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Researcher Biographies

Rajiv Kohli is an associate professor of Management Information Systems at the College of William & Mary. He received his PhD from the University of Maryland, Baltimore County. For over 15 years, he has worked or consulted with IBM Global Services, SAS Corporation, United Parcel Service, AM General, MCI Telecommunications, Westinghouse Electronics, Wipro Corporation and Godrej Industries (India), in addition to several healthcare organizations. Prior to joining full-time academia in 2001, he was a Project Leader in Decision Support Services at Trinity Health. Dr. Kohli's research is published in *MIS Quarterly, Management Science, Information Systems Research, Journal of Management Information Systems, and Communications of the ACM* among other journals. He is a co-author of IT Payoff: Measuring Business Value of Information Technology Investment published by Financial Times Prentice-Hall. Dr. Kohli has been a recipient of several grants in information systems research.

Sarv Devaraj is an associate professor of Management at the University of Notre Dame. He received his PhD from the University of Minnesota in 1997. His research areas include business value of IT, adoption, diffusion, and use of IT, IT and strategic advantage, IT in manufacturing and healthcare, IT and productivity/profitability/customer value, electronic commerce, business intelligence, supply chain management, service quality, and productivity management. He has worked or consulted with several healthcare, manufacturing, and software companies including Honeywell, Infosys Technologies, and Trinity Health. His research has been published in *Management Science, Information Systems Research, Journal of Management Information Systems, Decision Support Systems, Decision Sciences, Communications of the ACM, IEEE Transactions, Journal of Operations Management*, and other journals. He is also the co-author of a book published by Prentice-Hall / Financial Times on IT Payoff. His research work has won 'Best Paper' awards at several international conferences.

Executive Summary

Information Systems (IS²)-Business coordination implies that IS managers are instrumental in shaping business operations and strategy, while at the same time business executives play a role in IS strategy formulation and deployment. It is vital for business and IS managers to coordinate their activities and enable alignment for organizational success. Many recent IS failures in business can be attributed to a breakdown in this alignment. When business managers make decisions without input from IS executives they fail to harness the potential of today's information technologies. On the other hand, IS executives who make decisions without regard to the business strategy can miss opportunities that give their firm a competitive advantage. Therefore, a synergistic relationship must be nurtured between IS and Business executives.

Despite the significance of this issue, researchers and practitioners struggle with assessing the coordination between IS and Business within organizations. What lens can be used to understand this coordination of activities or alignment of functions? What metrics can be used to measure coordination? What steps can organizations take to promote coordination? To address such questions, we examined the causes and consequences of IS-Business alignment in a rigorous theoretical and empirical examination. The fundamental finding of our research is that coordination is a result of how IS and business executives assume responsibilities for critical business activities e.g. business process redesign, technology training and appropriate use, and justifying the IS investments. Our framework articulates the important role of the locus of

² IT and IS are used interchangeably depending upon the context.

responsibilities of IS and business executives and how an understanding of such responsibilities impacts IS-business coordination.

We observe that the coordination between IS and Business functions in an organization is the result of a combination of how much IT drives Business, and Business drives IT; and more importantly when Business managers lead IT-related projects. Second, we observe that the IS-Business coordination is a significant driver of the IS-Business partnership. Specifically, the alignment between Business and IS can be assessed as the agreement between the two functions about various organizational responsibilities. Our results indicate that IS-Business coordination affects the alignment along three dimensions – activities that are part of IS responsibilities, Business responsibilities, and joint IS-Business responsibilities. Finally, we wanted to see if the IS-Business partnership and the alignment of responsibilities affect financial performance of the Business. Our results suggest that an understanding of IS responsibilities, joint responsibilities, and the IS-Business coordination all impact return of sales (ROS), return on assets (ROA), and operating income by sales. Thus, we conclude that there is 'real Business value' to trying to understand the IS-Business alignment phenomenon.

Introduction

The role of the information systems (IS) function continues to evolve from automating business functions to that of an enabler of business opportunities. In the 1960's and 1970's information systems were primarily deployed to automate back office functions such as billing and payroll. With many organizations automated, some began to view IS as a differentiator to create competitive advantage. The widely studied Harvard Business School case in which American Hospital Supply (AHS) implemented computer systems on hospital floors to facilitate ordering of supplies served as an example of how IS can enable customer intimacy and create barriers to entry. Similarly, the use of IT for radical process design of Ford Motor Company's accounts payable and Mutual Benefit Life's insurance application processing were testimony to the role of IT in creating competitive advantage through reduced costs and improved cycle times for new product development. Such examples established the credibility of combining revolutionary business re-thinking with the power of IT to gain extraordinary competitive advantage (Hammer 1990). A common thread in these and other examples of IS capability is the indispensable coordination and partnership of the business functions (e.g. finance, marketing and manufacturing) with the IS function. In other words, such gains from IS would have been difficult to come by if IS leaders did not work closely with their business counterparts to coordinate activities that led to the cost advantage or shorter product development cycles. Yet the relationship between IS and business functions has been far from harmonious (Jones et al. 1995).

Given that the businesses are also increasingly dealing with changes such as outsourcing, global competition and increasing information asymmetry, the need for coordination and collaboration of activities between IS and business is greater than ever. Coordination of activities between the IS and business functions is germane to the success of an enterprise. Coordination requires that each constituency understand and accomplish its respective goals in conjunction with others. A gap between the expectations of business executives and those of the information systems executives on each other's role within the organization can lead to discord and higher coordination costs. A recent survey conducted by *CIO Magazine* found a gradual shift in the focus of CIO's role from the traditional IT-enabled process improvement to that of an alignment of IT with the business functions (Prewitt 2006). Intuitively, the synergy between IS and business functions is a prerequisite to process improvement and creation of IT-supported business value.

This research surveyed business and information systems executives to understand the mechanism by which effective coordination occurs. We examined IS-business coordination by relating information about the relationship between the functions and the locus of responsibility of key tasks. Utilizing a distinctive approach, the survey captured the gap between *as-is* (actual) and *to-be* (desired) of various critical business activities that are presumed to lead to greater coordination. Finally, we combined firm level financial data gathered from commercial databases to assess the relationship between coordination and business performance.

Previous Research in IS-Business Coordination

Although the issue of coordination between IS and business functions from the perspective of the locus of responsibility has not yet been studied, previous case studies in the

general area of coordination have reported its importance. Coordination of activities at the process level and the firm level has been recognized by several researchers. At the process level, better coordination of IS and business operations was found to lead to higher quality of service and greater efficiency in healthcare (Kohli et al. 1995). The lack of coordination between production and marketing has been a perennial problem and, as such, investments in decision support systems (DSS) have been found to help coordinate activities and promote efficiency between these two crucial business functions (Lee and Lee 1999). Others have found communication between the functions as one of the determinants of IS-Business alignment and gains from IT investments (Jeffery and Leliveld 2004). In our previous work, we recognized partnership between IS and Business constituencies as a means to accomplishing IS value (Devaraj and Kohli 2002).

At the firm level, the ability of an organization to effectively coordinate work is likely to give it the flexibility in structuring its ownership (Brynjolfsson 1994). For instance, by utilizing better coordination through IS, firms can exploit the market by lowering their costs, time to market and accelerate growth (Dewan et al. 1998). As a logical next step, researchers have expanded the research agenda to examine the role IS in facilitating coordination across the supply chain and with their business partners (Sahin and Robinson 2002).

The above review indicates that most previous research has focused upon the ability of organizations to coordinate business activities *through* the deployment and use of the IS resource. We propose that in order to exploit the IS resource, it is also important to coordinate business activities *with* the IS function. After all, better coordination of business activities through the use of IS is dependent upon working with the people within the IS function (department or group) who plan, develop, and deploy such IS for use within the business

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functions. Thus, the relationship between the IS and business functions can take center stage in the eventual success of IS in the organizational context.

In keeping with our proposed theme, past studies have examined the relationship between the business and IS function by understanding the reporting structure or the satisfaction level of the Chief Executive Officer (CEO) with the Chief Information Officer (CIO) (Jones et al. 1995) and the influences of CIO's on the senior management teams (Armstrong and Sambamurthy 1999). In another study Kearns and Lederer (2003) found that commitment of CEO and CIO to the formal alignment process leads to creation of competitive business strategies. Thus, it is evident that the CIO and CEO (or other business executives) must be engaged in the coordination, planning and deployment of IS, if organizations are to exploit the power of information technologies.

Our study promotes this line of research through a deeper examination of what leads to such coordination. Through an analysis of process level characteristics, communication mechanism and how IS investment decisions are made, we expand our understanding of how business functions establish better coordination with the IS function and leadership of which activities creates an environment of better IS-Business coordination.

Research Design

We gathered data from business executives who have first hand experience of the IS-Business working relationship. These executives were enrolled in Executive Education programs at two locations of a major private university. The membership of the respondents was geographically dispersed as were their role in corporate functions. Appendix A provides the items that form our core constructs and Appendix B provides the survey questionnaire. To supplement survey responses, we gathered financial performance data from commercial databases to examine the impact of coordination on business performance. Such additional data allows us to triangulate our findings and establish greater confidence in our findings. As further discussed below, our overall sample size for Stage I of the analysis was 268. For Stage II the sample size was 60. Given that Stage II involved gathering indicators of financial performance from publicly available databases, our dataset was limited due to the fact that fewer firms represented by respondents in Stage I were publicly traded. In other words, financial performance data for privately held firms were not available, thus decreasing the usable sample size for the Stage II analysis.

A Framework for IS-Business Coordination

Our research framework in Figure 1 proposes that organizations can accomplish coordination between their information systems and business functions if they appropriately distribute primary responsibilities of business activities.



To the extent that the respondents (executives) perceive that the responsibility for such activities is assigned appropriately, coordination will be higher. We examined the gap between the current (as-is) and expected (to-be) to understand the source of coordination, or lack thereof. For example, where there is narrow or no gap between the current and expected responsibilities of business activities, one would expect greater IS-Business coordination. We further examined whether such coordination is the result of the role of IS within the organization. For example, would greater coordination be the result of business driving IT investment or business managers leading IS projects? Further, does higher coordination lead to a stronger relationship between the IS and business functions? Finally, as indicated on the right hand side of our model, we test the hypothesis that the level of coordination between IS and Business functions has an impact on the firm's performance.

Data Analysis

We analyzed the data in two stages. Using structural equation modeling (SEM) analysis, Stage I examined how three constructs – (i) business driving IT, (ii) IT driving business and (iii) business managers leading IT projects, mediated by IS-Business coordination, lead to partnership and congruence (reduction of gap) between IS and Business functions. In Stage II, due to the smaller sample size, we utilized ordinary least squares (OLS) to examine the impact of IT and Business partnership and congruence upon the three indicators of financial performance – Return on Sales (ROS), Return on Assets (ROA) and Operating Income.

All perceptual measures employed in this study were subject to standard psychometric tests to assess their unidimensionality, reliability, convergent and divergent validity. Based on

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the results of these tests, all scales demonstrated adequate reliability and validity. Details of these tests are available upon request from the authors.

Results

The results of our analysis indicate that when business managers lead IS projects and IS managers take the lead in technology related investment decisions, the coordination between them increases. We find strong evidence (p < .01) that for coordination to take hold, investments with a technology component should be driven by the IT function. At the same time, we find equally strong evidence (p < .01) that business managers must determine the direction of projects.



The results provide some, albeit weaker, evidence that IT-Business coordination is enhanced when business leaders take the lead in determining IT strategy. The results show strong evidence that better IT-Business coordination leads to a partnership between the two functions. We also find a direct relationship between IT-Business partnership and business managers' leadership in IT projects. In other words, when business managers lead IS projects it has a dual benefit of well coordinated activities as well as a long term partnering relationship between the functions.

Better IS-Business coordination also results in a congruent understanding of who is responsible for key business activities. The results provide consistent and robust evidence that higher coordination leads to narrowing of the gap between perceived and expected leadership of business activities. We find evidence that when IT and business functions are well coordinated, each function understands the locus of its own responsibilities as well as those that require joint responsibility.

The Stage II results indicate that when IT and Business functions are well coordinated, and the two work as partners, the impacts are evident in performance indicators ROS, ROA, and Operating Income.

| 10 | ible 1. Kesults | of Stage II allarys. | 15 |
|-----------------------------|--------------------------|---------------------------|------------------------------|
| | Return on Sales (ROS) | Return on Assets (ROA) | Operating Income By Sales |
| IT- Business Relationship | 0.55*** | 0.35*** | 0.40*** |
| | (0.00) | (0.01) | (0.00) |
| Gap: IT Responsibilities | -0.24** | -0.25** | -0.21* |
| | (0.045) | (0.049) | (0.07) |
| Gap: Joint Responsibilities | -0.25** | -0.27** | -0.18* |
| | (0.035) | (0.03) | (0.09) |
| Gap: Business | -0.04 | -0.06 | -0.09 |
| Responsibilities | (0.38) | (0.35) | (0.27) |
| R-sq of Model | 0.253 | 0.16 | 0.15 |

Table 1: Results of Stage II analysis

Notes: Standardized coefficients reported in the table above. Numbers in parentheses are p-values. *** Significant at 0.01 level, ** Significant at the 0.05 level, * Significant at the 0.10 level

The results of OLS analysis (Table 1) indicates that IT-Business Partnership has the most pronounced impact (p<.01) on all three financial performance measures. Reduction of gap between expected and actual locus of responsibilities also has an impact upon organizational

performance. However, understanding the locus of business responsibilities is not found to be significant. The variables pertaining to IS-Business Relationship and the reduction in gap of locus of responsibilities explained the most variation in ROS (R-sq = .253), although the gap in business responsibilities was statistically not significant. One possible reason that the effect of business responsibilities does not manifest in our results is the temporal nature of our analyses. Our models examine if the degree of alignment of business responsibilities affect the financial outcomes in the same period. Given the strategic nature of most decisions that fall under business responsibilities, it is possible that their effect might be seen in later time periods. We hope our study spurs further research in this area and that future research will examine this phenomenon using expanded data over a longer time frame.

Discussion

The findings of our study contribute toward an understanding of how IT-Business coordination is accomplished. Our finding that coordination is facilitated when business managers lead IT projects reinforces the conventional wisdom that there are no "IT projects with business objectives", only "business projects that are IT enabled" (Mooney 2005). Further, better coordination results from IS involvement in making business decisions that have a technology content. This challenges a common practice in which IT managers are brought in to negotiate a contract or to implement hardware or software after the decision has been made. Delay in involving IT managers often increases integration costs and discourages partnership between functions. Thus our findings suggest that IS-Business coordination is achieved when there is a balance between business managers leading IT projects and IS managers taking a lead role in helping make business decisions where technology can play a role.

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Following our understanding of how IS-Business coordination is achieved, the findings further contribute to the results of such coordination. We find that better coordination leads to an increasing sense of partnership between the IS and Business functions. Traditionally, they have been adversaries. Therefore, it is intuitive that a sense of partnership among the constituents of an organization will bode well for its financial outcomes.

We find that better coordination results in IS and Business managers recognizing their respective responsibilities. Often, ambiguity over who is responsible for certain business activities causes discord between IT and the Business functions. For instance, business process redesign (BPR) is often relegated to the IS function, perhaps because BPR generally involves IT deployment. However, given that BPR involves redesign of 'business' processes, it would be appropriate for business functions such as finance, marketing and accounting to take the lead. Our findings indicate that when business executives understand and accept that BPR is their primary responsibility, and not that of IS, the result is a positive impact upon the organization's ROS, ROA and Operating Income. Similarly, we find that when the practitioners recognize that training, proper use of information systems, and managing hardware and software costs are the responsibilities of the IT function, the organization benefits with an improvement in financial performance.

In summary, our research contributes by:

- (i) Enhancing our understanding of who should lead certain activities of the investment in IT,
- (ii) Proposing a 'gap measure' to serve as a useful tool for practitioners to measure the level of coordination within their organizations,

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- (iii) Expanding the IS-Business relationship literature by examining coordination as a complement or prerequisite of alignment, and
- (iv) Demonstrating the business value of coordination between IS and business and how it affects the business performance.

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Appendix A: Constructs and Item classification

IT-Business Relationship*

1. IT managers and business function managers have a good working relationship

- 2. The business function managers consider IT managers as partners
- 3. IT managers generally involve business function managers in selecting information technology solutions
- 4. Any disagreements between IT managers and business function managers are generally resolved at the
- managerial level (without going to VP or COO level)
- 5. Business managers and IT managers trust each other
- 6. There is good communication between the business functions and the IT function
- 7. IT managers and business function managers make an effort to learn from each other

IT Driving Business Perspective

- 13. The business functions rely upon the IT managers to determine IT-driven investment
- 14. IT managers take the lead in establishing the criteria for purchasing information systems
- 16. IT department is responsible for determining all costs of implementing information systems
- 25. The IT department generally plays a lead role in investment decisions that have an IT component

Business Driving IT Perspective

8. In my opinion, business functions (Finance, Marketing, Manufacturing etc.) should lead the direction of IT investment

9. I believe that the business function managers are best equipped to define IT strategy

10. IT strategy should be driven by business strategy

11. The role of IT managers should be to primarily support business functions needs

IT-Business Coordination

- 17. The IT leadership commands significant political influence in my organization
- 20. My organization has standardized process for coordinating IT-business activities
- 21. The roles between IT and business functions for IT investment are clearly defined

Business Managers leading IT projects

- 22. The project leader for IT projects is generally a business function manager
- 23. Business Function managers generally determine the direction of IT-based projects

| As is | Should be |
|--|--|
| IT Responsibilities | IT Responsibilities |
| 26. IT Training | 26. IT Training |
| 28. Ensuring Proper Use of IT systems | 28. Ensuring Proper Use of IT systems |
| 29. Managing Hardware, Software, Labor Costs | 29. Managing Hardware, Software, Labor Costs |
| | |
| Joint IT-Business Responsibilities | Joint IT-Business Responsibilities |
| 34. Determining IT risk to business | 34. Determining IT risk to business |
| 35. Making IT-driven Outsourcing decisions | 35. Making IT-driven Outsourcing decisions |
| 36. Allocating IT spending budget | 36. Allocating IT spending budget |
| | |
| Business Responsibilities | Business Responsibilities |
| 27. Business Process Redesign | 27. Business Process Redesign |
| 30. Creating future business options | 30. Creating future business options |
| 31. Aligning the Business-IT Strategy | 31. Aligning the Business-IT Strategy |
| 32. Identifying strategic business opportunities | 32. Identifying strategic business opportunities |
| 33. Generating higher revenue using IT | 33. Generating higher revenue using IT |

LOCUS OF RESPONSIBILITY** (Reduction in Gap)

*Items relating to IT investment justification and infrastructure were dropped from the analysis,

** Developing new products and change management items were dropped from the analysis

Appendix B: Survey Questionnaire

Please answer the following questions about measuring business value of IT in your organization. <u>All responses will be kept strictly confidential</u>.

About you

| a. Name | |
|--|--|
| b. Education after High School Years | c. Work experience Years |
| d. Current position level: CEO/COO/CIO Executive (VP, Director) Manager Supervisor Analyst Other(please specify) | e. <u>Primary</u> area of work experience: Accounting/Finance Marketing Information Systems Manufacturing/Engineering; Customer Service(s); Other (please specify) |
| f. Which do you consider yourself? IT professional Business professional (Non-IT) | g. Which do you see yourself as in the future? IT professional Business professional (Non-IT) |

About your organization

| h. Organization Name | i. No. of Employees (Unit); in IT j. Total No. of Employees; in IT |
|--|---|
| k. <u>Primary</u> nature of business (choose one) | 1. Annual Revenue (approx) \$ |
| Manufacturing Financial Services Healthcare Education Information Technology Consulting Other (please specify) | m. Annual IT Budget (approx) \$ |
| n. CIO or top IT officer reports to: CFO COO CEO Board Other (please specify) | o. How long have you been with the organization? Years |

Relationship between Information Technology (IT) and Business Function (Business functions include Finance, Marketing, Manufacturing, etc.)

| 1. | IT managers ar | ıd busine | ess function mai | nagers hav | e a good work | ing relations | hip | | | | | |
|----|---|-----------|------------------|-------------|------------------|---------------|----------|--|--|--|--|--|
| | 1 2 | 3 | 4 5 | 6 | 7 8 | 9 | 10 | | | | | |
| | Strongly | | Somewhat | | Somewhat | | Strongly | | | | | |
| | Disagree | | Disagree | | Agree | | Agree | | | | | |
| 2 | The husiness fu | nction m | anavers consid | er IT mana | oers as nartne | rs | | | | | | |
| 2. | 1 2 | 3 | 4 5 | 6 | 7 8 | 9 | 10 | | | | | |
| | Strongly | 5 | Somewhat | 0 | Somewhat | | Strongly | | | | | |
| | Disagree | | Disagree | | Agree | | Agree | | | | | |
| 3. | IT managers generally involve business function managers in selecting information technology solutions | | | | | | | | | | | |
| | 1 2 | 3 | 4 5 | 6 | 7 8 | 9 | 10 | | | | | |
| | Strongly | | Somewhat | | Somewhat | | Strongly | | | | | |
| | Disagree | | Disagree | | Agree | | Agree | | | | | |
| 4. | Any disagreements between IT managers and business function managers are generally resolved at the managerial level (without going to VP or COO level) | | | | | | | | | | | |
| | 1 2 | 3 | 4 5 | 6 | 7 8 | 9 | 10 | | | | | |
| | Strongly | | Somewhat | | Somewhat | | Strongly | | | | | |
| | Disagree | | Disagree | | Agree | | Agree | | | | | |
| 5. | Business managers and IT managers trust each other | | | | | | | | | | | |
| | 1 2 | 3 | 4 5 | 6 | 7 8 | 9 | 10 | | | | | |
| | Strongly | | Somewhat | | Somewhat | | Strongly | | | | | |
| | Disagree | | Disagree | | Agree | | Agree | | | | | |
| 6. | There is good c | ommunic | ation between i | the busines | s functions and | d the IT func | tion | | | | | |
| | 1 2 | 3 | 4 5 | 6 | 7 8 | 9 | 10 | | | | | |
| | Strongly | | Somewhat | | Somewhat | | Strongly | | | | | |
| | Disagree | | Disagree | | Agree | | Agree | | | | | |
| 7. | IT managers an | d busine. | ss function man | agers mak | e an effort to l | earn from ea | ch other | | | | | |
| | 1 2 | 3 | 4 5 | 6 | 7 8 | · 9 | 10 | | | | | |
| | Strongly | | Somewhat | | Somewhat | | Strongly | | | | | |
| | Disagree | | Disagree | | Agree | | Agree | | | | | |

Leading the IT investment

In my opinion, business functions (Finance, Marketing, Manufacturing etc.) should lead the direction of IT investment
1
2
3
4
5
6
7
8
9
10

| 1 | 4 | 5 | т | 5 | 0 | / | 0 | / | 10 |
|----------|---|-------|---------|---|--------|----------|---|---|-------|
| Strongly | | Somew | hat | | Somewl | Strongly | | | |
| Disagree | e | | Disagre | e | | Agree | | | Agree |

| 9. | I believe | e that the | e business | function | n manage | ers are be | st equipp | ped to def | ine IT stra | itegy |
|-----|-----------|------------|------------|-----------|------------|------------|-----------|------------|-------------|----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | Strongly | у | | Somew | hat | | Somev | | Strongly | |
| | Disagre | e | | Disagro | ee | | Agree | | | Agree |
| 10. | IT strate | egy shou | ld be driv | en by bu | isiness st | rategy | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | Strongly | у | | Somew | vhat | | Somev | vhat | | Strongly |
| | Disagre | e | | Disagro | ee | | Agree | | Agree | |
| 11. | The role | e of IT m | anagers s | should be | e to prim | arily supp | ort busi | ness funct | ions need | s |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | Strongly | у | | Somew | vhat | | Somev | vhat | | Strongly |
| | Disagre | e | | Disagree | | | Agree | | Agree | |
| 12 | An invo | stmont in | IT infra | structure | must ab | ways ha iu | stified n | rior to sn | ondina | |

| 12. | An inv | esimeni | i in 11 inji | rasiruciu | re musi a | iways be | jusiijiea | prior io s | spenaing | |
|----------|--------|---------|--------------|-----------|-----------|----------|-----------|------------|----------|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Strongly | | | Some | ewhat | | Som | Strongly | | | |
| Disagree | | | Disagree | | | Agre | Agree | | | |

In your organization...

| 13. | The business fun | ctions rel | ly upon t | he IT ma | en investr | nent | | | | |
|-----|------------------|---------------|-------------------------|-----------|-------------|--|-----------|------------|-------------|--|
| | 1 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| | Strongly | | Somew | hat | | Somewh | nat | | Strongly | |
| | Disagree | | Disagre | ee | | Agree | | | Agree | |
| 14. | IT managers tak | es the lea | d in esta | blishing | the criteri | a for pur | chasing i | informatic | on systems | |
| | 1 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| | Strongly | | Somew | hat | | Somewh | nat | | Strongly | |
| | Disagree | | Disagre | ee | | Agree | | | Agree | |
| 15. | Functional busin | iess depa | partments play a suppor | | oport role | port role in identifying information systems | | | | |
| | 1 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| | Strongly | | Somew | hat | | Somewh | nat | | Strongly | |
| | Disagree | | Disagre | ee | | Agree | | | Agree | |
| 16. | IT department is | responsi | ble for d | eterminir | ng all cost | s of imple | ementing | informat | ion systems | |
| | 1 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| | Strongly | | Somew | hat | | Somewh | nat | | Strongly | |
| | Disagree | gree Disagree | | ee | | Agree | | | Agree | |
| | | | | | | | | | | |

17. The IT leadership commands significant political influence in my organization

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
|----------|------|---|-------|-------|---|------|----------|---|-------|--|
| Strongly | | | Some | ewhat | | Some | Somewhat | | | |
| Disag | gree | | Disag | gree | | Agre | e | | Agree | |

| 18. | The business fur systems | ictions ge | enerally determine | e the bene | fits from the depi | oyment of | information |
|-----|-----------------------------|------------|----------------------|--------------|---------------------|--------------|-------------------|
| | 1 2 | 3 | 4 5 | 6 | 7 8 | 9 | 10 |
| | Strongly | | Somewhat | | Somewhat | | Strongly |
| | Disagree | | Disagree | | Agree | | Agree |
| 19. | The need for new | w IT inve | stments generally | originate | es in functional bi | isiness are | eas |
| | 1 2 | 3 | 4 5 | 6 | 7 8 | 9 | 10 |
| | Strongly | | Somewhat | | Somewhat | | Strongly |
| | Disagree | | Disagree | | Agree | | Agree |
| 20. | My organization | n has star | ndardized process | for coord | linating IT-busin | ess activiti | es |
| | 1 2 | 3 | 4 5 | 6 | 7 8 | 9 | 10 |
| | Strongly | | Somewhat | | Somewhat | | Strongly |
| | Disagree | | Disagree | | Agree | | Agree |
| 21. | The roles between | en IT ana | l business functior | ıs for IT i | nvestment are cle | early defin | ed |
| | 1 2 | 3 | 4 5 | 6 | 7 8 | 9 | 10 |
| | Strongly | | Somewhat | | Somewhat | | Strongly |
| | Disagree | | Disagree | | Agree | | Agree |
| 22. | The project lead | ler for IT | projects is genera | ally a bus | iness function ma | nager | |
| | 1 2 | 3 | 4 5 | 6 | 7 8 | 9 | 10 |
| | Strongly | | Somewhat | | Somewhat | | Strongly |
| | Disagree | | Disagree | | Agree | | Agree |
| 23. | Business Functi | on manag | gers generally det | ermine th | e direction of IT- | based proj | iects |
| | 1 2 | 3 | 4 5 | 6 | 7 8 | 9 | 10 |
| | Strongly | | Somewhat | | Somewhat | | Strongly |
| | Disagree | | Disagree | | Agree | | Agree |
| 24. | The leadership f | for IT-bas | sed projects is flex | cible (It co | an go to either IT | or busine. | ss manager) |
| | 1 2 | 3 | 4 5 | 6 | 7 8 | 9 | 10 |
| | Strongly | | Somewhat | | Somewhat | | Strongly |
| | Disagree | | Disagree | | Agree | | Agree |
| 25. | The IT departme | ent gener | ally plays a lead r | ole in inv | estment decision. | s that have | e an IT component |
| | 1 2 | 3 | 4 5 | 6 | 7 8 | 9 | 10 |
| | Strongly | | Somewhat | | Somewhat | | Strongly |
| | Disagree | | Disagree | | Agree | | Agree |
| | č | | c | | J | | c |

For activities listed below, select where the responsibility currently lies (*As is*) and where, in your pinion, it should lie (*Should be*).

A rating of 1 is not worse or better than a rating of 10. EXAMPLE: 1-4 weights the responsibility more with the business side id 7-10 weights the responsibility more with the IT side. 5/6 means the responsibility is close to equally balanced.

| | | RESPONSIBILITY LIES WITH | | | | | | | | | | | |
|-----------------------------------|--------|--------------------------|------------|----------|----|----------|------------|------------|----------|------------|----|--|--|
| As is | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| (As it is in your organization) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | | |
| | Busir | iess | | | | | | | | Π | | | |
| | L | | | | | | | | - | | | | |
| re | sponsi | bility ma | ainly on b | ousiness | re | esponsib | ility mair | nly on inf | formatio | n technolo | gy | | |
| | Busir | ness | | | | | | | | π | | | |
| Should be | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| (in your opinion as it should be) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | | |
| | | | | | | | | | | 1 | | | |

responsibility mainly on business responsibility mainly on information technology

| ACTIVITY | | | | RESPONSIBILITY LIES WITH (Circle one) | | | | | | | | | |
|----------|--|---------------|----------|---------------------------------------|---|---|---|---|----|----|---|----|--|
| 26. | IT Training | As is | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| | | | D | | | | | | | | | T | |
| | | | Business | | | | | | | | | 11 | |
| | | Should be | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| | | | | | | | | | | | | | |
| 27. | Business | As is | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| | Process | | | | | | | | | T | | | |
| | Redesign | | Busi | iness | | | | | | | | IT | |
| | | Should be | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| | | Snouid De | 1 | 2 | 5 | - | 5 | 0 | , | 0 | , | 10 | |
| 28. | Ensuring Proper | As is | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| | Use of IT | | | | | | | | | | | | |
| | systems | | Busi | Business | | | | | | | | | |
| | | | 1 | 2 | 2 | 4 | 5 | C | 7 | 0 | 0 | 10 | |
| | | Snoula be | 1 | Z | 3 | 4 | 5 | 0 | / | 8 | 9 | 10 | |
| 29. | Managing | As is | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| | Hardware, | | | | | | | | | | | | |
| | Software, Labor | abor Business | | | | | | | IT | | | | |
| | Costs | | | | | | | | | | | | |
| | | Should be | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 30 | Creating future | Asis | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 50. | business options | 115 15 | 1 | 2 | 5 | - | 5 | 0 | , | 0 | , | 10 | |
| | T. T | Business | | | | | | | | IT | | | |
| | | | | | | | | | | | | | |
| | | Should be | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |

| | | | _ | | | | _ | | _ | - | - | 10 |
|---------------------|--|-------------|-------------|------------|---|---|-----|---|---|---|---|----|
| <i>31.</i> Bus | Aligning the | As is | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Dusiness-11 Sualegy | | | Business I' | | | | | | | | | IT |
| | | Should be | 1 | n | 2 | 4 | 5 | 6 | 7 | o | 0 | 10 |
| | | snouia de | 1 | Z | 3 | 4 | 3 | 0 | 1 | 0 | 9 | 10 |
| 32. | Identifying | As is | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | strategic business opportunities | | Business IT | | | | | | | | | IT |
| | | | | | | | | | | | | |
| | | Should be | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 33. | Generating | As is | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | using IT | | Business | | | | | | | | | |
| | | Should be | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | 10 |
| | | Should De | 1 | 2 | 5 | 4 | 5 | 0 | 7 | 0 | 9 | 10 |
| 34. | Determining IT | As is | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | Tisk to Sushiess | | Business IT | | | | | | | | | IT |
| | | Should be | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | | | | | | | | | | - | |
| 35. | Making IT- driven | As is | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | Outsourcing | | Business IT | | | | | | | | | |
| | decisions | Should be | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 26 | A 11 | · · | 1 | | | | | | | | | 10 |
| 36. | Allocating IT spending budget | As is | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 8 | 9 | 10 |
| | | | Business | | | | | | | | | IT |
| | | Should be | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 27 | <u> </u> | | - | | | | | | | | | 10 |
| 37. | Developing new products or | As is | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 8 | 9 | 10 |
| | services | Business IT | | | | | | | | | | |
| | | Should be | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| .38. | Leading change | As is | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 20. | management | 10 10 | Bue | - iness | - | | e e | č | | Ŭ | - | ТТ |
| | | | Dus | 111033 | | | | | | | | 11 |
| | | Should be | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Feel free to share your key <u>issues</u> and <u>suggestions</u> on how the IT function and business functions can work closely so that the organization benefits from it.

Thank you for taking the time to share your thoughts!