. As a result, almost all focus group companies are struggling with how to justify and appropriately fund it.

While each type of investment described above delivers a different type of business value, typically IT strategy has stressed only those initiatives with strong business cases. Others are shelved or struggle for a very small piece of the pie. However, there was a general recognition in the focus group that this approach to investment leads to an IT strategy with a heavy emphasis on the bottom line. As a result, all focus group companies were looking at new ways to build a strategy development process that reflects a more appropriate balance of all dimensions of IT strategy.

TOWARDS AN IT STRATEGY DEVELOPMENT PROCESS

“Strategy is still very much an art, not a science,” explained a focus group member, “And it is likely to remain so.” Strategy will never again be a coherent, long-term plan with predictable outcomes – if it ever was. Today, “leaders can’t predict which combinations [of strategic elements] will succeed [and] they can’t drive their organizations towards predetermined positions.” [26]. This situation only exacerbates the problem that has long faced IT strategists. That is, it is difficult to build systems, information and infrastructure when a business’ direction is continually changing and IT is rapidly evolving. Yet, this degree of flexibility is exactly what businesses are demanding [25]. Traditional IT planning and budgeting mechanisms done once a year simply will not work in today’s fast-paced business environment. “We always seem to lag behind the business, no matter how hard we try,” said a focus group manager.

Clearly, organizations need to be developing strategy differently. How to do this is not always apparent, but several organizations in the focus group were trying ways to more dynamically link IT strategy with the business strategy. While no one company in the focus group claimed to have “the” answer, they did identify several practices that are moving them more closely towards this goal. The practices are described below.

“Rolling” Planning and Budget Cycles.

All members of the focus group agreed that IT plans and budgets need attention more frequently than once a year. One company has created an 18 month rolling plan that is reviewed and updated quarterly with the business to maintain currency.

An Enterprise Architecture. This is an integrated blueprint for the development of the enterprise – both business and IT. “Our enterprise architecture includes business processes, applications, infrastructure, and data,” said a focus group manager. “Our enterprise architecture function has to approve all business and IT projects and is helpful in identifying duplicate solutions.” In some companies, this architecture is IT-initiated and business-validated, whereas in others it is a joint initiative. However, members warned that an architecture has the potential to be a corporate bottleneck if it becomes too bureaucratic.

Different Funding “Buckets”. Balancing short-term returns with the company’s longer-term interests is a continual challenge. As noted above, all five types of IT investment are necessary for an effective IT strategy (i.e., business improvement, business enabling, business opportunities, opportunity leverage, and infrastructure). Thus, a portfolio technique to IT investments is vital. In order to ensure that each different type of IT is appropriately funded, many companies are allocating pre-determined percentages of their IT budget to different types of projects

[28, 35]. This helps keep continual pressure on IT to reduce its “utility costs” in order to free up more resources for other types of projects. “Since we implemented this method of budgeting, we’ve gone from spending 70% of our revenues on mandatory and support projects to spending 70% on discretionary and strategic ones,” said a focus group manager. This is also an effective way to ensure that IT infrastructure is continually enhanced. “Leading companies build their infrastructure not through a few large investments but gradually through incremental, modular investments ...[that] build IT capabilities.” [36].

Account or Relationship Managers.

There is no substitute for a deep and rich understanding of the business according to the focus group. This is why some of them have appointed IT Account Managers to work closely with key lines of business. These managers help business leaders to observe their environments systematically and to identify new opportunities for which IT could be effective. Furthermore, together, account managers can identify synergies and interdependencies between lines of business. One organization holds both intra- and inter-functional strategy sessions on a regular basis with business managers to understand future needs, develop programs, and then design specific roadmaps for reaching business goals. “Our account managers have been a significant factor in synchronizing IT and business strategies,” said a manager.

A Prioritization Rubric. “We don’t do prioritization well,” said one participant. IT managers have long complained that it is extremely difficult to justify certain types of initiatives using the traditional business case method of prioritization. This has led to an over-representation of business improvement investments in the IT portfolio and has inhibited more strategic investments in general capabilities and business opportunities. This problem is leading some companies to adopt multiple approaches to justifying IT investments [28]. For example, business-enabling projects must be sponsored at a cross-functional level on the basis of the capabilities they will provide the enterprise as a whole. Senior management must then take responsibility to ensure that these capabilities are fully leveraged over time. Infrastructure priorities are often left up to IT to determine once a budget is set. One IT department does this by holding strategy sessions between its account and utility managers to align infrastructure spending with the organization’s strategic needs. Unfortunately, no one has yet figured out a way to prioritize business opportunity experiments. At present, this is typically left to the “enthusiasms and intuitions” of the sponsoring managers, either in IT or in the business [28]. “Overall,” said a focus group manager, “we need to do a

better job of thinking through the key performance indicators we’d like to use for each type of project.”

While it is unlikely that strategy development will ever become a completely formalized process, there is a clear need to add more structure to how it is done. A greater understanding of how strategy is developed will ensure that all stakeholders are involved and a broader range of IT investments are considered. While the outcomes of strategy will always be uncertain, the process of identifying new opportunities and how they should be funded must become more systematic if a business is going to realize optimum value from its IT investments.

CHALLENGES

As often happens in organizations, recognition of a need precedes the ability to put it into place. IT leaders are now making significant strides in articulating IT strategy and linking it more effectively with business strategy. Business leaders are also more open to a more integrated process. Nevertheless, there are still important organizational barriers remaining that often inhibit strategy development.

First, a supportive governance structure is frequently lacking. “Now that so many strategies are enterprise-wide, we need a better way to manage them,” explained a focus group manager. Often there are no formal structures to identify and manage interdependencies among different business processes. “It used to be that everything was aligned around organizational boundaries, but strategy is now more complex since we’re working on programs with broader organizational scope,” said another. Similarly, current managerial control systems and incentives are often designed to reward thinking that is aligned to a line of business, not to the greater organizational good.

Second, enterprise-wide funding models are also lacking. “Everything we do now requires negotiation for funding between the lines of business who control the resources,” one manager stated. Even within IT, the focus group suggested, it is not always clear who in the organization is responsible for taking IT strategies and turning them into detailed IT plans.

Third, traditional planning and budgetary practices are a further challenge. This is an often-neglected element of IT strategy. “Our business and IT strategies are not always done in parallel or even around the same time,” said a focus group participant. As a result, it is not easy to stay aligned or to integrate the two sets of plans. Another commented, “Our business plans change constantly. It is therefore common for IT strategy to grow farther and father apart over time.” Similarly, an annual budgeting process tends to lock an organization into fixed expenditures which may not be practical in a rapidly changing environment. Today’s IT

organizations therefore need both a longer term view of their resourcing practices and the opportunity to make changes to it more frequently. While rolling budgets are becoming more acceptable, they are by no means common in either IT or the business world today.

Fourth, both business and IT leaders need to develop better skills in strategizing. "We've gotten really good at implementing projects," said an IT manager. "Strategy and innovation are our least developed capabilities." In recent years, IT has tended to push business towards better articulation of their goals. "Right now, in many areas of our business, strategy is not well thought through," said another manager. "IT has to play the devil's advocate and get them to think beyond generalities such as, 'we are going to grow the business by 20% this year'". With more attention to the process, it is almost certain to get better, but at present, managers' rudimentary skills in this area limit the quality of strategy development.

Finally, over and over, the focus group stressed that IT strategy is mainly about getting the right balance between conflicting strategic imperatives. "It's always a balancing act between our tactical and operational commitments and the work that builds our long term capabilities," said a participant. Deciding how to make the trade-offs between the different types of IT work is the essence of effective strategy. Unfortunately, few businesses do this very well [3]. According to the focus group, traditional business thinking tends to favor short term profitability while IT leaders tend to take a longer-term view. Making sure some types of IT work (e.g., infrastructure, new business opportunities) are not under-funded while others (e.g., utility, business improvement) are not over-funded is a continual challenge for all IT and business leaders these days.

CONCLUSION

Effective strategy development is becoming vital for today's organizations. As the impact of IT has grown in organizations, IT strategy is finally getting the attention it deserves in business. Nevertheless, most organizations are still in the very early stages of learning how to develop an effective IT strategy and synchronize it with an overall business strategy. Getting the balance right between the many different ways IT can be used to affect a business is a constant challenge for today's leaders. While there is, as yet, no well-developed IT strategy development process, there appears to be general agreement on certain critical success factors and the key elements involved. Over time, these will likely be refined and better-integrated with overall business strategy development. Those who learn to do this well without locking the enterprise into inflexible technical

solutions are likely to win big in today's rapidly-evolving business environment.

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