

**IT Key Issues, Investments, and Practices of Organizations & IT Executives:
Results and Observations from the 2013 SIM IT Trends Study**

Leon Kappelman, University of North Texas

Ephraim McLean, Georgia State University

Jerry Luftman, Global Institute for IT Management

Vess Johnson, University of North Texas

Preliminary Report for Participants Only

Thank you for taking the time to complete the 2013 SIM survey!

Without your participation there is no research and no report.

This report is embargoed by SIM until after it is presented at their 2013 SIMposium conference on 11-November at 6:00 PM EST. The slide deck from that presentation will be made available to all SIM members after the conference on simnet.org.

This is the most complete report available anywhere. An edited and abridged version of this report will be published in the December 2013 issue of the *MIS Quarterly Executive*. As with all issues of that journal, it will be available free of charge to all SIM members.

We have done our very best to make this report error free. But let's face it, it's software; and you know how that goes sometimes 😊. So if you find a defect, or have a question, please let me know about it at Leon.Kappelman@unt.edu.

14-October-2013

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“I’ve got to admit it’s getting better, a little better all the time” – Lennon & McCartney

Executive Summary

Despite enduring economic uncertainties, U.S.-based organizations continue to invest in IT to improve operations, reduce costs, and enable strategies. IT budgets, hiring, and salaries are increasing; and we get a sense of cautious optimism from the Society for Information Management’s (SIM) 2013 IT Trends Survey.

Since its inception in 1980, SIM’s annual survey of its members has helped IT leaders around the globe understand important issues and trends. This article presents the major findings based on responses from 484 U.S.-based organizations in the second quarter of 2013. The five most important IT management concerns of these organizations in 2013 were:

1. IT and business alignment
2. Business agility
3. Business productivity
4. Business cost reduction and controls
5. IT cost reduction and controls

Their five largest IT investments in 2013 were:

1. Analytics / Business Intelligence
2. Customer Relationship Management
3. Cloud Computing (e.g., SaaS, PaaS, IaaS)
4. Enterprise Resource Planning
5. Big Data

As in previous reports, this article also presents findings on IT spending patterns, how CIOs spend their time and to whom they report, IT workforce trends, and other important aspects of IT management. Included for the first time are specifics about the use of cloud and shared services, IT workforce retirement forecasts, and the personal views of senior IT leadership about their most important or worrisome IT management issues and technologies.

Overall, as organizations and IT leadership focus more on tactical and operational issues and investments, it does appear that IT is fairly resilient and generally seen as “part of the solution” during these challenging times.

Introduction

Since 1980, the Society for Information Management (SIM), in a joint effort with different research institutions, has conducted an annual survey of the key issues facing IT executives. One of the important contributions of this research is its ability to identify important trends across the industry. The 2013 SIM IT Trends Survey, conducted in the second quarter of 2013, focused on five important areas:

- I. IT management key issues and concerns
- II. Largest and most significant IT investments
- III. IT budgets and staffing trends
- IV. Characteristics, background, and time utilization of CIOs
- V. Characteristics of participating organizations and their IT practices

This year we returned to the Delphi research method used in earlier SIM IT Trends Surveys to develop and refine the research questionnaire. Using prior questionnaires and reports as a starting point, we conducted a three-round Delphi with members of SIM’s Enterprise Architecture Working Group. The focus of the first two rounds was refining the questionnaire itself, with the third round mostly for pilot testing the online survey instrument. The survey invitation was distributed by individual e-mail with a personal link to all 4,913 SIM members. We received a total of 650 complete responses (a 13.2% response rate), including 573 senior IT leaders from 484 unique organizations (represented in our dataset by their highest ranking IT executive responding). We also analyzed separately the responses from the 285 CIOs (identified as the “top or highest IT person (e.g., the CIO)” among those who completed the survey; 267 of these are included in the 484 (organization affiliation was not available for 18 of the CIOs). See “Appendix: Design and Delivery of SIM’s IT Trends Survey” for additional details. Figure 1 provides a breakdown of these organizations by industry.

Figure 1: Response by Industry for 484 Unique Organizations		
Industry	Frequency	Percentage
Financial Services / Insurance	69	14.3%
Healthcare/Medical	52	10.7%
Manufacturing	52	10.7%
Education	34	7.0%
Government	28	5.8%
IT Services / Consulting	26	5.4%
Retail/Wholesale	26	5.4%
Not-For-Profit	25	5.2%
Business Professional Services	22	4.5%
Energy	18	3.7%
Transportation/Distribution	15	3.1%
Consumer Goods	13	2.7%
Media / Entertainment	12	2.5%
Technology	11	2.3%
Chemical Industry	9	1.9%
Construction	8	1.7%
Other	8	1.7%
Hospitality/Travel/Leisure	7	1.4%

Medical Technology / BioMedical	6	1.2%
Real Estate	6	1.2%
Utilities	6	1.2%
Aerospace / Defense	5	1.0%
Electronics / Semiconductor	5	1.0%
Telecommunications	5	1.0%
Agriculture	4	0.8%
Automotive	4	0.8%
Food Services	3	0.6%
Printing / Publishing	3	0.6%
Mining / Minerals	2	0.4%

The participants were asked to select their top three IT management issues or concerns from a list of 37 and their three largest technology investments from a list of 55. This is similar to the approach used for the past 34 years. In addition, participants were asked to select the top three IT management issues that they considered most worrisome or important to them personally, as well as the three IT investment priorities that cause them the greatest concern. This newfound ability to compare organizational priorities with issues and technologies of greatest concern to IT leaders provided some intriguing results. Respondents were also asked questions pertaining to their spending, reporting relationships, how they spend their time, and various other IT organizational and management practices.

This paper presents the major insights gained from the 2013 survey in each of the five key areas listed above. In addition to providing a snapshot of important IT considerations for 2013, it includes comparisons and trends based on earlier SIM survey results.

I. The Top IT Management Issues and Concerns

In this research respondents were asked to identify the three IT management issues that they considered “most important” to their organization and the three issues that were “most important or worrisome” to them personally or that “keep you up at night.” Capturing both the organizational and personal perspectives of the respondents adds detail to the research and provides the potential to yield additional insights. Several of the options used in previous year’s questionnaires were separated to provide further detail and granularity. For example:

- “Business Productivity & Cost Reduction” was split into
 - Business Cost Reduction and Controls
 - Business Productivity
- “Business Agility & Speed to Market” was split into
 - Time to Market/Velocity of Change
 - Business Agility
- “IT Reliability and Efficiency” was split into
 - IT Reliability
 - IT Efficiency
- “Vendor Management and Outsourcing” was split into
 - Vendor Management
 - Outsourcing
- “Security & Privacy” was split into
 - Security

- Privacy

In addition, new options were added, including

- Business Continuity / Disaster Recovery
- BYOD
- Integration
- IT Quality
- IT Service Delivery
- IT Talent / Skill Shortage
- Legal Compliance (e.g., HIPAA, SOX, PCI, +)
- Prioritization of IT Projects
- Risk Management
- Societal Impacts of IT

The 2013 top 10 IT management concerns of most importance to the organization, from the perspective of the senior-most IT leader in each of the 484 organizations, are shown in Figure 2, together with the comparative rankings from prior SIM IT Trends Surveys since 2003.

Comparing the top 10 organization issues reported this year with those reported in prior years, we find that these top issues have been relatively stable of late. Although they moved around, and some were split into two options as explained above, seven of 2012's top 10 concerns filled nine of 2013's top 10 slots. Seventh ranked Security moved up from #9, but its former partner Privacy strangely fell to dead last in 2013. The only selection new to the top 10 was #8 IT Service Delivery. Other highly ranked organizational concerns among the new options were #11 Prioritization of IT Projects, #14 Business Continuity / Disaster Recovery, #16 Legal Compliance, #17 Risk Management, and #18 Integration.

The three management concerns that appeared in the 2012 list but fell off of the 2013 top 10 list were Business Process Re-engineering (moving from 3rd to 12th), IT Strategic Planning (moving from 6th to 15th), and Enterprise Architecture. Enterprise Architecture dropped the furthest, moving from 8th to 21st, but interestingly ranked #6 as the most worrisome investment to these same 484 senior IT leaders. Perhaps the rankings drop we see in IT Strategic Planning, Business Process Reengineering, and Enterprise Architecture is an indication that these uncertain and middling economic times have caused organizations to focus more on tactical, operational, and more measurable considerations.

The Organization's Top Five Most important IT Management Issues and Concerns

Looking at the organizations' top five most important IT management concerns in Figure 2, Aligning IT with the Business is ranked number one. This issue was ranked second in the 2012 SIM IT Trends Survey and has been ranked #1 or #2 in all but one year since 2003, when it ranked #3. Business Agility ranked second in this survey and has appeared in the top three since 2009. Business Productivity, also a top five since 2009, ranked third in 2013, down from number one in 2012 when it was combined with Business Cost Reduction, which itself ranked #4 in 2013. Holding steady at 5th again this year was IT Cost Reduction.

Figure 2: Organizations’ Top 10 Most Important IT Management Concerns, 2003-2013 (1)

IT Management Concerns	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Alignment of IT with the Business	1	2	1	3	2	1	2	1	1	1	1
Business Agility (4)	2	3	2	2	3	13	17	7		5	7
Business Productivity (3)	3	1	4	1	1	7	4				
Business Cost Reduction and Controls	4	Combined with “Business Productivity” in prior years. (3)									
IT Cost Reduction and Controls	5	5	10	8	5	7	4	5	10	8	5
Time-to-Market / Velocity of Change	6	Combined with “Business Agility” in prior years. (4)									
Security (2)	7	9	8	9	9	8	6	3	2	3	3
IT Service Delivery	8	New									
IT Efficiency	9	10	6	3	6	Previously combined with “IT Reliability”					
Revenue Generating IT Projects	10	4	9	6	8	17					
(1) Blank cells, unless otherwise noted, indicate that the issue was not asked about in that year of the survey. (2) Previously combined with “Privacy”											

1. *Aligning IT with the Business*

Aligning IT with the Business has been a top ten concern since these SIM Surveys began in 1980. It ranked number one in seven of the last eleven years. This year, 211 of 483 organizations, or nearly 44% of all the responding organizations, identified Alignment as one of its top three IT management concern. Alignment was selected over 55% more often than #2 ranked Business Agility in 2013. The issue of IT Alignment with the Business has been of significant interest to both researchers and practitioners for decades¹ and appears to be central to how IT executives view the purpose of IT and their own roles. Perhaps alignment is a persistent issue because organizations, markets, economies, and technologies are constantly changing and thus getting and staying aligned is a continuous process too.

2. *Business Agility*

Although included in the SIM IT Trends questionnaire for over a decade, Business Agility became a top three IT management concern in 2009 during the global economic downturn. It is number two in this year’s survey, up from number three in last year’s survey when it was combined with Speed to Market (now ranked #6). This year it was identified as a top three pick by 133 organizations (27.5%), well below the number of organizations that listed Alignment in their top three. Agility’s high ranking suggests that the greater uncertainty and increasing pace of change that characterize these times correspondingly increases the need for organizations to be more flexible and responsive to market and other changes too. Thus Business Agility becomes ever more important in achieving business success. But on the other hand, IT agility requires not just understanding how the business and its requirements have changed, but also requires having a technological infrastructure in place that can also be quickly and economically changed.

3. *Business Productivity*

Business Productivity, introduced into the SIM IT Trends Survey in 2007, was selected as a top three concern by 113 organizations (23.4%) making it the 3rd most important concern in 2013, down from #1 in 2012 when it was combined with 2013’s 4th ranked Business Cost Reduction.

¹ Luftman, J, & Kempaiah, R. (2007). “An Update on Business-IT Alignment: ‘A Line’ Has Been Drawn, *MIS Quarterly Executive*, Vol. 6 No. 3, Sept., 165-177.

Business Productivity has been in the top five all but one year, and ranked number #1 three times during the seven years since its introduction into the SIM IT Trends questionnaire. Its continued high ranking demonstrates that organizations are still striving to “do more, with less.”

4. Business Cost Reduction and Controls

Business Cost Reduction and Control was added this year as a separate choice. In prior years this was combined as a single choice with Business Productivity. It is ranked fourth this year with 90 senior IT leaders (18.6%) selecting it as one of the top three IT management concern facing their organization. If these numbers were combined with the (above) numbers for Business Productivity, it would move their combination to a number two ranking. The fact that both these ranked in the top five highlights the overall importance of efficiency, productivity, and controlling costs.

5. IT Cost Reduction and Controls

IT Cost Reduction and Controls has appeared in the top 10 every year since 2003. In six of the last 11 years it was ranked in the top five, but never higher than fourth place. This year, IT Cost Reduction remains in 5th position, the same position it held in the 2012 SIM IT Trends Survey, with 81 (16.8%) organizations selecting IT Cost Reduction as one of their organizations top three IT management concerns.

Comparing Organization’s Key Issues to Those Most Important/Worrisome to IT Leaders

As discussed above, respondents were asked to select both the three IT management concerns that they considered most important to their organization and those that were the most important or worrisome to them personally. Interestingly, this brought to light several significant differences between the two lists (see Figure 3).

Figure 3: Comparison of Organizational and Personal Key IT Management Issues

Most Important/Worrisome to IT Leaders	Most Important to the Organization	Management Issue
1	1	Alignment of IT with the Business
2	7	Security
3	16	IT Talent / Skill Shortage
4	14	Business Continuity / Disaster Recovery
5	11	Prioritization Process for IT Projects
6	2	Business Agility
7	8	IT Service Delivery
8	19	Change Management
9	6	Time-to-Market / Velocity of Change
10	23	CIO Leadership Role

As the two columns in Figure 3 make clear, only five of the senior IT leaders’ most important IT management concerns appear in the top 10 list of their organizations’ concerns. Only Alignment of IT with the Business appears in the top five of both lists, rated as number one on both. However, only 30.2% of senior IT leaders selected it as one of their top three personal concern

versus 43.7% selecting it as an organizational one. The remaining top five personal concerns are more tactical and operational; with a very clear IT, rather than a business, focus.

Business Agility, which is number two on the organization list, is rated number six in personal importance by IT leaders. Five issues identified as most important or worrisome to IT leaders are not in the top ten issues identified as most important to the organization. They are: #3 IT Skill Shortages, #4 Business Continuity / Disaster Recovery, #5 IT Project Prioritization, #8 Change Management, and #10 the Role of the CIO – all issues, save perhaps the last, that are more operational than strategic in focus.

This mismatch or divergence, particularly in the top five with only one issue in common, raises more questions than it answers, and points to a need for further analysis and research. How might this be related to the continued concern by IT leaders about IT being in alignment with the business? Does it confirm IT's more indirect role in achieving many high profile organizational objectives? Is this simply a fact of life in these times of cost consciousness? Is this focus among IT leadership on "keeping the lights on" type IT operational issues related to industry, job tenure, reporting relationship, performance measures, incentives, or the size of the organization? Our curiosity has been piqued and we plan to explore this further.

II. The Largest / Most Significant IT Investments

The 2013 survey asked respondents to pick, from a list of 55, their organization's three "largest or most significant current or near-future IT investments." Figure 4 lists the top 15 technologies identified for 2013, along with their rankings since 2003. Looking at the previous ten years, we see that there has been significant variability in the top five technology investments, perhaps not surprising due to the rapid rate of change in the IT field. However, the top four have remained somewhat stable over the last three years.

This variability is also indicated by the relatively small percentage of respondents selecting any one investment. Only the top seven were selected by more than 10% of the respondents as one of their top three investments. Although more than 42% selected Analytics/BI, making it #1 for the 5th year in a row, #2 ranked CRM was selected by only 19.5%, #3 Cloud by 18.5%, #4 ERP by 16.6%, #5 Big Data by 12.6%, #6 [Mobile] Apps by 11.8%, and #7 Enterprise Application Integration by 10.4%. Those ranked #8 to #19 were each selected by between 5% and 10% of respondents. IT investments appear to be well diversified across a broad number of options. This too raises questions about possible trends and relationships and further research may provide beneficial insights into patterns of IT investment.

Examining the 2013 top five largest and most significant IT investments of organizations in Figure 4, it is not surprising to see that each of them could play a significant part in achieving the organizations' top five IT management concerns shown in Figure 2. IT Cost Reduction, the #5 issue in Figure 2, is perhaps the exception, although #3 Cloud can certainly reduce IT investment and potentially reduce IT costs as well. All of the top 10 investments in Figure 4 clearly have the potential to play a part in achieving the business objectives indicated in the top four IT management issues /concerns in Table 2.

Figure 4: Organizations’ Largest /Most Significant IT Investments, 2003-2013 (1)

	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Analytics / Business Intelligence	1	1	1	1	1	2	2	2	3	2	1
Customer Relationship Management	2	5	5	9	13						
Cloud Computing (e.g., SaaS, PaaS, IaaS)	3	2	2	5	17						
Enterprise Resource Planning	4	3	3	3	3	14	6		5		
Big Data	5	10									
[Mobile] Apps	6	6	4	9	24						
Enterprise Application Integration	7	8	9	18	5	12	32				3
Network / Telecommunications	8	12									
Customer / Corporate Portals	9	16									
Business Process Management Systems	10	9	16	12							
Disaster / Recovery	11	13	14	4	6	3	4				
Collaboration Tools	12	4	8	7	7						
Virtualization	13	15	7	2							
Security	14		11	8							
Enterprise Architecture	15										

(1) Blank cells, unless otherwise noted, indicate that the issue was not asked about in that year of the survey.

1. Analytics / Business Intelligence

Analytics / Business Intelligence (BI) remains in first place as the top IT investment, a ranking that it has now held for five years. It ranked in the top three since 2003. BI was selected by 203 organizations (42%), as one of their three largest or most significant IT investments, more than twice the number for second place Customer Relationship Management. It is worth mentioning that potential synergies exist between BI systems and the data made available via investments in #2 ranked CRM, #4 ERP, #5 Big Data, as well as many of the other technologies listed in Figure 4.

2. Customer Relationship Management (CRM)

Customer Relationship Management (CRM) first appeared on the list of largest IT investments in 2009, when it ranked 13th. In 2010 it tied for ninth and moved to fifth place in 2011 and 2012. This year CRM is in the number two spot behind BI. It was selected by 94 organizations (19.5%) as one of their top three technology investments. CRM is a tool for managing an organization’s interactions with its customers and/or suppliers. CRM systems can help organize, automate, and synchronize business processes related to sales, marketing, and customer service, enhancing quality and efficiency, decreasing overall costs, reducing response time, and promoting enterprise agility – all among the top 10 IT management concerns of organizations in 2013.

3. Cloud Computing

As technologies have evolved and matured, some of the technology investment categories in the SIM IT Trends questionnaire have also evolved. The first appearance of Cloud Computing was in the 2009 as Software as a Service (SaaS). Later, the more-comprehensive category “Cloud Computing” was added, to include SaaS, PaaS (Platform as a Service), and IaaS (Infrastructure as a Service). Cloud Computing is third in this year’s SIM IT Trends Survey, down from second

place in the last two years. Cloud Computing was a close third behind CRM, with 90 organizations (18.6%) selecting it as one of their three largest or most important IT investments.

4. Enterprise Resource Planning (ERP)

Investments in ERP systems fell slightly into 4th position in the 2013 SIM IT Trends Survey. ERP was 3rd ranked in the four consecutive years from 2009 until 2012. ERP was picked as one of the three largest or most significant technology investment by 80 (16.6%) of organizations. ERPs provides a vehicle for reducing business expenses and optimizing business processes, both important current management objectives, as organizations leverage IT to reengineer business processes. ERP systems can often enable IT agility and thus IT’s ability to quickly help its business partners and customers reduce costs, improve productivity, and respond to opportunities. ERP systems, by virtue of the comprehensive data they can provide about internal operations, as well supply chains and customers, can enable second and third order benefits when used in combination with BI and other systems. Thus it is not surprising that these IT investments have spent so many years at the top of this list.

5. Big Data

Rounding out the five largest IT investments of 2013, Big Data was selected by 61 (12.6%) organizations as a one of their three largest investments. Often linked and sometimes used synonymously with #1 ranked Analytics, Big Data typically has a customer-facing focus and, in addition to traditional data sources, can include the use of unstructured and external data sources, including data available from social media, government records, search engines, credit card transactions, and other sources. Its ranking is up considerably from #10 in 2012, when it was first added to the SIM questionnaire.

Comparing Organizations’ Largest IT Investments to IT Leadership’s Most Worrisome

As was done with the top IT management issues, the questionnaire also asked respondents to select not just their organization’s three “largest or most significant ... IT investments” but also the three that they felt were “most worrisome to you (i.e., things that ‘keep you up at night’).” By separating the IT investments most important to the organization from those viewed of greatest concern to IT leadership, additional detail and granularity were added to the research. This too provided some rather interesting insights. Apparently, what senior IT leaders personally worry about is substantially different than what they think is important to their organizations in terms of its largest or most significant IT investments. See Figure 5.

Figure 5: Comparison of Organizational and Personal Viewpoints on IT Investments		
Most Important/Worrisome to Senior IT Leader	Largest IT Investments for the Organization	Technology / Application
1	1	Analytics / Business Intelligence
2	14	Security
3	11	Disaster Recovery
4	3	Cloud Computing (e.g., SaaS, PaaS, IaaS)
5	21	BYOD (Bring Your Own Device)
6	15	Enterprise Architecture

7	20	Enterprise Application Integration
8	17	Legacy Applications
9	4	Enterprise Resource Planning
10	2	Customer Relationship Management

As was true for the IT management issues (in Figure 3), we see considerable differences between the two rankings depending on whether the perspective is the organization’s or that of the senior IT leader. Only four of the IT leaders’ top 10 technology concerns appear in the list of the top 10 for the organization, and all of these have the potential to reduce IT costs. BI ranks number one on both the organization and the IT leader lists. The only other technology common to the top five of both lists is Cloud Computing, ranked third for the organization and fourth for the IT leader.

As with the IT management issues discussed above, almost all of the technologies on the senior IT leaders’ top 10 list are operational in nature. The two exceptions are Enterprise Resource Planning and Customer Relationship Management, ranked as number four and two respectively on the organization list but only number nine and ten on the IT leaders’ list. Still, these typically enterprise-wide application investments do have the potential to replace several older and not well integrated systems, and thereby reduce IT operating costs.

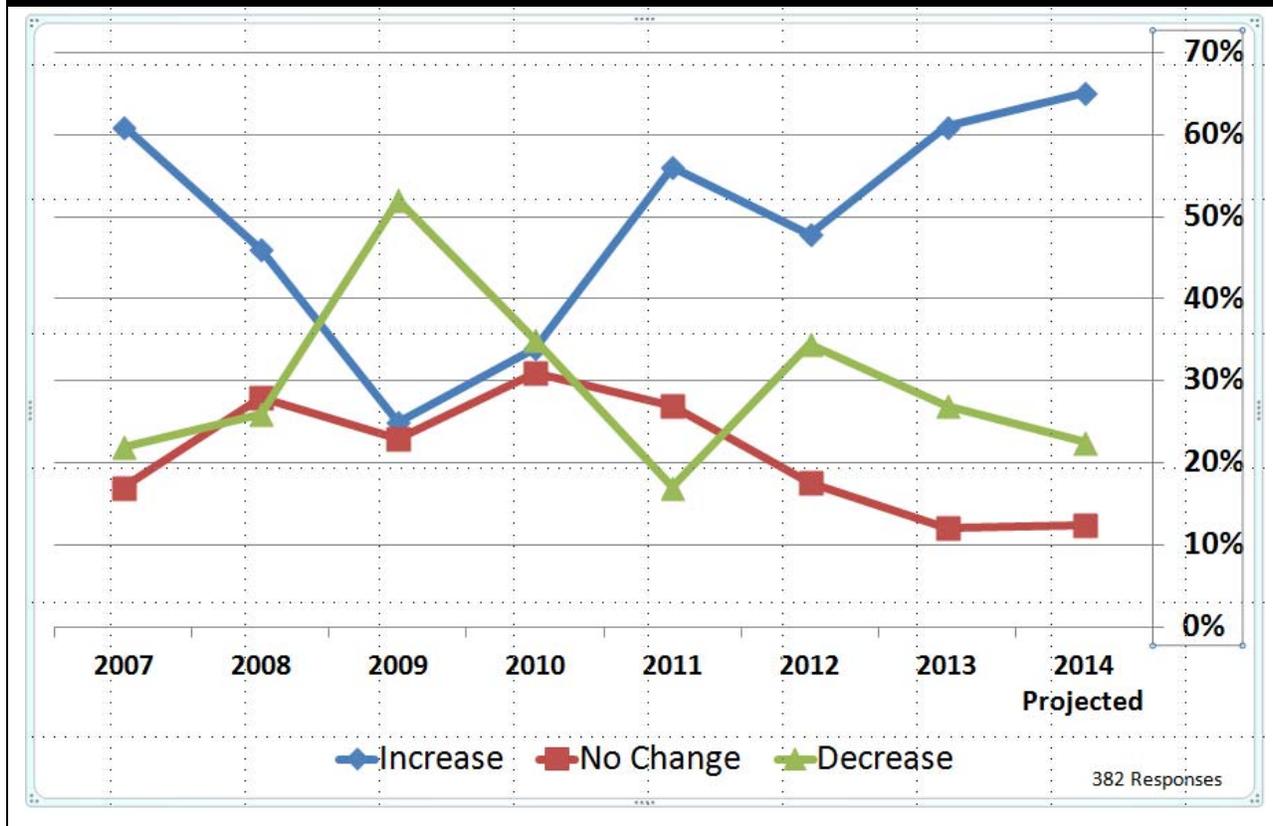
Some of this divergence in the two Figure 5 lists may be explained by the fact that some things may not require a lot of investment or cost, but nevertheless pose large risks or provide great opportunities. Second and 3rd ranked Security and Disaster Recovery are clearly examples of relatively small investments that still pose great risks to the organization and the responsibility of IT to “keep the lights on.” Likewise BYOD, which could potentially reduce IT costs, but brings with it significant security and other risks to IT and the organization. Sixth, 7th, and 8th ranked Enterprise Architecture, Enterprise Application Integration, and Legacy Applications all hold a relatively low-cost potential for IT cost reduction and increased agility, but not without some project and implementation risk.

It is noteworthy that in 2012, when organizational and personal importance were more or less combined in a single question (with an organizational emphasis), BYOD ranked #7 in its first appearance on the questionnaire. Separating these two perspectives in the 2013 survey, BYOD fell to 21st on the list of significant or important organizational IT investments, but rose to #5 as a concern of import or worry to senior IT leaders.

III. IT Budgets and Staffing Trends

Changing economic conditions have brought changes to IT budgets. From 2004-07 (prior to the “Great Recession”), the majority of organizations reported increasing IT budgets: 51% in recession-ending 2004, 62.5% in 2005, 56.6% in 2006, and 61.3% in 2007. However, as the economy slowed in 2008, only 46% of respondents reported increasing IT budgets. In 2009, only 25% of organizations reported increases, with 75% of respondents indicating that their IT budgets had remained flat or decreased, and 66% indicated flat or decreasing in 2010 with only 34% increasing (see Figure 6).

Figure 6. IT Budget Trends



In 2011 the trend improved further with 56% of the respondents reporting rising IT budgets, 27% reporting flat, and only 17% decreasing. The percent of increases pulled back a little in 2012 with 48% of organizations seeing budget increases, and budget decreases reported by 34% of respondents. Interestingly, in 2012 when respondents were asked about anticipated 2013 budgetary changes, 54.2% responded that the budgets would remain flat or decrease and only 45.8% of the organizations anticipated an increase in IT spending. However, according to the 2013 SIM Survey, the trend in IT budgets is up more than anticipated with 61% responding that budgets increased, 12% responding that budgets remained flat, and only 27% of organizations reporting that budgets actually decreased – less than half of the anticipated number flat or decreasing.

Their 2014 budget projections are more sanguine than last year’s, and more so than 2013’s actual numbers. More than sixty-five percent of organizations anticipate an increase in IT budgets in 2014, 12.4% anticipate no change, and only 22.5% anticipate budgetary reductions. Although there does appear to be some recency bias in the annual budget projections of these senior IT leaders, we do hope they are correct about 2014. Time will tell.

IT Budget Allocations

On average, IT budgets represent 4.95% of total revenues as reported in the 2013 SIM IT Trends Survey, which is about the same as reported in the 2012 survey, but significantly higher than the 3.5% to 3.9% range reported between 2005 and 2011. In fact, IT spending in 2012 and 2013, as a percentage of total revenue, is 25% above the 3.96% average for the period from 2005 to 2013.

Figure 7: 2009-2013 IT Budget Allocation (Actual) and 2014 Projected

IT Budget Area	2014 Projected	2013	2012	2011	2010	2009	2009-13 Average
PEOPLE							
Employees / Internal Staff: Domestic	37.1%	38.3%	34.0%	38.0%	43.0%	39.0%	
Offshore	2.2%	2.0%	6.0%	2.0%	3.0%	4.0%	
Outsourced Services/Contractors: Domestic	5.5%	5.7%	8.0%	3.0%	7.0%	8.0%	
Offshore	4.2%	3.8%	3.0%	2.0%	5.0%	4.0%	
Consulting Services	3.1%	3.1%	9.0%	11.0%	10.0%	12.0%	
TOTAL PEOPLE	52.1%	52.9%	60.0%	56.0%	68.0%	67.0%	60.8%
THINGS: Hardware, Software, Facilities							
In-house - domestic	34.2%	35.0%	24.0%	32.0%	32.0%	33.0%	
In-house – offshore	2.1%	1.9%	2.0%	*	*	*	
Outsourced - domestic	9.3%	8.3%	14.0%	12.0%	*	*	
Outsourced - offshore	2.4%	1.9%	*	*	*	*	
TOTAL THINGS	47.9%	47.1%	40.0%	44.0%	32.0%	33.0%	39.2%
* indicates category not used in that year. Responses: 2013 actual 314, 2014 projected 281							

An examination of the 2013 findings challenges what appear to be some common misconceptions about IT spending. More than 90% of the IT budgets of organizations based in the U.S. are spent domestically. Of the 9.5% or so of total IT spending that is spent offshore, about 40% goes to internal employees and facilities. The remaining 60% means just 5.7% of total IT spending goes to offshore outsourcing. Although nearly 23% of total IT spending is outsourced, more that 75% of that is outsourced to U.S.-based organizations.

The outlook for IT budget allocations in 2014 is very similar to the 2013 actuals. A shift in spending of about 0.7% from people to things is projected, as is a 0.9% increase in offshore outsourcing to 6.6% of total IT spending. In the 2012 SIM survey, respondents projected that offshore outsourcing would rise from 5% in 2012 to 7% in 2013. As it turned out, 5.7% was the actual 2013 level; nevertheless, they were correct about the direction albeit not in the magnitude. We will find out how prescient their 2014 projections are when we examine the results of the 2014 SIM IT Trends Survey. The higher than expected variability in the budget allocation findings from year to year as seen in Figure 7 will also be monitored.

IT Staffing Trends

Forty-seven percent of the 375 organizations that responded to this question reported an increase in the number of internal IT employees in 2013, and only 23% reported a decrease. On average, internal IT employment rose 1.1% year-over-year in 2013 (median 0%). Fifty-five percent of organizations expect further increases in 2014, while only 18% anticipate decreases, with an average anticipated increase in internal IT staff of 1.75% (median 1%).

Ninety-six percent of the 352 organizations responding reported that average IT salaries either remained flat or increased, with 89% reporting increases, and 7% no change. Only 4% reported average salary decreases, which is less than a third of the 13% who in the 2012 survey projected

average salary reductions in 2013. This is a significant improvement over the past several years and brings the percentage of organizations seeing decreases in average IT salary back down to the 4% level last seen in 2008, when only 78% saw increases.

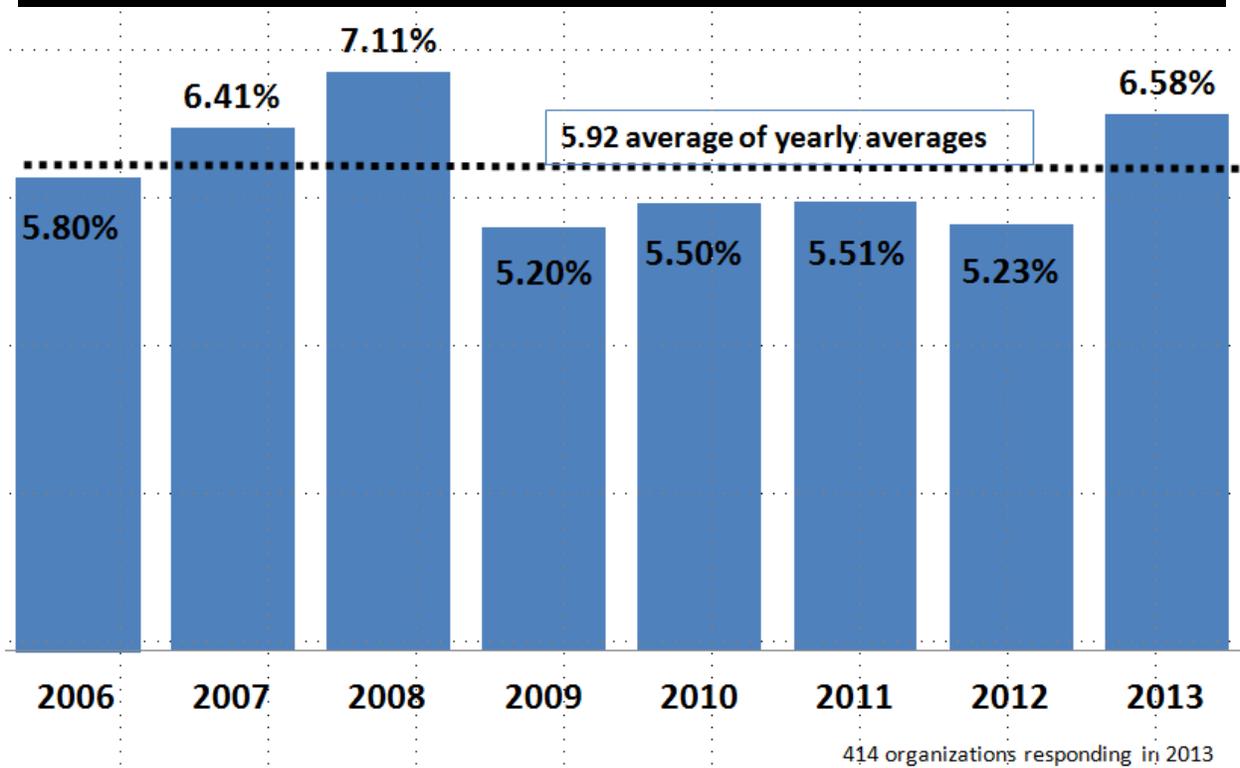
Looking forward to 2014, most organizations are predicting a year very similar to 2013. Ninety percent of the 351 responding organizations are anticipating average salary increases, 6% are predicting no change, and only 4% again foresee reductions. The average IT salary rose 2.24% in 2013 and is projected to rise by 2.45% more in 2014.

Similarly, total spending on IT salaries in 2013 rose in 83% of the 369 organizations reporting, remained flat in 10% of them, and decreased in 7%. Total IT salaries for 2014 are expected to rise in 86% of the 365 organizations reporting, remain flat in 9%, and decrease in only 5%. The average increase in total IT salaries for 2013 was 2.29% and the average increase projected for 2014 is 2.45%. The median number of IT employees as a percentage of total employment reported this year is 3.4%.

Turnover

As seen in Figure 8, IT employee turnover in the preceding 12 months increased significantly this year to 6.58%. This is up more than 25% from 2012's 5.23% turnover rate. Interestingly, IT turnover is approaching levels similar to those seen in the years prior to 2009, and is above the eight-year average rate of 5.92%. This is typically seen as an indication of an improving job market, with more job opportunities, inducing some employees to consider switching employers.

Figure 8: IT Employee Turnover Rate 2006 to 2013 (actual)

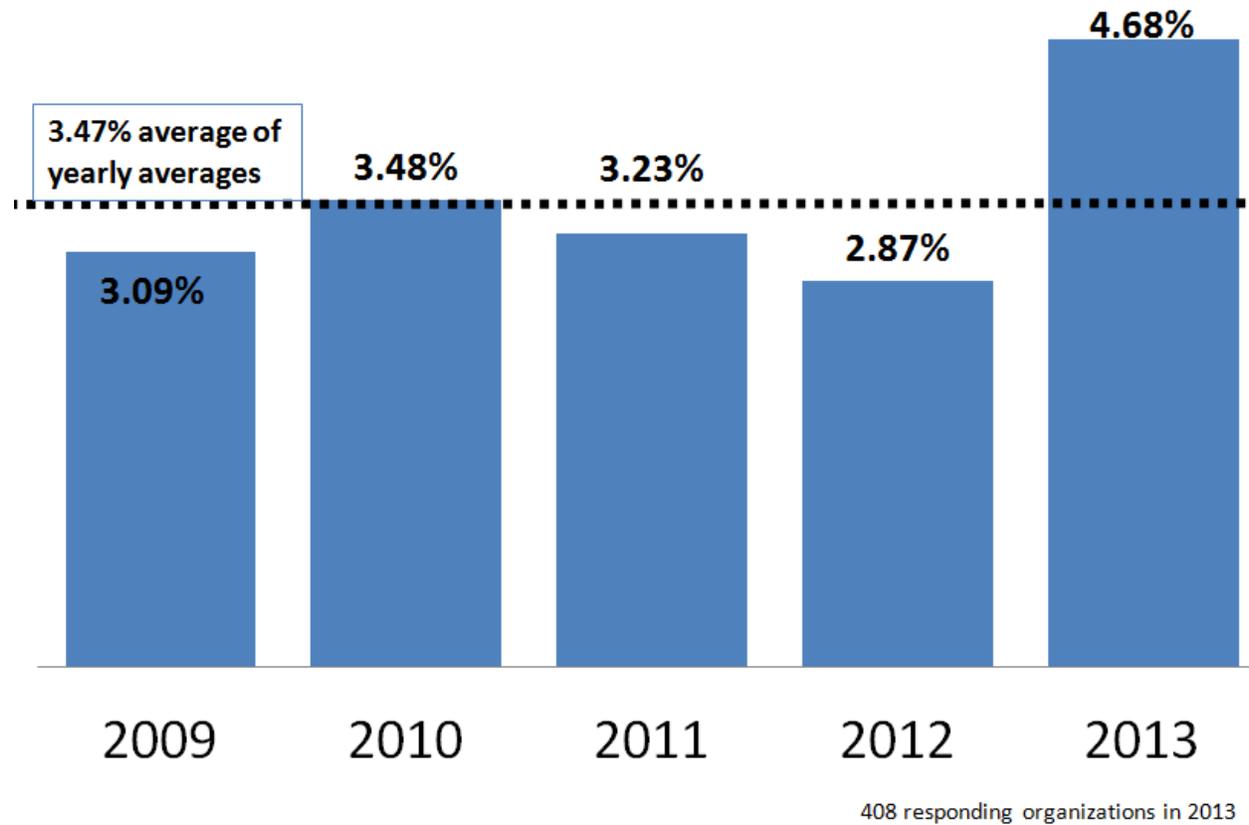


Education, Training, and Retirements

In the 2012 SIM IT Trends Survey, respondents anticipated an increase budget allocation for education and training to 2.99% of total IT spending. However, the actual increase in the 2013 survey of 4.68% greatly exceeded the 2012 projection for 2013. As shown in Figure 9, the 2013 amount exceeds each of the prior four years allocation by more than 1%. Given the large investments in new technologies and their potentially positive impact on the business, combined with IT skills shortages and increased IT budgets, salaries, and turnover, this comes as no surprise. Increased spending on IT training is also typically seen as an indication of an improving IT employment picture.

For the first time in 2013, senior IT leaders were also asked to estimate the percent of IT employees they expected to retire within the next five years. With 408 organizations responding, the average was only 5.46%, with 32% predicting 1% or less.

Figure 9: Percent of IT Budget Spent on Training and Education 2009 to 2013 (actual)



IV. CIO Reporting Relationships, Time Allocation, Background, and Tenure

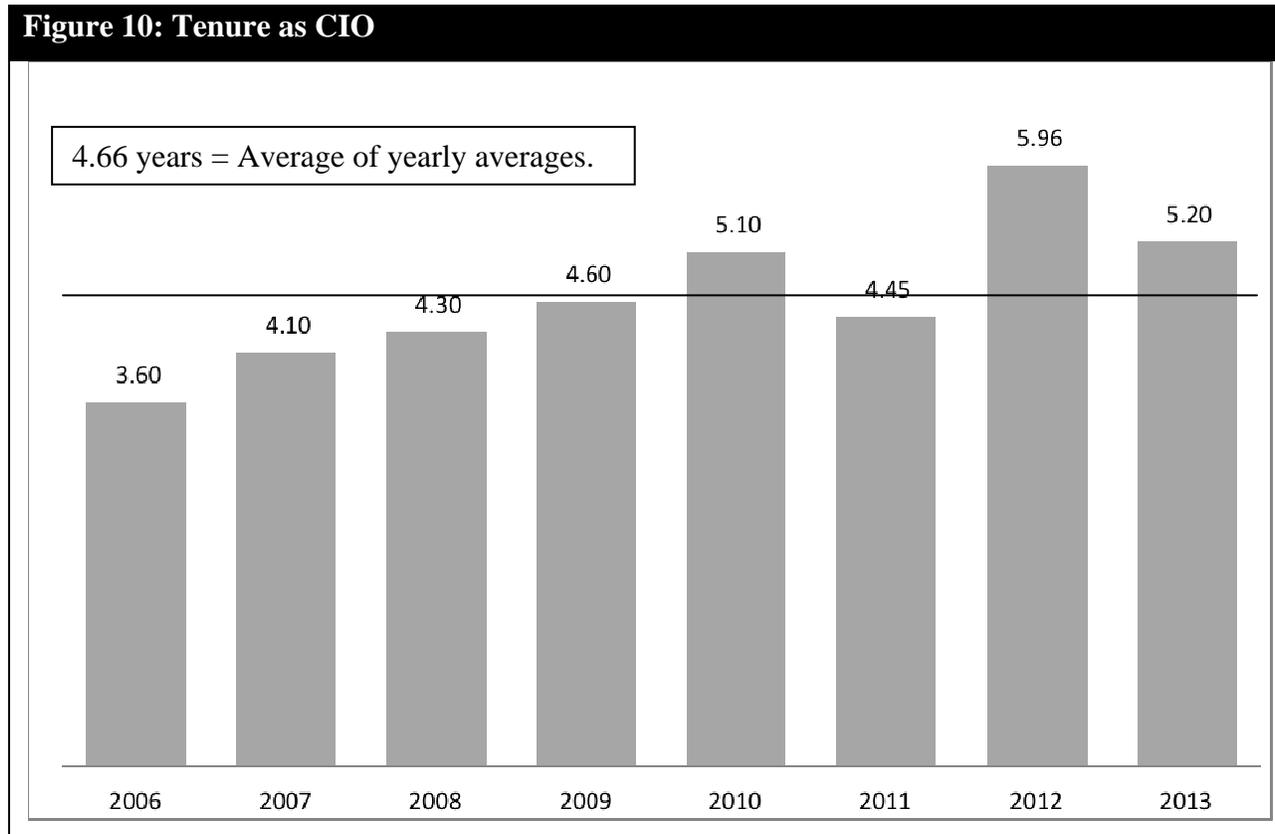
For the CIO trend data, we shift away from the data set of 484 unique organizations, represented by their highest ranking senior IT leader, to the data set consisting of the 285 CIOs who completed the 2013 SIM IT Trends Survey. This data set is more appropriate when considering CIO trends, activities, and opinions. However, it should be noted that the data set of 285 CIOs is for the most part a subset of the entire 484 organization data set since 267 of these 285 CIOs are also among the 484 senior IT leaders. As noted above, organization affiliation was not available

for 18 of the 285 CIOs and thus they could not be included in a sample meant to represent unique organizations.

CIO Tenure

The average time in their current position for CIOs was down from the 5.96 years level reported in 2012 to 5.20 years; although well above the 2006-2013 average of 4.66 years. This represents a 12.75% decrease from 2012, but it remains higher than the six years prior to 2012 (see Figure 10). Such high variability may be an artifact of the variations in the sample size from year to year. For example, 285 CIOs responded in 2013, but there were only 195 responses in 2012. It is expected that longer term averages, like the 4.66 over the 2006-2013 time period, tend to smooth out this sample variation, albeit imperfectly. The 2013 median job tenure for CIOs is 3.55 years. The average organization tenure of these 285 CIOs was 8.1 years, with a median of 6.1 years.

Figure 10: Tenure as CIO



CIO Reporting Relationships

The reporting relationships of CIOs changed a bit from 2012 to 2013. Nearly 45% of the 284 CIOs responding to this question report to their CEO, 27.1% report to the CFO, 14.4% to the COO, and 9.2% report to another executive (see Figure 11). This is fairly consistent with the longer term averages of 43.2%, 27.2%, 15.9%, and 6.9% respectively; although the 2013 percentages are above average for those reporting to their CEO or a business unit executive and lower for the COO.

The trends in CIO reporting relationships are not particularly strong, and there is more year-to-year variation than expected in some of these data. Nevertheless, an examination of the 2005-2013 SIM IT Trends data shown in Figure 11 does indicate an upward trend in the percentage of CIOs reporting to CEOs and CFOs, a weaker upward trend in CIOs reporting to a business unit executive, and a stronger downward trend in CIOs reporting to COOs.

Figure 11: To Whom CIO Reports, 2005-2013

CIO Reports to ...	Avg. 2005-2013	Percentage of Respondents								
		2005	2006	2007	2008	2009	2010	2011	2012	2013
CEO	43.2%	43%	45%	31%	43%	46%	44%	49%	43%	44.7%
CFO	27.2%	22%	25%	29%	28%	24%	31%	32%	27%	27.1%
COO	15.9%	21%	16%	22%	14%	14%	11%	12%	19%	14.4%
Business Unit Executive	6.9%	6%	9%	7%	3%	9%	4%	5%	10%	9.2%
Other	6.8%	9%	5%	10%	12%	7%	10%	2%	2%	4.6%

Despite industry prognostications that the Chief Marketing Officer (CMO) will soon “outspend” CIOs on IT, not a single CIO indicated that they reported to a CMO in 2013. The growing importance of CMOs as a customer of IT services and solutions is undeniable, given the growth and importance of e-commerce, social media, CRM, BI, Big Data, customer-facing mobile apps, and marketing management systems. However, as of 2013, CMOs on average appear to be less important as a customer of IT than CEOs, CFOs, and COOs (also see Figure 13). This is another trend worthy of attention going forward, and one where industry could make a significant difference.

CIO Previous Employment

Responding CIOs were asked to indicate from where they were hired before becoming CIO. With all 285 responding, 31.6% indicated that they were promoted from within their organization’s IT function. This is down from 37% in 2012, but more in line with the 2011 figure of 31%. The 2010-2013 average for this is 35%. The majority, 59.3%, indicated that they came from the IT function in another organization. This is up from 54% in 2012, but closer to the 2010-2013 average of 57%. Similar to the 2012 results and longer term average of 5%, 4.9% indicated that they were hired from a non-IT function within their current organization, and 4.2% indicated that they came from a non-IT function at another organization, down from 5% in 2012 but above the longer term average of 4%. Bottom line, 63.5% of CIOs came from outside their organization, 36.5% were promoted from within, and 90.9% came directly from a prior role in IT.

How CIOs Spend Their Time

The questions related to how CIOs spend their time were in the optional part of the questionnaire (see “Appendix: Design and Delivery of SIM’s IT Trends Survey” for additional details), so only 164 CIOs completed this question. These CIOs reported that on average they spend at least 37.1% of their time focused on the business customers of IT in their organizations. Looking at

Figure 12, this includes 14.2% in “business priorities / strategy / planning,” 12.3% “interacting with business (non-IT and non-C-level) personnel,” and 10.6% “interacting with C-level (non-IT) personnel.” Almost all of their remaining time (62.3%) is spent on IT-related activities.

Interactions with other employees in their organizations accounts for 36.7% of their time, and interacting with vendors an additional 6.8%, for a total of at least 43.5% of the average CIO’s time spent interacting with others. Working directly with others accounts for at least 50.1% of a CIO’s time if we include the 6.6% for IT Governance, which is almost always a collaborative activity.

Figure 12: How CIOs Spend Their Time 2007-2013

2013 Categories	How CIOs spend their time							2007-2012 Categories
	2013	2012	2011	2010	2009	2008	2007	
IT priorities/strategy/architecture	15.9%	12%	15%	13%	15%	17%	16%	Strategy
Business priorities/strategy/planning	14.2%							
Interacting w/ internal IT employees	13.5%	13%	12%	11%	12%	15%	13%	Relationship management w/ IT staff
Interacting w/ non-IT non-C-Level	12.3%							
IT operations	11.6%	11%	12%	13%	15%	8%	8%	Operations
Interacting w/ non-IT C-level	10.6%	24%	20%	18%	19%	26%	23%	Relationship management w/ business
Interacting with IT vendors	6.8%	8%	7%	6%	0%	0%	0%	Relationship management w/ vendors
IT governance	6.6%	10%	9%	9%	10%	11%	11%	IT governance
IT human resources	5.6%	8%	7%	7%	8%	7%	8%	Human resources
Software development	2.4%	6%	5%	6%	6%	4%	6%	Software development
Other	0.6%	1%	7%	11%	10%	6%	7%	Non-IT
		7%	6%	7%	7%	6%	8%	Architecture

164 CIOs responding in 2013

If one of the 164 responding CIOs indicated that they spent any time interacting with C-level personnel, they were also asked how often those interactions occurred and the “quality/value of this interaction to increasing the contribution of IT to your organization.” Their responses are summarized in Figure 13.

Figure 13: Frequency and Quality/Value of CIO’s C-level Interactions, 2013

	Interact w/ at least		Interaction is		Responses
	once a week	once a month	very or highly positive	neutral	
CEO	49%	21%	83%	14%	139
COO	40%	8%	78%	16%	92

CFO	59%	13%	75%	19%	136
CMO	29%	15%	68%	29%	78
C-Legal	19%	27%	47%	51%	81
Board of Directors	2%	16%	61%	39%	72

Since 2013 was the first year that data regarding the frequency and value of CIO interactions with other C-level executives were collected, trends cannot be ascertained. The availability of these data in 2013 raises questions about possible associations of these C-level interactions with how CIOs spend the rest of their time, IT key issues and investment priorities of organizations and IT leadership, and IT budget patterns, as well as IT’s role in organization performance and success in general. Industry- and size-specific differences are also possible.

What we do know is that, generally speaking, CIOs view their interactions with other C-level personnel quite positively. How the other executives view these interactions is not something we can determine from these SIM IT Trends Survey data; however, there is some evidence from other studies that their views are not as upbeat.^{2,3,4}

V. Participating Organizations and Their IT Practices

We identified 484 unique organizations represented by a senior IT leader and these were the primary dataset for this report. The distribution of these organizations by industry was shown earlier in Figure 1. Their 2013 average revenue was \$4.36 billion (about half the size of the *Forbes* Global 2000). Median revenue, with 384 responses, was \$503 million. Thirty-eight percent had revenue greater than \$1 billion and 24% have revenue of \$100 million or less. Their IT budgets average \$107.34 million, with a median of \$10 million in the 388 responding organizations. Their IT spending as a percentage of revenue in 2013 averaged 4.95%, with a median was 2.24% for the 332 organizations providing data necessary for the calculations.

On average, these participating organizations, with 412 responding, had 9,229 employees, with a median of 1,085. Their average number of IT employees was 585, with a median of 40, for 411 organizations responding. On average, IT employment represents about 6.34% of total employees in these organizations, with a median of 3.37%. In all, 45% have IT employment at 3% or less of total employment and in 45% IT employees represent more than 4% of total employment.

² Jim Stikeleather (2013) “The IT Conversation We Should Be Having,” *HBR Blog Network*, April 25, <http://blogs.hbr.org/2013/04/corporate-it-and-the-conversat/>.

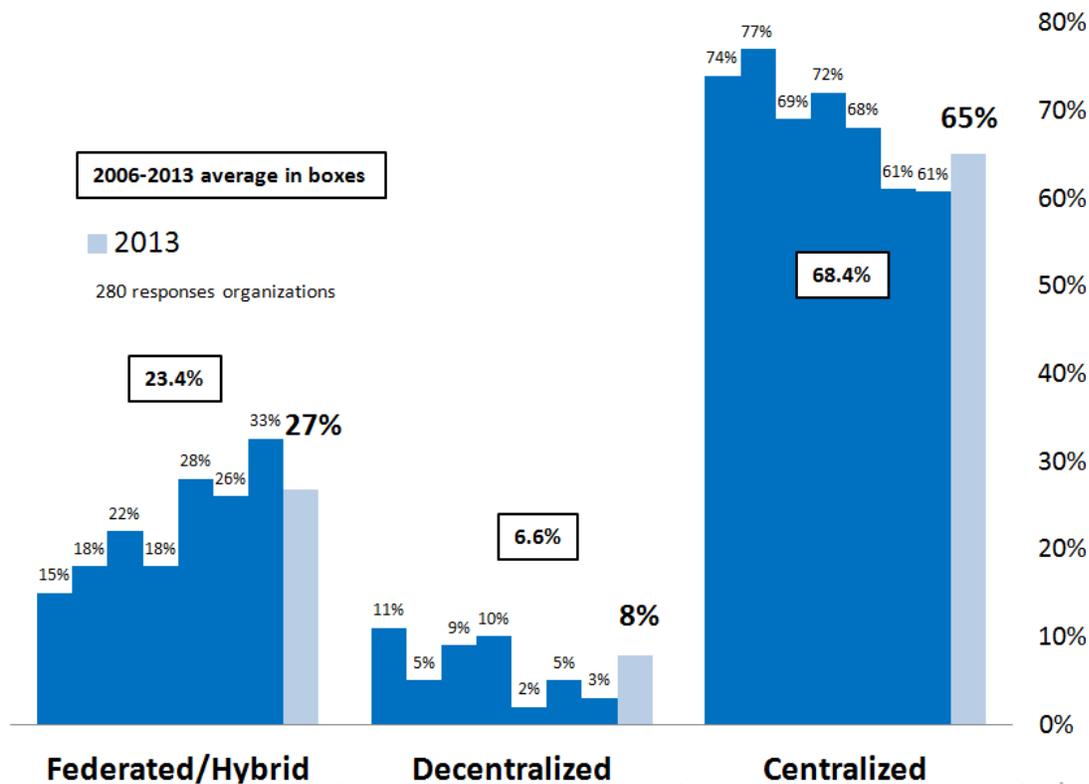
³ FERF (2012). *What CFOs Want From IT: Results of the 2012 Technology Issues for Financial Executives Survey*, Financial Executives Research Foundation, Inc., <http://www.financialexecutives.org/KenticoCMS/Research/catalog/2012/What-CFOs-Want-from-IT--Results-of-the-2012-Techno.aspx#axzz2hT6EedwA>.

⁴ Mark Raskino & Jorge Lopez (2012). *CEO Survey 2012: The Year of Living Hesitantly*, Gartner Group, <http://www.gartner.com/newsroom/id/1984416>.

IT Organization Structure

As in previous years, the majority of organizations (65%) report having a centralized IT organization structure. This is below the 2006-2013 average of 68.4%. With 280 organizations responding, 27% report a federated/hybrid structure (above the 2006-2013 average of 23.4%) and 8% decentralized (above the 6.6% longer term average). Although the percent reporting a centralized structure in 2013 is up from the 61% reported in 2012, the trend as shown in Figure 14 does appear to be down for Centralized and up for Federated/Hybrid. Federated/Hybrid, which had been trending upward in previous years, is down from a 33% high in 2012 to 27% for 2013, yet still well above its longer term average. A downward trend in decentralized is also indicated in Figure 14; although it appears fairly mild.

Figure 14: IT Organization Structure 2006-2013



Use of Performance Measures for Internal and Outsourced IT

The investigation of IT performance metrics was added to the SIM IT Trends Study in 2012 in order to gain an understanding of how IT is being assessed and measured. In 2013 respondents were asked to “select up to three (3) IT metrics most used currently for internal IT and up to three (3) for outsourced IT.” To the right of a list of 14 different IT metrics, two columns were provided for internal and outsourced respectively. Figure 15 shows the rankings and percentages selecting each metric.

Figure 15: Performance Measures Used for Internal and Outsourced IT, 2012-2013

Metrics Used	==== Internal IT =====			** Outsourced IT **	
	2013	% 2013	2012	2013	% 2013
Projects delivered on time	1	65.9%	1	1	73.9%
Projects delivered on budget	2	49.6%	2	2	66.4%
Increased customer/client satisfaction	3	33.3%	5	6	14.6%
SLA targets	4	30.1%	3	3	51.3%
Productivity improvement	5	28.6%	6	4	19.5%
Project ROI	6	24.3%	4	5	16.8%
Increases in new products/services	7	13.0%	8	8	7.5%
Innovative ideas	8	11.6%	10	9	5.8%
Lower error rates	9	8.3%	13	7	12.4%
Improved decision making	10	7.6%	9	12	1.8%
Revenue growth	11	7.3%	7	10	3.1%
Industry specific measurements	12	2.9%	11	11	2.2%
ROE	13	1.5%	12	13	0.4%
Earnings per share	14	0.4%	14	14	0.0%
Organizations responding	276		195	226	

Little change occurred between 2012 and 2013 in the rankings of those metrics used for internal IT. On-time Project Delivery is the top IT metric identified, with nearly 66% of 276 responding organizations selecting it as one of their top three internal IT metrics. On-time is also #1 ranked for outsourced IT, selected by nearly 74% of 226 responding organizations. The second place internal and outsourced IT metric is Projects Delivered on Budget, which was selected by nearly 50% for internal and over 66% for outsourced. Given the demand to deliver IT initiatives quickly and on budget, that these are top ranked metrics is not surprising; although, they are operational, not strategic, in nature.

On the internal IT side, increased customer/client satisfaction was selected by one-third of respondents to rank 3rd but, it ranked only 6th for outsourced IT with less than 15% selecting it. This is not surprising since operational activities are more likely to be outsourced than organizational or strategic ones. The third most selected metric for outsourced IT, with over 50% of organizations selecting it as one of their three most used IT performance measure, was the use of SLA targets, also an operational metric, which ranked fourth for internal IT with just over 30% selecting it as one of their top three.

Notice the more than 60% drop in the percent selecting on the outsourced side between an operational metric ranked three and an organizational one ranked four. This too supports the notion of a more operational focus in general for outsourced IT, while more organizational and strategic IT services, and thus metrics, are kept in house. Nevertheless, the use of metrics promoting IT operational excellence and keeping the lights on are understandably important for all of IT, whether internal or outsourced.

IT performance measures focused on organization performance improvements and strategic objectives rate highly also; however, they are selected less frequently for outsourced IT. On the internal side, productivity improvements, project ROI, new products and services, and innovative ideas ranked 5, 6, 7, and 8 with 28.6%, 24.3%, 13%, and 11.6% selecting them respectively as one of their top three. Productivity improvements, project ROI, new products and services, and innovative ideas ranked 4, 5, 8, and 9 as outsourced IT metrics, with 19.5%, 16.8%, 7.5%, and 5.8% selecting them respectively.

Use of Cloud and Shared Services

For the first time in 2013, questions were added to determine the extent to which IT solutions were being delivered as a shared service and as a cloud-based service. These questions were in the optional section of the questionnaire (see “Appendix: Design and Delivery of SIM’s IT Trends Survey” for additional details). Anecdotally, it appears the use of both cloud-based and shared IT services is increasing; but with the addition of these questions in future SIM IT Trends questionnaires, we will be able to see empirically how these IT delivery options are evolving.

The 260 organizations responding to the cloud questions indicated that more than 81% of them (211 of 260) used “the cloud” to some extent. Nearly 27% percent of all 260 responding organizations obtained more than 30% of their IT services and solutions via the cloud and more than 51% obtained 10% or less that way. On average, 26.5% of all IT services and solutions in 2013 were cloud-based, with 39.3% of these 211 organizations using only external or public clouds, 18.5% using only internal clouds, and 42.2% using a combination. Moreover, an average of 45.8% of these cloud-based solutions were internally sourced via private clouds and 54.2% were externally sourced via public ones. In other words, 12.1% of all IT services and solutions in 2013 were delivered via internal/private clouds and 14.4% via public/external ones.

The 244 organizations responding to the shared services questions reported that nearly 70.1% of them (171 of 244) delivered some IT services and solutions as a shared service. Nearly 51% percent of all 244 responding organizations delivered more than 50% of IT as a shared service and nearly 26% used 20% or less that way. On average, 56.4% of all IT services were delivered as a shared service, with 40.9% of these 171 organizations using only internal capabilities (i.e., via a private cloud) to deliver IT shared services, while 16.4% were exclusively externally sourced, leaving 42.7% using a combination of the two. Moreover, an average of 73.2% of these shared services solutions were internally sourced via private clouds and 26.8% were externally sourced via public ones. In other words, 41.3% of all IT services and solutions in 2013 were delivered as a shared service via internal/private clouds and 15.1% as a shared service via public/external ones.

Summary and Conclusions

The 2013 SIM IT Trends Survey points to a number of positive things happening for IT organizations and IT workers, as well as for IT vendors and suppliers, and perhaps even for the U.S. economy as a whole. Considering the increasing number of organizations with rising IT budgets, salaries, and headcounts; with the relative magnitude of IT budgets as a percent of total revenue; and with more than 90% of this IT spending being domestic; yes, as Lennon and McCartney say, we’ve “got to admit it's getting better.”

Moreover, it does appear to be a good time to be an IT professional. Organizations are hiring, salaries are up, turnover is up, and IT budgets for training and education are up. This is not all that surprising given that organizations are making new investments in IT and that more than 20% of senior IT leadership picked the shortage of IT skills as one of the three things keeping them up at night.

This is not, however, a “rising tide lifts all boats” situation; and we see 27% of responding organizations cutting IT budgets in 2013, 23% cutting IT employment, 7% reducing total IT salaries, and 4% cutting IT average salaries. Apparently uncertainty and economic weakness are still taking a toll; and as far as anyone can tell, this situation will continue to some degree for the foreseeable future.

Therefore, despite the positives, a less sanguine overall view is understandable given the macro-economic situation and a less than desirable level of negative micro-economic data in the 2013 SIM IT Trends Survey. Nevertheless, it does appear that IT is fairly resilient and generally seen as “part of the solution” during these challenging times, as both organizations and senior IT leaders are focused on more tactical and operational issues and investments.

Turning to the SIM IT Survey Trend data itself, there’s much more that we hope to do with these data in light of this year’s findings and the questions added to this year’s questionnaire. Of particular interest is the divergence between personal and organizational priorities and concerns, the possibility of IT investment patterns, and the role of the CIO’s C-level interaction, as well as differences by industry, size, and organizational and individual characteristics in general. So, to say the least, the SIM research team is excited about the prospects for sharing more findings with you soon, as well as getting ready for the 35th annual SIM IT Trends Survey in 2014. Until then, “may the wind always be at your back, may the sun shine warm upon your face,”⁵ and may your uptime be 100% 24/7/365.

⁵ Excerpt from “An Old Irish Blessing” <http://www.islandireland.com/Pages/folk/sets/bleess.html>.

Appendix: Design and Delivery of SIM’s IT Trends Survey

The SIM IT Trends Survey has been conducted since the late 1970s and the results published since 1980. Surveys prior to 2000 focused just on the top IT management concerns or key issues. Since 2003, the survey has been extended to include additional insights regarding key IT practices and investments. A significant strength of this research is its ability to identify important trends by comparing SIM IT Trends Survey data from previous years. As with almost all other surveys of actual management practices and activities in organizations, surveying SIM’s membership provides an opportunistic or “convenience” sample rather than a randomized or “scientific” one. Therefore, it is unknown to what extent these findings can be generalized to all organizations, or even to just USA-based ones. Nevertheless, as the USA’s largest professional organization of senior IT leaders, we believe these data are about as good as it gets.

The 2013 SIM IT Trends Survey was similar to previous ones in methodology and process; although, in the interests of increasing the response rate, additional effort was invested in questionnaire design and delivery. The questions were based on previous SIM surveys, with questions modified or added based on previous results and suggestions from the Delphi group (i.e., an expert panel largely of IT practitioners) consisting of members of SIM’s Enterprise Architecture Working Group (SIMEAWG) and the SIM IT Trends Survey Team, which included the authors and the SIMEAWG practitioner representatives Bill Peterson (LiquidHub) and Barbara Stewart (Celanese).

All 4913 SIM members were first invited in late April by individual email to take the online survey. The email contained a personal link to control survey access. In an effort to increase the response rate by making it possible to complete the questionnaire in 12 minutes or less, the survey was divided into a “main” part and an “optional” part. Those who completed the main survey were automatically entered into a drawing to win one of five \$500 gift cards, and those who complete the optional part were entered into a second drawing to win one of four additional \$500 gift cards. These prizes were provided thanks to the generous support of survey sponsors BravoTECH, ClearEdge Partners, Farr Systems, Pariveda Solutions, and VOTUM Technology Group. Reminder articles were also published periodically in SIM’s weekly and monthly emailed newsletters.

Several reminder emails were also sent to those who had not yet completed the survey. The survey was closed in mid June. The authors conducted the analysis and presentation of the findings. Statistical and graphical assistance was provided by Natalie Gerhart (University of North Texas) and Walter Rich (Georgia State University). The key findings were presented during SIM’s annual SIMposium conference, which was held in Boston on November 10-12, 2013. The entire slide deck was provided online to all SIM members after SIMposium.