

FIX IT-BUSINESS RELATIONSHIPS THROUGH **BETTER** DECISION RIGHTS

“The perils of screwing up (with technology) are greater every year, making the stakes for effective communication even higher.”

—STAN LEPEAK, VP OF TECHNOLOGY
RESEARCH SERVICES AT METAGROUP.

For better or worse, the IT spending boom has ground to a halt, replaced by a more sober era where IT decisions are made with far greater scrutiny. Once bitten, twice shy is the name of the game, as CEOs take more control of IT initiatives and tighten the purse strings by demanding greater justification for new initiatives. This cautious, less trusting environment has resulted in a credibility gap between management and IT, with IT staff in the vulnerable position of feeling expend-

able as long as the outsourcing bug is in the air. And IT staff frustration is often compounded as staff members are blamed for IT decisions made by top management!

The irony of this scenario is that there has never been a more important role for IT in the e-business environment of today. Integration of IT in internal processes and external markets is growing at a furious pace. The stakes for good communication are high. On one hand there is an adversarial relationship due to the credibility gap and the starkly different language spoken at the business and

also define accountability for IT decisions. Who is held responsible for decision failure and who gets credit for success? An IT governance system that creates a balance between decision rights and accountability can promote desirable decision making with respect to IT assets [4, 12]. A mismatch between the two can erode relationships and promote ineffective or inefficient decision making.

The decision rights and accountability framework for a firm is usually implemented through its structure, processes, committees, procedures, and incentives. For instance, some firms may treat IS as a centralized cost center with a fixed budget and processes that allow IS to only react to user requests. Such an environment does not promote “out of the box” thinking for the IT group. In this environment, if IT leadership is held accountable for a lack of strategic direction or the inability to respond nimbly to competitor moves due to restrictive legacy systems, there will be dissonance in the IT group. Ultimately this dissonance will result in poor relationships between the IT group and top management. On the other hand, an aggressive IT group that is allowed to retain decision rights for major IT decisions and has control processes in place to measure outcomes promotes innovative solutions for the business. If the accountability systems become overly stifling, however, this can again create a mismatch.

Figure 1 illustrates the decision rights and accountability gaps of IT executives. The top-left-hand corner is referred to as a *technocentric gap*, where IT executives make major decisions but the accountability systems are weak. Such environments often result in overspending on IT that may not yield commensurate business benefits. In some cases this could result in frustration for business groups, ultimately resulting in a transformation of structures, processes, or incentives to foster greater accountability [9]. In other cases business groups are just not motivated to think through IT decisions. As one CEO commented, “Because the business people are uninterested in information systems, the information systems people have the power” [7].

The *business gap* (bottom-right corner of Figure 1) occurs when major IT decisions are not made by IT executives, but business groups are not held account-

able for executive decisions. Business leaders might ignore potentially valuable technology projects or suddenly cancel them when they run into difficulties [6]. Often cost considerations dominate decision making, and the resulting IT assets are not aligned with existing competencies. In the case of a large electronics manufacturer, an executive committee denied IT’s request for a new scalable platform based upon an external vendor’s aggressive proposal for cutting costs through outsourcing. In such situations IT groups may feel frustrated because they believe their skills are underutilized and opportunities are being lost. Frustration could also result from the lack of control over their asset base, and in some cases their future viability. Moreover, the blame often falls on IT when projects run into difficulties.

The off diagonal boxes in Figure 1 reflect alignment between rights and accountability. In cases where both are low, IT groups are usually not strategic to the business and are viewed as administrative units that service the information needs of

the firm. The high-high box reflects a strategic norm, where IT is given the power to make major decisions, but it is kept in check through control systems that monitor decision outcomes.

IT EXECUTIVE PERCEPTIONS OF THE GAP

Various organizational forms are used to implement decision rights and accountability. Some of these are tacit or cultural, such as the historical notoriety of the IT group, while others are explicit, such as incentives, procedures, or committees. However, in many cases such forms do not keep up with enterprise changes and their original intent gets diluted. Therefore, rather than examining these organizational forms, we argue that how these forms are “perceived” by IT executives is what matters. Executives can best assess whether they feel they have a balance (no gap), technocentric gap, or business gap between rights and accountability. Our focus is to empirically assess these perceptions, and their implications for the relationship of IT management with top management.

We surveyed 89 senior IT executives (CIOs or VPs of IS) across a diverse set of industries (see the sidebar). After soliciting participation in an ongoing project, we requested that they respond to a series of questions on their perception of decision rights and

		Accountability	
		Low	High
Decision Rights	High	Technocentric Gap <ul style="list-style-type: none"> • Danger of overspending on IT • IT assets may not be utilized for business purposes • Business group frustration with IT group 	Strategic Norm <ul style="list-style-type: none"> • Works where IT is viewed as competent and strategic to the business
	Low	Administrative Norm <ul style="list-style-type: none"> • Works for organizations where IT is viewed as a support function. 	Business Gap <ul style="list-style-type: none"> • Cost considerations dominate IT decisions • IT assets may not utilize internal competencies • IT group frustration with business groups

Figure 1. IS decision rights-accountability gap framework.

There are a number of solutions to BRIDGE THE BUSINESS GAP, but a precursor is to recognize that gaps exist.

accountability as pertaining to major IT decisions in their organization.

Major IT decisions. A number of typologies have been proposed to categorize major IT decisions [11]. In this study we use six categories that represent major IT decisions. These are:

- **IT strategic vision.** The strategic role of IS in the organization.
- **IT architecture.** How technical capabilities are organized for business needs.
- **IT investments.** The amount, type, and priority of IT investments.
- **IT infrastructure.** How IT services are shared.
- **Application development.** Management of development and implementation.
- **Outsourcing.** IT outsourcing policy and management.

We requested that the respondents assess the decision rights and accountability for these decisions across five distinct groups. The “groups” include IT management (the respondent’s group), top management, business units, IT units, and vendors. *Decision rights* were defined as the extent to which groups make or have final “say so” over decisions, while *accountability for outcomes* was defined as the extent to which groups are held responsible for the outcome of decisions. Responses were captured for each group’s role in each decision (in percentage terms). For instance, decision rights for decisions of IT strategic vision could be distributed across the five groups, with the total equaling 100. A respondent could indicate that top management has 50% of the rights, and IT management has 50% (that is,

decision rights are shared). A similar percentage response was solicited for accountability of outcomes.

Quality of relationship. Our particular interest was in assessing the quality of the relationship between IT management and top management. This was done through a series of seven internally consistent questions that required responses ranging from strongly agree to strongly disagree. Each question describes an aspect of IT management’s relationship with top management such as effectiveness, level of cooperation, quality of decisions, level of conflict, feeling of partnership, and satisfaction. After checking statistically for the internal consistency and validity of the scale, these items were aggregated to form a “quality of relationship” measure.

INTRIGUING PATTERNS EMERGE FROM FINDINGS

The results on levels of decision rights and accountability are illustrated in Figures 2 and 3 respectively. The bars represent the average for the 89 executives surveyed. As can be seen, major decision rights and accountability for IT infrastructure and architecture, arguably the more technical areas, reside primarily with IT management or other IT units. Top management, IT management, and business units tend to share significant decision rights for IT investment and strategic vision decisions. IT management and top management are responsible for outsourcing decisions, while application development is primarily shared by IT management and the business units.

However, more interesting patterns emerge when

Figure 2. Decision rights.

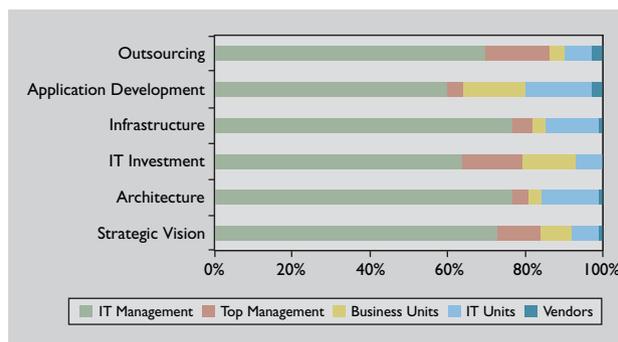
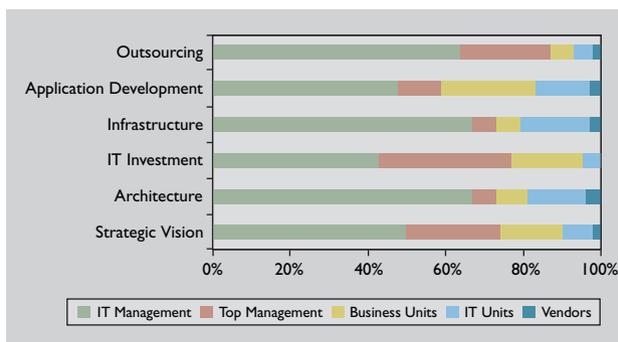


Figure 3. Accountability.

one looks at the gaps between decision rights and accountability. Table 1 illustrates these gaps (average differences), with the negative numbers indicating where accountability exceeds decision rights. As can be seen in the column under IT management, all numbers are negative indicating that *IT management perceives a business gap*, where accountability for major IT decisions exceeds decision rights. Table 2 describes this gap as perceived by IT management and its correlation with the measure on relationship quality. Significant correlations indicate where IT management is most sensitive to the perceived gaps, and where these gaps affect the quality of the relationship with top management. The last column of the table describes the correlation of top management's perceived level of accountability with relationship quality. Significant correlations here indicate where relationship quality is stronger if top management takes on greater accountability for decision outcomes.

As can be seen from the tables, some interesting patterns emerge with respect to the various categories of major IT decisions. Good IT governance promotes desired behavior with respect to IT deployment. By parceling out decisions to the right people and holding them accountable, governance can promote both empowerment and control [11]. However, in addition, we find that for some decisions, poor governance can adversely affect the instrumental relationship between IT and top management. We make four observations from these results.

First, the *higher level strategic vision and IT investment decisions follow similar patterns*. Strategic vision decisions set the role of IT in the firm, while investment decisions establish resource commitment, prioritization, and the IT portfolio. In both types of decisions there are large rights-accountability gaps perceived by IT management, which adversely affect relationship quality. For these decisions, top management might be making unpalatable IT investment decisions, while leaving IT management accountable for the success or failure of these decisions. The results

suggest that governance mechanisms that can promote greater accountability on the part of top management are particularly useful here. It is not sufficient to have executive committees with both top and IT management representation if they are providing only decision inputs. The assessment of decisions should also be brought within the charter of such committees or other governance structures. One company following an approach of clearly specifying business-oriented progress objectives as a part of IT investment decisions was able to enhance coordination, reduce cost, and improve capacity [3].

Secondly, we find that *more technical IT architecture and infrastructure decisions follow slightly different patterns*. Architecture decisions concern issues of mapping technical choices to business processes, while infrastructure decisions involve explicit technical choices on shared network, Web, and data services throughout the firm. While the gap is moderate for

	IT Management	Top Management	Business Units	IT Units	Vendors
Strategic Vision	-23	13	8	1	1
Architecture	-10	2	5	0	3
IT Investment	-21	19	4	-2	0
Infrastructure	-10	1	3	4	2
Application Development	-12	7	8	-3	0
Outsourcing	-6	7	2	-2	-1

Table 1. Decision rights-accountability gap.

	Business Gap	Correlation of Gap with Relationship Quality	Correlation of Top Management Accountability with Relationship Quality
Strategic Vision	High (-23)	Significant	Significant
Architecture	Medium (-10)	Not Significant	Not Significant
IT Investment	High (-21)	Significant	Significant
Infrastructure	Medium (-10)	Significant	Not Significant
Application Development	Medium (-12)	Not Significant	Significant
Outsourcing	Low (-6)	Significant	Not Significant

Table 2. Correlations with relationship quality.

both these decisions, its affect on relationship quality is inconsequential for architecture decisions but important for infrastructure decisions. Holding top management more accountable does not help relationship quality in either case. This indicates that IT feels that these decisions are outside top management's experience or expertise. IT management would rather increase its own authority over technical decisions that have enterprisewide implications. Increased control over technical infrastructural decisions, where IT management has an integral stake, will facilitate better relationships with top management. Of course, while architecture and infrastructure boards can be found in companies across a variety of industries (including Dow Jones, Verizon, and Hartford), it is critical that they not be comprised of pure technologists, but have people grounded in IT, but fluent in business [5].

Thirdly, we observe that *IT infrastructure and out-*

sourcing decisions follow similar patterns too. In general, the results suggest lower business gaps, which would suggest no major governance problem. However, the gap perceived by IT management has a significant influence on relationship quality. Situations where top management makes outsourcing decisions for which IT groups are held responsible will adversely affect relationship quality. IT groups are certainly sensitive concerning decisions regarding infrastructure management and outsourcing policies because of their centrality in the provision of IT services. These decisions directly reflect IT's effectiveness, professionalism, and future viability. Rather than top management taking on more accountability, IT man-

agement firm uses steering committees involving IT management at the local and enterprise levels and business unit managers to oversee IT development. Top management is involved in all major committee decisions.

GOVERNANCE APPROACHES

This study alerts firms to the importance of establishing a decision rights-accountability framework for the firm. We focused on one such outcome, the quality of the relationship between IT management and top management. While these results focused on the "biased" view of an IT executive in determining gaps, we would argue that it is these perceptions that are the ultimate manifestations of organizational structures, processes, and incentives. How these are perceived will directly affect organizational outcomes.

There are a number of solutions to bridge the business gap, but a precursor is to recognize that gaps exist. After that there are structural, process, and relationship capabilities that can be implemented [8]. Structural capabilities including formal positions, committees, and task forces can be used to design the appropriate governance framework. Processes (like chargeback, SLAs, and balanced scorecard) also offer useful accountability mechanisms. However, most important are the relationship capabilities that allow effective joint working relationships between IT and business groups.

Table 3. Summary of results and guidelines.

Decision Types	Gap Level	Relationship Quality	Governance Consideration	Governance Examples
For strategic vision decisions and IT investment decisions	high	adversely affected by the gap	having top management take on greater accountability	through executive committees that also assess the decision outcomes
For IT architecture decisions	moderate	not affected by the gap	giving IT management greater decision rights	through architecture boards that have technologists with business acumen
For IT infrastructure and IT outsourcing decisions	moderate to low	adversely affected by the gap	giving IT management greater decision rights	with support and counsel of top management
For application development decisions	moderate	not affected by the gap	having top management take on greater accountability	through tripartite structures that involve top management to manage user and business unit issues

agement would prefer to be a central mediator of these decisions and take on greater decision rights. However, it is important that control systems are in place to monitor IT-centric decisions. For instance, at Xerox, outsourcing decisions are made by the top IT manager, with the CEO and CFO providing an informal network for guidance, support, and counsel [10].

Finally, *application development decisions are different*. These decisions involve development and implementation of applications. Usually, IT groups and business units are involved in the development in concert. IT management perceives moderate gaps in decision rights and accountability that surprisingly have little adverse effect on the relationship with top management. However, governance that increases the accountability of top management helps the relationship. We suspect that development decisions require coordinating authority in dealing with users of business units. Without top management taking on accountability, IT management is vulnerable to blame for failures. More complex tripartite governance structures are necessary. For instance, a large financial ser-

Some firms set up IT as a cost center, usually reflecting a utility orientation toward IT. In these situations major IT decisions are made outside the IT domain and IT "reacts" to business needs. At the other extreme, the IT group can be set up as a profit center with the ability to provide services to the internal firm or external firms. In the former case, the coupling between the IT group and the firm is tight; in the latter the relationship is loose, and served by market mechanisms. The gap between decision rights and accountability could be low in both cases as top management either retains or relinquishes most rights and accountability for the IT budget.

Most firms, however, operate in some form of a partnership mode, where various groups work together through governance mechanisms like structures and processes. Top management and IT management can jointly determine the parameters of these

HOW WE COLLECTED THE DATA

We surveyed 89 executives listed in the Directory of Top Computer Executives were surveyed. These executives were selected from U.S. companies with over 50 IT employees or over 1,000 PCs or listed on the Fortune 1000 or Forbes 500 lists. Respondents were given a choice of responding to a paper-based version or a Web version of the instrument. Approximately half the executives are from manufacturing, service, or governmental organizations and approximately one-third are from financial, retail, or health care sectors. The average number of employees per organization is approximately 31,000 and there is no bias toward any geographic area.

partnerships, but they need to pay attention to possible discrepancies between authority and accountability [2]. The results here suggest that different arrangements can be made for different types of IT decisions. For strategic and major IT investment decisions, the interaction and relationship between IT and top management need to be carefully formulated so that this important working relationship allows the firm to be effective in deploying new IT initiatives that are important to business performance. More than half the firms identified as the CIO 100 used an executive council, consisting of IT and business executives, to vet ideas for new projects [3]. For architecture and infrastructural decisions, where IT management has superior expertise, they can take the greater role in terms of decision-making capacity and accountability. Outsourcing decisions also seem to fall here, since IT groups have a vested interest (and perhaps expertise). Application development, however, may require more complex tripartite governance involving IT management, business units, and top management. Table 3 summarizes the major results and guidelines from the study.

CONCLUSION

With the greater scrutiny on IT decisions, it is critical that the sometimes-adversarial relationship between IT managers and top management be made more effective. This is an imperative in today's environment, where IT is ubiquitous, and is the source of many innovative ideas that can help generate revenue. If the feasibility set from IT is closed to business due to poor relationship quality between the IT and business sides, the business will flounder. Our study strongly indicates that IT managers perceive a gap between their decision rights and accountability for major IT decisions. For most decisions the magnitude of this gap affects their relationship with top management. However, different IT decisions might not require the same rights-accountability framework. More technical decisions are better handled by the IT groups, while others require shared

responsibility. Planning an effective governance structure that recognizes these differences is essential for business leaders to be better managers of the technology they deploy.

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