

JOURNAL OF INFORMATION SYSTEMS APPLIED RESEARCH

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Does Size Matter in IT? An Exploratory Analysis of Critical Issues Facing Organizations Based on Company Size

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Abstract

Information technology (IT) continues to play a vital role in business organizations. The critical IT issues that are important to organizations, however, are varied, and range from strategic fit to replacement of legacy systems. Our study reviews fourteen commonly expressed IT issues and measures their importance based on the size of an organization. Company size has been determined to be a significant variable affecting what is important to an organization. This study finds that this company size, as measured by sales volume, does affect what IT issues are critical to an organization, and that there are statistically significant differences based on the size of an organization.

Key words: critical issues, company size, information technology issues

1. INTRODUCTION

Information technology (IT) continues to play a vital role in business organizations. It is estimated that nearly 9% of our gross national product is spent on information technology (Trading Economics, 2011), and that tremendous productivity gains have been accomplished via information technology. But despite the prevalence and importance of IT, success has not been universal. It is estimated that 68% of IT projects fail (Krigsman, 2008). It has also been posited that not all information technology expenditures are adding to US productivity. There are many areas that have been explored to improve IT performance and return. One of the areas that is often reviewed is key information technology issues. The AICPA annually surveys members on their views on the top information technology issues. They publish an annual report of the top ten technology initiatives, which suggests areas that need attention (see Table 1). The Financial Executives

International organization also surveys their members and asks what the critical issues are among their members. Our study re-explores their data to determine whether size of an organization plays a role in the identification of what issues are critical, important, or not important and performs chi-square analysis to determine whether the issues differ by size of an organization.

2. SIZE

The use of size as a variable affecting organization performance and issues is well established in the literature. Van Biesebroeck (2005) studied manufacturing firms from in sub-Saharan African countries He found that large firms achieve higher productivity levels and are more likely to survive. "The labor market relocates workers toward the most productive firms, and this reinforces the importance of large firms for aggregate productivity growth. Formal credit institutions award most financing to large

firms, and access to credit is positively correlated with productivity, even conditional on firm size." According to Biesebroeck (2005) size matters in the success of the manufacturing firms he studied. Larger firms perform better. González-Benito and González-Benito (2010) found company size to be a determinant factor in stakeholder environmental pressure. Our study will review key issues in information technology and determine whether company size influences the criticality of these issues among the firms.

Table 1: 2011 Top Ten Technology Initiatives

1. Control and Use of Mobile Devices
2. Information Security
3. Data Retention Policies and Structure
4. Remote Access
5. Staff and Management Training
6. Process Documentation and improvements
7. Saving and Making Money w/Technology
8. Technology Cost Controls
9. Budget Processes
10. Project Management & deployment of new

3. SURVEY SOURCE AND METHODOLOGY

In order to explore critical issues, specific corporate data were required. We found a rich data set that was available from Financial Executives International. Financial Executives International is "the preeminent association for CFOs and other senior finance executives." It has ... CFOs, VPs of Finance, Treasurers, Controllers, Tax Executives, Academics, Audit Committee members [in] companies large and small, public and private, cross-industry. (FEI, 2006, b) The FEI, each year, commissions a large scale study of "technology issues for Financial Executives". The survey instructions follow.

"FEI's Committee on Finance and information Technology (CFIT) and Financial Executives Research Foundation (FERF), in partnership with Computer Sciences Corporation (CSC), are conducting the eighth annual survey of Technology Issues for Financial Executives. This initiative explores and reports on information technology from the perspective of the financial executive. Last year we set another record for survey participation with nearly 800 responses, continuing our unbroken streak of year-over-

year increases since the survey's inception. As part of this year's effort, we are targeting another significant increase in response volume so that we can expand the resulting publication to include more analyses by industry and company size. ." (FEI, 2006)

As a part of this study, specific information was obtained from top financial executives on systems project management. These questions and responses were sufficiently detailed and pertinent to our hypotheses to serve as the bases for testing this study's hypotheses. The main advantage is the large data set and the independent collection from a private membership trade group. All data has been collected and furnished by the Financial Executives International and remains their property. Use for academic and research purposes was obtained by the author. The author wishes to sincerely thank the organizations for their cooperation.

The overall questionnaire included 44 questions in the noted categories but sub-questions and ranked responses raised the overall individual data points to more than 220. From this overall report a small subsection was used to analyze the relevant hypotheses. Selected responses from the Demographics section were included as well. The specific questions used to test the hypotheses are listed below:

What overall return is your organization obtaining on its technology investments? (Mark only one.)

- _ High
- _ Medium
- _ Low
- _ Negative
- _ Unknown

What is your overall return?

What is the size of your organization in annual revenues, stated in U.S. dollars?

- _ Less than \$100 Million
- _ \$100 Million - \$499 Million
- _ \$500 Million - \$999 Million
- _ \$1 Billion - \$5 Billion
- _ Greater than \$5 Billion

Please indicate how important you believe each of these technology issues is to your organization.

(1 = critical; 2 = important; 3 = not a concern.)

- _ _ _ Identifying the appropriate level of technology investment
- _ _ _ Upgrading or replacing legacy systems

- ___ Evaluating or measuring the return on technology investments
- ___ Prioritizing technology investments
- ___ Educating senior management on the value of technology
- ___ Establishing and maintaining effective dialogue between IT and users
- ___ Identifying the appropriate level of security for information and electronic applications
- ___ Identifying how IT can improve or influence business processes
- ___ Using technology to drive business change
- ___ Training staff in new technologies and upgrades
- ___ Developing disaster recovery capabilities
- ___ Deploying wireless technologies
- ___ Evaluating the adoption/use of XBRL
- ___ Using technology to improve the system of internal controls
- ___ Aligning business and IT strategy

From the preceding list, which is your most critical concern? Enter the letter representing your selection _____

4. CRITICAL ISSUE TOPICS BACKGROUND, RESULTS, AND DISCUSSION

The following are the critical issues that were extracted and tested from the survey. There is literature support for each area followed by the analysis of the actual question used in the survey. Statistical analyses were used to study each of these potential key issues facing information technology organizations today.

Identifying the appropriate level of technology investment

The first issue studied in the FEI survey was the exploration of the appropriate level of technology investment. In other words, how much money should we be spending for IT. Too much suggests wasted costs and too little could affect marketing efforts or productivity improvements. The concept of determining business value has been recognized by researchers. Melville, Kraemer, and Gurbaxani (2004) suggest that information technology is value but depends on many other issues and factors in an organization; therefore it is extremely important to determine the business value of your IT expenses.

Overall, it was found that 44% of all companies see identifying the appropriate level of

technology investment as a critical issue for information technology management. Another 51% see it as important. Our chi-square analysis furthermore reveals that there is a significant variation based on company size at $p < .01$. Large companies generally see level of investment as more critical than smaller companies. In addition, nearly all the companies surveyed with over \$1 billion in sales saw this as either important or critical. It is interesting to speculate on the cause of this disparity. It may be due to lesser understanding of the importance of IT or due to the lower complexity of IT among smaller companies. It may also reflect more of a perceived inability to change IT costs among smaller firms. Further study is necessary to determine the reasons behind this difference.

Table 2 Identifying the appropriate level of technology investment

[See Appendix]

Upgrading or replacing legacy systems

Old, legacy systems linger in many organizations. According to Chowdhury and Iqbal (2004), "Most Companies have an environment of disparate legacy systems, applications, processes and data sources. Maintaining legacy systems is one of the difficult challenges that modern enterprises are facing today." They discuss the challenges and approaches that can be implemented to deal with modernization of these legacy systems.

Overall, nearly 80% of firms surveyed find legacy systems critical or important. Our study finds that generally, once again, larger firms see that legacy systems as more important. For the smallest firms, 27% see legacy work as not a concern, whereas only 11% of the largest firms express this view. A probable cause is the complexity of businesses and systems as they grow in size, leading to more difficult legacy issues. Significant differences were found based on company size at $p < .05$.

Table 3 Upgrading or replacing legacy systems * SIZE Crosstabulation

[See Appendix]

Table 4 Upgrading Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.949 ^a	8	.031
Likelihood Ratio	17.026	8	.030
Linear-by-Linear Association	8.140	1	.004
N of Valid Cases	696		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.19.

Table 5 IT Return Report

SIZE	Mean	N	Std. Deviation
< 100M	1.72	286	.450
100-499M	1.66	196	.476
500-999M	1.55	65	.501
1-5B	1.45	107	.500
>5B	1.37	35	.490
Total	1.63	689	.484

Evaluating or measuring the return on technology investments

For many years there has been a debate on the return that information technology is providing. Mahmood and Mann (1993) write, "Organizations are investing ever-increasing amounts in information technology (IT). However, the existing literature provides little evidence of a relationship between IT investment and organizational strategic and economic performance. The exploratory research reported here appears to be the first to relate comprehensive sets of IT investment measures to organizational strategic and economic performance measures." This work supports this study. According to this FEI survey, the average return for each size group ranged between High (1) and Medium (2), see table 5. It was also found thought that larger firms reported higher returns on information technology investments, significant at $p < .001$.

Once again, size does matter, in this case for IT return.

This work also supports the importance of measurement of these returns. 43% of Firms over \$5 billion see IT return measurement as critical, while only 16% of firms under \$100 million feel this way. Chi-square differences are significant at $p < .001$.

Table 6 Evaluating or measuring the return on technology investments * SIZE Crosstabulation

[See Appendix]

Prioritizing technology investments

Bardhan, Sougstad, and Sougstad (2004) have suggested that prioritizing a portfolio of information technology projects could provide significant benefits for an organization. Our participants seem to agree with this proposition, with 92% of all organizations seeing this as either important or critical. Higher criticality is noted by larger firms at $p < .001$.

Table 7 Prioritizing technology investments * SIZE Crosstabulation

[See Appendix]

Educating senior management on the value of technology

Beath (1991) found that project champions and support are vital to information technology support. This is one area where there is only a weak significant difference based on company size, however (significant at $p < .10$). Approximately 20% see this as a critical issue, 50% as important, and 30% as not a concern (perhaps suggesting that the support already exists).

Table 8 Educating senior management on the value of technology * SIZE Crosstabulation

[See Appendix]

Establishing and maintaining effective dialogue between IT and users

Boynton et al. (1994) report that the effective application of IT is dependent on the interactions between IT and line managers.

Table 9 Establishing and maintaining effective dialogue between IT and users * SIZE Crosstabulation**[See Appendix]**

Dialogue also appears to be an area that is understood and addressed by all sizes of organizations. There is no significant difference among the company sizes on the issue of Establishing and maintaining effective dialogue between IT and users based on company size at $p < .05$. About 40% see this as critical, 50% as important, and 10% not a concern, across all company sizes.

Identifying the appropriate level of security for information and electronic applications

According to Baker and Wallace (2007) , "organizations are consequently more aware of information security risks and the need to take appropriate action. Previous studies of organizations' use of information security controls have focused on the presence or absence of controls, rather than their quality."

Table 10 Identifying the appropriate level of security for information and electronic applications * SIZE Crosstabulation**[See Appendix]**

All company sizes recognize the importance of determining the adequate level of security necessary. Security increases costs and decreases flexibility, therefore it is important to get this right. 50% of respondents see this as critical and another 46% as important. There is no significant difference based on company size.

Identifying how IT can improve or influence business processes

One of the most important initiatives in business in the past several decades has been overall process and productivity improvement. Broadbent, Weill, & St Clair (1999) found that those who emphasized IT in conjunction with BPR had higher levels of success.

Table 11 Identifying how IT can improve or influence business processes * SIZE Crosstabulation**[See Appendix]**

Since much BPR has already been accomplished, this issue had a reduced importance across the

board. 40% still see it as a critical issue, though, and 52% as important. This issue may be already well understood among all sizes of companies. There is no significant difference based on company size.

Using technology to drive business change

Davenport (1993) suggests that using technology to drive business change is "best hope we have for getting value out of our vast IT expenditures."

Table 12 Using technology to drive business change * SIZE Crosstabulation**[See Appendix]**

Though important (52%), only 34% of organizations see this as a critical issue. There is no significant difference in this view based on company size.

Training staff in new technologies and Upgrades

According to Cynthia and Peter (2000)," 308 small business executives were interviewed and asked to identify the single most important thing they had learned about managing the use of information technology (IT) in their firms. The most common response was staying current/keeping up with changing IT." This view does not seem to be shared by our respondents. Only 20% saw this skills maintenance as a critical item, though 66% did see it as important. There was no significant difference in this view based on company size.

Table 13 Training staff in new technologies and upgrades * SIZE Crosstabulation**[See Appendix]****Developing disaster recovery capabilities**

In Disaster recovery planning: a strategy for data security, Hawkins, Yen, and Chou (2000) express a strong concern and plan for disaster recovery, noting its damaging and costly results if such a plan is not in place. This is a view not necessarily shared across our participants. 29% see DRP as critical and 60% see as important. There was no significant difference across company size.

Table 14 Developing disaster recovery capabilities * SIZE Crosstabulation**[See Appendix]**

Note the importance of information technology disaster recovery planning. There are advantages and costs of having a DRP. Some of the advantages are the reduction in data loss, minimizing the need of decision-making process during a disaster, and the protection of company employees. It also causes extra expenses and requires manpower. Despite the questions that arise when considering a DRP, companies should focus on the most important commodity: company data. Depending on the importance of the data, developing a DRP can be more economical than replacing the lost data.

Deploying wireless technologies

According to Islam, Khan, Ramayah, and Hossain (2011) wireless technologies are extremely important for mobile commerce suggesting "the real value of M-commerce lies in its ability to realize the tremendous business opportunity and address lifestyle issues prevalent in an aware, hyper-efficient, "on always" world."

Table 15 Deploying wireless technologies * SIZE Crosstabulation

[See Appendix]

Since this data is from 2006, this issue may not be as important as it is today. In this survey only 8% saw this issue as critical. In addition, much traditional wireless infrastructure is already in place. Nearly 50% saw this issue as not a concern. There were no significant differences across company sizes.

Evaluating the adoption/use of XBRL

According to Doolin and Troshani (2007), "XBRL is an emerging innovation that has the potential to play an important role in the electronic production and consumption of financial information." This issue was here check since it was a survey of financial executives. Even still, only 3% see as critical and 27% as important. There were no significant differences across company sizes.

Table 16 Evaluating the adoption/use of XBRL * SIZE Crosstabulation

[See Appendix]

Using technology to improve the system of internal controls

Wallace and Cefaratti (2011) see "Information technology (IT) is a vital component of information security. IT refers to any technology that helps to manage, process, or disseminate information, such as some combination of computer hardware, software, and associated communications systems." It is especially important for internal controls and Sarbanes-Oxley compliance.

Table 17 Using technology to improve the system of internal controls * SIZE Crosstabulation

[See Appendix]

Our financial officers placed a relatively high degree of importance on this issue with 23% viewing as critical and 62% as important. There was a weak relationship with size, with the largest companies expressing the highest importance. This was significant at $p < .10$.

Aligning business and IT strategy

There is much research focusing on the importance of aligning business and IT strategy, such as Estrada (2010) and Reich and Benbasat (2000).

Table 18 Aligning business and IT strategy * SIZE Crosstabulation

[See Appendix]

Our practitioners echo this importance with a full 45% seeing this issue as critical, and another 46% as important. The recognition of this increased directly with company size, and was significant at $p < .001$.

Table 19 Most important issue * SIZE Crosstabulation

[See Appendix]

The final question asked was, what was the most important issue across all the noted issues. As expected, there were a variety of answers, and each size group had a different importance ranking. These differences were significant at $p < .05$.

The smallest firms had the widest variety of most critical issues. Surprisingly, the greatest issue was replacing legacy systems. This issue

was at or near the top of all size categories. The largest firms had prioritization of technology investments as their top priority. This issue was not on the top five for firms in the lowest two size categories. This suggests that IT project portfolio management does not have high implementation until firms reach about \$500 million in sales. Aligning business and IT strategy was in the top 5 issues for all size firms, confirming its understanding and importance. Finally, identifying how IT can improve business process was on the top list for all but companies over \$5 billion. This suggests that this issue may have been addressed by the largest companies already.

5. CONCLUSION

The overall objective of the manuscript was to determine if and whether size mattered in the recognition and prioritization of critical and important IT issues. Over the 14 issues, our analysis has determined that seven of the fourteen did have significant differences at $p < .10$ based on company size. For information technology issues, size does indeed matter, just not for all issues. As a general rule, the more strategic issues, including level of investment, evaluating return, and aligning business strategy tended to vary based on company size. More general skills such as effective dialogue, training, and wireless technologies did not vary with size. One could suggest that this reflects an overall management maturity, and does represent an opportunity for small and medium sized businesses to improve their information technology management.

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Appendices

Table 2 Identifying the appropriate level of technology investment

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	120	83	23	55	24	305
	% within SIZE	41.7%	41.9%	34.8%	51.4%	64.9%	43.8%
Important	Count	147	101	40	51	13	352
	% within SIZE	51.0%	51.0%	60.6%	47.7%	35.1%	50.6%
Not a Concern	Count	21	14	3	1	0	39
	% within SIZE	7.3%	7.1%	4.5%	.9%	.0%	5.6%
Total	Count	288	198	66	107	37	696
	% within SIZE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3 Upgrading or replacing legacy systems * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	91	61	33	39	16	240
	% within SIZE	31.6%	30.8%	50.0%	36.4%	43.2%	34.5%
Important	Count	119	95	24	47	17	302
	% within SIZE	41.3%	48.0%	36.4%	43.9%	45.9%	43.4%
Not a Concern	Count	78	42	9	21	4	154
	% within SIZE	27.1%	21.2%	13.6%	19.6%	10.8%	22.1%
Total	Count	288	198	66	107	37	696

Table 3 Upgrading or replacing legacy systems * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	91	61	33	39	16	240
	% within SIZE	31.6%	30.8%	50.0%	36.4%	43.2%	34.5%
Important	Count	119	95	24	47	17	302
	% within SIZE	41.3%	48.0%	36.4%	43.9%	45.9%	43.4%
Not a Concern	Count	78	42	9	21	4	154
	% within SIZE	27.1%	21.2%	13.6%	19.6%	10.8%	22.1%
Total	Count	288	198	66	107	37	696
	% within SIZE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 6 Evaluating or measuring the return on technology investments * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	46	35	8	18	16	123
	% within SIZE	16.0%	17.7%	12.1%	17.0%	43.2%	17.7%
Important	Count	173	122	46	77	19	437
	% within SIZE	60.1%	61.6%	69.7%	72.6%	51.4%	62.9%
Not a Concern	Count	69	41	12	11	2	135
	% within SIZE	24.0%	20.7%	18.2%	10.4%	5.4%	19.4%
Total	Count	288	198	66	106	37	695

**Table 6 Evaluating or measuring the return on technology investments * SIZE
Crosstabulation**

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	46	35	8	18	16	123
	% within SIZE	16.0%	17.7%	12.1%	17.0%	43.2%	17.7%
Important	Count	173	122	46	77	19	437
	% within SIZE	60.1%	61.6%	69.7%	72.6%	51.4%	62.9%
Not a Concern	Count	69	41	12	11	2	135
	% within SIZE	24.0%	20.7%	18.2%	10.4%	5.4%	19.4%
Total	Count	288	198	66	106	37	695
	% within SIZE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 7 Prioritizing technology investments * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	117	88	28	59	27	319
	% within SIZE	40.6%	44.4%	42.4%	55.7%	75.0%	46.0%
Important	Count	143	93	30	45	9	320
	% within SIZE	49.7%	47.0%	45.5%	42.5%	25.0%	46.1%
Not a Concern	Count	28	17	8	2	0	55
	% within SIZE	9.7%	8.6%	12.1%	1.9%	.0%	7.9%
Total	Count	288	198	66	106	36	694

Table 7 Prioritizing technology investments * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	117	88	28	59	27	319
	% within SIZE	40.6%	44.4%	42.4%	55.7%	75.0%	46.0%
Important	Count	143	93	30	45	9	320
	% within SIZE	49.7%	47.0%	45.5%	42.5%	25.0%	46.1%
Not a Concern	Count	28	17	8	2	0	55
	% within SIZE	9.7%	8.6%	12.1%	1.9%	.0%	7.9%
Total	Count	288	198	66	106	36	694
	% within SIZE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8 Educating senior management on the value of technology * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	56	34	15	22	8	135
	% within SIZE	19.5%	17.3%	22.7%	20.6%	21.6%	19.5%
Important	Count	131	102	27	56	16	332
	% within SIZE	45.6%	52.0%	40.9%	52.3%	43.2%	47.9%
Not a Concern	Count	100	60	24	29	13	226
	% within SIZE	34.8%	30.6%	36.4%	27.1%	35.1%	32.6%
Total	Count	287	196	66	107	37	693

Table 8 Educating senior management on the value of technology * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	56	34	15	22	8	135
	% within SIZE	19.5%	17.3%	22.7%	20.6%	21.6%	19.5%
Important	Count	131	102	27	56	16	332
	% within SIZE	45.6%	52.0%	40.9%	52.3%	43.2%	47.9%
Not a Concern	Count	100	60	24	29	13	226
	% within SIZE	34.8%	30.6%	36.4%	27.1%	35.1%	32.6%
Total	Count	287	196	66	107	37	693
	% within SIZE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 9 Establishing and maintaining effective dialogue between IT and users * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	98	94	24	49	17	282
	% within SIZE	34.0%	47.5%	36.4%	45.8%	45.9%	40.5%
Important	Count	153	82	32	49	18	334
	% within SIZE	53.1%	41.4%	48.5%	45.8%	48.6%	48.0%
Not a Concern	Count	37	22	10	9	2	80
	% within SIZE	12.8%	11.1%	15.2%	8.4%	5.4%	11.5%
Total	Count	288	198	66	107	37	696
	% within SIZE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10 Identifying the appropriate level of security for information and electronic applications * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	150	94	31	50	22	347
	% within SIZE	52.4%	47.7%	47.0%	46.7%	59.5%	50.1%
Important	Count	123	98	31	51	14	317
	% within SIZE	43.0%	49.7%	47.0%	47.7%	37.8%	45.7%
Not a Concern	Count	13	5	4	6	1	29
	% within SIZE	4.5%	2.5%	6.1%	5.6%	2.7%	4.2%
Total	Count	286	197	66	107	37	693
	% within SIZE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 11 Identifying how IT can improve or influence business processes * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	119	77	25	44	15	280
	% within SIZE	41.5%	38.9%	37.9%	41.1%	40.5%	40.3%
Important	Count	152	103	36	52	21	364
	% within SIZE	53.0%	52.0%	54.5%	48.6%	56.8%	52.4%
Not a Concern	Count	16	18	5	11	1	51
	% within SIZE	5.6%	9.1%	7.6%	10.3%	2.7%	7.3%
Total	Count	287	198	66	107	37	695

Table 11 Identifying how IT can improve or influence business processes * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	119	77	25	44	15	280
	% within SIZE	41.5%	38.9%	37.9%	41.1%	40.5%	40.3%
Important	Count	152	103	36	52	21	364
	% within SIZE	53.0%	52.0%	54.5%	48.6%	56.8%	52.4%
Not a Concern	Count	16	18	5	11	1	51
	% within SIZE	5.6%	9.1%	7.6%	10.3%	2.7%	7.3%
Total	Count	287	198	66	107	37	695
	% within SIZE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 12 Using technology to drive business change * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	95	65	21	37	18	236
	% within SIZE	33.1%	32.8%	31.8%	34.6%	48.6%	34.0%
Important	Count	156	99	34	58	15	362
	% within SIZE	54.4%	50.0%	51.5%	54.2%	40.5%	52.1%
Not a Concern	Count	36	34	11	12	4	97
	% within SIZE	12.5%	17.2%	16.7%	11.2%	10.8%	14.0%
Total	Count	287	198	66	107	37	695
	% within SIZE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 13 Training staff in new technologies and upgrades * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	62	46	10	16	5	139
	% within SIZE	21.6%	23.2%	15.2%	15.0%	13.5%	20.0%
Important	Count	187	126	40	79	27	459
	% within SIZE	65.2%	63.6%	60.6%	73.8%	73.0%	66.0%
Not a Concern	Count	38	26	16	12	5	97
	% within SIZE	13.2%	13.1%	24.2%	11.2%	13.5%	14.0%
Total	Count	287	198	66	107	37	695
	% within SIZE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 14 Developing disaster recovery capabilities * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	90	45	21	29	13	198
	% within SIZE	31.4%	22.8%	31.8%	27.1%	35.1%	28.5%
Important	Count	161	130	38	66	19	414
	% within SIZE	56.1%	66.0%	57.6%	61.7%	51.4%	59.7%
Not a Concern	Count	36	22	7	12	5	82
	% within SIZE	12.5%	11.2%	10.6%	11.2%	13.5%	11.8%
Total	Count	287	197	66	107	37	694
	% within SIZE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 15 Deploying wireless technologies * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	25	14	6	5	3	53
	% within SIZE	8.7%	7.1%	9.2%	4.7%	8.1%	7.6%
Important	Count	126	95	27	49	19	316
	% within SIZE	43.9%	48.2%	41.5%	45.8%	51.4%	45.6%
Not a Concern	Count	136	88	32	53	15	324
	% within SIZE	47.4%	44.7%	49.2%	49.5%	40.5%	46.8%
Total	Count	287	197	65	107	37	693
	% within SIZE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 16 Evaluating the adoption/use of XBRL * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	5	4	3	3	3	18
	% within SIZE	1.8%	2.1%	4.6%	2.9%	8.1%	2.6%
Important	Count	71	54	16	31	14	186
	% within SIZE	25.1%	28.0%	24.6%	29.5%	37.8%	27.2%
Not a Concern	Count	207	135	46	71	20	479
	% within SIZE	73.1%	69.9%	70.8%	67.6%	54.1%	70.1%
Total	Count	283	193	65	105	37	683

Table 16 Evaluating the adoption/use of XBRL * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	5	4	3	3	3	18
	% within SIZE	1.8%	2.1%	4.6%	2.9%	8.1%	2.6%
Important	Count	71	54	16	31	14	186
	% within SIZE	25.1%	28.0%	24.6%	29.5%	37.8%	27.2%
Not a Concern	Count	207	135	46	71	20	479
	% within SIZE	73.1%	69.9%	70.8%	67.6%	54.1%	70.1%
Total	Count	283	193	65	105	37	683
	% within SIZE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 17 Using technology to improve the system of internal controls * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	61	42	11	35	13	162
	% within SIZE	21.3%	21.3%	16.7%	32.7%	35.1%	23.3%
Important	Count	177	123	43	62	22	427
	% within SIZE	61.7%	62.4%	65.2%	57.9%	59.5%	61.5%
Not a Concern	Count	49	32	12	10	2	105
	% within SIZE	17.1%	16.2%	18.2%	9.3%	5.4%	15.1%
Total	Count	287	197	66	107	37	694
	% within SIZE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 18 Aligning business and IT strategy * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
Critical	Count	107	77	35	66	25	310
	% within SIZE	37.3%	39.1%	53.0%	62.9%	67.6%	44.8%
Important	Count	145	105	23	35	12	320
	% within SIZE	50.5%	53.3%	34.8%	33.3%	32.4%	46.2%
Not a Concern	Count	35	15	8	4	0	62
	% within SIZE	12.2%	7.6%	12.1%	3.8%	.0%	9.0%
Total	Count	287	197	66	105	37	692
	% within SIZE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 19 Most important issue * SIZE Crosstabulation

		SIZE					Total
		< 100 M	100-499M	500-999M	1-5B	>5B	
	Count	4	1	0	2	0	7
	% within SIZE	1.4%	.5%	.0%	1.9%	.0%	1.0%
a	Count	33	20	4	7	6	70
	% within SIZE	11.4%	10.1%	6.1%	6.5%	16.2%	10.0%
b	Count	47	33	15	18	6	119
	% within SIZE	16.3%	16.6%	22.7%	16.8%	16.2%	17.0%
c	Count	7	6	1	4	4	22
	% within SIZE	2.4%	3.0%	1.5%	3.7%	10.8%	3.2%

d	Count	25	25	6	15	9	80
	% within SIZE	8.7%	12.6%	9.1%	14.0%	24.3%	11.5%
e	Count	11	3	2	1	1	18
	% within SIZE	3.8%	1.5%	3.0%	.9%	2.7%	2.6%
f	Count	13	11	2	4	0	30
	% within SIZE	4.5%	5.5%	3.0%	3.7%	.0%	4.3%
g	Count	32	10	4	4	0	50
	% within SIZE	11.1%	5.0%	6.1%	3.7%	.0%	7.2%
h	Count	35	30	8	11	0	84
	% within SIZE	12.1%	15.1%	12.1%	10.3%	.0%	12.0%
i	Count	21	15	2	10	3	51
	% within SIZE	7.3%	7.5%	3.0%	9.3%	8.1%	7.3%
j	Count	2	8	2	2	0	14
	% within SIZE	.7%	4.0%	3.0%	1.9%	.0%	2.0%
k	Count	9	3	0	2	0	14
	% within SIZE	3.1%	1.5%	.0%	1.9%	.0%	2.0%
l	Count	3	2	0	0	0	5
	% within SIZE	1.0%	1.0%	.0%	.0%	.0%	.7%
m	Count	1	1	0	0	0	2
	% within SIZE	.3%	.5%	.0%	.0%	.0%	.3%
n	Count	11	7	3	2	2	25

	% within SIZE	3.8%	3.5%	4.5%	1.9%	5.4%	3.6%
o	Count	35	24	17	25	6	107
	% within SIZE	12.1%	12.1%	25.8%	23.4%	16.2%	15.3%
Total	Count	289	199	66	107	37	698
	% within SIZE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%