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I. INTRODUCTION

IT managers have struggled to deal with negative perceptions of IS for at least the last 15 years [Busch et al. 1991; McKeen and Smith 1996]. And it is clear that IS is still wrestling with many of these same challenges. A 2005 survey of business leaders gave IS's value to the organization a rating of 6 out of 10, where one is extremely negative and 10 is extremely positive [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 IS managers in developing strategy and concerns about IT's cost effectiveness and the value it adds [Willcoxson and Chatham 2004]. Several studies by McKinsey Associates and Gartner Group found similar results, e.g., "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 IS still has some work to do in understanding business leaders' overall perceptions of IS and addressing misperceptions (or problem) perceptions. To explore this issue, the authors convened a day-long focus group of senior IS managers from 15 different companies in a variety of industries. In preparation for this meeting, they were asked to review our 1996 paper on this topic [McKeen and Smith 1996]] and to consider how IS is currently perceived in their organization. We wanted to *validate our earlier findings*, which suggested that both positive and negative perceptions of IS arise from how business managers view IS's competence, credibility, and ability to partner with the business. We also wanted to *identify any new factors that now affect how IS is perceived* in the organization. Finally, we wished to *examine how best to measure and manage these perceptions*.

This current paper presents the conclusions of the focus group while placing the issues discussed in a larger context of other relevant research. It first looks at the concept of perceptions and why they are important for IS leaders to understand and manage. Next, it examines the nature of perceptions in the business-IS relationship and the factors which affect them. In the final two

[1] This paper focuses on the overall perceptions of the IS function. This should not to be confused with "IT effectiveness" which relates specifically to the IT artefact. While it is not argued in this paper, the authors believe that existing overall perceptions of the IS function will indeed affect impressions of IT effectiveness.

sections of this paper, we discuss some of the root causes of perceptual problems and present some practical approaches for measuring and managing perceptions in this relationship.

II. 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 stakeholders constitute a firm's reputation (i.e., identity or brand). A reputation includes not only facts and knowledge, but also emotions toward an organization. According to Weick et al. [2005]], perceptions are formed via the process of sense-making—the ongoing sequence of extracting information, interpreting, and enacting processes about things that concern reputation—and, according to Tallon and Kraemer [2007]], result in the formation of perceptions.

It is interesting 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 subconscious 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 subconscious minds, are grounded in a variety of factual and emotional factors, and are the basis for establishing a more enduring reputation. Furthermore, research has shown that managerial perceptions are uncannily accurate [Tallon and Kramer 2007; Venkatraman and Ramanujam 1987]].

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 reputation is an important intangible resource that must be carefully managed [Martinez and Norman 2004]]. While a firm's reputation may vary with its different stakeholder groups, studies show that those firms with good reputations are those which tend to align the interests of their various stakeholders [Martinez and Norman 2004].

However, while the concepts of reputation, perceptions and attitudes are also applied to IS by researchers and practitioners (e.g., Tallon and Kraemer 2007], how to manage them appropriately is much less well understood. Although many IS leaders believe that managing perceptions of IS is important, few feel that marketing IS to stakeholders is the way to deal with them [Pastore and Cosgrove 2005]. Sometimes, these efforts try to sell others in the organization on what IS wants to be, which can set up false expectations and further damage IS's reputation when they are not met [Schrage 2006]. Typically however, IS managers believe that "formal marketing of IT is not required because if the product/service 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-IS 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 IS's value may threaten the future success and influence of IS 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 IS and the organization, such as increased credibility, closer alignment, and improved teamwork [Pastore and Cosgrove 2005].

Second, focus group members pointed out that even within IS 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 IS who's responsible for how we

are perceived." Another noted, "We need internal credibility and trust inside IS in order to build it outside."

These comments are supported by recent research showing that organizational citizenship behaviors (OCBs) (i.e., behaviors which promote effective organizational function that are discretionary and not recognized by the formal reward system) are much lower for IS workers than for others in organizations [Moore and Love 2005]. OCBs tend to be higher when employees 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, employees are more likely to see their work as a social exchange (i.e., a relationship) rather than simply an economic one. The authors speculate that in high pressure, deadline-driven work such as that in IS, employees may not have time to exhibit OCBs. This thought was echoed by a focus group 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]. The focus group agreed, pointing out that gaining political alignment and collaboration is an important reason for managing perceptions in today's organizational environment. Thus, at a time when IS staff is expected to be resourceful, proactive, and innovative, it is vital that managers ensure that the internal perceptions of IS staff toward IS are positive.

Third, perceptions can simply be inaccurate 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 perceptions can be trained to be more accurate, and this is where managing them becomes important.

III. PERCEPTIONS IN THE BUSINESS-IS RELATIONSHIP

Before looking at how perceptions in the business-IS 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 IS managers learn how and where their efforts can have an impact.

The most obvious problem for IS in dealing with perceptions is that they vary significantly among stakeholders. There are a number of factors that affect perceptions in the business-IS relationship:

- **The sub-function of IS with which the user deals.** In many organizations, there is no single brand or identity which IS promotes to its own staff. Therefore, it is not surprising that different parts of the business (and even different parts of IS) can have significantly different experiences with IS. Focus group managers explained that, while the business thinks of the IS function as a single entity, different parts of IS see themselves differently and have different strengths and weaknesses. For example, IT operations can be very efficient and customer-centric, but applications development or IT planning processes can be inadequate. One manger noted that his organization has a centralized IS function for shared services and planning, while the rest of IS is 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 IS manager, "because central IS 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 IS department was trying to serve three different businesses. "The vision of IS 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 IS will affect their perceptions and result in different perspectives on how well IS 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 view of IS is especially important because it contributes strongly to how IT is used in the organization. Positive attitudes toward IS are co-related with more progressive use of technology [Tallon et al. 2000]. A number of surveys show that senior leaders in particular have mixed feelings about the role, importance and value of IS [Flint 2004; Anonymous 2002; Willcoxson and Chatham 2004; Prewitt 2005]. While almost all studies have found that senior leaders believe that IS 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 IS is viewed. One focus group manager noted, "Our CEO is very hands-off with IS, so the different business units each do what they like." Unfortunately, CIOs appear to have different perceptions of their relationship 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 that way [Flint 2004].

- **The rising bar of expectations.** One of the biggest frustrations for IS, according to the focus group, is that the bar of expectations of what IS should be doing is constantly shifting. While surveys show that there have been significant improvements in many aspects of IS's work, overall impressions of IS remain negative [Anonymous 2002; Willcoxson and Chatham 2005]. One study noted that "at the micro level of individual service and communication, the IS-business relationship is much healthier than it was. However, considerable work needs to be done at the macro level in promoting understanding of IS's capacity and potential across the organization" [Anonymous 2002]. The phenomenon that improvements in the business-IS relationship at the individual level are not necessarily reflected in overall perceptions of IS was first noted more than 20 years ago [Smith 1990].

Each of these factors suggests that the overall image of IS 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 IS and its reputation in the organization arise from a set of shared perceptions amongst all stakeholder groups that exist over and above those at the individual level.

Therefore, while as the focus group pointed out "perceptions move all over," it is important to understand and manage business' perceptions of IS *as a whole* and how IS *as a whole* perceives and presents itself to the business. The following are common perceptions of the IS function, as articulated by the focus group and various studies [Overby 2005]:

- IT costs too much;
- IS takes too long to deliver;
- IS fails to deliver competitive differentiation;

- IT is not aligned with business strategy;
- IS doesn't do the right things;
- IS doesn't do things right;
- IS doesn't add value;
- IS is a barrier to change;
- IS is inflexible.

While these may or may not be valid perceptions, because people *act* on their perceptions at this level, there are consequences to the organization in poor decisions, inefficiencies, and missed opportunities, if IS does not make an effort to address and mange them.

IV. THE ROOT CAUSES OF PERCEPTIONS OF IS

In our earlier research into how IS 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, which can be represented in a pyramid, the most basic forming the base of the pyramid [Thierauf et al. 1977]. These are: physiological; safety; love and belonging; esteem; and self-actualization. Only after lower level needs are met, can an individual concentrate on his needs at the next highest level. Thus, physiological needs take priority over all others. Furthermore, the first four levels are "deficiency needs" in 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 stop 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 re-focus on meeting his/her survival needs [McKeen and Smith 1996].

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

- **Level 1 Needs.** At the most basic level, organizations require a **competent** IS organization that delivers basic IT services to the business. In order to be considered competent, IS 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** IS organization that delivers high-quality systems on time and on budget which meet real organizational goals.
- **Level III Needs.** After credibility has been established, organizations need an IS **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 IS organization is acting as a business partner, failure to meet lower level needs will re-focus the business on addressing those needs and could result in anxiety and frustration, which in turn could manifest itself in hostility towards IS [McKeen and Smith 1996]. The current focus group concurred that this analysis is still sound and that IS's failure to consistently address lower level needs could be the source of many of the ongoing negative perceptions of IS. "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 IS has made significant strides in being perceived as capable and credible in the past two decades [Deloitte 2004; Pastore and Cosgrove 2005; Anonymous 2002; Overby 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 IS faced a decade ago. However, at the same time, important *new* challenges have helped undermine IS'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 IS 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 IS organization [Smith and McKeen 2006]. Similarly, credibility involves a great deal more than it did 10 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, customer-centric 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 IS 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, credible IS function is a bit like walking through 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 IS organizations today. The real challenge is how to leverage the skills, capabilities and investment the organization has in its IS department. Today, competence and credibility are simply not enough to admit IS to the inner circle of business decision-making.

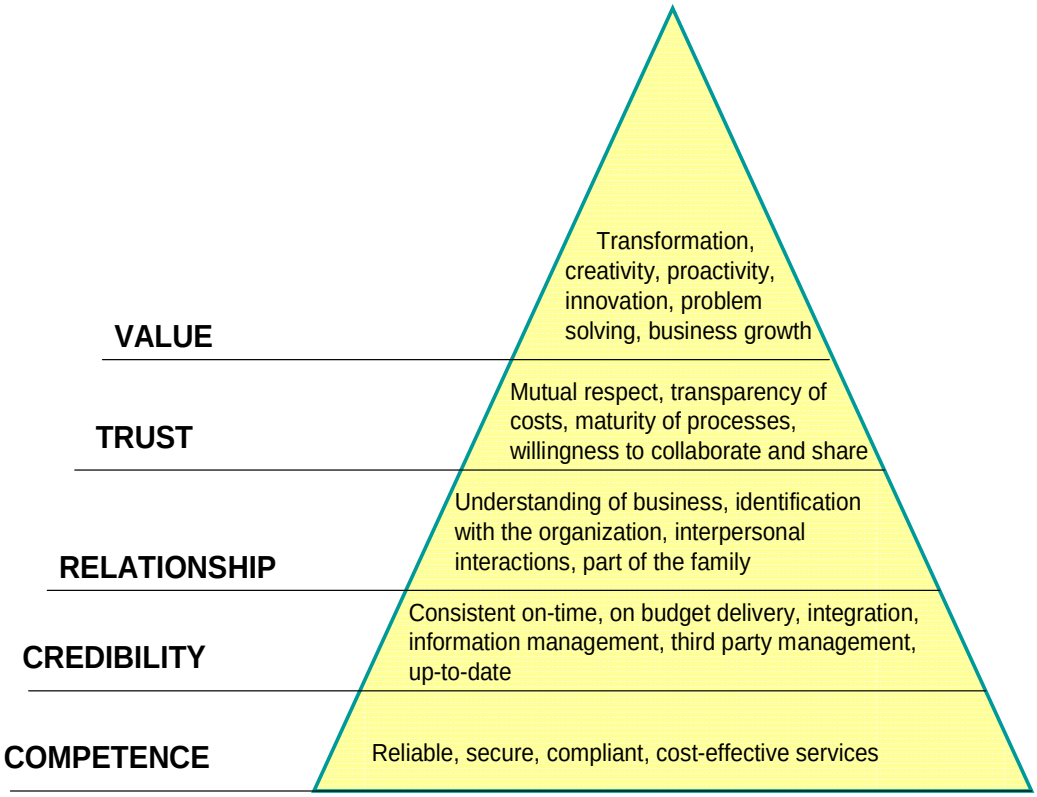

Figure 1. Business Hierarchy of IT Needs

While these needs are still important, we now understand the nature of the business' higher level needs (i.e., partnership) in a much more nuanced fashion. There is now widespread recognition that business and IS need strong, positive interpersonal interactions before they can truly work together to make decisions for the organization [Tallon et al. 2000; Willcoxson and Chatham 2004; Pastore and Cosgrove 2005; Jaska and Hogan 2006]. To paraphrase Maslow, the business needs to feel that IS 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 in each other. Competence, credibility, relationships and trust could each be 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 IS hierarchy of needs more closely parallels Maslow's than we previously thought (see Figure 1). These new higher-level business needs are described in more detail below:

- **New Level III Need: Relationship.** The focus group made it clear that IS is still not accepted as "part of the family." "We want to be loved, but we're still viewed as techies," said one. "The business views IS differently than other parts of the organization," said another. There is wide agreement that relationships are essential to changing perceptions. One researcher noted that IS managers are left out of decision-making because of their naivety 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 it is in interpersonal interaction that the mutual understanding, interests and expectations are shaped which lead to business-IS 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 et al. 2000]. In general, there is a perception that IS and business need to move closer together so that 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 IS 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; Smith et al. 2007]. "It's all about relationships," said a focus group manager. "We need to get out there with the business, have lunch and talk with them. This really makes a difference."

- **New Level IV Need: Trust.** While relationships build interpersonal trust, trust in the IS itself is also needed. At this level, both business and IS staff must trust IS's processes, leaders and plans. One focus group manager described an example of how a lack of trust is manifested in her organization: "There's a feeling that IS is self-serving. The users say, 'we did the package selection ourselves because we knew you wouldn't come up with it.'" IS's processes are notoriously convoluted and bureaucratic, leaving the business unsure of how to accomplish their business strategies with IS [Smith et al. 2007; McKeen and Smith 2001]. From strategy alignment to prioritization to budgeting and resourcing to delivering value to managing ongoing costs, it must be clear that what IS 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 IS's value [Prewitt 2005; Levinson and Pastore 2005; Overby 2005]. Similarly, developing more mature processes to carry out the work of IS and effective leadership is often cited as the precursor to delivering business value [Gerrard 2004; Young 2005]. Before real value can be achieved, IS 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 mangers to question IT costs or to make "end runs" around IS. Trust is built on agreement on four elements—the role of IS, that it's doing things right, that it's

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

- **New Level V Need: Value.** The goal of addressing the four "deficiency needs" is, of course, to get to the point where IS can deliver real business value to the organization. Researchers have found that business executives can pinpoint areas in the organization where IS is creating value and that these perceptual measures correlate strongly with more traditional objective measures [Tallon et al. 2000; Apfel 2006]. Studies also show that CEOs want their IS organizations to deliver value more consistently [Prewitt 2005]. Business is looking for IS to provide transformational leadership, innovative and creative solutions to business problems and to leverage existing investments in technology [Smith and McKeen 2006]. Yet poor perceptions of how well IS delivers value often result in tentative IT investments and underutilization 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, represent the crux of the challenge for IS in managing business' perceptions. The next section will address some ways that IS functions can measure and work to change perceptions at these levels.

V. MANAGING PERCEPTIONS

"Managing perceptions is a daily challenge," sighed one manager. "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 IS and just as much disagreement about what should be done. What is clear is that managing perceptions actually consists of three steps: understanding current perceptions, addressing perceptual problems, and monitoring perceptions on an ongoing basis. All IS organizations should therefore have strategies in place for dealing with each of these.

1) **Understanding current perceptions.** It is often confusing to IS leaders that individual perceptions of IS appear to be good but overall perceptions remain negative [Anonymous 2002]. As noted previously, overall perceptions are not necessarily built one by one (although this won't hurt). Instead, IS 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 actual fact [Tallon et al. 2000; Tallon and Kraemer 2007].

   Current perceptions can be captured in both qualitative and quantitative ways, such as through surveys, focus groups or interviews [Gold 2006]. However, IS managers tend to distrust formal surveys as not capturing meaningful dimensions of the business-IS relationship [Smith 2007]. "I'm not convinced formal surveys touch on perceptions," said a focus group 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 2007]. These can be supplemented with comments or interviews, if more detail is needed. Questions can be based on the "IT hierarchy of needs," as outlined previously, or it can relate to a set of categories identified by the organization (e.g., behaviors and attitudes, leadership and execution excellence). Appendices A and B provide two different samples of assessment tools, which have been successfully used by some of the organizations in our focus group to get at perceptions in

the business-IS relationship. Such tools can be used by IS alone; by pairs of IS and business managers; or by business managers alone. In all cases however, it is essential to focus on *overall* impressions, rather than on individual relationships.

2) **Addressing Perceptual Problems.** Once perceptions are understood, they can be "educated, trained and controlled" [Gladwell 2005]. There is no one best way to do this. "We're each trying to hit the target and using a variety of approaches," said a focus group manager. There are certainly many lists of activities IS should be doing to resolve negative perceptions [see Pastore and Cosgrove 2005; Jaska and Hogan 2006; Mack 2006a for some of these]. However, participants felt that generalized marketing programs have not been effective and this belief is also borne out by practitioner surveys [Pastore and Cosgrove, 2005]. The focus group recommended three avenues for addressing perceptual problems:

   1. **Ensure that the IS function understands and practices a set of core IS values.** These should be established, communicated and monitored by the IS leadership team, who should take accountability for IS's image in the rest of the organization. IS's brand should be consistent across the function and reflected in its leadership, daily activities and processes.

   2. **Build from the bottom up.** While all IS organizations want to deliver innovation and creativity and business value, the business will not accept these types of initiatives unless IS is already addressing its lower level needs. Efforts to address perceptions should therefore start from the bottom up, ensuring that IS is considered competent and credible, has good relationships and is trusted.

   3. **Use focused metrics and communication to retrain perceptions.** IS 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 [McKeen and Smith 2003; Smith et al. 2004; Kaplan and Norton 1996]. Once the IS leadership team has targeted a set of needs to address, more focused efforts can be employed. For example, if IS 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 IS 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 IS activities, we suggest that *perceptions* of the value IS adds will become increasingly positive as IS addresses lower level business needs. To this end, IS 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 member stressed that IS 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 earlier. 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 IS management team and viewed as appropriate and valuable indicators of how well IS is serving the needs of the organization and delivering value.

VI. CONCLUSION

In spite of significant achievements in its delivery of services over the past decade, negative perceptions of IS persist. However, all too often the value and reality of perceptions have been undervalued by IS managers, who, possibly because of their training, prefer harder and more objective assessments of their performance. This paper has shown that positive perceptions of IS must be built by addressing four layers of business need: competence, credibility, relationships and 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 IS 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: SAMPLE BUSINESS PARTNER REVIEWS

(after Smith 2006)

These reviews are a facilitated dialogue between matched pairs of IS and business leaders and are designed to capture overall perceptions in the business-IS 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 10 questions in a 90-minute face-to-face conversation. Each question specifically relates to a mutual goal for the business-IS partnership, as determined through preliminary interviews (see following 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 on year, but the categories of perception stay the same.

Behaviors & Attitudes	• Do business and IS 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	• Does IS demonstrate and apply insight into leading-edge technologies? • Does IS envision alternatives and introduce ideas that meet the needs of the business?
Execution Excellence	• Do we (business and IS) 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? • De 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?

ABOUT THE AUTHORS

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