

Jerry Luftman
Stevens Institute of
Technology (U.S.)

Rajkumar Kempaiah
College of Mount Saint
Vincent (U.S.)

Eduardo Henrique
Rigoni
Universidade Federal
do Rio Grande do Sul
(Brazil)

Executive Summary

This has been a tumultuous year for organizations faced with sharp decreases in revenue that demanded IT budget cuts, initiatives being put on hold, downsizing, and hiring freezes. While many IT organizations have been collaborating with their business partners to leverage IT to help reduce costs and improve productivity across the company, most are moving forward with a sense of foreboding. When this survey was conducted in June 2008 (before the extent of the recession was known), many executives were anticipating an economic downturn—although perhaps not the decline that has developed. The survey results are compared against more recent research.

Since its inception in 1980, the Society for Information Management (SIM) survey has helped IT leaders around the globe understand important issues and trends. This article presents the major findings based on surveys received from 291 organizations. The top five management concerns were:

1. *IT and business alignment*
2. *Build business skills in IT*
3. *IT strategic planning*
4. *Attracting IT professionals*
5. *Making better use of information*

This is the third in a series of MISQE-published reports on SIM membership surveys. As in the 2007 survey, the paper also presents findings with regard to application and technology developments and aspects of the IT organization.

IMPORTANCE OF IT MANAGEMENT ISSUES

Since 1980, the Society for Information Management (SIM), in a joint effort with different academic leaders, has periodically surveyed the key issues facing IT executives in the United States. The 2008 SIM survey, conducted in June 2008, focused on three important areas:

- Management concerns
- Application and technology developments
- Organizational issues (e.g., IT budgets, IT staff salaries, headcount and recruitment, CIO issues, and IT organization structure)

Participants were asked to rate the importance of 39 managerial concerns, 65 application and technology opportunities, and 18 organizational issues. (See the Appendix for a description of the survey design.)

The top management concern raised by IT executives in 2008 was the persistent and pervasive “IT and business alignment” issue. Alignment has been on the list of

¹ Jack Rockart is the accepting Senior Editor for this article. The editors’ thanks go to the SIM Executive Board and the members of SIM for their contributions and participation in the survey.

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Figure 1: Top 10 IT Management Concerns of 2008 Compared with Data since 1980²

IT Management Concerns	2008	2007	2006	2005	2004	2003		1994	1990	1986	1985	1983	1980
IT and Business alignment	1	2	1	1	1	1		9	7	5	2	7	9
Build business skills in IT	2	3											
IT strategic planning	3	8	4	4	4	2		10	3	1	1	1	1
Attracting new IT professionals ³	4	1	2	2	2	4		8	4	12	15	8	7
Making better use of information	5	9											
Manage change	6	7	3	2	3	3			19	18	6	14	12
Reduce the cost of doing business	7	4											
Improve IT quality	8	5											
Retaining IT professionals ³	8	1	2	2	2	4		8	4	12	15	8	7
Security and privacy	8	6	3	2	3	3			19	18	6	14	12

management concerns since the first SIM survey and, with the exception of 2007, has been the number one issue since 2003 (see Figure 1). Last year's top concern, "Attracting and retaining IT professionals" was separated into two questions to better understand the relative importance of attracting versus retaining employees. In 2008, "attracting IT professionals" ranked 4th, and "retaining IT professionals" was tied for 8th—clearly indicating the importance of attracting over retaining. However, if these two had been combined as a single issue, as it was in 2007 and all previous surveys, it would again have been ranked number one. Even more striking, three of the top 10 concerns in the 2008 survey are related to IT human resources, as "Build business skills in IT" was ranked 2nd (along with attracting in 4th and retaining ranked 8th).

The rest of this article elaborates on these and the other major insights from the 2008 survey and compares them with the earlier SIM results and more recent research, as appropriate. These findings are based on responses from IT executives representing 291 SIM organizations. (Figure 2 provides a breakdown of the industry respondents.) Although the survey was conducted in June 2008, we believe the results are still valid because even then executives were anticipating the economic downturn, albeit not the extent of the recession. For a few issues, current research is provided to demonstrate similarities and differences.

² Cells with blank data indicate that the issue was not asked in the survey.

³ These two concerns were previously asked as a single item prior to the 2008 survey.

THE TOP MANAGEMENT CONCERNS

The top 10 management concerns for 2008 are shown in Figure 1, together with the comparative rankings since 1980. The respondents rated each concern on a five-point Likert scale (1 = not important, 5 = extremely important).

Management concerns tend to evolve slowly. The top 10 management concerns from 2007 remained the 10 top concerns in 2008, although the sequence has changed. Five of the management concerns from 2007 moved up (closer to 1): "IT

Figure 2: Percentage of Respondents by Industry

Industry Classification	Percentage
IT Services/Vendor	23.7%
Finance/Insurance	13.7%
Manufacturing	13.4%
Pharmaceutical/Healthcare	9.3%
Educational/Universities	8.2%
Transportation/Logistics	6.2%
Telecom/Utility/Oil & Energy	5.8%
Media/Entertainment	4.5%
Government	3.8%
Non-Profit	3.1%
Real Estate/Legal Services	3.1%
Marketing/Retail	3.1%
Travel & Tourism	1.4%
Construction	0.7%

and business alignment,” “Building business skills in IT,” “IT strategic planning,” “Making better use of information,” and “Manage change.”

1. IT and Business Alignment

IT and business alignment is the top ranked issue. 92.6% of the respondents said IT and business alignment is somewhat important to extremely important (on the five-point scale, where 5 connotes “extremely important” and 3 denotes “somewhat important”). IT and business alignment continues to be elusive for the following four reasons. First, IT leaders often debate about how to refer to it using different “buzz words” (e.g., linked, integrated, converged, harmony, fused, matched, fit, interwoven) when describing the alignment conundrum. Second, people tend to look for the one silver bullet that will enhance alignment; in reality, organizations need to address many strategic alignment maturity components (e.g., communications, partnership, IT metrics, governance, human resources, and technology scope).⁴ Third, organizations need to recognize that it is not how IT is aligned with the business; it is how IT and business are aligned with each other. Fourth, organizations need to go beyond just focusing on IT infrastructure. Recent research⁴ suggests that while IT business alignment has been improving, and there is a strong correlation between alignment maturity and firm performance, there are still challenges that remain.

2. Build Business Skills in IT

“Build business skills in IT,” (one of three HR considerations, along with “Attracting IT professionals” and “Retaining IT professionals”) has moved to No. 2 from No. 3 in 2007. This concern was introduced into the SIM survey in 2007. In today’s environment in the United States, IT professionals, a number of whose jobs are being outsourced offshore, require more than just traditional technical skills. Organizations need technically competent business-savvy IT professionals. It is often difficult to find candidates with the appropriate balance of skills.⁵

The SIM survey this year also identified the top skills executives look for when hiring IT professionals at the

4 Luftman, J. and Kempaiah, R. “An Update on Business-IT Alignment: ‘A Line’ Has Been Drawn,” *MIS Quarterly Executive* (6:3), September 2007, pp. 165-177.

5 See Bullen, C.V., et al. “Information Technology Workforce: Trends and Implications 2005-2008,” *MIS Quarterly Executive* (5:2), June 2006, pp. 47-54, as well as published reports on SIM issues in *MIS Quarterly Executive* (5:2), June 2006, pp. 81-99, and *MIS Quarterly Executive* (7:3), June 2008, pp. 99-112.

Figure 3: Importance of Skills for Entry-Level Employees

Ranking	Skills
1	Ethics and Morals
2	Critical Thinking
3	Collaboration; Teams
4	Problem Solving
5	Communication: Oral
6	Communication: Written
7	User Relationship Management
8	Creativity/Innovation
9	Managing Expectations
10*	Programming/Application Development
11	Decision Making
12	Functional Area knowledge
13	Project Leadership
14*	Database Knowledge
15*	Systems Analysis
*Technical skills	

entry level (shown in Figure 3). It is interesting to note that these same skills are what executives look for when hiring mid-level IT professionals. Non-technical skills are clearly considered much more important than technical skills for both level hires. Only 3 of the top 15 skills are technical: Programming/application Development, Database Knowledge, and Systems Analysis.

It is clear that IT professionals also need to understand technology, but fundamental to a successful IT career is the need to understand and communicate the importance of how to apply technology to the business. IT professionals must be able to integrate IT knowledge with their business knowledge and interpersonal skills.

3. IT Strategic Planning

“IT strategic planning” has moved up to No. 3 from No. 8 in 2007. IT strategic planning has remained on the top 10 management concerns since 1980. In the 1980s, it was continuously ranked as the top management concern. In today’s economic downturn, having an IT strategic planning process should be considered just as important (as during economic growth) for a successful IT organization. Unlike previous years with economic downturns, when IT was the first place that business executives looked

to reduce costs, this time, many business and IT leaders have been working closer together to identify strategic opportunities to leverage IT to reduce costs and improve productivity throughout the organization. Some IT organizations are building strategies to reduce costs by consolidating their infrastructure using technologies like virtualization (see discussion for top technologies), while others are working with their vendors to negotiate new contracts. It is anticipated that as the economy turns, IT strategic planning will continue to be important but will revert to helping the organization increase revenues and profits.

4. Attracting IT Professionals

“Attracting IT professionals,” along with “Retaining IT professionals,” when combined last year, was number one. This year, for the first time in the 24-year history of the survey, they were separated and are No. 4 and No. 9, respectively. They have remained among the top 10 management concerns since 1980 (with the exception of 1985 and 1986). Attracting IT professionals has become a significant challenge for organizations. Even with the recession, the demand for appropriately skilled IT professionals is high. We still hear reports of declines in the number of students receiving engineering and computer science degrees and even some leading university programs closing. More important, as the economy improves, there will likely be fierce competition for attracting skilled IT professionals. Given the continuous speed at which technology and business changes, and the impending “baby boomer” retirement, it appears that there will soon be a shortage of IT talent.

5. Making Better Use of Information

“Making better use of information” has moved from No. 9 in 2007 to No. 5 in 2008. This concern was first included in the SIM survey in 2007. We still frequently hear the comment, “If I only had the right information, I could make an informed decision.” In organizations throughout the world, increased attention is being paid to making effective use of both internally and externally available information. Newly available technologies (see the key technologies discussion on Business Intelligence) have altered the way we conduct business.

6. Managing Change

“Manage change” has moved to No. 6 from No. 7 in 2007. It has been on the top management concerns list for the past six years. Technology continues to change at an incredibly fast pace. These technical changes are

enabling/driving changes to business processes. In essence, IT is in the business of change.

7. Reduce the Cost of Doing Business

Interestingly, “Reduce the cost of doing business” dropped to No. 7 from No. 4 in 2007. This concern was introduced into the SIM survey in 2007. With organizations facing the toughest economic climate in decades, executives are faced with budget cuts and doing more with less. Clearly, the timing of our survey affected the results. The Forrester research conducted in October 2008⁶ found that 77% of the respondents cited “reducing cost of business” as somewhat critical or important compared with 62% in 2007. This is likely to continue (along with managing change), especially until the economy turns around.

8. Improve IT Quality

“Improve IT quality” has dropped to No. 8 from No. 5 in 2007. This concern was introduced into the SIM survey in 2007. IT quality refers to the accuracy, timeliness, and reliability of data and information delivered by IT services. Management decisions are only as good as the quality of the IT services used to make decisions. Yet, very few organizations routinely measure their IT quality. However, the drop in the rating of this concern might be seen as a good sign; perhaps information and data quality may be improving.

9. Retaining IT Professionals

“Retaining IT professionals,” when combined with “Attracting IT professionals,” was No. 1 in 2007; it is No. 9 in 2008. Retaining IT professionals is an important issue for all organizations, albeit evidently not as important as hiring IT professionals.

The 2008 SIM survey also identified that the IT turnover rate is only 8.8%, although somewhat higher than in recent years. The 2007 rate was 8.13%, and the 2006 rate was 7.2%. These are far lower than the 10-20% rates of a decade ago, where employees frequently changed companies for career growth opportunities. The recession is certain to impact the overall IT retention number this year; hence this number is expected to change as the economy changes. The retention issue, like attracting IT professionals, will continue to be important as

6 Moore, C. “Drive BPM Initiatives to Higher Business Value, Forrester Research, Oct. 6, 2008, <http://www.forrester.com/Research/Document/Excerpt/0,7211,46375,00.html>.

resources with the appropriate skills become more difficult to find.

10. Security and Privacy

The only technical consideration on the top 10 management concerns, “Security and privacy,” has dropped to No. 10 from No. 6 in 2007. It has remained in the top 10 management concerns since 2003. Organizations have valuable information assets such as individuals’ taxes, financial assets, medical records, job performance reviews, trade secrets, new product developments, and marketing strategies that need to be protected. One study⁷ estimates that when the security of an organization is compromised, the organization loses approximately 2.1% of its market value within two days of the security breach. U.S. organizations paid an average of \$202 per exposed record in 2008, up from \$197 in 2007. The average total cost per breach for each organization was \$6.6 million in 2008, up from \$6.3 million in 2007.⁸

Organizations continue to apply new approaches to address this persistent problem. For example:

- Workplace access only with the use of swipe cards.
- Conforming to prescribed standards of data transfer.
- Shredding notes of client conversations.
- Keypad authentication of PIN numbers for credit card processing.
- Monitoring phone conversations, data misuse, and total compliance to data privacy and IT security standards.

THE TOP FIVE APPLICATIONS AND TECHNOLOGIES

The 2008 SIM survey has once again asked respondents to rank the importance of applications and technology developments on a five-point scale (from not important to extremely important). New IT applications and technologies have fueled, and will continue to fuel, the development of new products and services for all organizations. The list of choices in the survey continues to evolve from both the authors’ research as well as technologies added by survey

⁷ Glynn, K. and Mueffelmann, K. “On-Line Privacy Monitoring as Part of an Overall Proactive Privacy Strategy,” January 2007, hisoftware.com.

⁸ Michael, H. “Data Breaches Cost Companies \$6.6 Million on Average.” *Techfragments*, Feb. 2, 2009.

participants. Figure 4 lists the top five application and technology rankings for 2003-2008, together with those that have been highly ranked in the past. These results are much more dynamic than the management concerns previously discussed. The top five for 2008 are described below.

1. Antivirus Protection

“Antivirus protection” was introduced into the 2007 SIM survey and retained the No. 1 rank in the list of top technologies in 2008. As previously discussed, “Security and privacy” was the only technology that appeared on the top management concerns. However, given these rankings, it is surprising that “Security technology” was only tied for 15th in the application and technology section.

2. Business Intelligence

As in 2006 and 2007, “Business intelligence” (BI) was ranked No. 2 in 2008. This item has been on the top five application and technology list since 2003 and is clearly related to “Making better use of information,” a leading management concern, which appeared in the top five for the first time this year. Increased competition and the recognition of the value of company data/information seem to have underlined the need for leveraging business intelligence. While organizations have been making BI a high priority initiative, they are often finding it difficult to implement. Key considerations such as data quality (tied for No. 8 on management concerns) and having the appropriate skills to leverage this often complex software (Nos. 2, 4, and 9 on management concerns) are often impediments to successful deployment.

3 (tie). Business Process Management

“Business process management” has moved up to tie with “Continuity planning and disaster recovery in 2008, up one rank from No. 4 in 2006 and 2007. Process management continues to gain adherents as it has since the early 1990s. In these turbulent economic times, business process management is more crucial than ever for reducing cost, improving operational performance, managing risk, and aligning all facets of the organization.

3 (tie). Continuity Planning and Disaster Recovery

“Continuity planning and disaster recovery” focuses on how an organization can restore business operations after a major outage. It identifies critical

Figure 4: Top Application and Technology Developments over Six-Year Period

Application and Technology Development	2008	2007	2006	2005	2004	2003
Antivirus Protection	1	1				
Business Intelligence	2	2	2	3	2	1
Business Process Management	3	4				
Continuity Planning/Disaster Recovery	3	4				
Server Virtualization	5					
Infrastructure Development	9	30				2
Enterprise Application Integration	12	32				3
Web Services	11	14	1		4	4
Knowledge Management	24	32				5
Security Technologies	12	8	3	1	1	
Customer Portals	6	14	4		5	
Data Synchronization	15	22		5	6	
System Integration	10	22	6	2		
Mobile & Wireless Applications	23	9		4		11
Enterprise Resource Management	14	6		5		

business processes, services, and systems, and determines action plans for handling mission-critical functions in the event of an outage. Many IT organizations continue to outsource this important activity to help reduce costs.

5. Server Virtualization

“Server virtualization” is new to the 2008 list of key technologies and is ranked No. 5. It is expected to rise in the rankings in the future because as organizations deploy thousands of servers, they are discovering that they are spending excessive amounts to maintain them and to power and cool them. “Server virtualization” enables organizations to run more than one operating system at a time on a single machine. Frequently, servers run at just 15 to 20% of capacity; virtualization can boost server utilization rates to greater than 70%. Higher utilization rates translate into fewer servers needed to process the same amount of work. Clearly, this is an important source of reducing costs. It is interesting, however, to note the low rankings for “Cloud computing” (No. 53), “Utility computing” (tied at No. 61), and “GRID computing” (No. 64). These are expected to rise in future surveys.

IT BUDGETS

Even with the prevailing economic conditions, the 2008 SIM data collected in June 2008 reflected the expectation that IT budgets would increase modestly

in 2009. Forty-six percent of the respondents indicated that their 2008 IT budgets were higher than 2007. Eighty-one percent of the respondents indicated that their 2009 budgets would be higher or the same as in 2008. IT budgets have been rising since 2004 (51% of the respondents in 2004, 62.5% in 2005, 56.6% in 2006, 61.3% in 2007, and 46% in 2008 indicated this).

However, the timing of our survey clearly led to more optimism than current events allow. In October of 2008, Gartner Inc. reduced its estimate for increased 2009 IT spending in the U.S. to 2.3% from an earlier prediction of 5.8%.⁹ In a similar study by Gartner (from September 15 to December 15, 2008), they reported that IT budgets were flat across the U.S. An IBM market intelligence report in January of 2009 reported that 86% of its respondents said that IT budgets would remain flat or slightly changed.

On average, the IT budget in the 2008 SIM survey was 3.82% of corporate revenues. Compared to previous SIM results, the IT budget as a percentage of corporate revenue had been slowly rising since 2006 (3.6% of corporate revenue in 2006, 3.5% in 2007, and 3.82% in 2008).

As Figure 5 illustrates, staffing is the largest component of IT budgets, with 35% allocated to internal IT employees; total staffing is about 53%

⁹ Gartner says IT spending to slow in 2009, but continued growth reflects critical role of technology to business performance. Oct. 13, 2008, Press Release, <http://www.gartner.com/it/page.jsp?id=776112>.

Figure 5: 2008 IT Budget Allocation (Actual)

IT Budget Area	Percentage*
Internal Staff	35%
Software	16%
Hardware	15%
Network	12%
Consulting Services	10%
Other	5%
Outsourced staff – Domestic	5%
Outsourced staff – Offshore	3%

*Total adds up to 101% because of rounding.

of IT budgets when we include consulting and outsourced staff. The IT budget allocation for internal staffing has been slowly dropping, averaging about 38% since 2005.

The 2008 budget numbers reveal that about 18% of IT personnel resources are outsourced; 3% is outsourced offshore. While the projected IT budgets for 2009 reflect plans to have about 55% of the budget allocated to personnel resources, the use of offshore outsourcing is projected to be 5.6% (up from 3.3% in 2008). This projection will bring the percentage of IT resources outsourced offshore to approximately 10% (offshore outsourcing 5.6% of the 55% allocated to all personnel). The use of domestic outsourcing is also expected to rise in 2009, with respondents projecting to spend 6.2% of their IT budgets, compared to 5.2% of the 2008 IT budgets. The projected rise in overall outsourcing is related to organizations looking to rein in costs as well as to fill “skills gaps.”

IT HEADCOUNT, STAFF SALARIES, AND RECRUITMENT

Again, the timing of our survey led to more optimistic responses than current events allow: 76% of the respondents in the SIM survey indicated that their 2008 IT headcount would be the same or greater in comparison to 2007, and 85% of the respondents said that 2009 IT head count would be the same or greater than 2008. A more recent survey conducted by Gartner¹⁰ (in September of 2008) found that 72% of the respondents believed that they have either the wrong people or people not qualified enough to get the

10 Johnson, C. and Davis, E. “Common Challenges in Hiring for Ebusiness,” Forrester Research, <http://www.forrester.com/Research/Document/Excerpt/0,7211,47812,00.html>.

job done. While there are plenty of IT professionals looking for jobs, the ones with the appropriate experience and skills are in short supply, as noted in the earlier discussion on skills.

Findings from another recent survey identified that the market for IT headcount has hit an equilibrium moving into 2009, with an equal number of employers looking to hire IT professionals as are looking to cut.¹¹ This report also identified an upswing in the hiring of temp-to-permanent IT staff. Another recent study, the Robert Half technology IT hiring index of 1,400 CIOs, found that CIOs are planning hiring increases in the coming months.¹²

The “special treatment days” of the late 1990s, when IT professionals enjoyed lavish signing bonuses and other perks, are gone, for now. In the current economic situation, organizations are pulling in the reins on IT salaries. Still, 96% of the respondents said that IT salaries in 2008 remained at the same level or increased compared to 2007. Looking forward to 2009, 97% of the respondents said that IT salaries will remain at the same level or increase compared to 2008.

CIO TRENDS

CIO Reporting Structure and Role of CIO

The roles of CIOs continue to evolve. In the current economy, it has become critical for CIOs to be proactive with their business partners in identifying opportunities to leverage IT to reduce business costs, while also identifying opportunities to reduce IT costs. As in previous economic downturns, the greatest challenge for managers is to do more with less. CIOs need to work with their staff and business partners to evaluate priorities while ensuring IT delivers value.

Figure 6 shows that in the 2008 SIM survey, nearly 43% of the CIOs report to the CEO, 28% report to the CFO, 14% report to the COO, 3% report to business unit executives and 12% report to other corporate executives.

The four-year growth in the number of CIOs reporting to CFOs is interesting. CIOs reporting to CFOs may bring more financial discipline, but it won't necessarily lead to the IT function being more

11 2009 IT Hiring Outlook, <http://www.Veritude.com/pp.aspx>.

12 http://www.roberthalftechnology.com/PressRoom?pressRelease_5.request_type=RenderPressRelease&pressRelease_5.releaseId=2476.

Figure 6: Reporting Location for Senior IT Executive (CIO)

IT Executive Reports to:	Percentage of Respondents			
	2008	2007	2006	2005
CEO	43%	31.4%	45.2%	42.6%
CFO	28%	29.3%	25.4%	21.8%
COO	14%	22.1	15.9%	20.8%
Other Corporate Executive	12%	10.1%	4.8%	8.9%
Business Unit Executive	3%	7.1%	8.7%	5.9%

strategic to organizational goals. CIOs reporting to other business executives may be effective, but the CIO needs to understand who the CEO listens to and establish strong relationships with them. Previous research¹³ has shown that, on average, organizations in which CIOs report to CEOs have higher alignment maturity than those reporting to business executives, the COO, or the CFO (lowest maturity scores).

CIO Tenure and Hiring

Compared to previous years, CIO tenure has increased somewhat. The 2008 SIM survey found that the average CIO tenure is 4.3 years, compared to 4.1 years in 2007 and 3.6 years in 2006. Forty-five percent of the respondents said that their CIOs held the position for more than three years. High CIO turnover (short tenure) makes it difficult for CIOs to address any long-term changes to the business or IT. They will have difficulty in focusing on the long-term quality of IT professionals, IT systems, and alignment.

48.8% of the respondents said that their organizational CIOs were hired from an external IT organization (outside the company); 36% said that their CIOs were hired within the company's IT organization; 9.6% said that their CIOs were hired from outside the company from a non-IT organization; and 5.6% said that their CIOs were hired from within the company but from outside the IT organization.

CIO Time on Activities

New CIOs and established CIOs spend their time in a very similar way. They spend nearly 80% of their time dealing with non-technical issues such as relationship management with business (24%) and IT staff (18%), strategies (13%), governance (11%), and human

resources (8%). Technical areas include operations (9%), architecture (6%), and software development (4%).

An important difference between new and established CIOs is that the former spend less time with business and IT strategy than the latter (13% versus 17%). It also can be noted that new CIOs spend more time with human resources and business relationship management than established ones (over 2% difference in time). One possible explanation of these differences can be attributed to the fact that new CIOs must first build their IT staff and business relationships before implementing new policies, while established ones have already built these capabilities. Research on new and established CIOs and how they focus their time, by Leidner & Mackay, found similar results.¹⁴

IT ORGANIZATION STRUCTURE

One of the major levers that can affect the performance of the IT organization is the degree to which it is centralized, decentralized, or federalized. In the 2008 survey, 67.5% of the respondents said that their IT organizations are centralized (down from 77% in 2007, 74% in 2006, and 72.3% in 2005). Centralized IT organizations are those in which all of IT reports to a single IT unit, which can lead to improved economies of scale; the responsibility for all IT services resides at the corporate level. The benefit of having a centralized structure is (or should be) consistency and standardization of IT management practices, and more flexibility in assigning IT staff.

8.8% of respondents said that their IT organization is decentralized, slightly up from 5% in 2007, down from 10.3% in 2006 and 9.9% in 2005. In a decentralized structure, each business unit has its own IT organization (including IT infrastructure). There is little or no coordination across business units or with a corporate unit; corporate IT primarily supports the corporate departmental staff and some enterprise applications.

Moving towards a federated structure with shared services can provide significant cost reduction opportunities, while enhancing opportunities for leveraging information and services across the company. In what looks to be a clear trend toward federal structures, 22.2% of the respondents said

¹³ Luftman and Kempaiah, op. cit., 2007.

¹⁴ Leidner, D. and Mackay, J. "How Incoming CIOs Transition Into Their New Jobs," *MIS Quarterly Executive* (6:1), March 2007, pp.17-28.

that their IT organization is federated—up from 18% in 2007, 15.7% in 2006, and 15.8% in 2005. The federated structure can achieve both centralization and decentralization benefits; it ensures that a corporate-wide synergy is maintained and, at the same time, makes sure that the business unit IT needs are also given attention.

SUMMARY

Once again, even with the current recession, the key challenges have remained consistent. The five managerial concerns “IT-business alignment,” “IT strategic planning,” “security and privacy,” “attracting IT professionals,” and “retaining IT professionals” are fundamental to the success of IT. Managerial concerns such as “Build business skills in IT,” “Reducing the cost of doing business,” “Making better use of information,” and “Improve IT quality” have appeared on the executive’s radar since the 2007 survey and present new challenges and opportunities for IT executives.

All of the top 15 “Application and technology developments” in 2008 were also in the top 25 in the 2007 list, despite the host of new developments over the past five years. The 2008 list has 33 new application and technology items when compared to the 2005 survey; 40 are new when compared to the 2004 survey; and 52 were new when compared to the 2003 survey.

While we have learned a lot, the need for IT-business alignment and management attention to IT human resource issues remains persistent and pervasive. CIOs reporting to the CEO and federal organization structures seem to be viewed as more valuable and growing.

Organizations are facing the worst financial crisis in decades. IT and the business working closely together in these trying times is key, but this is also the case when things are going well. CIOs continue to struggle with cost reductions, infrastructure challenges, and both attracting and retaining IT professionals, plus are called upon to exert unmatched leadership in using IT to drive efficiencies—some things never change.

APPENDIX: SIM SURVEY METHODS

The SIM survey has been conducted since 1980. Surveys prior to 2000 focused just on the top management concerns. Since 2003, the survey has

been extended to pursue more specific insights to the key IT issues of the day.

The 2008 SIM survey was similar to the previous studies in methodology and process. The survey questions were based on previous SIM surveys, with questions modified based on previous results and suggestions from respondents and researchers (academic and industry). Additionally, some changes were updated based on (1) lists from other similar research, (2) input from SIM board members, and (3) the lead author’s experience.

The survey was sent electronically to all SIM members in June 2008. By August, 291 organizations responded. The data were analyzed, and key findings were presented during the SIM annual conference (SIMposium) in Lake Buena Vista, FL.