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The Association of Accountants and Financial Professionals in Business

Process Automation in Accounting and Finance

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IMA, the association of accountants and financial professionals in business, is one of the largest and most respected associations focused exclusively on advancing the management accounting profession. Globally, IMA supports the profession through research, the CMA® (Certified Management Accountant) program, continuing education, networking, and advocacy of the highest ethical business practices. IMA has a global network of more than 80,000 members in 140 countries and 300 professional and student chapters. Headquartered in Montvale, N.J., USA, IMA provides localized services through its four global regions: The Americas, Asia/Pacific, Europe, and Middle East/Africa. For more information about IMA, please visit **www.imanet.org.**

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BlackLine is a provider of cloud-based solutions for Finance & Accounting (F&A) that centralize and streamline financial close operations and other key F&A processes for midsize and large organizations. Designed to complement ERP and other financial systems, the BlackLine Finance Controls & Automation Platform increases operational efficiency, real-time visibility, control and compliance to ensure end-to-end financial close management, fueling confidence throughout the entire accounting cycle.

BlackLine's mission is to continuously improve the quality, accuracy, and efficiency of Finance & Accounting by centralizing key functions within a single, unified cloud platform. Enabling customers to move beyond outdated processes and point solutions to a Continuous Accounting model, in which real-time automation, controls, and period-end tasks are embedded within day-to-day activities, BlackLine helps companies achieve Modern Finance status, ensuring more accurate and insightful financial statements and a more efficient financial close. More than 1,500 companies with users in approximately 120 countries around the world trust BlackLine to ensure balance sheet integrity and confidence in their financial statements.

BlackLine is recognized by Gartner as a Leader in its 2016 Magic Quadrant for Financial Corporate Performance Management (FCPM) Solutions and as a pioneer of the Enhanced Financial Controls & Automation (EFCA) software category.

Based in Los Angeles, BlackLine also has regional headquarters in London, Singapore, and Sydney. For more information, please visit **www.blackline.com.**

Introduction

Despite advances in technology, many management accountants continue to spend long hours on manual and redundant month-end activities. Freeing them from this labor enables them to focus on strategic initiatives that can help grow the business.

In May 2016, IMA® (Institute of Management Accountants) surveyed more than 751 financial executives, managers, and analysts in the United States to learn how companies are automating their accounting processes and what problems were faced and overcome, and to identify best practices. The goals of this study were to learn more about the extent to which companies have automated their accounting processes, where would they like to automate, the challenges they face, and the best practices for automating. We considered the following types of processes:

- Bank, credit card, and operational reconciliations
- Account reconciliations
- Cost allocations
- Amortization
- Journal entry creation
- Variance analysis
- Controls verification

The response rate for the survey was 3.2%. Information about the respondents is provided in the Appendix.

Current Closing Process

Overall, 75% of respondents said they track how long it takes to close the books. For this report, we split the responses into small firms (revenues up to $100 million) and large firms (revenues greater than $100 million). As shown in Table 1, larger firms are more likely to track closing time than small firms (82% vs. 70%). The number of days to close the books is slightly less for large firms than for small firms (6.6 days vs. 7.4 days).

Table 1. Closing the Books

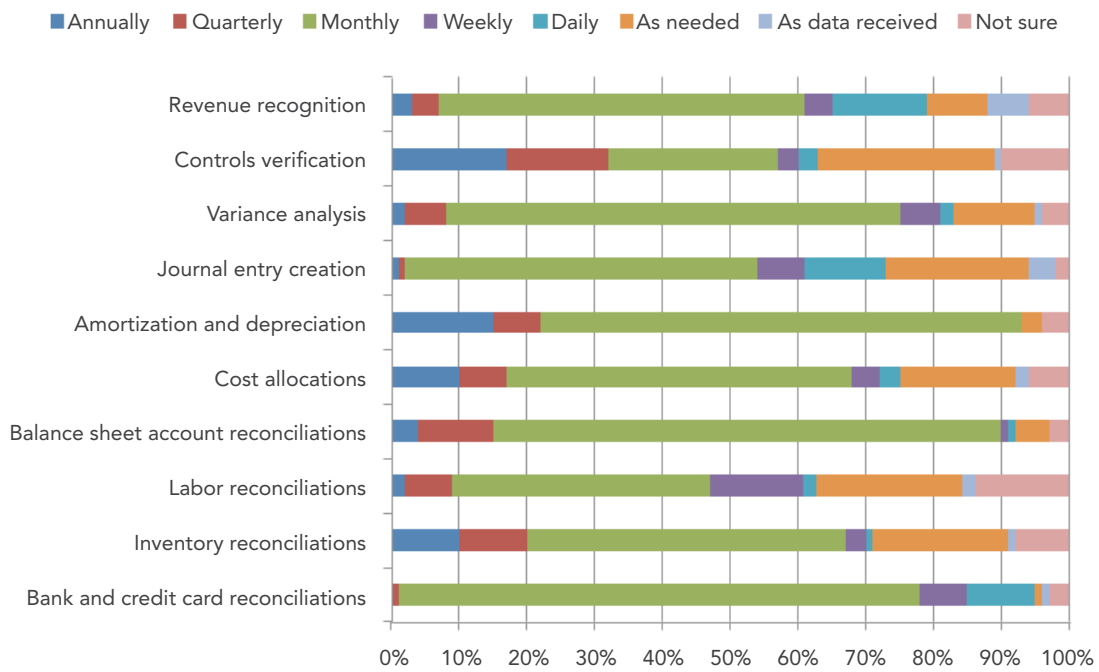
	% of Firms		
Do you track how long it takes to close the books?	**Small**	**Large**	**All Firms**
Yes	70%	82%	75%
No	27%	14%	22%
Not sure	3%	4%	3%
If yes, how many days? (mean)	7.4	6.6	7.1

Note: Relative difference in those saying "Yes" is statistically different at $p < 0.01\%$. Difference in days is not statistically significant.

Sixty-four percent of the firms track how long it takes to produce financial statements. The range was 0 to 180 days, with a mean of 6.5 days and a median of 4 days.

Figure 1 shows how often respondents' companies perform various accounting activities. Except for controls verification, the activities are most commonly performed monthly. These results suggest that many firms may have some opportunity for more automated or continuous accounting. Controls verification is commonly performed as needed, monthly, annually, and quarterly. Also, labor and inventory reconciliations, journal entries, and cost allocations are done as needed by many companies. Small firms are somewhat more likely than large firms to perform inventory reconciliations and amortization and depreciation activities annually rather than monthly. They also are somewhat more likely to perform inventory and labor reconciliations, variance analysis, and controls verification on an as-needed basis.

Figure 1. Frequency that Various Accounting Activities Are Performed



When asked whether their closing processes are documented:

- 33% said "yes, thoroughly"
- 48% "yes, but not thoroughly"
- 17% said they are not documented

Large firms were more likely than small firms to document their closing processes thoroughly (41% vs. 28%). Twenty-one percent of small firms don't document their closing processes at all vs. only 10% of large firms. Overall, these results point to the fact that about two-thirds of the firms either don't document their closing processes at all or do so for only parts of the process.

Table 2 shows that about two-thirds of respondents' firms are highly dependent on packaged accounting or enterprise resource planning (ERP) applications for closing processes. About two-thirds are also highly dependent on spreadsheets (28% said they were somewhat dependent on spreadsheets). The high dependence on spreadsheets is a bit alarming given the risks and problems associated with spreadsheet use, including changing accounting standards, time required, input errors, and spreadsheet cell linkages.

Table 2. Degree of Dependence on Applications and Spreadsheets for Closing Processes

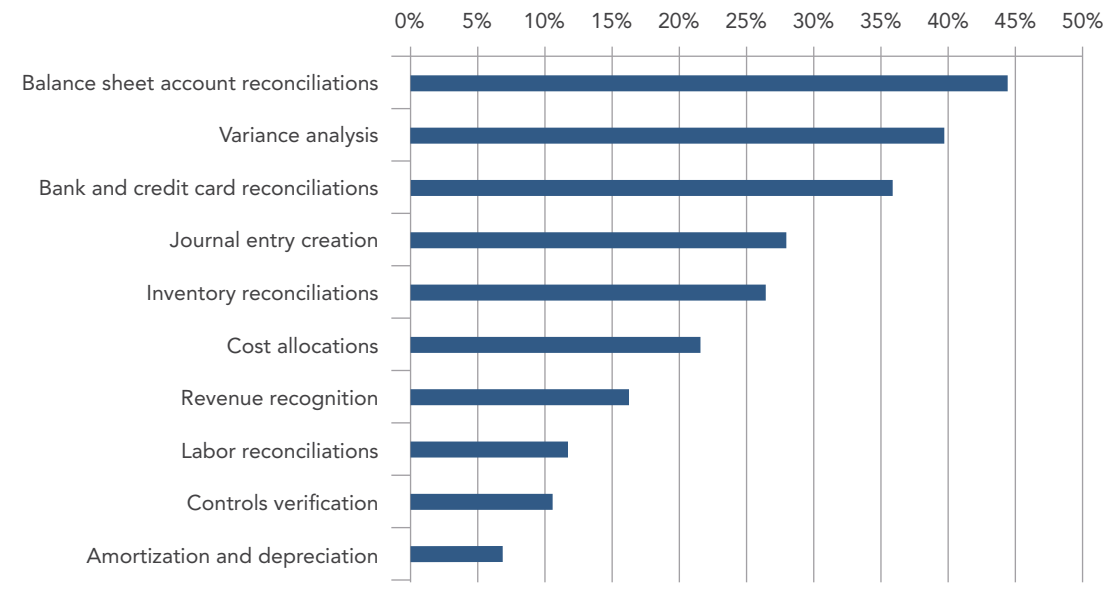
	Small Firms	Large Firms	All Firms
Packaged accounting or enterprise resource planning (ERP) application	66.1%	70.1%	67.7%
Custom application	17.9%	31.0%	23.2%
Spreadsheets	61.4%	73.7%	66.4%

Note: Only percentages with very high dependence are included. The relative mix of responses between small and large firms is statistically different at p < 1%.

Challenges with Current Accounting Processes

As shown in Figure 2, the four accounting processes that respondents identify as requiring the most time and effort are balance sheet account reconciliations (44%), variance analysis (39%), bank and credit card reconciliations (36%), and journal entry creation (28%). These processes may be especially good candidates to consider for automation.

Figure 2. Processes Requiring the Most Time and Effort



Note: Respondents could select up to three processes.

More than two-thirds of the respondents said they are under pressure to speed up the closing process. When asked where the most pressure is coming from, 50% said top management or owners. Other sources of pressure include line of business leaders, midlevel managers, investors, and auditors.

The number one constraint identified in the closing process is getting information from other departments (see Table 3). Examples include final sales data, shipments, time sheets, and travel expenses. Other common constraints include staff resources, current software systems, and correcting data errors. These constraints can be alleviated with integrated systems and automated processes. Some comments from respondents were:

- *The general need to reconcile trial balance accounts for accuracy and reliability. The time it takes to perform complex reconciliations to ensure accuracy then becomes a constraint under limited resources, like staff.*
- *M&A integrations not in ERP systems yet!*
- *We have a really old ERP system.*

Those who said there were other major constraints often indicated third parties. Two representative comments are:

- *Data from outside providers.*
- *Dependent on outside consultants and internal actuaries that take up to 12-15 workdays to supply data.*

Table 3. Biggest Constraint on the Current Closing Process

Getting information from other departments	29%
Staff resources	22%
Current software systems	19%
Correcting data errors	9%
Internal controls	2%
Foreign entities	2%
Review by upper management	2%

We asked respondents to indicate the greatest obstacles to their finance team's ability to respond effectively to the information demands of management and lines of business (LOB) decision makers. The top answer—cited by 41% of respondents—was the time required to compile the data, which undermines the information's usefulness (see Table 4). Also frequently mentioned were lack of information technology (IT) resources, difficulty measuring or quantifying costs, unrealistic expectations, dependence on cross-functional teams, lack of data, and the demand to provide more information. Companies with these issues may want to consider more integrated and automated systems.

Table 4. Biggest Obstacles to Meeting the Information Demands of Management	
Time required to compile the data is undermining the information's usefulness	41%
Lack of IT resources	20%
Difficulty measuring or quantifying costs	18%
Unrealistic expectations about finance's ability to provide analysis and interpretation	17%
Lack of control; dependence on cross-functional teams	15%
Lack of data	14%
Demand to provide more information	14%
Other	5%

Note: Respondents could select up to three processes.

Respondents' comments about obstacles typically identified system limitations, time, data issues, skills, and confusion about priorities—all of which suggest the need for more integrated information systems and automation of closing processes. Here are some representative comments:

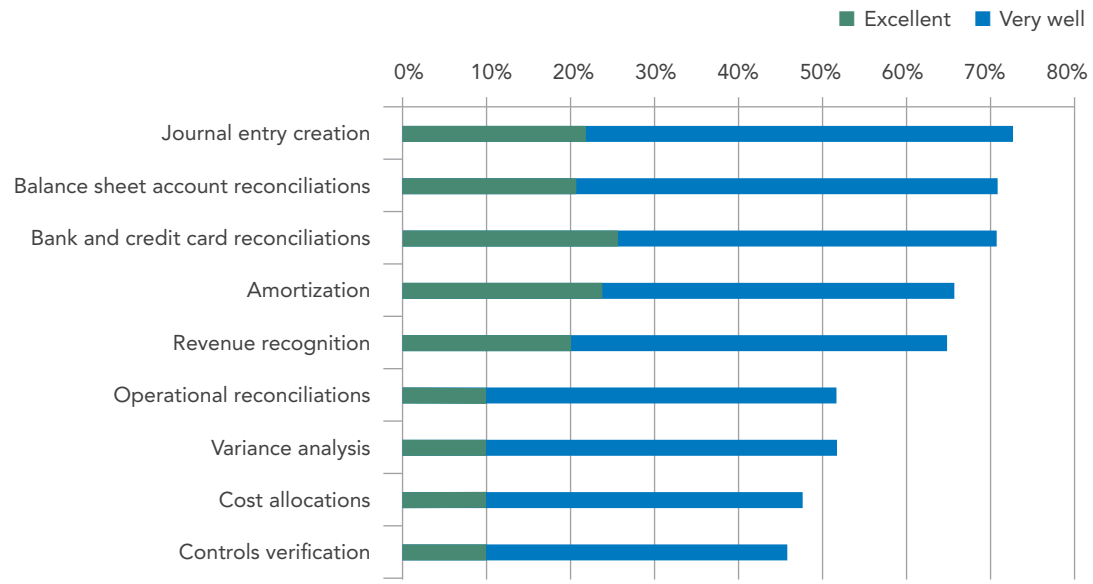
- *Lack of useful information. Data lacks detail to be able to make much sense of it.*
- *M&A data and ensuring apples to apples.*
- *Lack of direction as to what information is demanded and how it needs to be presented.*
- *Lack of training on how to get and process data. Only a few have adequate training.*
- *Not enough personnel to do all the work.*
- *Data in silo systems.*
- *Data is in too many places because of the lack of planning when our software was created.*
- *ERP system limitations vs. current makeshift processes.*
- *Importing five different software transactions.*
- *Lack of an integrated data warehouse that stores operational metrics and client-level data.*

Satisfaction with Current Accounting Processes

As shown in Figure 3, the processes that best meet expectations (rated "excellent" or "very well") are journal entry creation, balance sheet account reconciliations, and bank card reconciliations. The processes least meeting expectations (rated "poorly" or "very poorly") are variance analysis, cost allocations, and controls verification.

There were a few differences in responses from respondents in small firms compared to those from large firms. Small firms generally felt their bank reconciliations and journal entry creation processes were performing better than large firms did. Large firms cited controls verification and amortization processes as performing somewhat better than small firms did.

Figure 3. How Well Accounting Processes Meet Needs



Overall, few respondents expressed strong satisfaction with their closing process. Only 21% were very satisfied, and 54% were somewhat satisfied. Of the rest, 20% were somewhat unsatisfied, and 5% were very unsatisfied. These results were consistent for both large and small firms.

Similarly, as shown in Table 5, only 28% of respondents said they completely trust the accuracy and overall integrity of the financial close data, while 61% trust it for the most part. Four in 10 respondents said they don't use effective data management tools.

Table 5. Level of Trust in the Accuracy of Financial Close Data

I trust it completely.	28%
I trust it for the most part.	61%
I trust it to a limited extent.	9%
I don't trust it much.	2%
I don't trust it all.	1%

Automating Accounting Processes

Despite the fact that two-thirds of the respondents said automation would improve the flow and usability of the information to LOB decision makers and engage them more in financial planning processes, only 32% have automated any accounting processes in the last year. Of those who specified what processes they have automated, the most related to accounts payable (14%), journal entry creation (12%), accounts receivable/billing (13%), bank reconciliations (7%), and reporting (7%).

A continuous accounting approach means shifting activities so they occur on a more frequent basis. Within the last year, only 23% had shifted at least some activities previously performed at

the end of the period to occur on a more frequent basis. The most frequent activities mentioned related to account reconciliations (19%), bank reconciliations (15%), journal entry creation (7%), and reporting (7%).

We asked respondents about the most important benefit of spending less time on closing cycles. As shown in Table 6, the biggest benefit by far, mentioned by 55% of respondents, is to have more time available to work on strategic initiatives that can help grow the business. Another 23% said the most important benefit would be more timely and accurate financial statements.

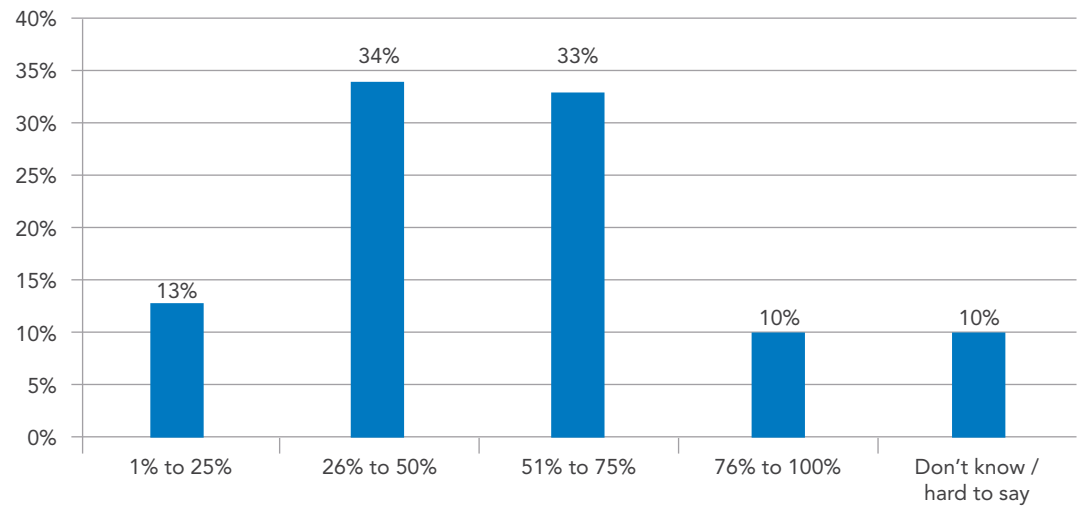
Table 6. Most Cited Benefits of Spending Less Time on Closing Cycles

More time available to work on strategic initiatives that can help grow the business	55%
More timely and accurate financial statements	23%
Less reliance on specific individuals	8%
I don't see a benefit	6%
Increased visibility	5%
Mitigation of financial risk	4%

The closing process takes more than seven days on average—with 43% of respondents spending more than half their time on collecting, entering, and validating data (see Figure 4). Another 34% said they spend from 26%-50% of their time on those tasks. The results are consistent for both large and small firms.

If that time could be reduced by even a day or two, it would free up hours of time to enable the accounting team to do more value-adding analysis. Almost one-fourth of the respondents said it would result in more accurate financial statements, presumably due to having more time to validate the data and improve the information gathering system.

Figure 4. Percentage of the Finance Team's Time Spent on Collecting, Entering, and Validating Data



When respondents were asked what would need to happen for their company to automate its closing process, the following were the most common types of comments (with examples):

- Better IT system: "A whole new software package."
- Data collection: "Other departments could close their monthly data on timely basis."
- Automation of processes: "Change processes to be less dependent on other departments."
- Management buy-in: "A massive change in thinking by management and their reliance on paper/ink sign offs."
- ERP system: "Better integration with ERP systems."
- More staff: "Hire more IT people."
- New accounting system: "New accounting system that brought all aspects of the business together creating less reliance on spreadsheets and manual intervention."
- More integrated systems: "Integrated system instead of several processes that have to be manually combined."
- Training: "Better understanding of our new software system."

We found general agreement that automation would improve the flow and usability of the information to LOB decision makers and engage them more in financial planning processes:

- 66% of all respondents agreed.
- 72% of large firms agreed vs. 62% of small firms.
- 84% of those who said they are very dissatisfied with their current closing process agreed.

Among all respondents, 73% said that quicker access to the right information would help their organization to more rapidly alter course and adjust business plans to achieve better results.

On the other hand, several respondents said they are already as automated as they need to be and further automation would not help. One person commented, "I already close month end on the first business day of the following month. We have no need to speed up the process." Many of the respondents wish they could say that.

Conclusions

The results of this study suggest many firms could benefit from a more continuous accounting approach. This means shifting activities to occur on a more frequent basis. More than just automating accounting processes, continuous accounting is a methodology where those processes traditionally left for the month or period end are spread throughout the period more evenly, with the goals of improving accuracy, allowing more time for review, and increasing efficiency.

We collected survey data about respondents' current closing process, their challenges and satisfaction with their current accounting processes, and the impact of automating more accounting processes. As mentioned, on average it takes about seven days to complete the closing process. Two-thirds of the firms surveyed either do not document their closing processes or do so only for some activities.

Sadly, two-thirds also said they rely heavily on spreadsheets. This high reliance on spreadsheets adds both time to produce financial statements and the risk of inaccurate results. Reliance on spreadsheets and other manual closing processes contribute to especially longer time requirements for balance sheet accounting and bank reconciliations, variance analysis, and journal entry creation. Companies may want to reconsider these and other manual processes and find ways to automate at least some of the data collection and integration steps.

More than two-thirds of the respondents said they face some type of pressure from upper management or others to speed up the closing process. The biggest constraints to doing so are getting information from other departments, staff resources, current software systems, and correcting data errors. Financial leaders may want to assess these constraints in their companies and find ways to overcome them.

In spite of the fact that only about 20% are very satisfied with their current closing process and only 28% completely trust the accuracy of their financial reporting data, only about a third of the companies have automated some part of their accounting processes in the last year. There were many different answers to the question of what would need to happen to automate their company's closing process. Some of them require monetary investment (e.g., better IT systems, more staff, or new accounting systems), and others are more about changing behaviors (e.g., management buy-in and training). One person wrote, "We rely on a couple of different ERP systems to feed data into our main ERP system. If we could get a better handle [on] exporting/importing and the accuracy of the data, it could improve our closing process. We currently spend a lot of time reconciling data from one system to the other."

It's always difficult to provide hard numbers for a return on investment (ROI) for new data systems because the value they provide is often hard to cull away from other initiatives. For those financial professionals who wish to save time from closing the books and put more time into value-adding activities to help the firm reach its strategic goals, a key first step is probably not all that difficult. Talk with other LOB managers and decision makers and ask them what

information they wish they had to help them make the company more profitable. Find out how they would use that information to help the business and link those activities to increased profits. For example, one person who started an automation initiative stated, "This will provide better, more timely information and reduce overhead costs." Then conduct an assessment of where that information can be found and what tools will help collect and manage that information. Showing a logical progression from reducing the time it takes to collect and process accounting information to being able to provide information that will lead to more profits is an effective way to gain management buy-in.

Appendix: Demographic Data for Respondents

Table 7. Job Titles		
	Number	**%**
Controller, financial controller, or comptroller	197	26%
Finance or accounting manager	156	21%
CFO	80	11%
Finance or accounting director	52	7%
VP of Finance or Accounting	45	6%
Chief Accounting Officer	4	1%
COO	2	0%
Other	213	28%
Total	**749**	**100%**

Table 8. Industries		
	Number	**%**
Manufacturing	266	36%
Business services	79	11%
Construction and contracting	51	7%
Finance/insurance	50	7%
Healthcare	47	6%
Wholesale/distribution	41	5%
Nonprofit	37	5%
Retail/ecommerce	35	5%
High tech/software	34	5%
Transportation/utilities	29	4%
Education	19	3%
Energy	18	2%
Government	14	2%
Media/entertainment	13	2%
Advertising/creative services	10	1%
Communication	6	1%
Total	**749**	**100%**

Table 9. Annual Revenue of Respondents' Companies		
	Number	**%**
Less than $1 million	45	6%
$1 million – $10 million	138	18%
$11 million – $100 million	263	35%
$101 million – $500 million	122	16%
$501 million – $1 billion	60	8%
$2 billion – $5 billion	49	7%
$6 billion – $10 billion	21	3%
More than $10 billion	51	7%
Total	**749**	**100%**

Table 10. Number of Employees in Organization		
	Number	**%**
Less than 50	163	22%
51-100	113	15%
101-200	102	14%
201-500	106	14%
501-1,000	58	8%
1,001-10,000	131	17%
More than 10,000	76	10%
Total	**749**	**100%**