

Chapter 4

Managing Perceptions of IT¹

IT managers have struggled to deal with negative perceptions of IT's effectiveness and value for many years (Busch et al. 1991; McKeen and Smith 1996) and it is clear that IT is still wrestling with many of these same challenges. A 2005 survey of business leaders gave IT's value to the organization a rating of six out of ten (Overby 2005). Another survey found that while business leaders recognize the growing importance of IT as a fundamental driver of business, they still have doubts about the role of senior IT managers in developing strategy and concerns about IT's cost effectiveness and the value it adds (Willcoxson and Chatham 2004). Studies by McKinsey Associates and Gartner Group found similar results: "CIOs must do more to improve the perceptions of IT amongst CEOs and other business leaders" (Prewitt 2005). Other research shows that executives continue to have mixed feelings about IT, believing it is important but feeling that it is also a barrier to change (Flint 2004).

These findings demonstrate that IT still has some work to do in understanding business leaders' perceptions in order to address any misperceptions or problem perceptions. As a result, this chapter first looks at the concept of perceptions and why they are important for business and IT leaders to understand and manage. Next, it examines the nature of perceptions in the business-IT relationship and the factors that affect them. In the final two sections of this chapter, we discuss some of the root causes of perceptual problems and present some practical approaches for measuring and managing perceptions in this relationship.

¹Smith, H. A., J. D. McKeen, and S. Singh, "Managing Perceptions of IS," *Communications of the Association of Information Systems* 20, article 47 (November 2007), 760–773 (reproduced by permission of the Association for Information Systems).

THE VALUE OF PERCEPTIONS

A perception is “a thought, belief, or opinion held by many people and based on appearances” (Overby 2005). At an organizational level, the collective and multidimensional perceptions of a variety of stakeholder groups constitute a firm’s reputation (i.e., *brand* in marketing terms). A reputation is perceptual and includes not only facts and knowledge, but also emotions toward an organization. While a firm’s reputation may vary with its different stakeholder groups, studies show that firms with good reputations are those that tend to align the interests of their various stakeholders (Martinez and Norman 2004). Unfortunately, there is no consistent definition about what a reputation is and how it should be measured.

It is interesting, therefore, that research shows that while perceptions are immediate, they are often more accurate than opinions based on large amounts of data. While no one really understands how perceptions work, our unconscious minds appear to be primed to make rapid, instinctive judgments based on very “thin slices” of exposure to a situation (Gladwell 2005). In short, perceptions are formed in our unconscious, are grounded in a variety of factual and emotional factors, and are the basis for establishing a more enduring reputation or brand.

The value and importance of perceptions have been recognized in marketing for some time. Understanding and addressing both favorable and unfavorable attitudes to a particular brand and the beliefs and feelings about it is an important step in the marketing process (Rossiter and Percy 1987). Most organizations also understand that their reputations are important intangible resources that must be carefully managed (Martinez and Norman 2004).

However, while the concepts of reputation, perceptions, and attitudes are also applied to IT by researchers and practitioners, how to manage them appropriately is much less well understood. Although many IT leaders believe that managing perceptions of IT is important, few feel that marketing is the way to deal with them (Pastore and Cosgrove 2005). Sometimes these efforts try to sell others in the organization on what IT wants *to be*, which can set up false expectations and further damage IT’s reputation when they are not met (Schrage 2006). Typically, however, IT managers believe that “formal marketing should not be required since, if the product is good, it will sell itself” (McKeen and Smith 1996).

Nevertheless, *not* managing perceptions is dangerous for three important reasons. First, “understanding, shaping, and fulfilling the expectations of stakeholders is central to successful strategy execution” (Gold 2006). Expectations and perceptions drive stakeholders’ behavior, which, in turn, influences the quality of the business-IT partnership and “ultimately how efficiently the resources that drive enterprise performance and strategy execution are used” (Gold 2006). Furthermore, *not* trying to change perceptions of IT’s value may threaten the future success and influence of IT in the organization (Jaska and Hogan 2006). As a result, ignoring this issue will likely lead to missed opportunities and increased inefficiencies (Pastore and Cosgrove 2005). As well, better management of perceptions is seen to have a number of positive benefits for both IT and the organization, such as increased credibility, closer alignment, and improved teamwork (Pastore and Cosgrove 2005).

Second, even *within* IT there are perceptual problems that need to be better managed. “We must first understand how we perceive ourselves and present ourselves to

our users,” said one manager. “There’s no one in IT who’s responsible for how we are perceived.” Another noted, “We need internal credibility and trust *inside* IT in order to build it outside.”

These comments are supported by recent research showing that organizational citizenship behaviors (OCBs)—behaviors that promote effective organizational functioning that are discretionary and not recognized by the formal reward system—are much lower for IT workers than for others in organizations (Moore and Love 2005). OCBs tend to be higher when staff perceive they are treated fairly and with dignity and respect, and lower when management places unrealistic and arbitrary demands on them and there is a lack of resources. When OCBs are high, staff are more likely to see their work as a social exchange rather than as simply an economic relationship. The authors speculate that in high-pressure, deadline-driven work such as that in IT, staff may not have time to exhibit OCBs. This thought was echoed by a manager who stated, “We’re so busy, we can’t take time to work on how we are perceived.” OCBs become increasingly important as individuals’ jobs grow less clear, span organizational boundaries, and contain ambiguities (Moore and Love 2005). Thus, gaining political alignment and collaboration is an important reason for managing perceptions in today’s organizational environment. At a time when IT staff are expected to be resourceful, proactive, and innovative, it is vital that managers ensure that the internal perceptions of IT staff toward IT are positive.

Third, perceptions can simply be wrong, and such misperceptions can result in improper judgments and poor decisions. Gladwell (2005) writes, “while our unconscious is a powerful force, it’s fallible . . . our instinctive reactions have to compete with all kinds of other interests, emotions, and sentiments.” The focus group agreed. “There are misperceptions of problems and real gaps. We need to distinguish between these.” The good news is that people’s perceptions can be trained to be more accurate, and this is where managing them becomes important.

PERCEPTIONS IN THE BUSINESS-IT RELATIONSHIP

Before looking at how perceptions in the business-IT relationship can be managed and measured, it is important to better understand how perceptions manifest themselves in this relationship. Deeper insights in this area will help IT managers learn how and where their efforts can have an impact.

The most obvious problem for IT in dealing with perceptions is that they vary significantly according to who you ask. There are a number of factors that may affect perceptions in the business-IT relationship:

- ***The subfunction of IT with which the user deals.*** As noted above, in many organizations, there is no single “brand” or identity that IT promotes. Therefore, it is not surprising that different parts of the business (and even different parts of IT) can have significantly different experiences with IT. Even if the business thinks of “IT” as a single entity, different parts of IT see themselves differently and have different strengths and weaknesses. For example,

IT operations can be very efficient and customercentric, but applications development or IT planning processes can be inadequate. One manager noted that his organization had a centralized IT function for shared services and planning, while the rest of IT was decentralized into the major business units. “We have a daily fight to keep our credibility and trust with the business unit leaders,” said this business unit-focused IT manager, “because central IT keeps screwing up.”

- ***The needs and interests of business stakeholders.*** Similarly, “the business” is not one entity. “There are significant cultural differences between our business units and what they want from us,” explained a manager whose IT department was trying to serve three different businesses. “The vision of IT depends on who you ask.” There are two common views of IT among business executives. The first is that IT is “table stakes” and a service; the second is that IT is a critical differentiator (Deloitte 2004). Clearly what different business leaders want from IT will affect their perceptions and result in different perspectives of how well IT achieves its goals (Jaska and Hogan 2006). Unfortunately, once a specific group of stakeholders is dissatisfied, its impressions can be hard to change (Martinez and Norman 2004).
- ***Level in the corporate hierarchy.*** The CEO and senior management team’s views of IT are especially important because they contribute strongly to how IT is used in the organization. Positive attitudes toward IT are related to more progressive use of technology (Tallon, Kraemer, and Gurbaxani 2000). A number of surveys show that senior leaders in particular have mixed feelings about the role, importance, and value of IT (Anonymous 2002; Flint 2004; Prewitt 2005; Willcoxson and Chatham 2004). While almost all studies have found that senior leaders believe that IT is important to the business, its ability to add value, be responsive to business needs, and drive growth are questioned. The CEO-CIO relationship is particularly critical in setting the tone for how IT is viewed. One manager noted, “Our CEO is very hands-off with IT, so the different business units each do what they like.” Unfortunately, CIOs appear to have different perceptions of their relationships than CEOs. One study found that, while most CIOs believe they are trusted and respected business leaders, their CEOs are significantly less likely to see them this way (Flint 2004).
- ***The rising bar of expectations.*** One of the biggest frustrations is that IT expectations are constantly shifting. While surveys show that there have been significant improvements in many aspects of IT’s work, overall impressions of IT remain negative (Anonymous 2002; Willcoxson and Chatham 2004). One study noted that “at the micro level of individual service and communication, the IT-business relationship is much healthier than it was. However, considerable work needs to be done at the macro level in promoting understanding of IT’s capacity and potential across the organization” (Anonymous 2002). The phenomenon that improvements in the business-IT relationship at the individual level are not necessarily reflected in overall perceptions of IT was first noted more than twenty years ago (Smith 1990).

Each of these factors suggests that the overall image or brand of IT is enduringly negative, in spite of ongoing efforts to improve it with individual stakeholders and

groups. This reflects a wider principle of managing perceptions noted by the Reputation Institute (cited in Martinez and Norman 2004):

... various stakeholders [can] have different images of the firm based on differing values, expectations, and experiences. In contrast, reputation is the **aggregate, overall attractiveness of the [function] to all constituents**. Notably, although experiences ... may be most meaningful at the individual level, they cannot be aggregated at the stakeholder level. (emphasis added)

In short, it seems that the image of IT and its reputation in the organization arise from a set of *shared* perceptions among all stakeholder groups that exist over and above those at the individual level.

Therefore, it is important to understand and manage business's perceptions of IT *as a whole* and how IT *as a whole* perceives and presents itself to the business. The following are some common perceptions of the IT function as articulated by the focus group and various studies (Overby 2005):

- IT costs too much.
- IT takes too long to deliver.
- IT fails to deliver competitive differentiation.
- IT is not aligned with business strategy.
- IT doesn't do the right things.
- IT doesn't do things right.
- IT doesn't add value.
- IT is a barrier to change.
- IT is inflexible.

While these may or may not be valid, because people *act* on their perceptions, there are consequences to the organization (e.g., poor decisions, inefficiencies, and missed opportunities) if IT does not make an effort to address and manage existing perceptions of IT.

THE ROOT CAUSES OF PERCEPTIONS OF IT

In our earlier research into how IT is viewed by the rest of the organization, we suggested that an organization's needs for IT essentially parallel Maslow's hierarchy of needs (McKeen and Smith 1996). Maslow suggested that people are motivated by five sets of needs—(1) physiological, (2) safety, (3) love and belonging, (4) esteem, (5) and self-actualization—represented as a pyramid (Thierauf, Klekamp, and Geeding 1977). Only after lower-level needs are met can an individual concentrate on needs at the next highest level. Thus, physiological needs take priority over all others. The first four levels are “deficiency needs” meaning that the individual does not feel anything if they are met but feels anxious and increasingly frustrated if they are *not* met (Wikipedia 2007). Over time, these feelings can turn into hostility toward the source of frustration. The highest level, self-actualization, contains growth needs, which when fulfilled, do not go away but motivate the individual further. However,

if lower-level needs cease being met (e.g., as in a natural disaster or a war), then the individual will stop striving to meet higher-level needs and will refocus on meeting survival needs (McKeen and Smith 1996).

We described a similar but simplified three-level pyramid for addressing the organization's IT needs:

- **Level I needs.** At the most basic level, organizations require a **competent** IT organization that delivers basic IT services to the business. In order to be considered competent, IT must demonstrate that it can consistently deliver cost-efficient services as well as essential security, reliability, and integrity of data.
- **Level II needs.** At the next level, organizations need a **credible** IT organization that delivers high-quality systems that meet real organizational goals on time and on budget.
- **Level III needs.** After credibility has been established, organizations need an IT **partner** to help guide and direct the organization's use of technology to achieve the organization's strategic objectives.

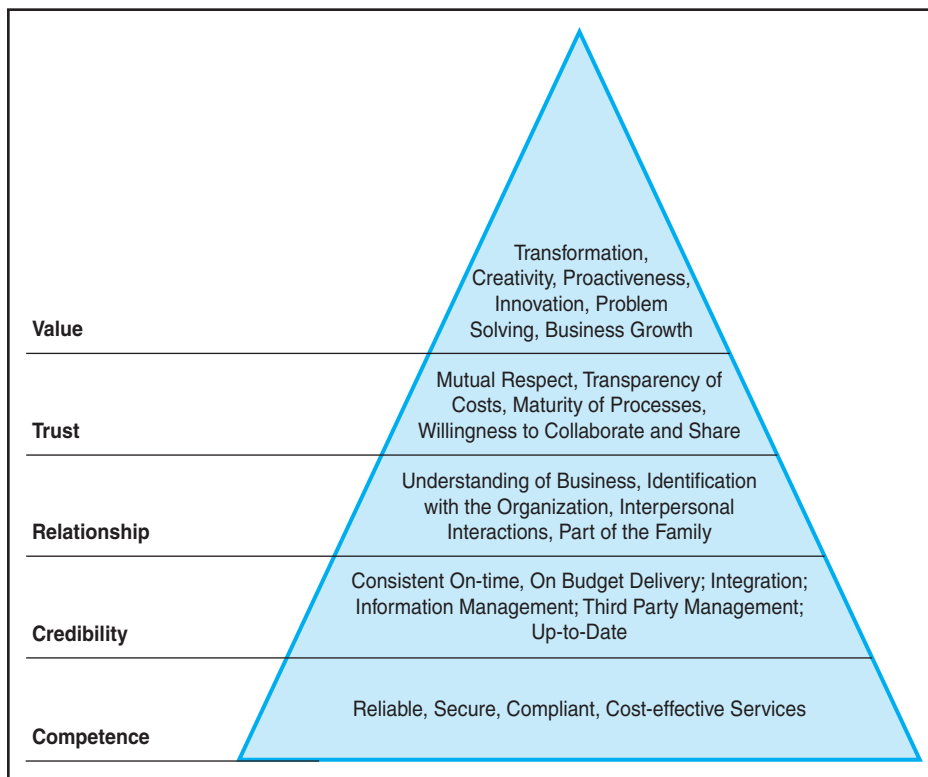
As with Maslow's hierarchy, we suggested that even if an IT organization is acting as a business partner, failure to meet lower-level needs will refocus the business on addressing those needs and could result in anxiety and frustration, which, in turn, could manifest itself in hostility toward IT (McKeen and Smith 1996). The focus group concurred that this analysis is still sound and that IT's failure to consistently address lower-level needs could be the source of many of the ongoing negative perceptions of IT. "They never forget that screw-up," said one manager. Another noted, "If nothing breaks, we're credible." "Everyone wants to be at level III," said a third, "but it's based on credibility; you must do what you say you will do."

More contemporary analysis of business needs at the first two levels shows that IT has made significant strides in being perceived as capable and credible in the past two decades (Anonymous 2002; Deloitte 2004; Overby 2005; Pastore and Cosgrove 2005). Service-level agreements, benchmarking, cost transparency, project management offices, and improved tools and technologies for system development have all helped to address many of the challenges that IT faced a decade ago. Unfortunately, important *new* challenges have helped undermine IT's image at these two layers. The advent of the Internet and online crime, heightened appreciation for security in a post-9/11 world, compliance laws and regulations, the increased visibility of IT errors when online systems fail, and the growing vulnerability of organizations because of their dependence on IT have all raised the bar on what is needed from a competent IT organization (Smith and McKeen 2006). Similarly, credibility involves a great deal more than it did ten years ago. Today's IT projects are considerably more complex than those of the past in that they involve many more elements, such as risk management; integration across multiple platforms and business units; anywhere, anytime access; customercentric services; information and content management; and adherence to numerous laws, regulations, and standards. Multiple stakeholder groups are typically involved as well, including different business units, outsourcers, various IT functions (e.g., architecture), and sometimes vendors or other third parties. At the same time, hardware, software, and development tools; methods; and practices are constantly changing.

The result is that staying a competent and credible IT function is a bit like walking along the shifting floors of a fun house; the ground keeps moving, and you're never sure what's going to jump out at you! Yet these are simply fundamentals for most IT organizations today. The real challenge is how to leverage the skills, capabilities, and investment the organization has in its IT department. Today competence and credibility are simply not enough to admit IT to the inner circle of business decision making.

Also, we now understand the nature of the business's higher-lever needs (i.e., partnership) in a much more nuanced fashion. There is now widespread recognition that business and IT need strong, positive interpersonal interactions before they can truly work together to make decisions for the organization (Jaska and Hogan 2006; Pastore and Cosgrove 2005; Tallon, Kraemer, and Gurbaxani 2000; Willcoxson and Chatham 2004). To paraphrase Maslow, the business needs to feel that IT is "part of the family" and will keep its best interests at heart. In turn, these relationships form the foundation on which trust is built. Corresponding to Maslow's "esteem layer," trust is a condition of mutual respect and confidence. As a result, competence, credibility, relationships, and trust are considered "deficiency needs" in that, when they are present, they are not noticed, but when absent, frustration, miscommunication, dysfunctional behavior, and ultimately negativity result. As one manager commented, "When things are going well, no one notices." Finally, there is a need for business value, or the self-actualization of the organization as characterized by innovation, the ability to learn from failures and mistakes, problem-solving, and proactiveness. Together, these suggest that the IT hierarchy of needs more closely parallels Maslow's than we previously thought (see Figure 4.1). Therefore, our original level III has been split into three new higher-level business needs, which are described in more detail below:

- **New level III need: relationship.** It is clear that IT is still not accepted as "part of the family" in many organizations. "We want to be loved, but we're still viewed as techies," said one manager. "The business views IT differently than other parts of the organization," said another. There is wide agreement that relationships are essential to changing perceptions. One researcher noted that IT managers are left out of decision making because of their naiveté about how relationships work at the highest levels of the business (Anonymous 2002). Experts point out the importance of a strong CIO-CEO relationship (Flint 2004; Prewitt 2005) and have noted that relationships are important because mutual understanding, interests, and expectations are formed and shaped during interpersonal interaction leading to business-IT alignment (Gold 2006). Often the need for relationship is described as a need for more communication to ensure that goals are fully understood and acted upon (Tallon, Kraemer, and Gurbaxani 2000). In general, there is a perception that IT and the business need to move closer together so they can act as a team (Pastore and Cosgrove 2005). Research shows that having a deep understanding of (and identification with) the organization is strongly associated with positive perceptions of the impact of IT (Jaska and Hogan 2006). This is why so many IT organizations have created roles for relationship managers whose job is to represent IT to the business, understand business needs, and ultimately to align the two (Young 2005). "It's all about relationships," said a manager. "We need to get out there with the business, have lunch, and talk with them. This really makes a difference."

Figure 4.1 The IT Hierarchy of Needs

- New level IV need: trust.** While relationships build interpersonal trust, trust in the IT function itself is also needed. At this level, both business and IT staff must trust IT's processes, leaders, and plans. One manager described an example of how a lack of trust is manifested in her organization: "There's a feeling that IT is self-serving. The users say, 'We did the package selection ourselves because we knew you wouldn't come up with it.'" IT's processes are notoriously convoluted and bureaucratic, leaving the business unsure of how to accomplish their business strategies with IT (McKeen and Smith 2001; Smith, McKeen, and Singh 2007). From strategy alignment to prioritization to budgeting and resourcing to delivering value to managing ongoing costs, it must be clear that what IT is doing is for the benefit of the enterprise, not itself. This is why so many experts recommend transparency of costs and improved communication about IT's value (Levinson and Pastore 2005; Overby 2005; Prewitt 2005). Similarly, developing more mature processes to carry out the work of IT and effective leadership is often cited as the precursor to delivering business value (Gerrard 2004; Young 2005). Before real value can be achieved, IT and the business must have mutual respect for each other's skills and abilities and be willing to defer to each other's area of expertise. It is a lack of trust that often leads business managers to question IT costs or to make "end runs" around IT. Trust is built on agreement on four elements: (1) the role of IT, (2) that it's doing things

right, (3) that it's doing the right things, (4) and that it's positioning the organization well for the future (Deloitte 2004; McKeen and Smith 2003). Trust is also essential because of the increasing ambiguity, uncertainty, and complexity of IT work and the growing need for business-IT collaboration (Anonymous 2002; Mack 2006; Willcoxson and Chatham 2004).

- **New level V need: value.** The goal of addressing the four “deficiency needs” is, of course, to get to the point where IT can deliver real business value to the organization. Researchers have found that business executives can pinpoint areas in the organization where IT is creating value and that these perceptual measures correlate strongly with more traditional objective measures (Apfel 2006; Tallon, Kraemer, and Gurbaxani 2000). Studies also show that CEOs want their IT organizations to deliver value more consistently (Prewitt 2005). Business is looking for IT to provide transformational leadership, to offer innovative and creative solutions to business problems, and to leverage existing investments in technology (Smith and McKeen 2006). Yet poor perceptions of how well IT delivers value often result in tentative IT investments and underuse of technology by the business, which, in turn, can further undermine an organization's competitive position (Gerrard 2004).

Addressing these three new layers of need while remaining competent and credible represents the crux of the challenge for IT in managing the business's perceptions. The next section will address some ways that IT functions can measure and work to change perceptions at these levels.

MANAGING PERCEPTIONS

“Managing perceptions is a daily challenge,” one manager said with a sigh. “They always want to know what you’ve done for them lately.” There is no shortage of suggestions about how to better manage poor business perceptions of IT and just as much disagreement about what should be done. What is clear is that managing perceptions actually consists of three steps: (1) understanding current perceptions, (2) addressing perceptual problems, and (3) monitoring perceptions on an ongoing basis. All IT organizations should, therefore, have strategies in place for dealing with each of these.

1. **Understanding current perceptions.** It is often confusing to IT leaders that individual perceptions of IT appear to be good but overall perceptions remain negative (Anonymous 2002). As noted above, overall perceptions are not necessarily built one by one (although this won't hurt). Instead, IT needs mechanisms for understanding *aggregate* perceptions. While it may seem odd to some to measure overall perceptions, rather than use more objective measures, there are two important reasons for doing so. First, perceptions, whether accurate or not, *are* important because they guide behavior at a subconscious level (Gladwell 2005). Second, perceptions have been shown to be surprisingly accurate measures of actuality (Tallon, Kraemer, and Gurbaxani 2000).

Current perceptions can be captured in both qualitative and quantitative ways, such as through surveys, focus groups, or interviews (Gold 2006). However,

IT managers tend to distrust formal surveys as not capturing meaningful dimensions of the business-IT relationship (Smith 2006). “I’m not convinced formal surveys touch on perceptions,” said a manager. Another added, “The best indicator of how the business feels about you is how the users wave at you at night. Metrics simply don’t get at perceptions.”

A good starting point for understanding perceptions is often a simple assessment of overall feelings and beliefs based on a short set of “impressionistic” questions (McKeen and Smith 1996; McKeen and Smith 2003; Smith 2006). These can be supplemented with comments or interviews, if more detail is needed. Questions can be based on the “IT hierarchy of needs” outlined above, or they can relate to a set of categories identified by the organization (e.g., behaviors and attitudes, leadership, and execution excellence). Appendixes A and B provide two different samples of assessment tools, which have been successfully used by practitioners to get at perceptions in the business-IT relationship. Such tools can be used by IT alone, by pairs of IT and business managers, or by business managers alone. In all cases, however, for the reasons outlined above, it is essential to focus on overall impressions, rather than on individual relationships.

2. Addressing perceptual problems. Once perceptions at this level are understood, they can be “educated, trained, and controlled” (Gladwell 2005). There is no single best way to do this. “We’re each trying to hit the target and using a variety of approaches,” said a manager. There are certainly many lists of activities IT should be doing to resolve negative perceptions (see Jaska and Hogan 2006; Mack 2006; Pastore and Cosgrove 2005 for some of these). However, participants suggested that generalized marketing programs have not been effective, and this belief is also borne out by practitioner surveys (Pastore and Cosgrove 2005). Three approaches for addressing perceptual problems were recommended:

- a. Ensure that the IT function understands and practices a set of core IT values.** These should be established, communicated, and monitored by the IT leadership team, who should take accountability for IT’s image in the rest of the organization. IT’s brand should be consistent across the function and reflected in its leadership, daily activities, and processes.
- b. Build from the bottom up.** While all IT organizations want to deliver innovation, creativity, and business value, the business will not accept these types of initiatives unless IT is already addressing its lower-level needs. Efforts to address perceptions should, therefore, start from the bottom up, ensuring that IT is considered competent and credible, has good relationships, and is trusted as a function.
- c. Use focused metrics and communication to retrain perceptions.** IT organizations often err on the side of providing too many metrics and too much communication, which is why scorecards and dashboards have become so popular with business executives (Kaplan and Norton 1996; McKeen and Smith 2003; Smith, McKeen, and Street 2004). Once the IT leadership team has targeted a set of needs to address, more focused efforts can be employed. For example, if IT is not trusted as a function, internal initiatives can streamline processes and make costs and service levels more transparent. Communications and metrics may then be used to effectively correct misperceptions or clarify confusion. Education should also be used selectively, for example,

to help business leaders better understand what IT is doing in this area. “We must be honest with our message,” said a manager, “but we can use communication and education to interpret situations for the business.”

3. Monitor perceptions on an ongoing basis. While value should always be the objective of all IT activities, we suggest that *perceptions* of the value IT adds will become increasingly positive as IT addresses lower-level business needs. To this end, IT should monitor perceptions of value with every new initiative (Apfel 2006). A key means of monitoring perceptions is with informal “check-ins” with business leaders. One participant stressed that IT managers should make regular opportunities to interact casually with their business colleagues. He believes “management by walking around” will help deal with many problem perceptions—both those that are real and those that are the result of faulty interpretations. Another informal indicator is “how much the CFO hassles us.” More formal assessments of overall perceptions should be done annually, using one of the tools suggested above. These will help demonstrate trends and show where management efforts are working or need improvement. However they are monitored, perceptions should be assessed and discussed regularly by the IT management team and viewed as appropriate and valuable indicators of how well IT is serving the needs of the organization and delivering value.

CONCLUSION

In spite of significant achievements in its delivery of services, negative perceptions of IT persist. In addition, these perceptions tend to be undervalued by IT managers who, possibly because of their training, prefer harder and more objective assessments of their performance. This chapter has shown that positive perceptions of IT must be built by addressing four layers of business need: (1) competence,

(2) credibility, (3) relationships, and (4) trust, in this order. Failing to meet these needs will likely reinforce existing negative perceptions and result in an inability to deliver real business value. Understanding and managing perceptions is, therefore, at least as important for IT managers as dealing with the “hard numbers” and should command more of their effort and attention than it has to date.

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Appendix A

Suggested Indicators of How Positively IT Is Perceived

Competence

IT services are considered reliable and high quality by the business.
Migration to new technology is managed effectively.
Our infrastructure supports our current business needs.
Our service levels are consistently high.

Credibility

IT provides technological leadership to the organization.
Our middle-level business managers are strong supporters of information systems.
The IT department consistently meets its commitments to users.
Project management is one of our core competencies.

Relationship

IT and line management share the responsibility for delivering IT projects.
The IT department is consulted about most business decisions.

IT staff understand the business well.
Employees from the IT department are actively recruited by other areas of the business.

Trust

IT plans are closely tied to the organization's strategic plans.
The IT leadership team has a unified vision of its mission and values.
The organization considers IT leadership to be strong.
The role of IT has been clearly articulated to the organization.

Value

IT investments are positioning the firm well for the future.
IT is actively involved in the organization's long-term planning activities.
Our CIO is a member of the organization's senior management team.
Top executives consider IT to be a source of strategic advantage.

Appendix B

Business Partner Review

(after Smith 2006)

These reviews are a facilitated dialogue between matched pairs of IT and business leaders and are designed to capture overall perceptions in the business-IT relationship. Each pair of leaders has a working relationship with each other, but as a group, different parts of the organization and different levels of the relationship are represented. The pair discusses a set of ten questions in a ninety-minute face-to-face conversation. Each question specifically relates to a mutual goal for the business-IT partnership, as

determined through preliminary interviews (see below for a sample set of questions). Together, the pair must agree on a mutual grade (using a five-point scale) for each question. In addition, the facilitator captures any relevant comments. Results are rolled up and averaged to provide a rating for the relationship in each category, as well as an overall average and a summary of comments. Specific questions can change year by year, but the categories of perception stay the same.

Behaviors & Attitudes	<ul style="list-style-type: none"> • Do the business and IT effectively collaborate, sharing information, resources, and expertise to accomplish our objectives? • Do we effectively collaborate, sharing information, resources, and expertise to accomplish our objectives? • Do we display a “can-do attitude,” sense of urgency, inclusion, and flexibility?
Technology Leadership	<ul style="list-style-type: none"> • Does IT demonstrate and apply insight into leading-edge technologies? • Does IT envision alternatives and introduce ideas that meet the needs of the business?
Execution Excellence	<ul style="list-style-type: none"> • Do we (the business and IT) assume joint accountability for arriving at solutions that meet both our needs? • Do we define the best mix of capability, cost, and schedule to maximize the value to the business? • Do we appropriately staff our projects, using the right people with the right skills at the right level? • Do we communicate relevant issues with appropriate advance notice and adequate information given? • Do we meet our project commitments with regard to scope, schedule, and budget?

MINI CASE

IT Leadership at MaxTrade

Richard Fanning surveyed his home office gloomily as he pondered the disaster before him. He'd just completed a month's worth of fact-finding on the state of IT at his newest client, MaxTrade, and he was beginning to realize just how deep the company's IT problems were. As an IT turnaround specialist, Richard was often asked to take on difficult CIO positions on a temporary basis, and he was used to facing management challenges, but MaxTrade (if he took the job, and he wasn't sure yet if he would) would be the toughest of his career. "How could this have happened?" he asked himself. "Money certainly isn't the issue." The company was spending lots . . . but on what? There was no IT plan. Backup and recovery planning was minimal. System outages were increasing. The internal auditors' reports were highly critical of the rapidly escalating operational risks.

MaxTrade is a brokerage firm set up to make extensive use of IT. It was founded by a career entrepreneur who provided the initial inspiration but is no longer involved in daily operations. CEO Bruce Robinson, who holds the next-largest share, developed the company and oversaw its impressive growth. The firm now has six divisions: besides research and analysis, institutional trading, and investment banking, it has other business units that are responsible for different types of trading accounts. Online trading allows clients to make their own trades; discount trading fills buy and sell orders but offers no investment advice; wealth management provides full service. Clients may also view their accounts online without making any trades.

The company is highly profitable; the bottom line is the first consideration in every decision. As Robinson explained to Richard in their first interview, "The one thing that people in this industry are clear about is that they're all in business to make money." And short-term thinking is the order of the day. "In this business long-term planning is where we're going to go for lunch," remarked one business executive

Richard interviewed during his fact-finding. In the volatile and dynamic world in which MaxTrade operates, priorities are constantly changing and whole business units have to be able to turn on a dime to take advantage of new opportunities. Staff make real-time decisions that could make or cost the firm millions of dollars. The risks are extremely high. A solid IT infrastructure, available 100 percent of the time, is essential.

At first, MaxTrade's IT was handled by a CTO, but it had clearly outgrown his capabilities. The initial technology requirements were straightforward: get an online brokerage off the ground by bringing the required technologies together to provide an online trading platform. As the company grew, however, it became evident to the CEO that he was the wrong person to develop the IT department beyond its infant state. Many poor decisions were made, resulting in the waste of hundreds of thousands of dollars in unutilized software licenses, server capacity, and development. Sour relationships with vendors resulted in frequent switching and an integration nightmare.

"Over the last two years, no one was happy—not the business unit heads, not the users, not the CTO," Robinson told Richard. "Finally, he resigned and for the past three months, we've been looking for someone to take the job of CIO. But we're in such a mess, it's been a tough sell. What I need is to have you get us on track again within the next twelve months. You'll have my support, of course, and you'll report to me, but you'll need to get the business unit heads on board as well. They have a lot of independence here at MaxTrade because of the money they make for us. You've got to convince them they can make more money your way than the way things are today."

Richard considered the company's current situation. It was no wonder they couldn't find anyone to take the job, he thought. At present, the politics involved in determining what IT

worked on were so sensitive that no one in IT dared to say no to any new project. As a result, IT had 932 projects on the books that the users *thought* were all being worked on, even though the company had only 152 IT people to do development. Morale was at rock bottom. Turnover was approaching 50 percent annually.

The senior management at MaxTrade clearly felt as though they were standing on a “burning platform” with regard to IT. They were looking to Richard to turn things around, but the question was, did he want the job? Surveying the scope of the problem, the answer was clearly no. The situation was dire, and it was going to be next to impossible to get the whole thing working properly. And yet . . . he could see how much they needed a solution. He had spent hours talking to people in all parts of the company, and he *knew* he could make a difference not only to the organization’s future, but to the lives of many of its staff. And despite the ghastly experiences he knew were yet to be discovered, he also knew that he’d always be sorry if he let such a challenge go by. He picked up the phone to call Robinson. “I’ll do it,” he told him. “But let’s get started before I recover my sanity and change my mind.”

The necessary first steps were clear, and Richard’s first month as temporary CIO was as brutal as he had expected. He began by doing a thorough assessment of the current technology situation at the company. At the same time, he spent long hours in all parts of the firm, getting to know both the business and the people involved. He logged many twelve- to fourteen-hour days, speaking with users, sitting with them and learning what they did, going on sales calls, and finding out firsthand the issues they faced on the job. Socializing was part of this work too, to build up the trust that would be the foundation for the difficult job ahead. “This is something I always do when I start at a new company,” he explained to Robinson. “Many IT people don’t do this, but there is no

substitute for spending the time to get to know the business well.”

Eight weeks into his time with MaxTrade, he at least had the basis of an action plan in mind, but it would take all his leadership skills to pull it off. He believed that the company was not going to be able to use IT effectively in an increasingly competitive marketplace or even keep up with simple business requests unless a number of key changes were made—especially how IT work was done and how decisions about it were made. “These are tough people. Not all of them are going to be receptive to my ideas,” he said to himself. “I’m going to have to put my job on the line to get them to do it differently.”

Never one to pull punches, Richard also had to deliver some tough messages to senior management about systems development. Not only did he need their support for some fairly drastic actions, but he had to get them thinking differently about their own business if he were going to make any headway in delivering new functionality. It was a hard reality that not all 932 projects could be worked on. Somehow the resources available would have to be made to match the work to be done.

The tough talk would have to continue within IT to ensure that it could deliver on these projects. What was needed soon was a culture of customer service to the users of what IT provided. “The immediate challenge here,” he explained to Robinson, “is to build a team capable of providing innovative solutions on a timely basis and to start treating the business units as customers. We have to convince everyone that we all work together and IT is committed to building a partnership with them.”

“It’s going to take a lot to make IT credible enough for that to happen,” Robinson answered, “but, as I said before, you can count on my support.”

“OK,” Richard said, “this is what the action plan is going to look like . . .” ■

DISCUSSION QUESTIONS

The CEO Robinson tells Richard, “What I need is to have you get us on track again within the next twelve months.”

1. What does it mean to be “on track”?

2. What are the next steps?
3. Is one year achievable? Why or why not?

MINI CASE

Investing in TUFs

"Why do I keep this around?" Martin Drysdale wondered. "It infuriates me every time I see all that satisfaction over something that is now the bane of my existence."

He looked gloomily at the offending photo, which showed the project team happily "clinking" pop cans and coffee cups in a toast: "Here's to TUFs!" The Technical Underwriting Financial System (TUFs) was the largest single investment in IT ever made by Northern Insurance, and it was going to transform Northern by streamlining the underwriting processes and providing strategic e-business capabilities. The TUFs team had brought the project in on time and on budget, so the party was a thank-you for all of the team's dedicated, hard work. But it was two years ago when the camera captured the happy moment for posterity, and Martin, CIO for Northern, had celebrated with the rest.

"Yeah, right," Martin grimaced as he turned from the photo to the e-mail message on his computer screen, summoning him to a meeting with his boss that morning to discuss TUFs. The system had turned into a nightmare in its first few months of operation. Now his job was on the line. What was supposed to have brought efficiency to the underwriting process and new opportunities for top-line growth had become a major corporate money pit. TUFs was still eating up the vast majority of Northern's IT budget and resources to fix the underwriting errors that kept appearing, and resistance to the system had grown from sniping and grumbling into calls for Martin's head. "No wonder we're not saving any money, though, with senior underwriting managers still insisting on receiving some of their old reports, even though TUFs lets them look up the same information online anytime they want," Martin fumed. The meeting with the CFO was to discuss TUFs and the company's "very significant investment in this system." Feeling like a condemned prisoner on his way to the gallows, Martin grabbed his suit

jacket, straightened his tie, and headed up to the seventh floor executive suite.

An hour later Martin was feeling very well grilled as he was confronted with a long list of the problems with TUFs. The CFO, Melissa Freeman, had done her homework. Before her was a binder full of TUFs documentation, stretching back almost three years from when the project had been first identified. "According to my calculations, Northern has spent almost \$4 million on this system, if you include all of the resources dedicated to fixing the problems identified *after* implementation," she noted. "And I have yet to see any cost savings in the underwriting department. Why?"

"It's true that there have been some unanticipated changes to the system that have cost us, but the underwriters have never bought into the system," Martin conceded. "They insist on following their old procedures and then using the system at the last possible moment as a 'double-check.' What can we do if they won't use the system the way it was designed?"

"Could there *possibly* be a reason why they don't like the system?" Freeman asked. "It seems to me from looking at these change reports that the system hasn't been meeting our basic underwriting needs."

Martin acknowledged that there had been some problems. "But my guys are technicians, not underwriters. They didn't get much participation from the underwriters in the first place. The underwriting department wouldn't take the time to bring my people up to speed on what they needed and why. As well, we were facing a very tight deadline, which meant that we had to defer some of the functionality we had originally intended to include. That was senior management's decision, and everyone was informed about it when it was made." He added that they were now asking for a TUFs training program and a help desk to handle questions that underwriters might face while using the system!

"A help desk and training program weren't in our original plan," Martin reminded Freeman. "These 'extras' are eating away at the system's benefits." According to the business case prepared by the users, TUFs was supposed to pay for itself over its first two years of operations from savings realized from the underwriting process. The system's problems certainly accounted for some of the extra costs, but the users hadn't made any of the process changes that would help those savings be realized. "They think we can just plug in the system and cost savings will appear like magic. And other parts of the system are going to take time to deliver benefits."

The "other parts" he was referring to were the e-business capabilities that TUFs provided. "If you will recall, this system was approved in the days when we *had* to have e-business or we were going to be dinosaurs. In retrospect, we could have cut back on this functionality more easily and left some of the underwriting functionality in, but who knew?"

"Well, as you know, our financial resources are very limited at present." Freeman leaned

forward. "I've been asked to make some recommendations to the executive committee about whether or not we should put more money into this system. TUFs has been our number one priority for two years now, and there are quite a few people saying that enough is enough—that we need to make some major changes around here."

Martin took a deep breath, waiting for the ax to fall. Freeman continued, "What I need to know now from you is this:

- What went wrong with our TUFs investment, and what can we do to prevent these problems in the future?
- What do we need to do to realize the benefits that were projected for TUFs?
- How can we measure these benefits?
- How can we best decide how to apportion our IT budget between TUFs and these other projects?"

As he slowly exhaled and felt his pulse resume, Martin nodded. "I've got some ideas. Can I get them to you in writing by the end of the week?" ■

DISCUSSION QUESTIONS

1. What went wrong with the TUFs investment, and what can be done to prevent these problems in the future?
2. What does Northern need to do to realize the benefits that were projected for TUFs?
3. How can they measure these benefits?

MINI CASE

IT Planning at ModMeters

Brian Smith, CIO of ModMeters, groaned inwardly as he listened to CEO John Johnson wrapping up his remarks. “So our executive team thinks there are real business opportunities for us in developing these two new strategic thrusts. But before I go to the board for final approval next month, I need to know that our IT, marketing, and sales plans will support us all the way,” Johnson concluded.

Brian mentally calculated the impact these new initiatives would have on his organization. He had heard rumors from his boss, the COO, that something big was coming down. He had even been asked his opinion about whether these strategies were technically doable, *theoretically*. But *both* at once? Resources—people, time, and money—were tight, as usual. ModMeters was making a reasonable profit, but the CFO, Stan Abrams, had always kept the lid screwed down tightly on IT spending. Brian had to fight for every dime. How he was going to find the wherewithal to support not one but *two* new strategic initiatives, he didn’t know.

The other VPs at this strategy presentation were smiling. Taking ModMeters global from a North American operation seemed to be a logical next step for the company. Its products, metering components of all types, were highly specialized and in great demand by such diverse customers as utility companies, manufacturers, and a host of other industries. Originally founded as Modern Meters, the firm had grown steadily as demand for its metering expertise and components had grown over the past century or so. Today ModMeters was the largest producer of metering components in the world with a full range of both mechanical and, now, digital products. Expanding into meter assembly with plants in Asia and Eastern Europe was a good plan, thought Brian, but he wasn’t exactly sure how he was going to get the infrastructure in place to support it. “Many of these countries simply don’t have the telecommunications and equipment we are going to need, and

the training and new systems we have to put in place are going to be substantial,” he said.

But it was the second strategic thrust that was going to give him nightmares, he predicted. How on earth did they expect him to put direct-to-customer sales in place so they could sell “green” electric meters to individual users? His attention was jerked back to the present by a flashy new logo on an easel that the CEO had just unveiled.

“In keeping with our updated strategy, may I present our new name—MMI!” Johnson announced portentously.

“Oh, this is just great,” thought Brian. “Now I have to go into every single application and every single document this company produces and change our name!”

Because of its age and scientific orientation, ModMeters (as he still preferred to call it) had been in the IT business a long time. Starting back in the early 1960s, the company had gradually automated almost every aspect of its business from finance and accounting to supply-chain management. About the only thing it didn’t have was a fancy Web site for consumers, although even *that* was about to change. Today ModMeters had systems reflecting just about every era of computers from punch cards to PCs. Unfortunately, the company never seemed to have the resources to invest in reengineering its existing systems. It just layered more systems on top of the others. A diagram of all the interactions among systems looked like a plate of spaghetti. There was *no way* they were going to be able to support two new strategic thrusts with their current budget levels, he thought as he applauded the new design along with the others. “Next week’s IT budget meeting is going to be a doozy!”

Sure enough, the following week found them all, except for the CEO, back in the same meeting room, ready to do battle. Holding his fire, Brian waited until each of the VPs had presented their essential IT initiatives. In addition

to what needed to be done to support the new business strategies, each division had a full laundry list of essentials for maintaining the *current* business of the firm. Even Abrams had got into the act this year because of new legislation that gave the firm's outside auditors immense scope to peer into the inner workings of every financial and governance process the organization had.

After listening carefully to each speaker in turn, Brian stood up. "As many of you know, we have always been cautious about how we spend our IT budget. We have been given a budget that is equal to 2 percent of revenues, which seriously limits what we in IT have been able to do for the company. Every year we spend a lot of time paring our project list down to bare bones, and every year we make do with a patchwork of infrastructure investments. We are now at the point where 80 percent of our budget in IT is fixed. Here's how we spend our money." Brian clicked on a PowerPoint presentation showing a multicolored pie chart.

"This large chunk in blue is just about half our budget," he stated. "This is simply the cost of keeping the lights on—running our systems and replacing a bare minimum of equipment. The red chunk is about 30 percent of the pie. This is the stuff we *have* to do—fixing errors, dealing with changes mandated by government and our own industry, and providing essential services like the help desk. How we divide up the remainder of the pie is what this meeting is all about."

Brian clicked to a second slide showing a second pie chart. "As you know, we have typically divided up the remaining IT budget proportionately, according to who has the biggest overall operating budget. This large pink chunk is you, Fred." Brian gestured at Fred Tompkins, head of manufacturing and the most powerful executive in the room. It was his division that made the firm's profit. The pink chunk easily took up more than half of the pie. Tompkins smiled. Brian went on, pointing out the slice that each part of the firm had been allotted in the previous year. "Finally, we come to Harriet and Brenda," he said with a smile. Harriet Simpson and Brenda Barnes were the VPs of human resources and marketing, respectively. Their tiny slivers were barely visible—just a few percent of the total budget.

"This approach to divvying up our IT budget may have served us well over the years,"—Brian didn't think it had, but he wasn't going to fight past battles—"however, we all heard what John said last week, and this approach to budgeting doesn't give us *any* room to develop our new strategies *or* cover our new infrastructure or staffing needs. While we might get a little more money to obtain some new applications and buy some more computers,"—Abrams nodded slightly—"it won't get us where we need to go in the future."

A third graph went up on the screen, showing the next five years. "If we don't do something *now* to address our IT challenges, within five years our entire IT budget will be eaten up by just operations and maintenance. In the past we have paid minimal attention to our infrastructure or our information and technology architecture or in reengineering our existing systems and processes." A diagram of the "spaghetti" flashed on. "This is what you're asking me to manage in a cost-effective manner. It isn't pretty. We need a better plan for making our systems more robust and flexible. If we are going to be moving in new directions with this firm, the foundation just isn't there. Stan, you *should* be worried that we won't be able to give our auditors what they ask for. But you should also be worried about our risk exposure if one of these systems fails and about how we are going to integrate two new business ventures into this mess."

Tompkins looked up from his papers. It was clear he wasn't pleased with where this presentation was headed. "Well, I, for one, *need* everything I've asked for on my list," he stated flatly. "You can't expect me to be the cash cow of the organization and not enable me to make the money we need to invest elsewhere."

Brian was conciliatory. "I'm not saying that you don't, Fred. I'm just saying that we've been given a new strategic direction from the top and that some things are going to have to change to enable IT to support the whole enterprise better. For example, until now, we have always prioritized divisional IT projects on the basis of ROI. How should we prioritize these new strategic initiatives? Furthermore, these new ventures will require a *lot* of additional infrastructure, so we need to figure out a way to afford this. And right now our systems don't 'talk' to the ones

running in other divisions because they don't use the same terminology. But in the future, if we're going to have systems that won't cost increasing amounts of our budget, we are going to have to simplify and integrate them better.

Tompkins clearly hadn't considered the enterprise's needs at all. He scowled but said nothing. Brian continued, "We are being asked to do some new things in the company. Obviously, John hopes there's going to be a payback, but it may take a while. New strategies don't always bear fruit right away." Now looking at Abrams, he said pointedly, "There's more to IT value than short-term profit. Part of our business strategy is to *make* new markets for our company. That requires investment, not only in equipment and product but also in the underlying processes and information we need to manage and monitor that investment."

Harriet Simpson spoke for the first time. "It's like when we hire someone new in R & D. We hire for quality because we want their ideas and innovation, not just a warm body. I think we need to better understand how we are going to translate our five key corporate objectives into IT projects. Yes, we need to make a profit, but Stan needs to satisfy regulators and Brenda's going to be on the hot seat when we start marketing to individuals. And we haven't even spoken about Ted's needs." As the VP of R & D, Ted Kwok was tasked with keeping one or more steps ahead of the competition. New types of products and customer needs would mean expansion in his area as well.

Abrams cleared his throat. "All of you are right. As I see it, we are going to have to keep the cash flowing from Fred's area while we expand. But Brian's got a point. We may be being penny-wise and pound-foolish if we don't think things through more carefully. We've put a lot of effort into developing this new strategy, and there *will* be some extra money for IT but not enough to do that plus everything all of you want. We need to retrench and regroup *and* move forward at the same time."

There was silence in the room. Abrams had an annoying way of stating the obvious without

really helping to move the ball forward. Brian spoke again. "The way I see it, we have to understand two things before we can really make a new budget. First, we need to figure out how each of the IT projects we've got on the table contributes to one of our key corporate objectives. Second, we need to figure out a way to determine the *value* of each to ModMeters so that we can prioritize it. Then I need to incorporate a reasonable amount of IT regeneration so that we can continue to do new projects at all."

Everyone was nodding now. Brian breathed a small sigh of relief. That was step one accomplished. But step two was going to be harder. "We have a month to get back to the board with our assurances that the IT plan can incorporate the new strategies and what we're going to need in terms of extra funds to do this. As I said earlier, this is *not* just a matter of throwing money at the problem. What we need is a *process* for IT planning and budgeting that will serve us well over the next few years. This process will need to accomplish a number of things:

- It will need to take an *enterprise* perspective on IT. We're all in these new strategies together.
- It will have to incorporate all types of IT initiatives—our new strategies, the needs of Fred and others for the new IT to operate and improve our existing business, Stan's new auditing needs, and our operations and maintenance needs.
- In addition, we *must* find some way of allocating some of the budget to fixing the mess we have in IT right now.
- It must provide a better way to connect new IT work with our corporate objectives.
- It must help us prioritize projects with different types of value.
- Finally, it must ensure we have the business *and* IT resources in place to deliver that value."

Looking at each of his colleagues in turn, he asked, "Now how are we going to do this?" ■

DISCUSSION QUESTION

Develop an IT planning process for ModMeters to accomplish the demands as set out above.