

## IT Risks—Present and Future

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Risk management has become an area of increased focus over the last decade or so. Practically all types of audits begin with a risk assessment and take a risk-based approach. IT managers are equally more focused on IT risk. With the major role that IT risk plays in the current business environment, it is beneficial to understand as much about IT risk as possible. Two recent surveys provide valuable information about IT risks today and in the near future.

### AICPA: 2011 TOP 10 TECHNOLOGY INITIATIVES

In 2011, the AICPA conducted its 22<sup>nd</sup> Top Technology Initiatives (TTI) Survey. Certified Information Technology Professionals (CITPs) and select Certified Public Accountants (CPAs) were asked to rank the technology issues of greatest importance today. The results were divided into those related to public accounting and those related to business and industry. The final composite rankings are included in **figure 1**.

This list provides insight to IT auditors as to some of the major issues most likely to be relevant in today's IT audit environment.

### IBM GLOBAL RISK STUDY (2010)

In 2010, IBM conducted a global risk survey of people in various roles to understand how IT

managers are working to better understand and mitigate IT risk.

The results show that 66 percent of respondents rate their entity's overall approach to mitigating IT risk as "good to expert." Results also reveal that IT professionals are involved in a number of risk-related issues and feel strongly that they should be even more involved in the future. Current IT risk budgets have not fallen over the last year, but, rather, have remained steady or have increased. Organizations and senior executives recognize the need for and business benefits of risk mitigation. All of these results fall under "good news." The results were also consistent across geographies, industries, size and participant role.

However, there are some areas for improvement and indicators of what the future might hold for IT risks.

### Present: IT Risk Issues

The survey results included a rating of current IT risk issues. When respondents were asked to identify risk issues of the last year, efforts were focused in a few areas (responding "yes" to the IT risk as a top-of-mind issue):

1. IT security [78%]
2. Hardware and software malfunction [63%]
3. Power failure [50%]
4. Physical security [40%]

### Present: IT Risk Maturity

One outcome of the survey was the conclusion that the examination and assessment of an entity's IT risk maturity is foundational to effective risk management. According to the survey, there is a need for an objective assessment of IT risk maturity now. Recommendations included:

- Determine the entity's IT risk maturity with objectivity.
- Institute a cross-functional plan for all risk categories (data, security, recovery and new IT).

**Figure 1—AICPA Top 10 Technology Initiatives**

Technology Initiative	Public Accounting	Business and Industry
Control and use of mobile devices	1	2
Information security	2	1
Data retention policies and structure	3	3
Remote access	4	5
Staff and management training	5	6
(Business) Process documentation and improvements	6	8
Saving and making money with IT	7	10
Budget processes	9	4
Project management and deployment of new IT	10	9
Technology cost controls	8	-
Key performance indicators	-	7



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- Look at the range of risks and plan for each.
- Search for IT risk champions among senior leaders.
- Articulate the benefits of risk mitigation to all constituents.

Areas the survey identified as major ones for improvement in IT risk maturity include:

1. IT risk planning happens in silos [48%]
2. Creating a formal risk management department [41%]
3. Being more proactive vs. reactive [38%]

## Future: Emerging IT Risks

The survey results show several emerging technologies that represent significant IT risks. Those with the most concerns were (rating the IT as “extremely risky/risky”):

1. Social networking tools [64%]
2. Mobile platforms [54%]
3. Cloud computing [42%]

There were some common threads across these risky technologies. One is the security control of the flow of data to and from these technologies. Another was the fact that entities are still struggling with securing their own networks while considering moving to cloud computing; that is, professionals were not sure they were ready internally to extend the IT risks to cloud computing since they were not yet effectively managing IT risks locally. Cutting costs was an attraction for cloud computing in particular, but many consider the risk to be very high.

Social networking and mobile computing concerns were primarily in loss of control of data and threats of unauthorized access to confidential, proprietary data. Overall, social networking and mobile computing were considered very risky.

## Future: Shift in Involvement

The survey looked at the current and future involvement of IT managers and professionals in IT risk management. There

was a shift predicted three years out—increases in the area of branding (customer service, marketing), business strategy and financials. The decline side of the shift was infrastructure. Perhaps the decline shift is either because infrastructure is being successfully hardened or because entities are moving to cloud computing, Software as a Service (SaaS) and Infrastructure as a Service (IaaS) and, therefore, are able to focus more attention on other areas.

Sixty-five percent of the respondents said that risk mitigation is becoming a more integral part of their job, and 83 percent agree that IT managers should be more involved.

## IMPLICATIONS TO IT AUDITORS

First, these surveys provide information to better assess IT risks for any current IT audit activities. In particular, they provide information on emerging issues such as cloud computing and mobile computing. For instance, the IT risk maturity assessment (IBM) would be beneficial information to have for an IT audit. There are areas identified for IT auditors to seek evidence of IT risks and mitigating controls.

The surveys also help focus IT auditors on key issues in performing IT risk assessments. For instance, it is beneficial to compare these two lists and note that mobile computing and information security are prominent on both lists. Risks associated with data are also prominent in both surveys.

The IBM survey also provides forward-looking information to see where IT audits might be moving in the future. Clearly, social networking, mobile computing, cloud computing, SaaS and IaaS (data centers) are areas in which IT auditors will be asked to do more. The IBM survey shows the future parties of interest for potential interviews and sources of information for the IT auditor. For instance, IT managers will apparently become even more involved with IT risk assessment and management in the future, at the enterprise level. It is particularly interesting to note that there will be a shift to more involvement by IT managers in financial-related IT risks.

## CONCLUSION

Because of the nature of IT, IT auditors have to stay abreast of the ever-changing IT environment. The AICPA TTI and the IBM Global Risk surveys provide valuable information to help keep the IT auditor up to date.