



Global Status Report on the Governance of Enterprise IT (GEIT)—2011



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1. Executive Summary

Ask 834 business executives and heads of information technology (IT) what they think about the role of IT in their enterprise and you might expect to get 834 different answers. But that was not the case in this fourth edition of the IT Governance Institute's *Global Status Report on the Governance of Enterprise IT (GEIT)*. The survey, covering 21 countries, 10 industries, and both large and small enterprises, revealed a significant degree of accord on the contribution of IT to business success, the challenges and opportunities connected with IT, the impact of the economic crisis and views on IT outsourcing, social networking and the cloud.

Key findings include:

- **The good and the not-so-good**—Value creation of IT investments is one of the most important dimensions of IT's contribution to the business (mentioned by more than nine out of 10 respondents). But challenges exist: increasing IT costs and an insufficient number of IT staff are the most common IT-related issues experienced by respondents in the past 12 months.
- **IT leading or following**—There is a correlation between the position of the head of IT in the enterprise's hierarchy and the pro-active nature of the IT department. Overall, 70 percent of respondents noted that the head of IT is a member of the senior management team, but this figure increases to 80 percent for those enterprises where IT has a proactive role.
- **A focus on governance**—Governance of enterprise IT (GEIT) is a priority with most enterprises—only five percent indicated that they do not consider it important. Two-thirds of respondent enterprises have some GEIT activities in place, the most common being the use of IT policies and standards, followed by the employment of defined and managed IT processes. The main driver for activities related to GEIT is ensuring that IT functionality aligns with business needs, and the most commonly experienced outcomes are improvements in management of IT-related risk and communication and relationships between business and IT.
- **Moving out**—Outsourcing is highly prevalent across the board, but especially in larger enterprises and those where IT is considered important or very important to the delivery of the business strategy or vision.
- **Cloudy days**—Respondents reported that their heads were in the cloud: 60 percent use or are planning to use cloud computing for non-mission-critical IT services, and more than 40 percent use or are planning to use it for mission-critical IT services. For companies that do not have plans to use cloud computing the main reasons are data privacy and security concerns.
- **Watching expenses**—The global economic downturn has had an effect on IT activities, the primary response initiatives being: (1) a reduction in contractor staff, (2) a reduction in permanent staff and (3) a consolidation of the infrastructure.
- **Social networking**—The use of Facebook or Twitter at work is not highly prized; only one out of five respondents believes that the benefits of employees using social networking outweigh the risks.

1.1 Conclusions and Recommendations

The survey findings lend themselves to a variety of conclusions and issues to consider.

There are still significant opportunities for many enterprises to **transition IT's role to a more pro-active one**. This can be done through the use of mechanisms such as GEIT boards, an appropriate organisation structure encompassing roles for managing business relationships, and standardised processes to effectively bridge the business demand with the IT supply. IT innovation offers ample opportunities for IT to play a more pro-active role. For example, GEIT enablers such as optimal investment management processes can help ensure a balance between IT innovation and 'run-the-business' initiatives.

The **right governance enablers can ensure the transparency of IT supply and demand** and facilitate decision making about demand and its prioritisation in pursuit of value delivery to the enterprise.

It is a fact of business life that specific events, activities or even crises will arise that will require some GEIT objectives to take precedence over others for a time. However, it is important to note that GEIT objectives, regardless of their priority at a particular time, are related (e.g., an emphasis on value delivery will impact resource management). Therefore, GEIT initiatives must take a **balanced and holistic view of the five GEIT focus areas** (strategic alignment, risk management, value delivery, resource management, performance



1. Executive Summary

measurement). During an economic crisis, when there is a strong focus on managing cost, effective GEIT can ensure that this focus is balanced with a view on investments that can generate cost savings and are ultimately self-funding.

Governing enterprise IT effectively can help increase project success rates by addressing both the way projects are selected or approved (e.g., ensuring use of the right gating process and assessment criteria) and the way they are governed and overseen, once they are underway.

Successfully implementing GEIT depends on several factors: change management, communication, proper scoping and identification of achievable objectives.¹ And the outcomes of a successful implementation are worth it, producing both shorter-term, tangible benefits such as reduced cost and longer-term benefits such as enhanced management of IT-related risk, improved relationships between business and IT, and increased business competitiveness. In fact, the survey results as reported in this publication **can aid enterprises that need to build a business case for GEIT initiatives.**

Outsourcing can create significant benefits, with the proper governance focus. Enterprises using outsourcing are more likely to have a pro-active role of IT and a better perception of IT service levels and less likely to experience issues related to an insufficient number of IT staff. Some enterprises have put in place dedicated governance structures such as an external service management committee to report on, oversee and co-ordinate third-party services and delivery enterprise-wide. The intent is to ensure compliance with corporate and regulatory requirements, prevent value leakage and mitigate outsourcing risks.

GEIT can help enable the adoption of emerging technologies such as cloud computing. More than one-third of the survey respondents reported significant legacy infrastructure investments that are inhibiting their cloud computing plans. Enterprises will need to plan how legacy infrastructure investments should be managed and retired over time. These are complex decisions that require the involvement of many stakeholders from different areas of the business—a process that could be facilitated by having a clear GEIT decision model that delineates the responsibilities and accountabilities of these stakeholders.

The use of **frameworks and structures can help improve the governance of enterprise architecture.** Frameworks and standards such as COBIT,² ITIL,³ ISO 27000 series and TOGAF⁴ can help improve GEIT, bringing structure and clarity to areas such as service management, information security and enterprise architecture. COBIT provides an overarching framework within which the more focussed frameworks and standards can be applied more effectively. Similarly, structures such as an architecture review board can improve the re-use of and synergies between initiatives, ensure that total cost of ownership is considered, and help reduce complexity and increase agility over time.

1.2 Overview of This Report

This report is structured as follows:

- Section 2 provides an introduction to the research approach and objectives.
- Sections 3 through 5 present key findings from the survey and supporting analyses.
- Section 6 highlights conclusions and provides recommendations to enterprises on the governance of enterprise IT.

The appendices contain the questionnaire that was utilised and information on the profile of survey respondents.

¹ ISACA, *Implementing and Continually Improving IT Governance*, USA, 2009, www.isaca.org/bookstore; provides excellent guidance on how to ensure that these areas are properly addressed.

² ISACA, COBIT 4.1, USA, 2007, www.isaca.org/cobit

³ Office of Government Commerce (OGC), IT Infrastructure Library, UK, www.itil-officialsite.com

⁴ International Organization for Standardization, TOGAF Version 9, www.iso.org, www.theopengroup.org/togaf

2. Introduction



In 2010, PricewaterhouseCoopers Belgium was commissioned by the IT Governance Institute (ITGI) to conduct the fourth edition of a market research project on the governance of enterprise IT, resulting in this *Global Status Report on the Governance of Enterprise IT (GEIT)*—2011. Similar survey reports were issued in 2008, 2006 and 2004. This survey was conducted from June 2010 to August 2010 and included more than 800 respondents from 21 countries across the globe.

2.1 Survey Approach

A combination of telephone and web survey methods was utilised, employing a standard questionnaire for both. For the web survey, service providers were utilised that have established panels of enterprises that are willing to participate in specific types of surveys. This had the advantage of improving the quality of data received (compared to open web surveys) and enabling specific enterprise profiles to be targeted (e.g., representation across geographic locations and industries).

A total of 834 surveys were completed, of which 704 were received through the online survey and 130 were gathered by telephone. The surveys were conducted in the native language of the interviewees, and included Chinese, Czech, Dutch, French, German, Japanese, Polish, Portuguese, Russian and Spanish.

The survey was carried out under the Market Research Society and Marketing Research Association codes of conduct, guaranteeing complete anonymity of the participants. None of the information obtained in the interviews has been attributed to any individual and all comments have been treated in the strictest confidence.

The questionnaire used (see appendix A) consisted of 39 multiple-choice questions. The questions were grouped as follows:

- Seven demographic questions, to define the respondent's position within his/her enterprise and the organisation itself
- 11 questions on the current business and IT strategy of the enterprise, the role of IT within the organisation, issues encountered and initiatives planned
- 12 questions on the current application of GEIT within the organisation
- Nine questions related to topics of current special interest, such as outsourcing and cloud computing

Some of the more technical IT questions were asked only of the IT respondents.

A number of questions were carried over from or were similar to those used in previous surveys, enabling trend analysis with the historical data.

2.2 Objectives

The objectives for the survey were:

- Survey and analyse the degree to which the concept of GEIT is recognised, established and accepted by the C-suite (both business and IT). This includes perceptions of the importance of IT, the current contribution of IT to the business, accountability for the governance of IT and integration with overall enterprise governance.
- Determine the level of GEIT that exists, the frameworks that are recognised and used in the market, and the certifications that are recognised and required/preferred in the market.
- Determine the impact of topics of current special interest related to GEIT. For this survey, this included the impact of the economic crisis, innovation and the governance of enterprise architecture.

Objectives were also set relative to targeted respondents:

- **Geographic representation**—A target of 21 countries was set, representing broad geographic coverage. Brazil, Russia, India and China (the BRIC countries) were included as important representatives of newly advanced economic growth.
- **Number of respondents**—A target of 730 participants was established, representing at least 20 participants per country.



2. Introduction

- **Industry sectors**—Adequate representation of a variety of sectors
- **Organisation size**—Responses from both smaller enterprises and larger enterprises were sought, the differentiator between the two being number of employees (see Key Terms).
- **Business/IT**—The objective was to obtain an equal split between business and IT audiences.

More information on the profile of survey respondents is provided in appendix B.

2.3 Key Terms

Throughout the report a number of key terms are used that are defined here to facilitate understanding.

Survey demographic terms include:

- **Business and IT respondents**—Business respondents are those with a non-IT-related responsibility within the organisation, such as chief executive officer (CEO), chief financial officer (CFO) or chief operating officer (COO). IT respondents are those with an IT-related responsibility, such as chief information officer (CIO) or head of IT.
- **Large and small enterprises**—Two survey questions related to organisation size: number of employees and latest available revenue figure. In this report, the employee dimension was used to distinguish between large and small enterprises, large referring to those with 500 or more full-time equivalent (FTE) staff members and small to those with fewer than 500 FTEs.
- **Government-owned or private enterprises**—A government-owned enterprise is one in which more than 50 percent of the shares are owned by a government, whereas in private enterprises at least half of the shares are owned by private companies or persons.

Amongst the IT organisation terms are:

- **Centralised IT organisation**—One central IT organisation provides services to all functions or business units.
- **Decentralised IT organisation**—Multiple IT organisations provide services to various functions or business units.
- **Federated IT organisation**—This describes a hybrid of the centralised and decentralised models. A central IT organisation provides some IT services, but there are also IT organisations in some or all of the functions or business units.
- **Reactive or pro-active role of IT**—IT has a reactive role in the organisation when IT is responding to the business when the business has a formal request. In a reactive role IT is typically technically focussed and concentrates on keeping existing systems running and available. IT has a pro-active role in the organisation when IT is a partner of the business and takes the initiative to help in IT innovation and achieving strategic objectives.

3. Perceptions of Enterprise IT and its Governance



This section deals with the key findings related to the first objective for the survey: determine and analyse the degree to which the concept of GEIT is recognised, established and accepted by the C-suite (both business and IT). This includes perceptions of the importance of IT, the current contribution of IT to the business, accountability for the governance of IT and integration with overall enterprise governance.

The key findings are:

- IT is considered to be important or very important to the delivery of the overall business strategy and vision by 94 percent of respondents.
- The contribution of IT to the business is widely recognised, with value creation of IT investments being one of the most important dimensions (mentioned by more than nine out of 10 respondents).
- Seventy-seven percent of respondents from large enterprises mentioned that the head of IT is a member of the senior management team, confirming the increasing importance of IT in many enterprises.
- More respondents describe the current role of IT in their enterprises as pro-active than reactive (55 percent vs. 42 percent) but the percentage with a pro-active role is higher (63 percent) in enterprises where some IT services are outsourced compared to those with no outsourcing.
- The main initiatives planned by respondents in the next 12 months relate to major system implementations or upgrades, IT cost reduction, and data or information.
- One in four respondents is planning green IT or sustainability initiatives.
- Increasing IT costs and an insufficient number of IT staff are the main IT-related issues experienced by respondents in the past 12 months.
- One in five respondents noted ending an IT-related project before it was fully implemented, with the main reason being the project did not deliver as promised or the project exceeded its budget.
- The main driver for GEIT activities is ensuring that current IT functionality is aligned with current business needs.

The detailed findings are presented in the following subsections. Where appropriate, certain cross-analyses have been performed to determine relevant trends. The factors used for cross-analyses included (amongst others) geographic location, company size by revenue and number of employees, industry sector, IT organisation model, business strategy followed, type of respondent (business vs. IT), ownership structure, and the current IT sourcing situation.

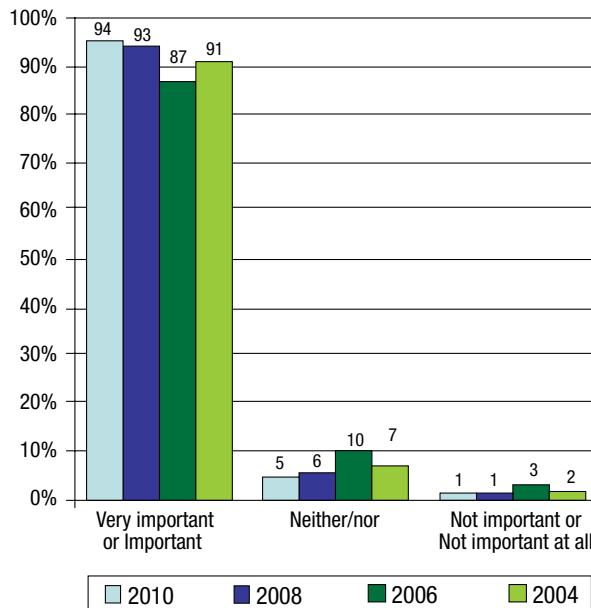


3. Perceptions of Enterprise IT and its Governance

3.1 Importance of IT to the Delivery of the Overall Business Strategy and Vision

IT is considered important or very important to the delivery of the overall business strategy and vision by almost all respondents (94 percent). This response has not varied significantly over the years that the survey has been performed, as indicated in **figure 1**.

Figure 1—Importance of IT to the Delivery of the Business Strategy and Vision



Cross-analysis

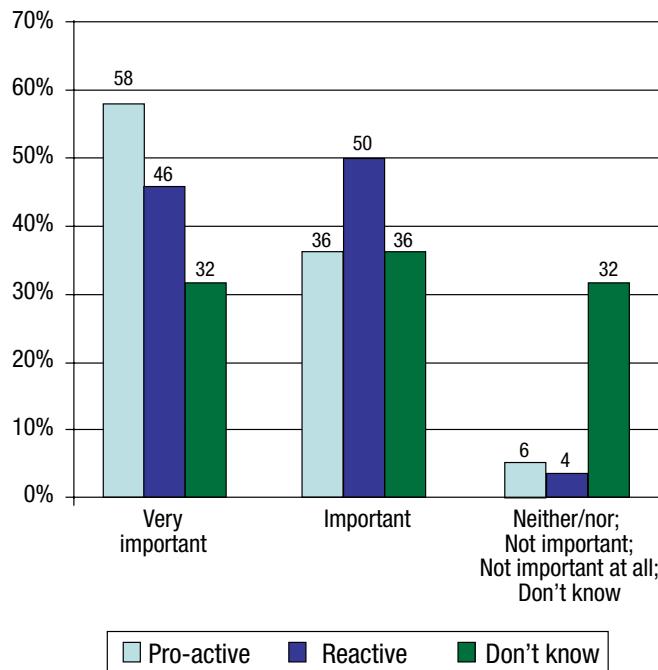
There is no great variance between business and IT respondents: 54.0 percent of IT respondents considered IT to be very important vs. 49.7 percent of business respondents, and 40.7 percent of IT respondents considered IT to be important vs. 43.2 percent of business respondents.

The survey data indicate that IT is more likely to be considered very important to the execution of business strategy in enterprises where it has a pro-active role (partnering with the business to help it innovate and achieve strategic objectives) as opposed to a reactive role (responding to technical needs, focussed on keeping the environment running and available). This is illustrated in **figure 2**.

3. Perceptions of Enterprise IT and its Governance



Figure 2—Importance of IT Related to the Current Role of IT in the Enterprise



3.2 Contribution of IT to the Business

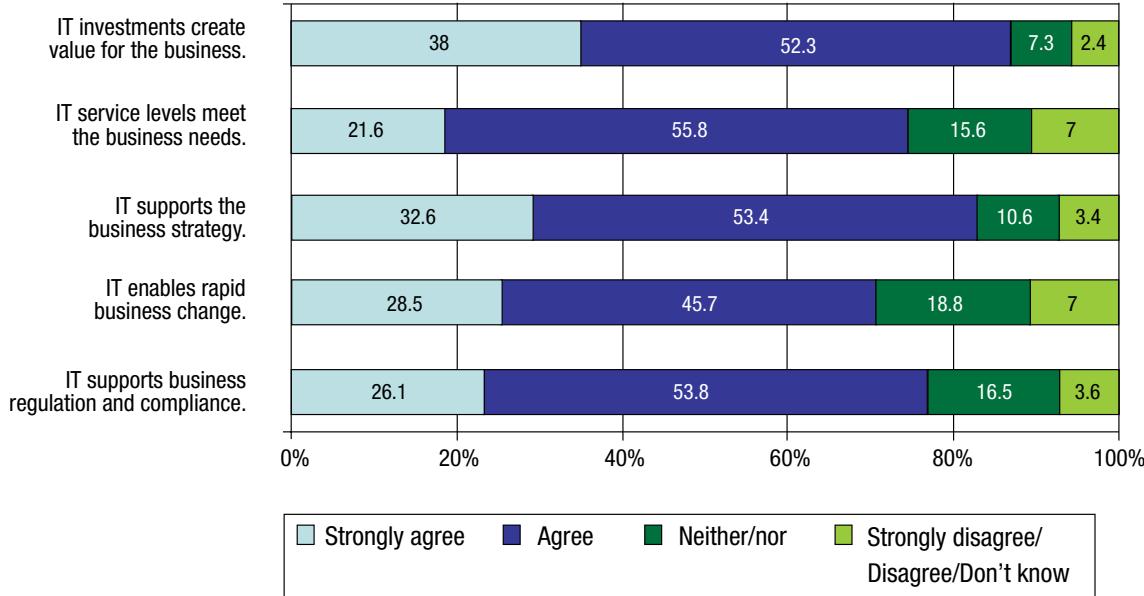
The contribution of IT to the business is widely recognised, with value creation of IT investments being one of the most important dimensions.

IT is generally seen as contributing significantly to the business, as indicated in **figure 3**. Value creation of IT investments is the highest-scoring dimension; IT's enablement of rapid business change is on the other end of the spectrum. An inability to enable rapid business change can often be ascribed to issues with the company's enterprise architecture, an issue that many enterprises are addressing via the launch of enterprise architecture initiatives with a specific objective of increasing IT agility and an increased focus on the governance of enterprise architecture.



3. Perceptions of Enterprise IT and its Governance

Figure 3—Contribution of IT to the Business



Cross-analysis

Figure 4 lists the percentages of business and IT respondents that selected ‘Strongly agree’ or ‘Agree’ for each dimension of IT contribution to the business.

Figure 4—Perceptions of Business and IT Stakeholders on the Contribution of IT to the Business

Contribution of IT to the Business	Percent of Business Respondents	Percent of IT Respondents
IT investments create value for the business.	87.8	92.4
IT service levels meet the business needs.	70.0	83.5
IT supports the business strategy.	71.7	89.5
IT enables rapid business change.	80.8	77.1
IT supports business regulation and compliance.	77.1	82.4

In most dimensions, the IT respondents are generally more positive than their business counterparts. The most striking difference can be observed for ‘IT supports the business strategy’, where almost 90 percent of IT respondents agree or strongly agree with the statement whereas considerably fewer (72 percent) of the business respondents hold a similar view.

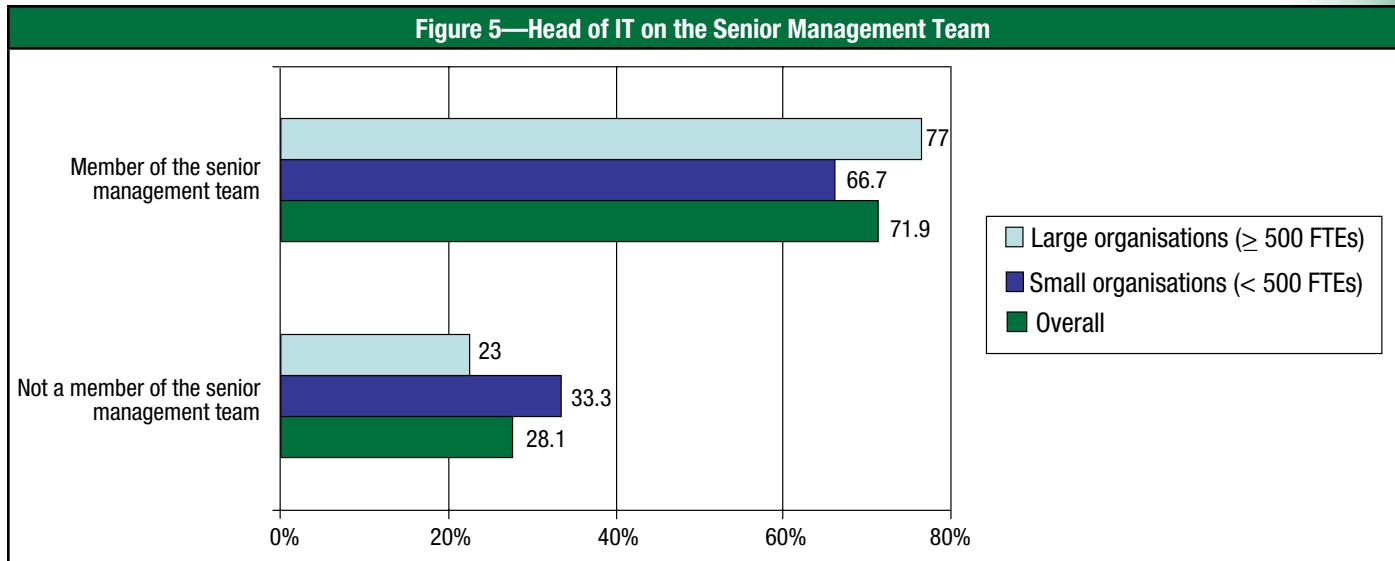
It is also interesting to note (not reflected in figure 4) that when it comes to IT service levels meeting business needs, a more positive view is reflected amongst those enterprises that outsource some IT services as opposed to those that do no outsourcing.

3. Perceptions of Enterprise IT and its Governance



3.3 Head of IT as a Member of the Senior Management Team

Seventy percent of respondents indicated that in their enterprises the head of IT is a member of the senior management team (**figure 5**). This position on the senior management team is more likely to occur in enterprises with 500 or more employees (77.0 percent) than in those with fewer than 500 employees (66.7 percent).



These results confirm the significant importance of IT in many enterprises. Those respondents indicating that the head of IT is not a member of the senior management team in their enterprise pointed to the organisation's small senior management team as the main reason (43 percent). This is in line with the finding (in **figure 5**) that it is more common in smaller enterprises for the head of IT not to be on the senior management team. Other reasons frequently provided include that IT is a support function and IT is adequately represented by another member of the senior executive team (32.5 percent of respondents for each option).

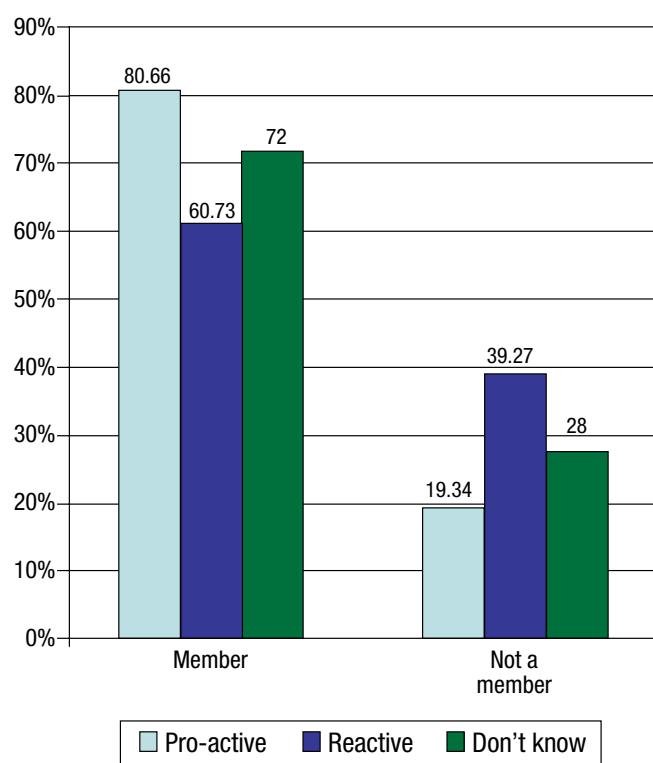


3. Perceptions of Enterprise IT and its Governance

Cross-analysis

Survey respondents' descriptions of the role of IT (pro-active vs. reactive) were compared to their responses to the question about the head of IT's membership on the senior executive team. A clear correlation was found between the two (**figure 6**). Of all respondents who mentioned that IT has a pro-active role in their organisations, 80 percent also noted that the head of IT is a member of the senior executive team. The converse was true as well: a reactive IT role tended to correlate with the head of IT not belonging to the senior management team.

Figure 6—Correlation Between Position of Head of IT and Role of IT



3.4 Role of IT in the Organisation

Respondents were asked to characterise the current role of IT in their enterprises as either pro-active or reactive. Overall, the majority of respondents described the current role as pro-active (54.6 percent vs. 42.4 percent), as indicated in **figure 7**.

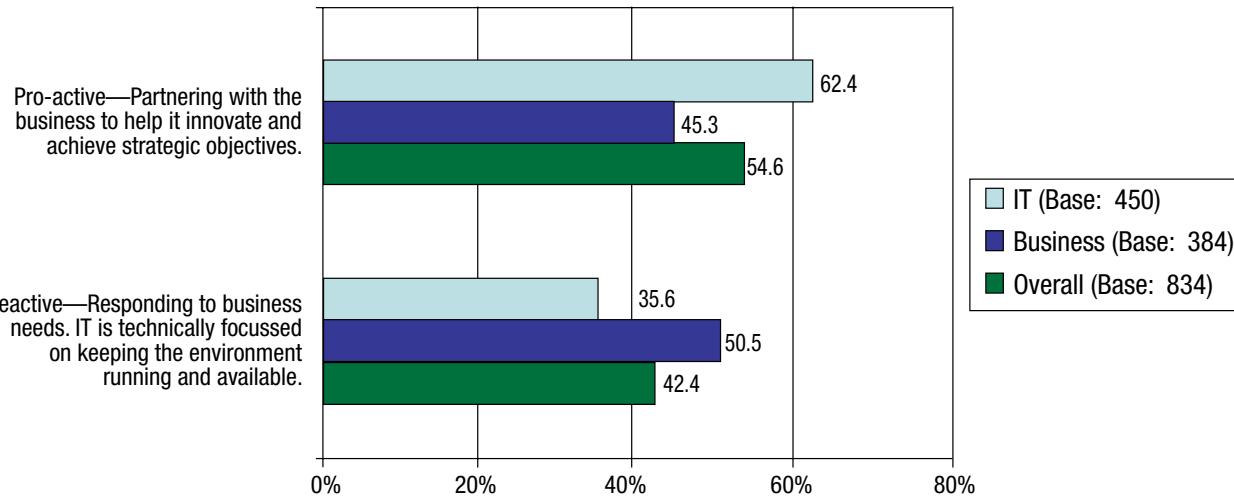
However, heads of IT and business executives do not necessarily agree. Heads of IT are more likely to describe the current IT role as pro-active (62.4 percent vs. 35.6 of business respondents), whereas business executives view the role as reactive (50.5 percent vs. 45.3 percent of IT respondents).

This points to an area in which GEIT could have a significant impact—improving communication and transparency between business and IT, and putting in place the right enablers to ensure that IT can play a more pro-active role in the enterprise.

3. Perceptions of Enterprise IT and its Governance



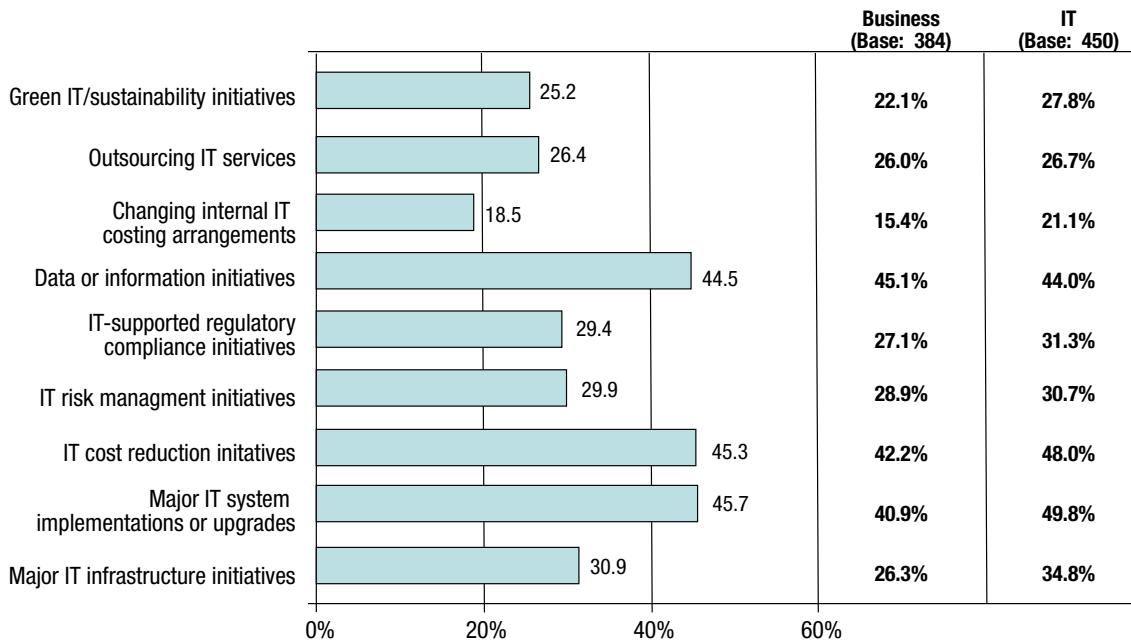
Figure 7—Role of IT in the Enterprise



3.5 Planned IT Initiatives

The main activities planned by respondents in the next 12 months relate to major system implementations or upgrades, IT cost reduction initiatives, and data or information initiatives (**figure 8**). It is also noteworthy that one-quarter of respondents are planning green IT or sustainability initiatives.

Figure 8—Major IT-related Initiatives Planned for Next 12 Months





3. Perceptions of Enterprise IT and its Governance

Cross-analysis

The views of business and IT respondents are quite similar, with the exceptions being major IT system implementations or upgrades (40.9 percent vs. 49.8 percent) and major IT infrastructure initiatives (26.3 percent vs. 34.8 percent).

Large enterprises are more likely to be planning initiatives in the next 12 months than smaller enterprises—across the list of initiatives the responses of those working in large enterprises are at least 10 percent higher. Smaller enterprises may be constrained in the initiatives that they can undertake by the availability of financial, human and other resources.

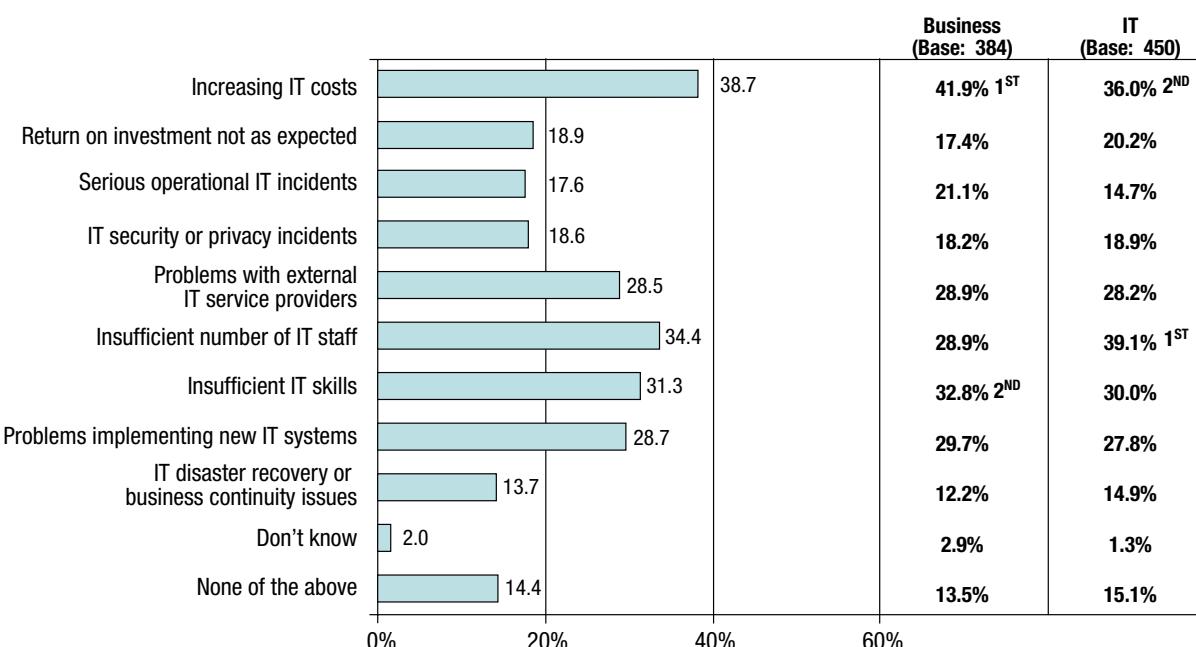
An interesting perspective is revealed by cross-analysing planned initiatives and the respondents' view on whether IT investments create value for the business. Of those respondents who expressed a negative perception of the value of IT investments (disagreed or strongly disagreed with the statement that IT investments create value), a significant portion are planning major IT system implementation or upgrade initiatives. It may be that the current IT systems are generating problems that contribute to these respondents' negative perceptions of IT investments.

3.6 IT-related Issues Experienced in the Past 12 Months

Increasing IT costs and an insufficient number of IT staff were the main IT-related issues experienced by respondents in the past 12 months. (Increasing IT costs being mentioned by almost four out of 10 respondents could be due to the emphasis on costs during the global economic crisis.) Other prevalent issues included insufficient IT skills (possibly, but not necessarily, related to an insufficient number of IT staff), difficulties implementing new IT systems and problems with external IT service providers (**figure 9**).

Comparing these responses to the major initiatives planned (discussed in subsection 3.5), there are some clear links between certain issues and initiatives. For example, IT cost reduction initiatives are a response to increasing IT costs and major IT system implementations.

Figure 9—IT-related Issues Experienced in the Past 12 Months



3. Perceptions of Enterprise IT and its Governance

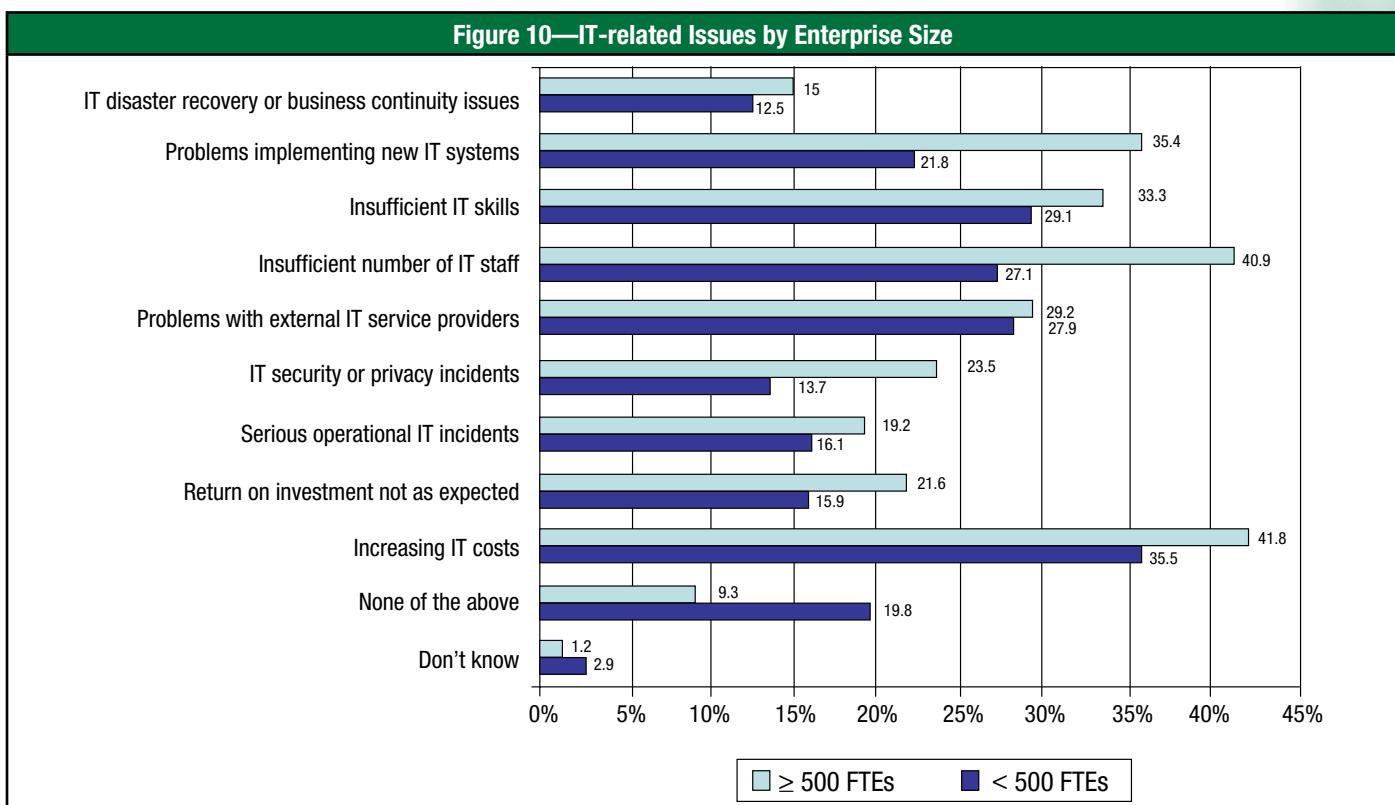


Cross-analysis

The views of business and IT respondents do not differ significantly. The only issue that generates substantially different responses is the insufficient number of IT staff, which was mentioned by 28.9 percent of business respondents, but by 39.1 percent of IT respondents. It was the highest-scoring issue identified by IT respondents, whereas ‘increasing IT costs’ was at the top of the list for business respondents.

‘Insufficient number of IT staff’ was selected by a significant number of respondents in the healthcare/pharmaceuticals and transportation sectors. Issues relating to insufficient IT skills were especially experienced in the education and healthcare/pharmaceuticals sectors.

It is perhaps counter to expectations that increasing IT costs, IT security or privacy incidents, insufficient number of IT staff, and problems implementing new IT systems are more prevalent in large enterprises (**figure 10**).



Analysing these IT issues in reference to enterprises’ stance on outsourcing reveals that outsourcing may partly address the insufficient number of IT staff. That was mentioned as an issue by 23.5 percent of respondents who do no outsourcing vs. 15.6 percent of those who outsource some IT services. On the other hand, problems implementing new IT systems are mentioned by only 2.9 percent of non-outsourcing respondents—only one-fifth of those who outsource some IT services (11.6 percent).

Comparing these results to those reported in the 2008 publication shows that the prevalence of a number of IT issues has significantly decreased during the past three years (**figure 11**). There is a sharp decline in the issues ‘return on IT investment not as expected’, ‘insufficient number of IT staff’ and ‘IT disaster recovery or business continuity issues’.



3. Perceptions of Enterprise IT and its Governance

Figure 11—Trends in Issues Experienced, 2008 vs. 2010		
Issue	2008	2010
Return on IT investment not as expected	41%	19%
Serious operational IT issues	23%	18%
IT security or privacy incidents	21%	19%
Insufficient number of IT staff	58%	34%
Insufficient IT skills	38%	31%
IT disaster recovery or business continuity issues	26%	14%

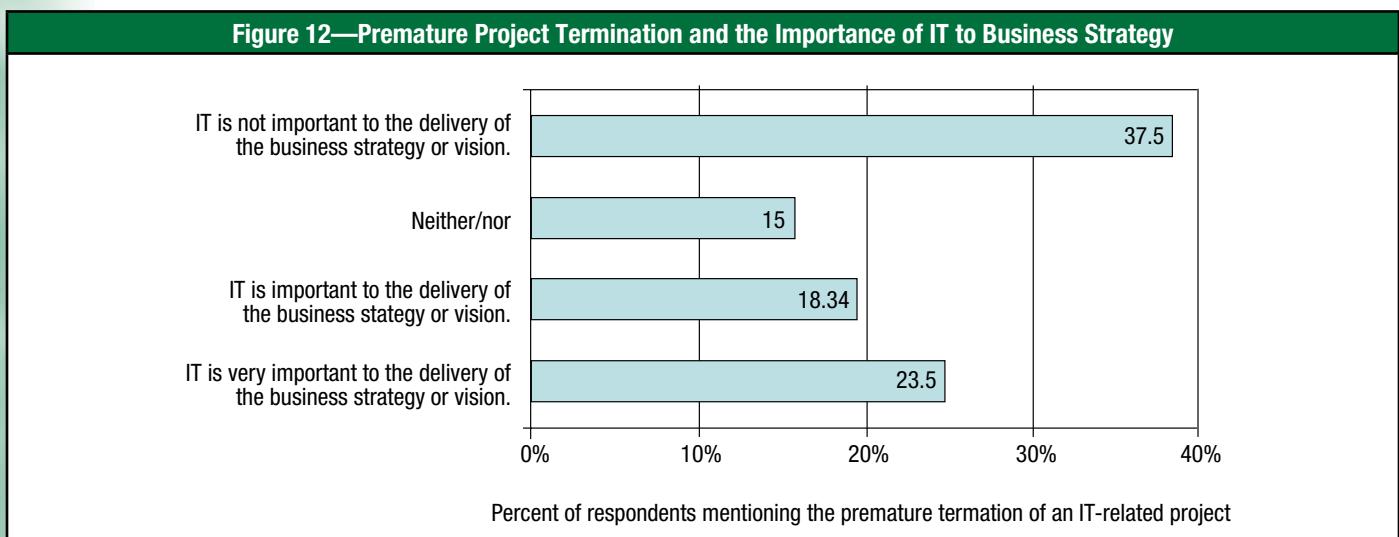
3.7 Prematurely Ended IT Projects

One-fifth of all respondents noted ending an IT-related project prematurely—before it was fully implemented. The 21 percent response may be considered high because it pertains only to those projects not completed; it does not include other projects that might have been candidates for premature closure—that is, they were not within time and/or budget and did not achieve objectives—but that were completed.

Cross-analysis

There were no significant differences between the views of IT and business respondents. More than one-quarter of larger enterprises indicated that an IT-related project was ended before being fully implemented compared to 14.7 percent of smaller enterprises.

Cross-referencing this question to the question on the importance of IT to the successful delivery of the business strategy or vision indicates that the premature ending of an IT-related project is more prevalent in those enterprises that do not consider IT important to the achievement of business strategy (**figure 12**).

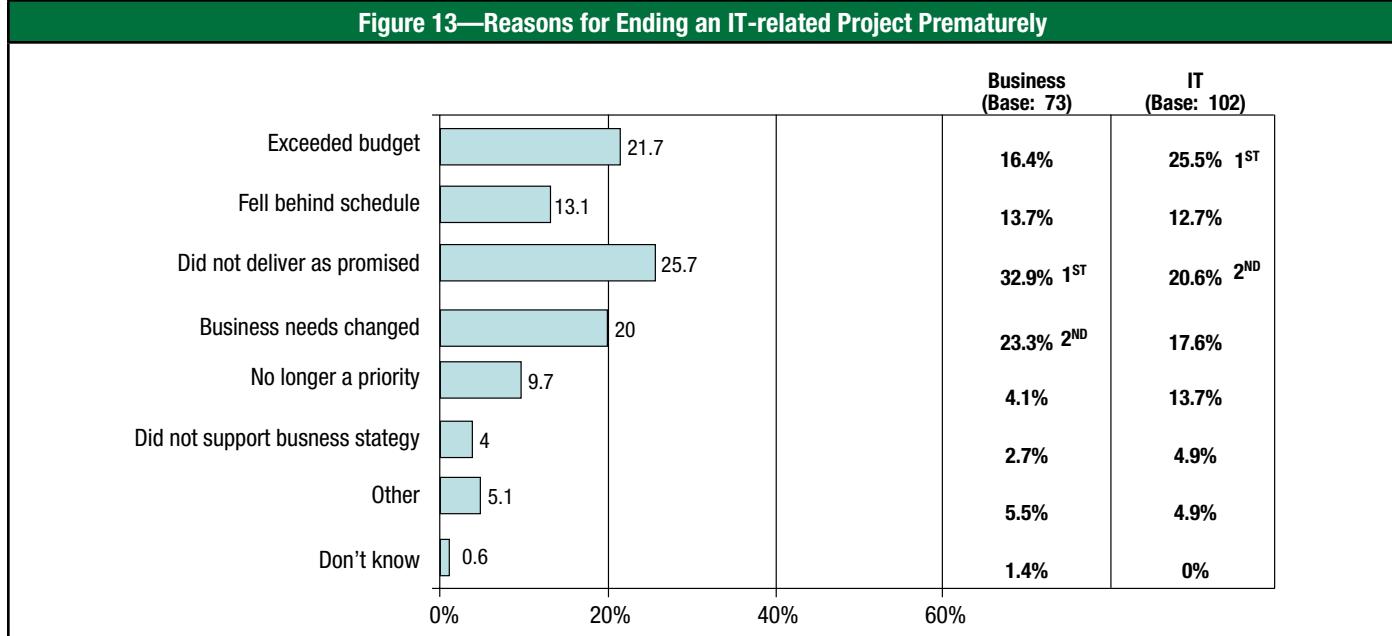


The main reasons respondents stated for ending an IT-related project before it was fully implemented were that the project was not delivering as promised, it was exceeding the budget and/or there was a change in business needs (**figure 13**).

3. Perceptions of Enterprise IT and its Governance



Figure 13—Reasons for Ending an IT-related Project Prematurely



It is interesting to note the differences between IT and business respondents. The top reason mentioned by business respondents is that the project did not deliver as promised (in second place for IT respondents), whereas IT respondents point to the project exceeding budget as the top reason (in third place for business respondents). This may highlight an opportunity to increase transparency regarding projects, their management and governance, to better align business and IT perceptions.

Exceeding budget was more commonly cited as a reason for ending IT-related projects early in the energy and telecommunications sectors than in other industry sectors.

Although large enterprises terminate projects prematurely more than small enterprises, when small enterprises do end a project early, it is more than twice as likely as a large enterprise to be due to the project falling behind schedule (20.0 percent vs. 9.6 percent).

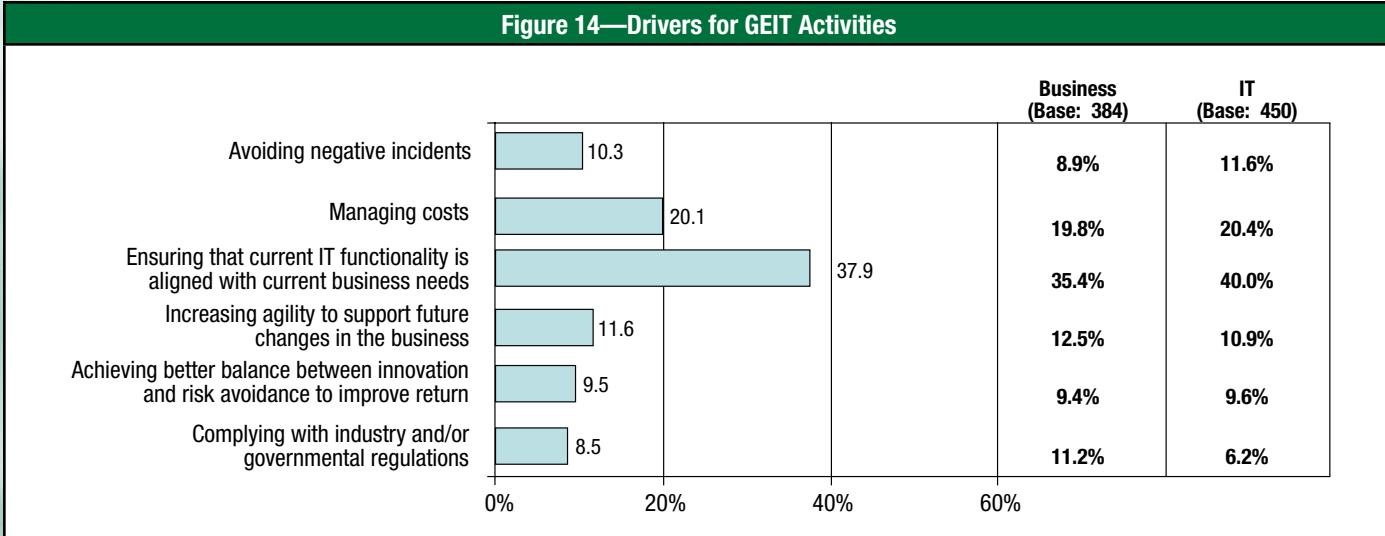
3.8 Drivers for GEIT Activities

Ensuring that current IT functionality is aligned with current business needs is the most important driver for GEIT activities. The second most frequently mentioned driver was managing cost (**figure 14**).



3. Perceptions of Enterprise IT and its Governance

Figure 14—Drivers for GEIT Activities



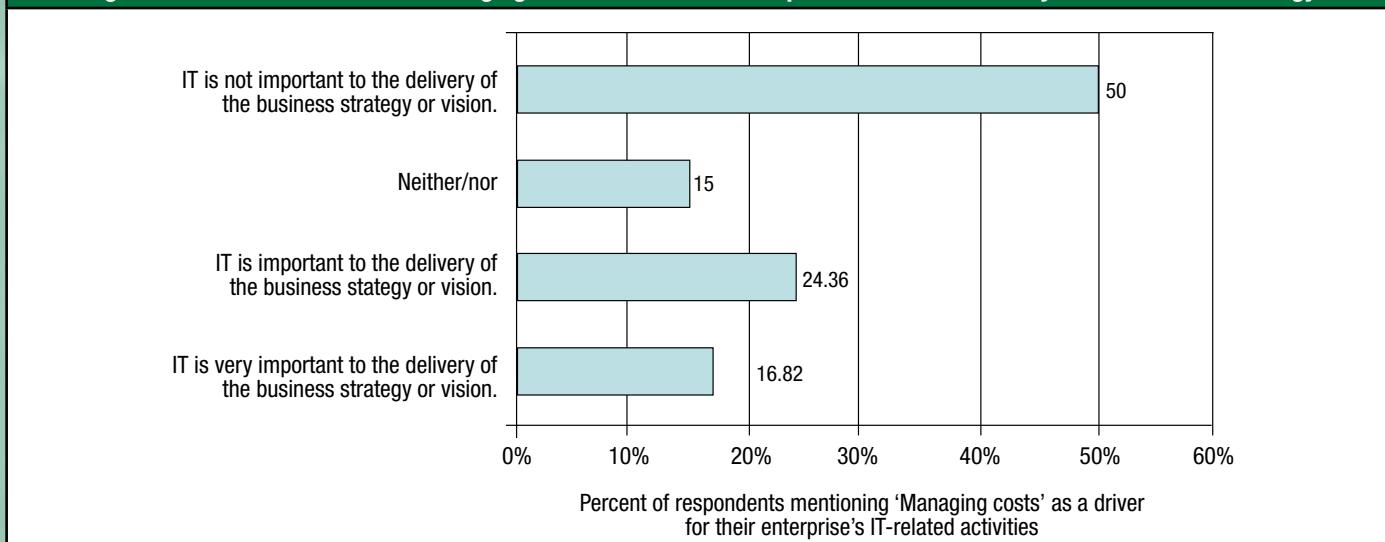
Cross-analysis

The views of business and IT respondents are very similar for this question, with the exception of compliance as a driver, which was mentioned by more business than IT respondents.

‘Increasing agility to support future changes in the business’ is more prevalent amongst enterprises that are more than 50 percent publicly owned. It is mentioned as a driver by 21 percent of these enterprises compared to 11 percent or less for other ownership structures. ‘Complying with industry and/or governmental regulations’ is mentioned as a driver by 17 percent of enterprises that are more than 50 percent government owned, compared to responses of eight percent or less for other ownership structures.

The list of drivers was cross-referenced to the responses on the importance of IT to the successful delivery of the business strategy or vision. The ‘Managing cost’ driver was mentioned by half of the enterprises that do not consider IT important to delivering the business strategy, but was selected much less frequently by enterprises that do consider IT important or very important to delivery of the business strategy (**figure 15**). If IT is considered an unimportant component in delivering the business strategy, a primary focus on managing cost is often the consequence.

Figure 15—Cross-reference of ‘Managing costs’ Driver and the Importance of IT to Delivery of the Business Strategy





4. The Maturity and State of GEIT

This section builds on the findings of the previous section and addresses the second objective of the survey: to determine the level of GEIT that exists, the frameworks that are recognised and used in the market, and the certifications that are recognised and/or preferred in the market.

Key findings related to this objective are:

- GEIT frameworks/standards and other IT best practice frameworks/standards are seen to be the most important enablers for effective GEIT.
- Large IT and consultancy firms are deemed to have the highest capability to provide guidance or solutions in GEIT.
- Two-thirds of respondents have some level of GEIT measures in place, and only five percent do not think that GEIT is important. The maturity level of smaller enterprises is lower overall than larger ones. The overall maturity level is also lower in enterprises where IT is not considered important to the delivery of business strategy and in enterprises with a decentralised organisation model.
- IT policies and standards is the most common GEIT practice, followed by defined and managed IT processes.
- The strategy and the culture of the organisation have most influenced the implementation of GEIT practices, being mentioned by half of the respondents.
- ITIL or ISO 20000 was most often mentioned by respondents as the framework or standard on which they base their GEIT approaches. ISACA's Risk IT framework, which was launched in 2009, is already being used by 12 percent of respondents.
- TOGAF 9 and PRINCE2 are the most popular IT-related certifications. ISACA's CGEIT certification, which was introduced in 2007, has gained a solid take-up with 35.3 percent of respondents reporting a significant number of IT employees holding the certification and a further 27.6 percent with some IT employees so certified.
- The improved management of IT-related risk and improved communication and relationships between business and IT are the most commonly experienced outcomes of GEIT practices, mentioned by four out of 10 respondents. Lower IT costs are reported as an outcome by 38.0 percent of respondents and improved business competitiveness by 28.0 percent.
- The main challenges experienced in implementing GEIT mechanisms are communication, change management and trying to do too much at once.

4.1 Enablers for Effective GEIT

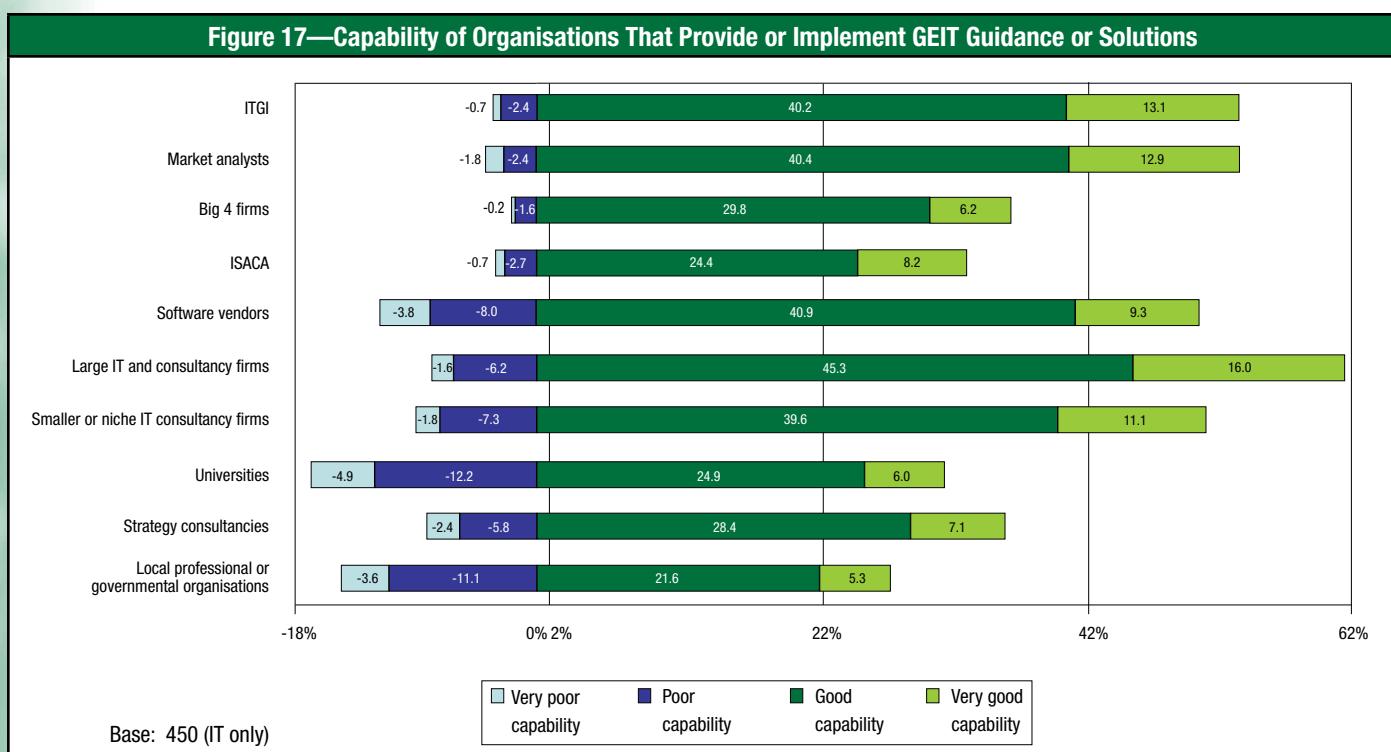
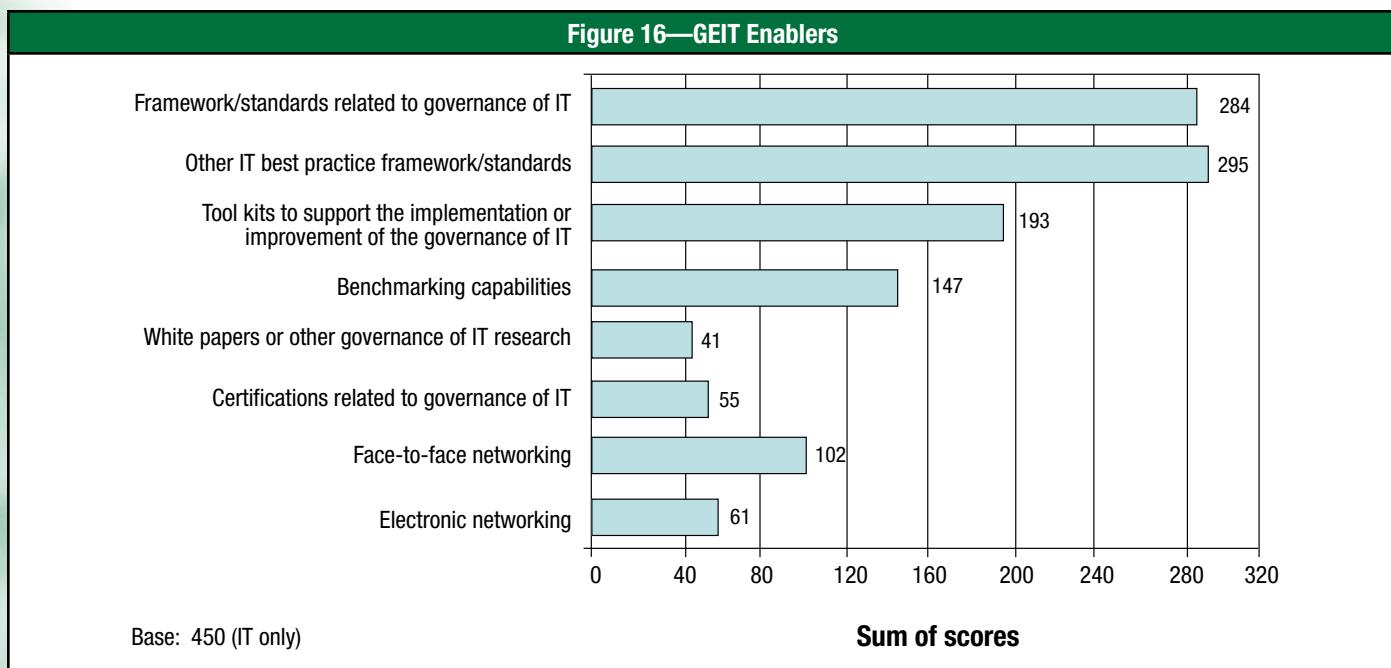
The most important enablers for the effective GEIT are GEIT-related frameworks/standards and other IT best practice frameworks/standards. White papers or other GEIT research and GEIT-related certifications were deemed the least important enablers (**figure 16**).

4.2 Providers of GEIT Guidance or Solutions

Large IT and consultancy firms are deemed to have the highest capability to provide guidance or solutions relative to GEIT. Other organisations that were rated as having high capabilities include market analysts (Gartner, Forrester, IDC, etc.), ITGI and the Big 4 firms (PricewaterhouseCoopers, Deloitte, KMPG, Ernst & Young), as illustrated in **figure 17**. It is somewhat of an anomaly that the providers receiving the highest rating—large IT and consultancy firms—also receive a relatively significant percentage of respondents placing them in the poor or very poor end of the spectrum.



4. The Maturity and State of GEIT



4.3 Level of GEIT Measures in Place

Two-thirds of respondents' enterprises have some degree of GEIT measures in place (**figure 18**). Only a very small number (five percent) consider GEIT unimportant.

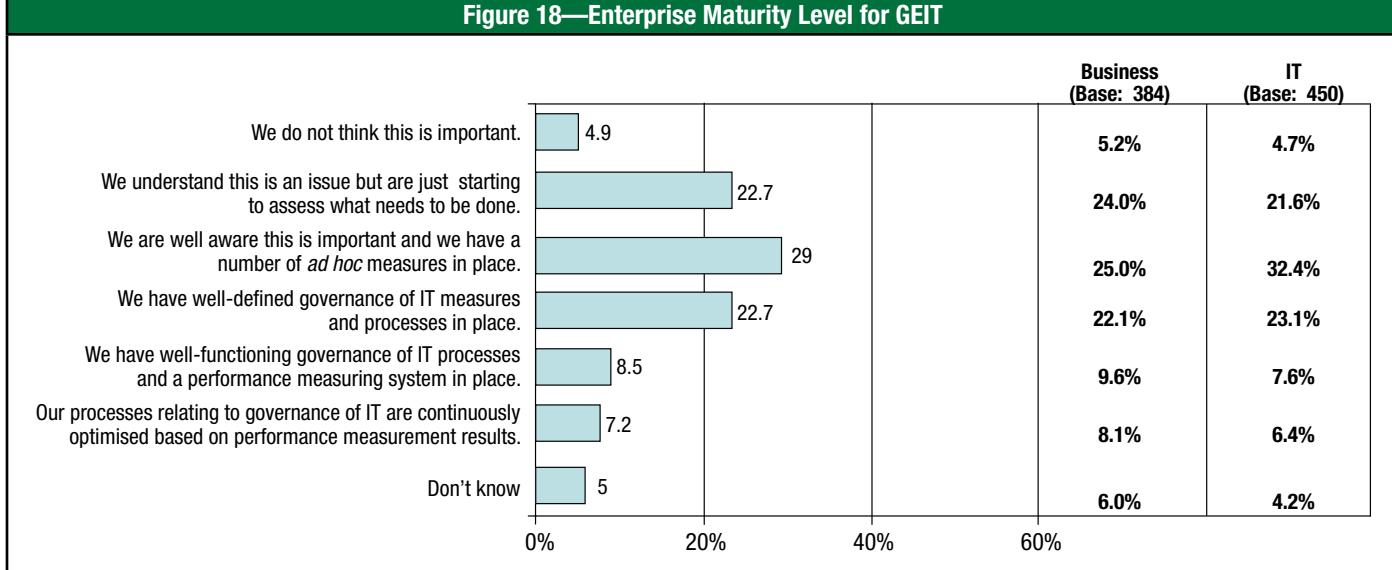
Cross-analysis

Responses from business and IT respondents are very similar, as noted in **figure 18**.



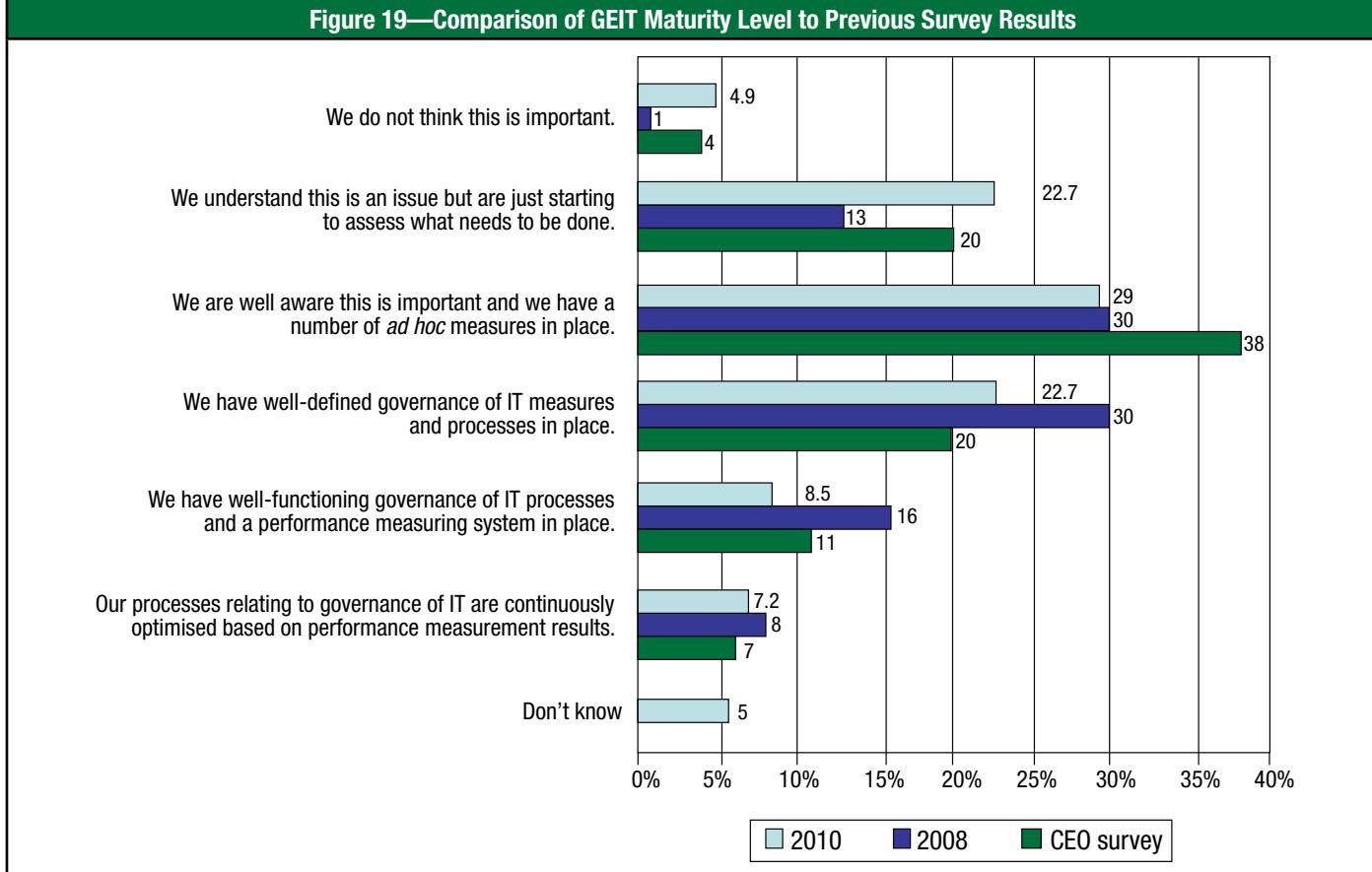
4. The Maturity and State of GEIT

Figure 18—Enterprise Maturity Level for GEIT



Comparing these results against the results of a 2009 ITGI survey that was similar in focus but targeted towards business executives and against the 2008 version of this survey reveals that these results are similar to the 2009 findings, except for the maturity level ‘We are well aware this is important and have a number of *ad hoc* measures in place’ (figure 19). Overall, enterprises reported a slightly higher maturity profile in the 2008 survey—but it should be noted that the respondents in the 2008 survey were mostly heads of IT.

Figure 19—Comparison of GEIT Maturity Level to Previous Survey Results





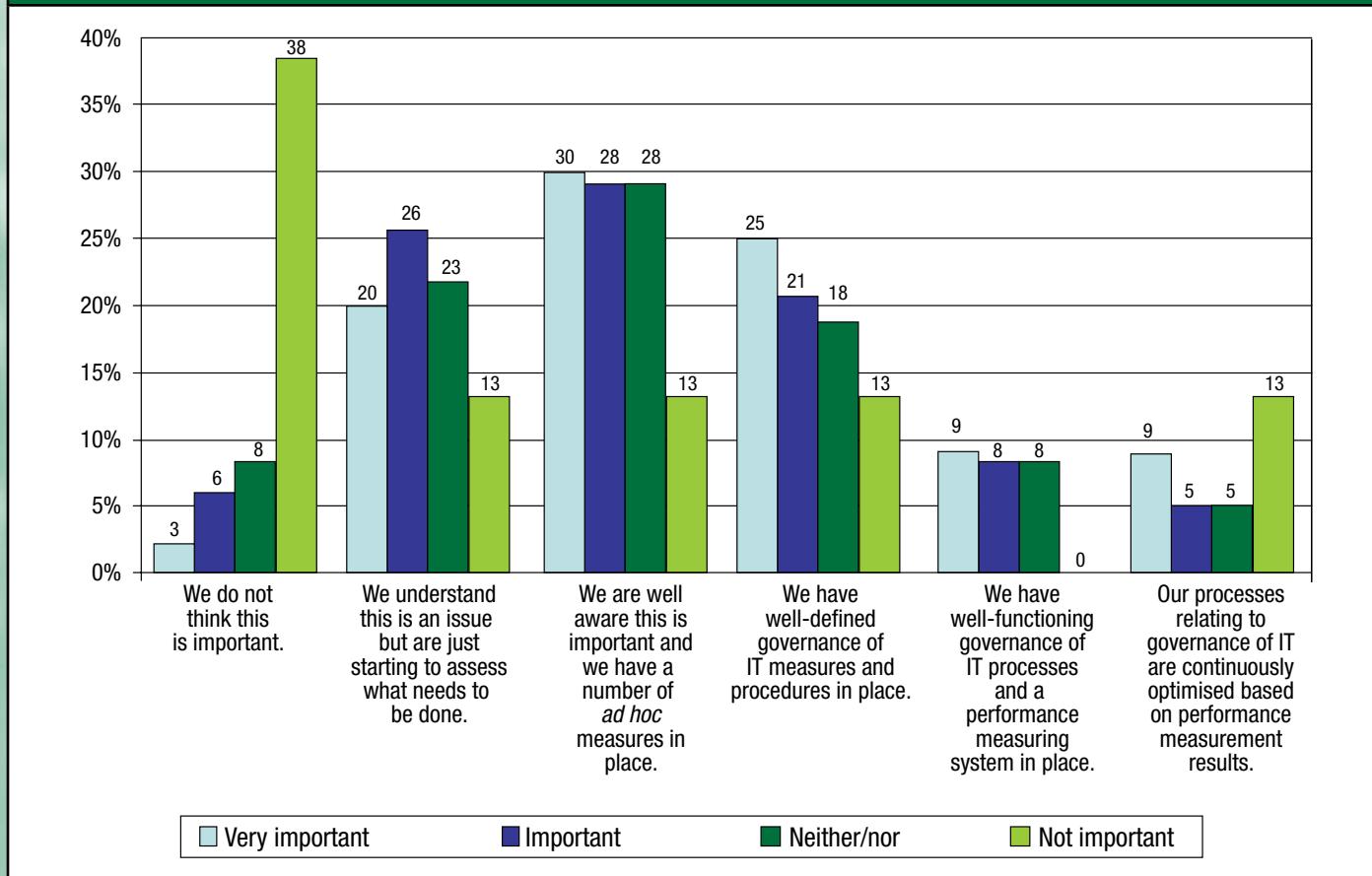
4. The Maturity and State of GEIT

Figure 20 shows that smaller enterprises reported a lower maturity profile than larger enterprises. Eighty-one percent of large enterprises have at least *ad hoc* GEIT measures in place, while only 53.5 percent of small enterprises claim this level of maturity.

Figure 20—GEIT Maturity Levels of Large and Small Enterprises		
Maturity	< 500 FTEs	≥ 500FTEs
We do not think this is important.	8.3%	1.7%
We understand this is an issue but are just starting to assess what needs to be done.	30.8%	14.5%
We are well aware this is important and we have a number of <i>ad hoc</i> measures in place.	25.9%	32.1%
We have well-defined governance of IT measures and processes in place.	15.9%	29.2%
We have well-functioning governance of IT processes and a performance measurement system in place.	4.4%	12.6%
Our processes relating to governance of IT are continuously optimised based on performance measurement results.	7.3%	7.1%

The responses on GEIT maturity levels were cross-referenced to those relating to the importance of IT to the delivery of the business strategy or vision. **Figure 21** shows that organisations that do not consider IT important to the delivery of the business strategy also generally have a lower GEIT maturity level.

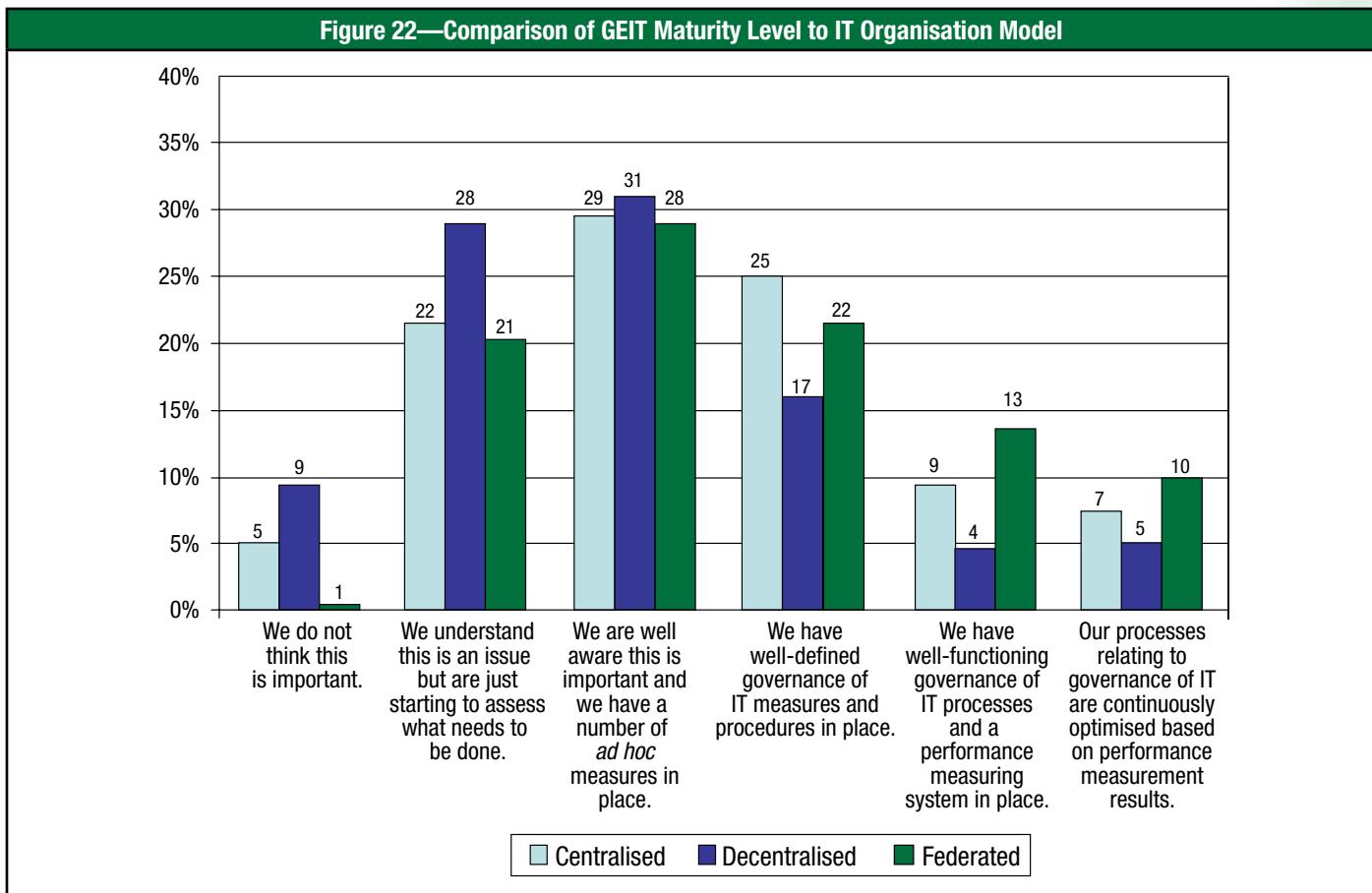
Figure 21—Comparison of GEIT Maturity Level to the Importance of IT to Delivery of the Business Strategy





4. The Maturity and State of GEIT

Cross-referencing the responses on GEIT maturity levels to the IT organisation model indicates that centralised and federated IT organisations have an overall higher maturity profile than decentralised (**figure 22**).



4.4 Common GEIT Practices

The most common GEIT practice is IT policies and standards, followed by defined and managed IT processes. IT governance frameworks, mechanisms to measure progress and the use of steering committees are less widely used (**figure 23**).

Cross-analysis

Business and IT respondents have similar views. However, as shown in **figure 23**, the percentage of business respondents is consistently lower than IT respondents across all practices.

Analysing responses by enterprise size, GEIT practices are more prevalent in larger enterprises than in smaller enterprises (**figure 24**). It is also noteworthy that even amongst larger enterprises, only one-quarter have mechanisms to measure progress towards improved GEIT.



4. The Maturity and State of GEIT

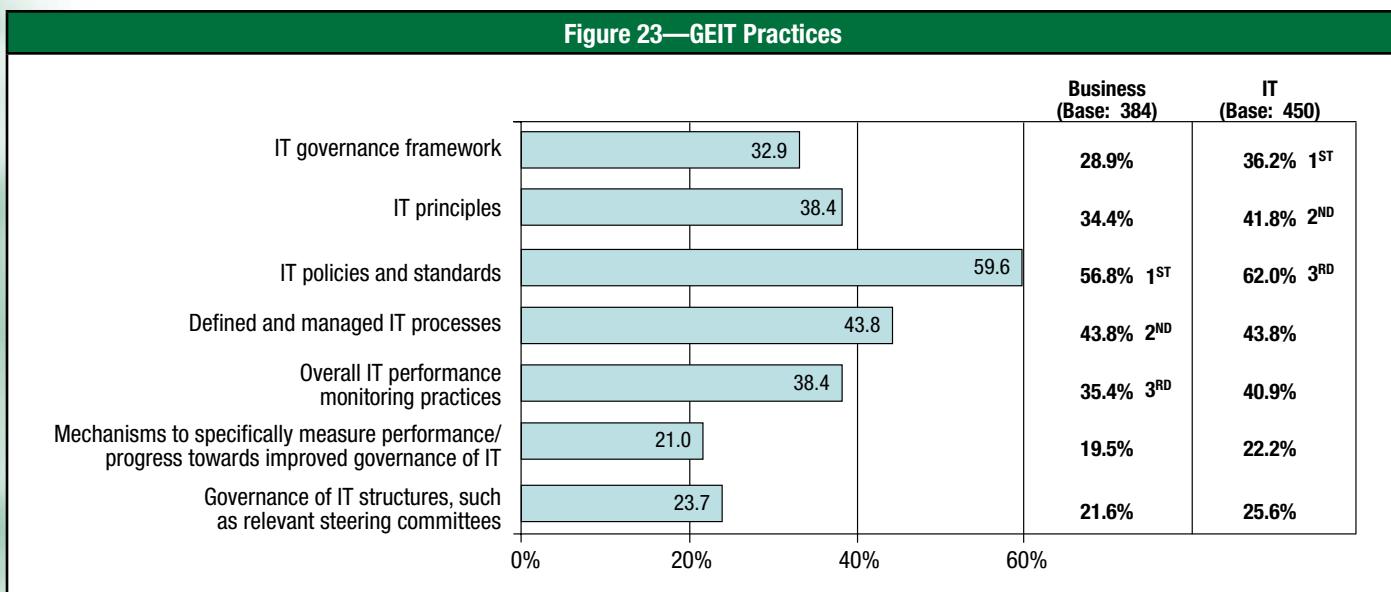


Figure 24—GEIT Practices by Enterprise Size

GEIT Practice	Small Enterprises	Large Enterprises
IT governance framework	20.5%	44.7%
IT principles	30.6%	46.1%
IT policies and standards	46.9%	71.7%
Defined and managed IT processes	35.9%	51.1%
Overall IT performance monitoring practices	33%	43.5%
Mechanisms to specifically measure performance/progress towards improved governance of IT	16.1%	25.4%
Governance of IT structures	13.4%	34%

4.5 Factors That Influence the Implementation of GEIT Practices

Business objectives or strategy is the factor most heavily influencing the implementation of GEIT practices, followed by the culture of the organisation, its way of working and human factors (**figure 25**).

Cross-analysis

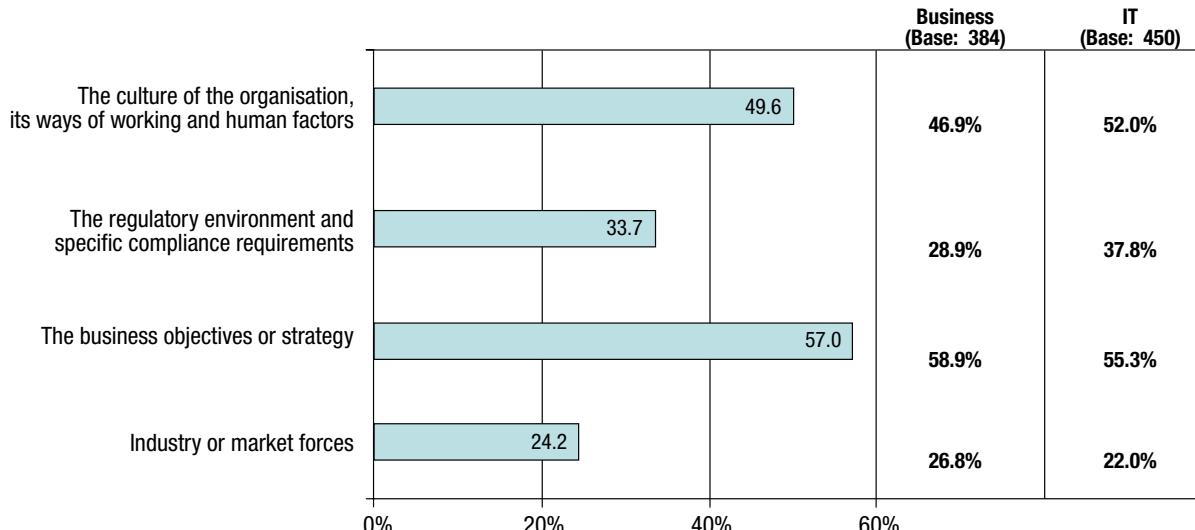
Figure 25 shows that the responses of business and IT respondents are fairly similar, with the exception of ‘The regulatory environment and specific compliance requirements’, which is mentioned by more by IT than business respondents.

Comparing responses by organisation size, the factor relating to regulatory environment and compliance requirements is more influential in larger enterprises (42.3 percent vs. 24.7 percent for smaller enterprises) while the industry or market forces factor is slightly more prevalent in smaller enterprises (28.1 percent vs. 20.4 percent).



4. The Maturity and State of GEIT

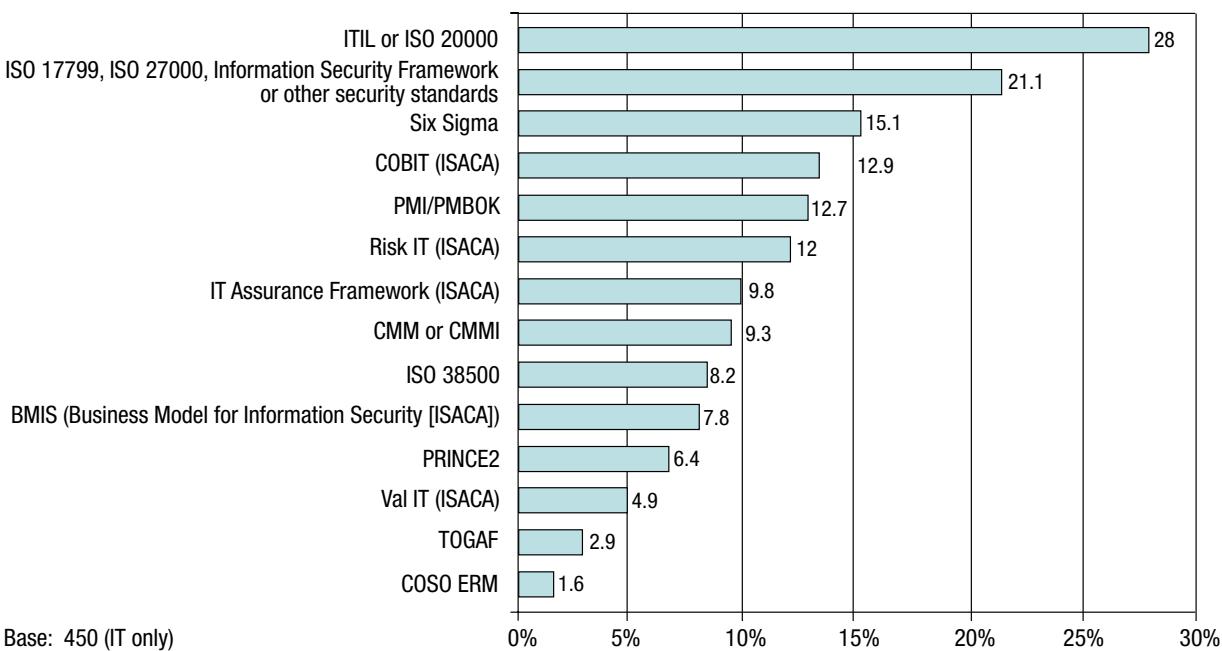
Figure 25—Factors Influencing the Implementation of GEIT Practices



4.6 Basis for an Enterprise's GEIT Approach

ISO 20000 is the external framework most frequently mentioned as a basis for an enterprise's GEIT approach. The second most commonly cited external framework or standard on which an enterprise bases its GEIT approach is ISO 17799/ISO 27000, the Information Security Framework or other security standards (figure 26). It is also interesting to note that ISACA's Risk IT framework,⁵ released in 2009, is already being used by 12 percent of the respondent enterprises.

Figure 26—External Frameworks and Standards Used as Basis for GEIT Approach



⁵ ISACA, *The Risk IT Framework*, USA, 2009, www.isaca.org/riskit



4. The Maturity and State of GEIT

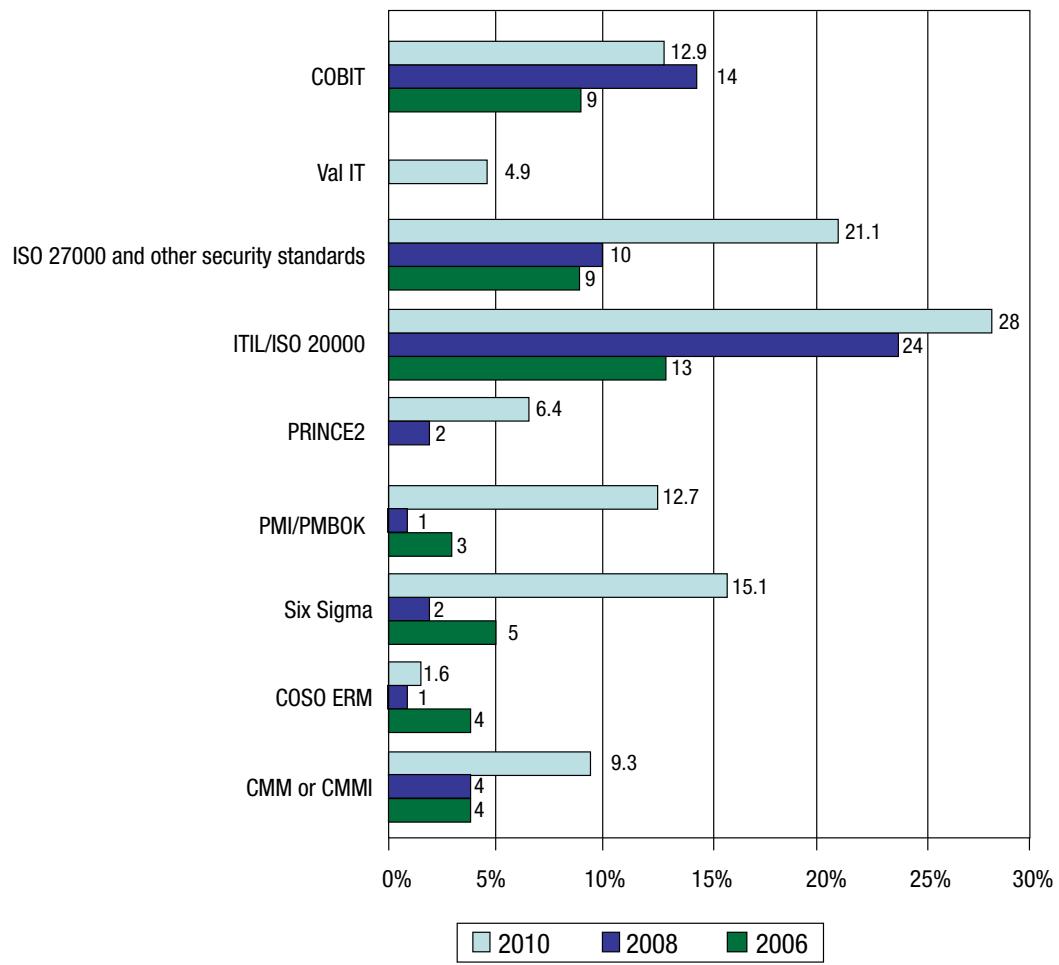
Overall it can be stated there is no single framework recognised as the market leader and organisations tend to look at multiple sources for guidance. It should be noted that this question was posed only to the IT respondents.

Cross-analysis

Larger enterprises tend to use most of the external frameworks or standards more than smaller enterprises.

Uncovering trends in the use of some of these GEIT frameworks by comparing these results to results from previous ITGI surveys reveals an increase in the use of the security frameworks (ISO 27000, Information Security Framework, etc.), PMI/PMBOK®, Six Sigma and CMM/CMMI (**figure 27**). (Historical data are not available for all of the frameworks.) In general, **figure 27** shows an increase in acceptance of frameworks and standards as a tool for achieving GEIT.

Figure 27—Trends in Usage of External Frameworks and Standards



4.7 Popular IT-related Certifications

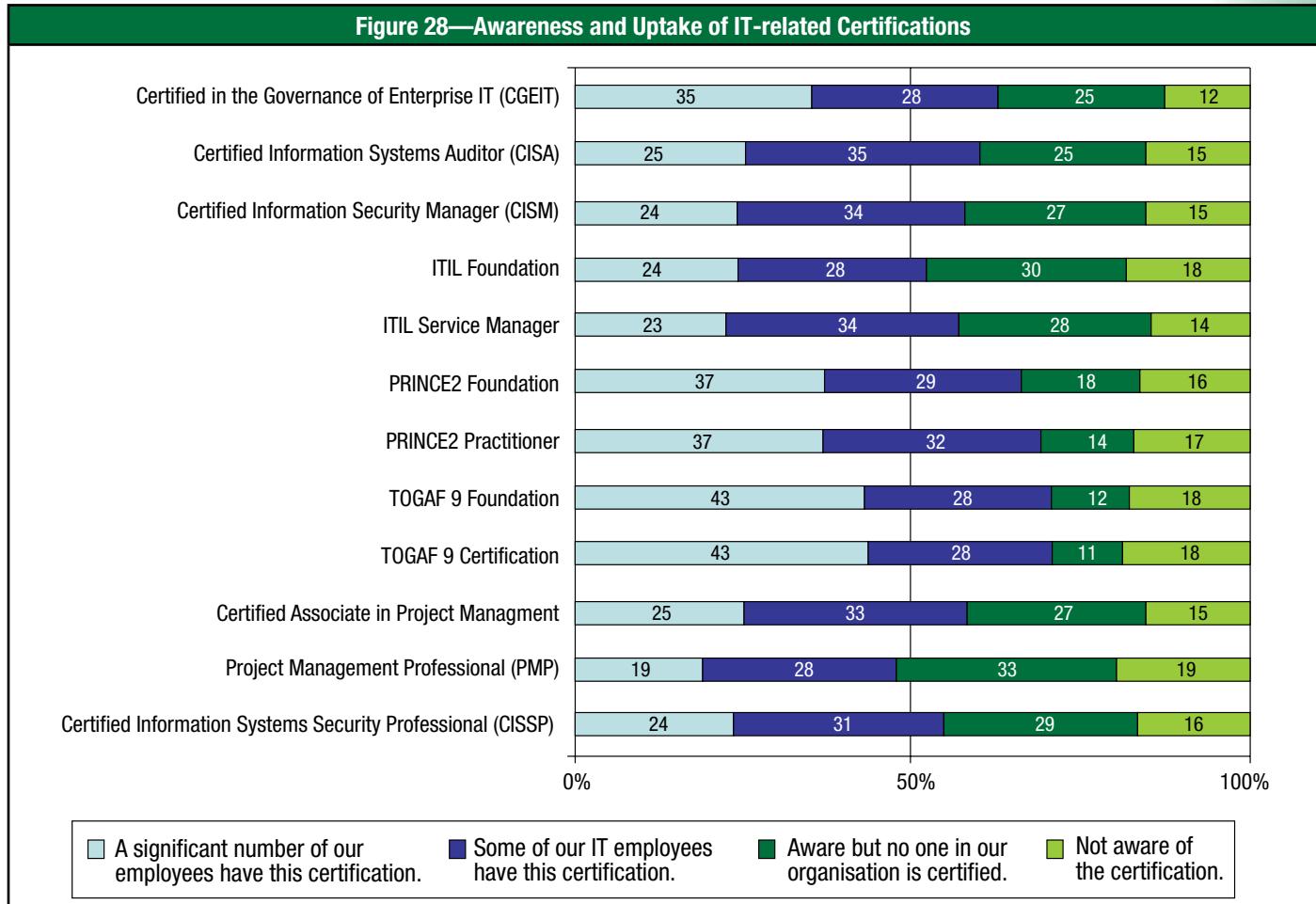
TOGAF 9 and PRINCE2 are the most frequently cited IT-related certifications, followed by ISACA's Certified in the Governance of Enterprise IT® (CGEIT®) certification (**figure 28**). The Project Management Professional (PMP) certification was the least known by respondents, but this could be due to the PMP certification being more popular in some regions and PRINCE2 being more popular in others.



4. The Maturity and State of GEIT

Cross-analysis

Figure 26 illustrates that ITIL is one of the frameworks most commonly used by respondents as a basis for a GEIT approach. However, its popularity as a framework apparently does not transfer to ITIL certifications, as can be seen in figure 28.





4. The Maturity and State of GEIT

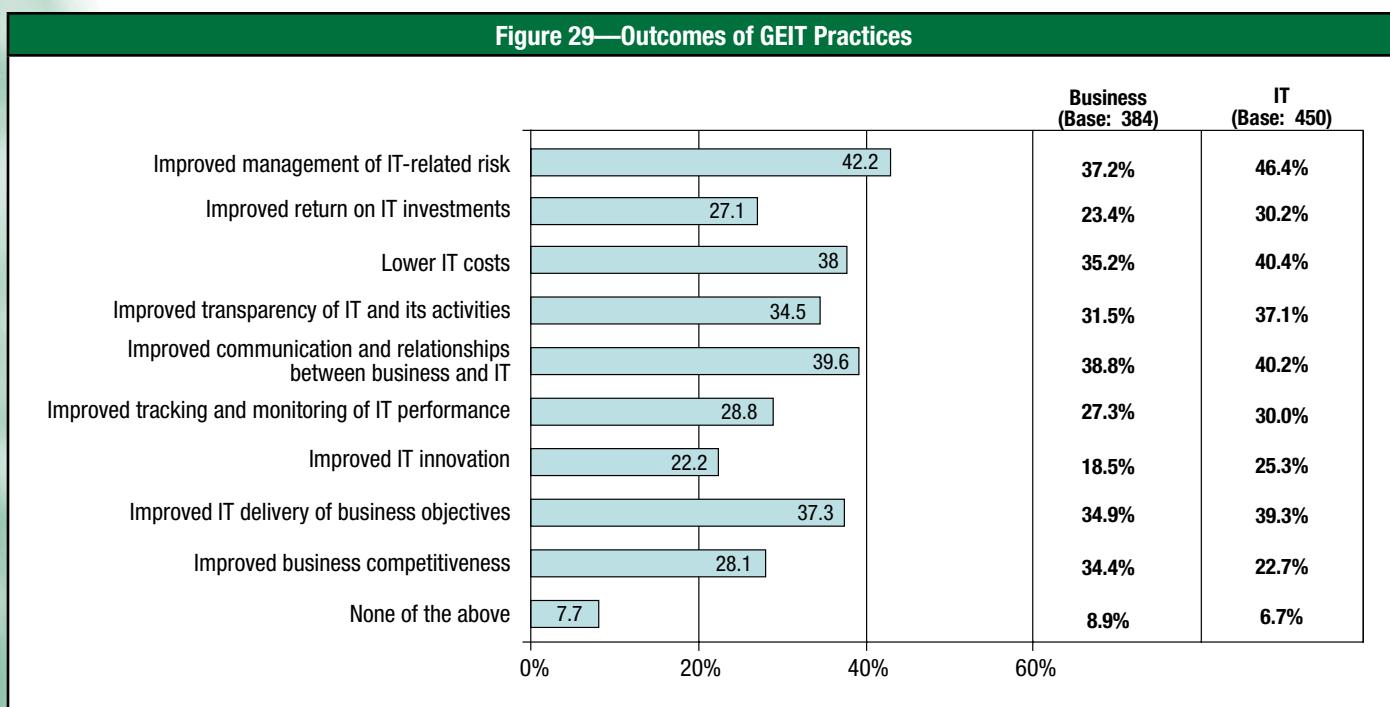
4.8 Outcomes of GEIT Practices

The most commonly experienced outcomes of GEIT practices are improvements in two key areas: management of IT-related risk and communication and relationships between business and IT. Lower IT costs, improved IT delivery of business objectives, and enhanced transparency of IT and its activities are also frequently experienced (**figure 29**).

The outcomes identified cover both tangible and shorter-term aspects, such as lower IT costs, and more intangible and longer-term benefits, such as improved communication and transparency.

Almost four out of 10 respondents cited lower cost as an outcome of GEIT practices and almost three of 10 respondents cited improved business competitiveness. These results can be useful to enterprises looking to build a business case for implementing or improving GEIT practices.

Figure 29—Outcomes of GEIT Practices



Cross-analysis

IT respondents pointed to improved management of IT-related risk as the most prevalent outcome of GEIT practices, whereas business respondents selected improved communication and relationships between business and IT. All of the outcomes listed generally received more responses from IT than business respondents, with the exception of increased business competitiveness, favoured by business respondents.

Large enterprises reported improved management of risk as the leading outcome of GEIT practices, while small enterprises selected lower IT costs. Both large and small enterprises placed improved communication and co-operation between business and IT in the second spot.



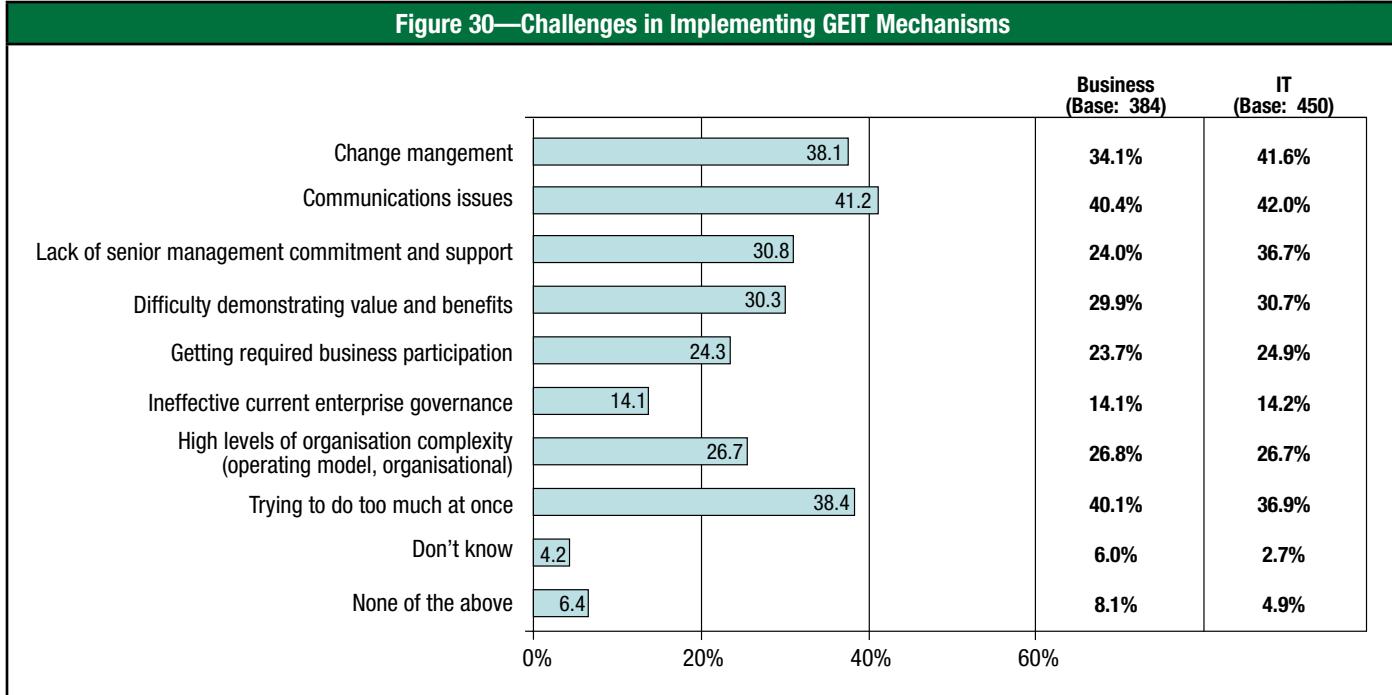
4. The Maturity and State of GEIT

4.9 Challenges Implementing GEIT

The main challenges experienced in implementing GEIT mechanisms are communication, change management and trying to do too much at once. On the other hand, ineffective current enterprise governance is not experienced as a challenge by many of the respondents' enterprises and around three-quarters of enterprises are not experiencing a challenge obtaining required business participation (**figure 30**).

The findings related to communication and change management are in line with the results reported in section 4.5, where half of the respondents selected 'The culture of the organisation, its way of working and human factors' as a factor in influencing GEIT implementations.

Figure 30—Challenges in Implementing GEIT Mechanisms



Cross-analysis

The responses of business and IT respondents are fairly similar, with two exceptions: lack of senior management commitment and support and change management are mentioned more frequently by IT respondents. The visible commitment and support of senior management is frequently mentioned in IT-related publications as a critical success factor for GEIT implementations.⁶

All challenges are typically experienced more frequently in larger than in smaller enterprises, with the exception of 'Trying to do too much at once', which is equally prevalent in both. The 'High levels of organisational complexity (operating model, organisational)' challenge is cited by only 14 percent of smaller enterprises, but 39 percent of larger ones.

⁶ ISACA's *Implementing and Continually Improving IT Governance* is one such publication, amongst many others.

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5. Topics of Special Interest

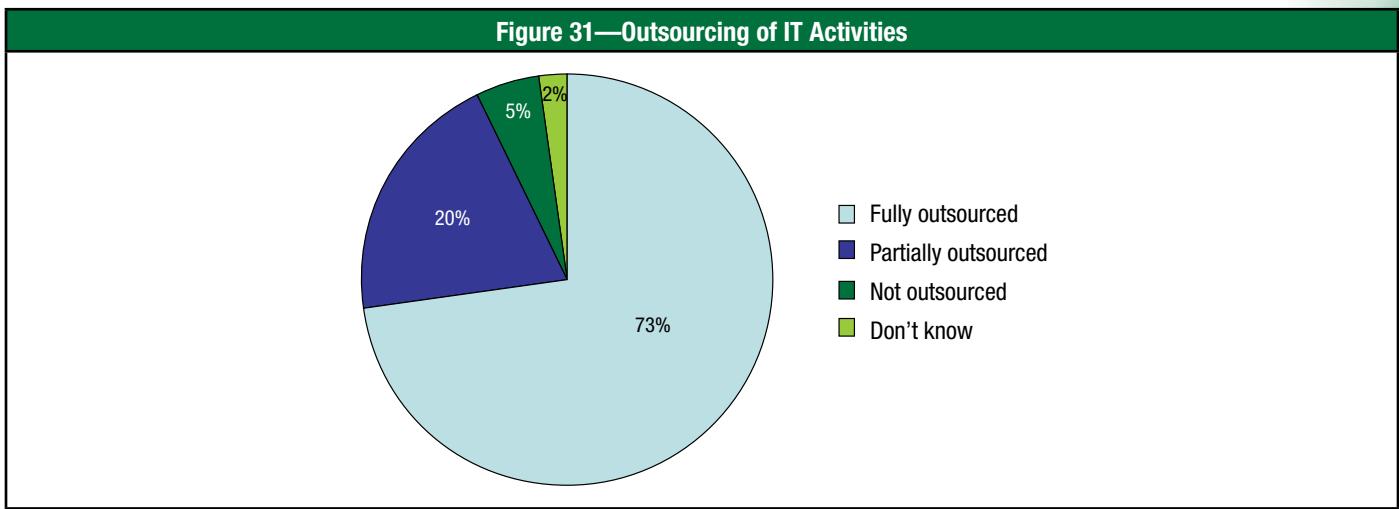
This section focuses on findings related to the third objective for the survey: determine the impacts of topics of current special interest related to GEIT. For purposes of this survey, this included the impact of the economic crisis, innovation, and the governance of enterprise architecture.

Key findings related to this objective are:

- Outsourcing is widely utilised: 73 percent of respondents have fully outsourced some of their IT activities and another 20 percent use partial outsourcing. Full outsourcing of some IT activities is more prevalent in larger enterprises, enterprises with a centralised organisation model, and those in which IT is considered important or very important to the delivery of the business strategy or vision.
- Sixty percent of respondents' enterprises use or are planning to use cloud computing for non-mission-critical IT services, and more than 40 percent use or are planning to use it for mission-critical IT services. Data privacy and security concerns are the main reasons enterprises give for not planning to use cloud computing.
- The primary initiatives implemented in response to the economic downturn are a reduction in contractor and permanent staff numbers and infrastructure consolidation.
- Almost half of the business respondents report that their enterprises have implemented or are planning initiatives to promote IT innovation. The IT respondents identify the primary initiatives as monitoring emerging technologies and working collaboratively with business staff.
- The measure most commonly used to govern enterprise architecture is defined technology standards. Measures to govern enterprise architecture are most prevalent in enterprises in which IT has a pro-active role and in enterprises that consider growth through mergers or acquisition as the most important driver of the business strategy.
- Four out of 10 respondents believe that the risks of employees using social networking outweigh the benefits.

5.1 Outsourcing of IT Activities

Outsourcing of IT activities is widely prevalent, with 73 percent of respondents fully outsourcing some of their IT activities and a further 20 percent outsourcing partially (**figure 31**).



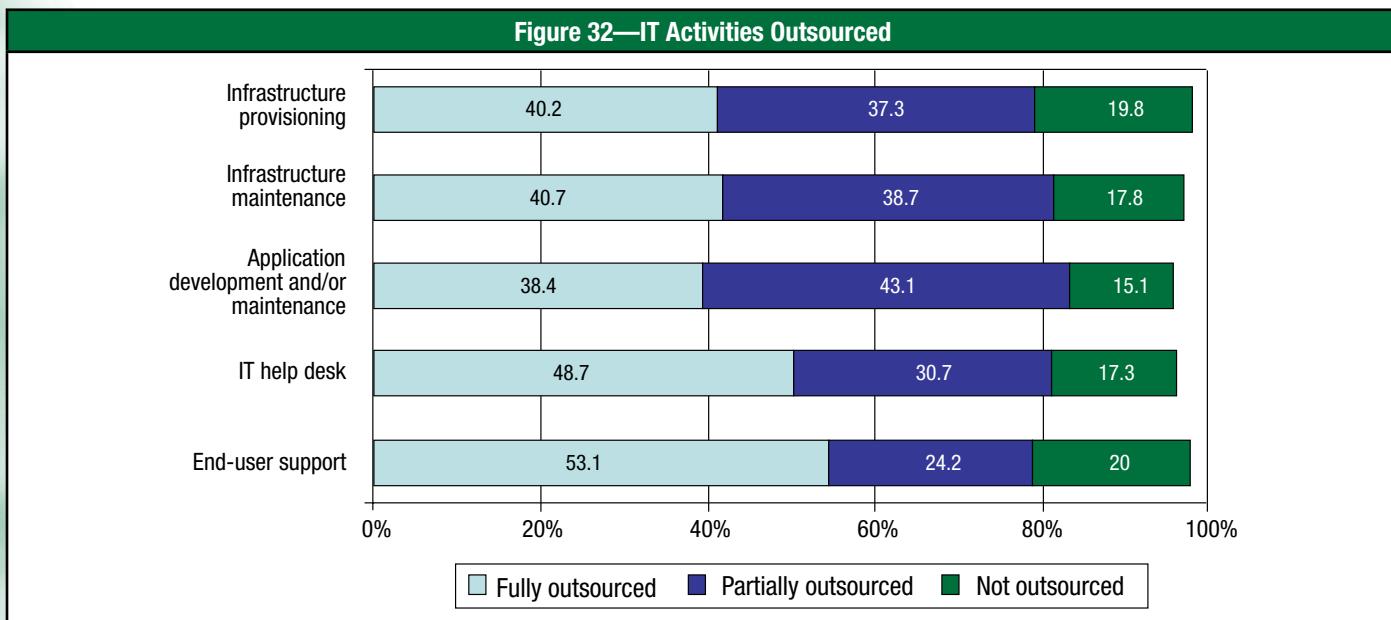
End-user support and IT help desk activities are more likely to be fully outsourced than infrastructure-related activities or application development and maintenance, as illustrated in **figure 32**.

Cross-analysis

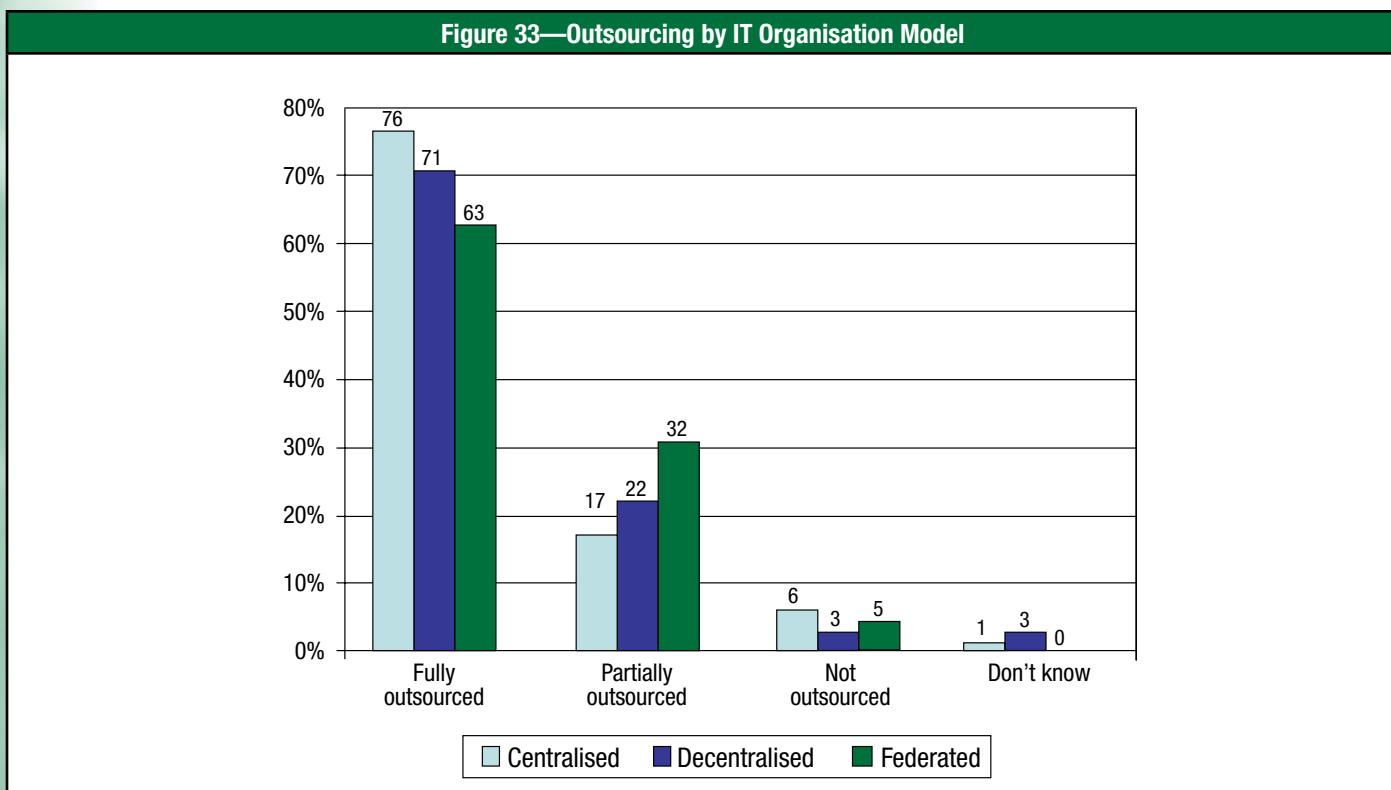
Small enterprises fully outsource the IT activities listed in **figure 32** 10 percent more often than do large enterprises.



5. Topics of Special Interest



Full outsourcing is also more prevalent in enterprises with a centralised organisation model. Partial outsourcing is more prevalent in enterprises with a decentralised or federated organisation model (**figure 33**).

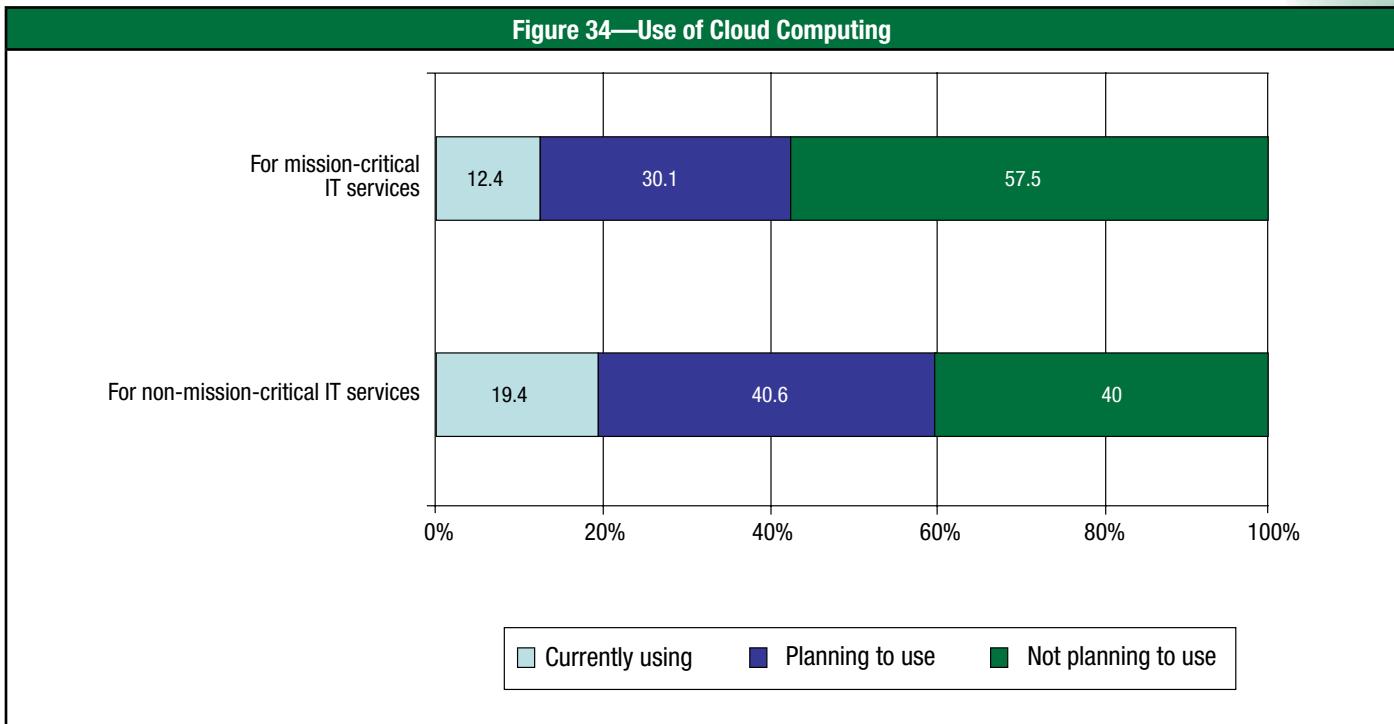




5. Topics of Special Interest

5.2 Current and Planned Use of Cloud Computing

Six out of 10 respondents currently use or plan to use cloud computing for non-mission-critical IT services, compared to four out of 10 who use it or plan to use it for mission-critical IT services (**figure 34**).



Those respondents not planning to use cloud computing cited data privacy and security concerns as the main reasons (**figure 35**). It is also noteworthy that a significant number of respondents have concerns about reliability and one-third have significant legacy infrastructure investments that are influencing their cloud computing plans.

Cross-analysis

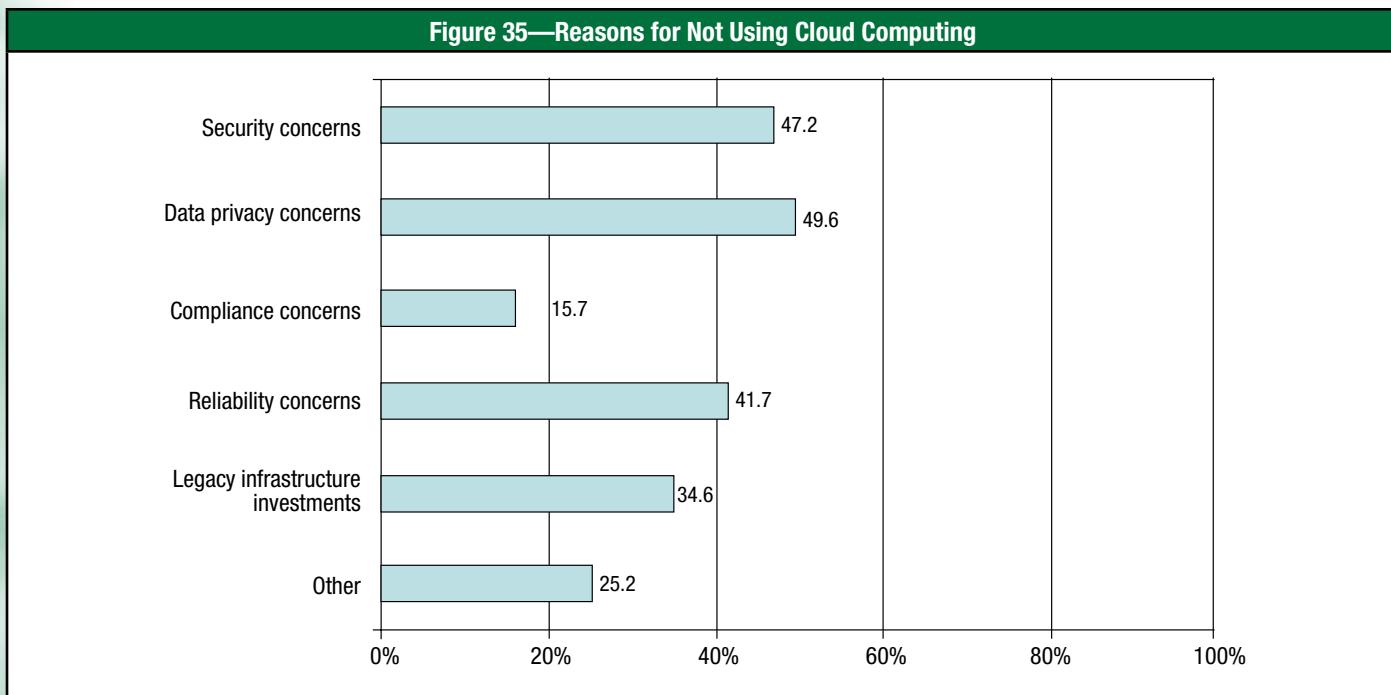
The current use of cloud computing is very similar amongst small and large enterprises for both mission-critical and non-mission-critical IT services. However, more large enterprises are planning to use cloud computing in the future.

Cross-referencing the planned and current usage of cloud computing to respondents' views on the importance of IT to the successful delivery of the business strategy and vision reveals that cloud computing is more likely to be currently used or planned in enterprises where IT is considered important or very important to business strategy delivery.

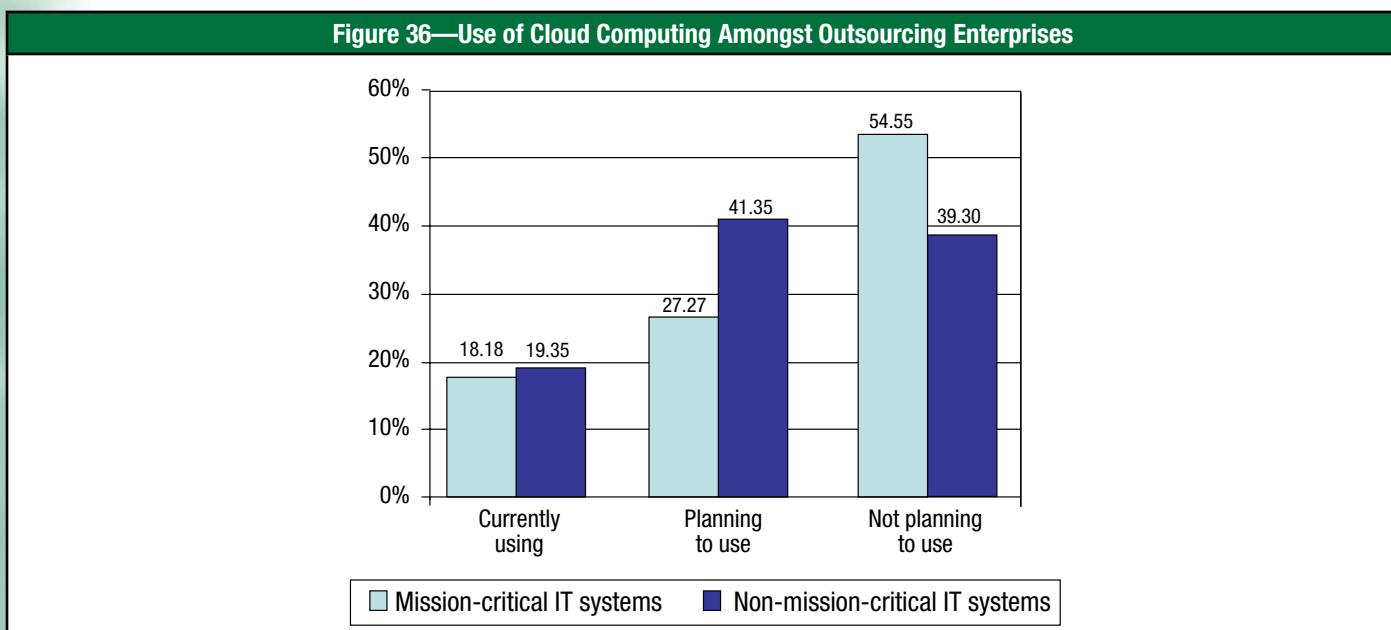
While IT's role as reactive vs. pro-active does not seem to affect the level of current usage of cloud computing, more enterprises with a pro-active model are planning to use cloud computing in the future.



5. Topics of Special Interest



Amongst all respondents who indicated that they are or fully or partly outsourcing at least one of their IT activities, more than 60 percent are planning to use cloud computing for non-mission-critical IT systems (**figure 36**). More than 40 percent plan to use it for mission-critical IT systems.



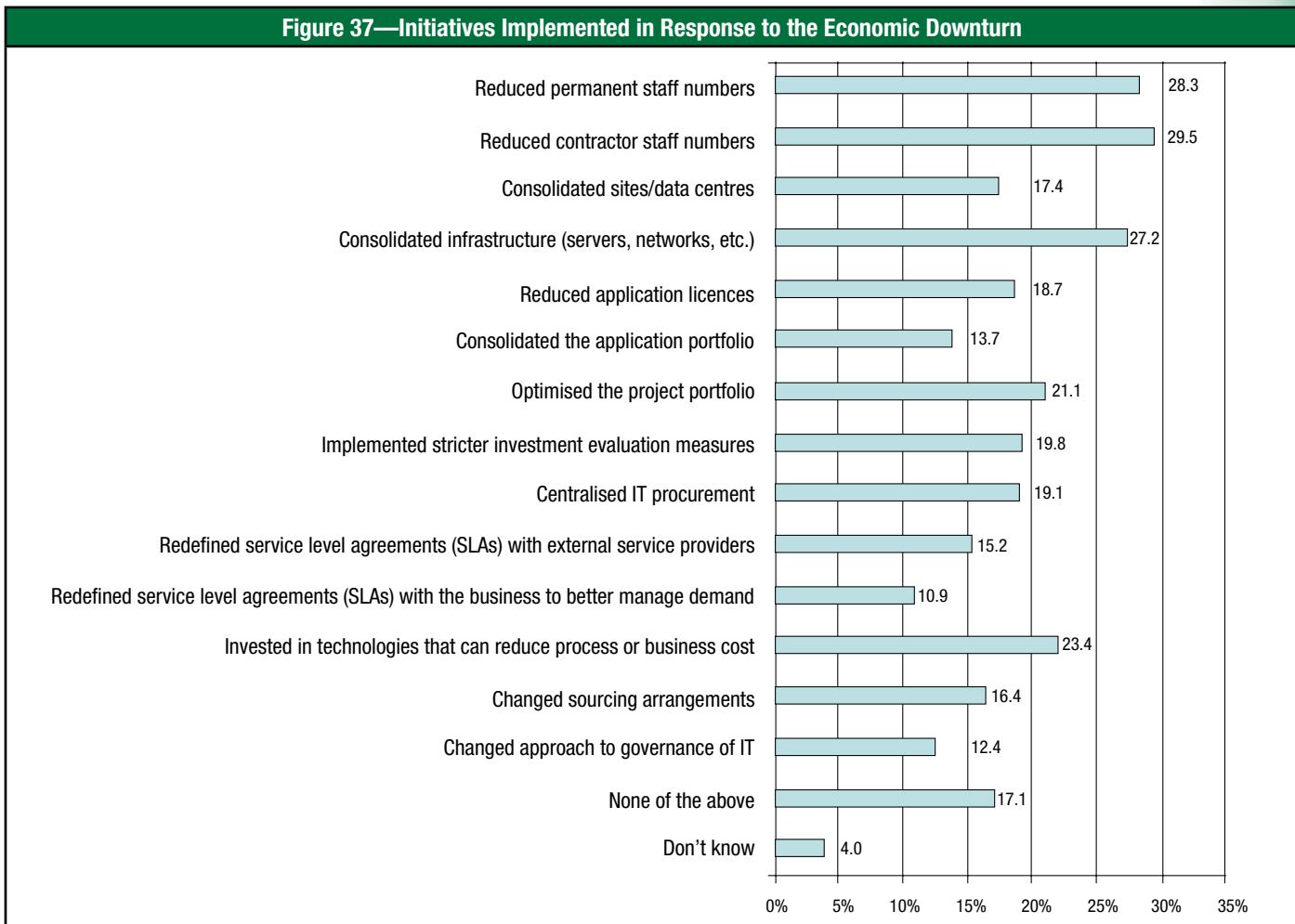
Cloud computing-related concerns about security, data privacy and legacy infrastructure investments are generally higher in large enterprises than in small ones.



5. Topics of Special Interest

5.3 Initiatives Implemented in Response to the Economic Downturn

Reducing contractor and permanent staff numbers and consolidating infrastructure were the main initiatives the survey respondents reported implementing in 2009 and 2010 to combat the economic downturn (**figure 37**). Almost a quarter of respondents also invested in technologies that can reduce process or business cost, and approximately one in eight changed their GEIT approach.



Cross-analysis

In general, more IT respondents indicated that a specific initiative had been implemented in their enterprises than did business respondents. The exceptions were ‘Implementing stricter investment evaluation measures’ and ‘Centralised IT procurement’, selected by more business respondents. The greatest difference between IT and business respondents was reflected in ‘Reduced contractor staff numbers’, which was mentioned by 34.2 percent of IT respondents but only 24.0 percent of business respondents.

An analysis of the responses by enterprise size indicates that the following initiatives were more prevalent amongst large enterprises than small ones (differences in response rate of 10 percent or higher):

- Reduction in permanent staff numbers
- Reduction in contractor staff numbers
- Consolidation of sites/data centres
- Consolidation of infrastructure (servers, networks, etc.)
- Optimisation of the project portfolio



5. Topics of Special Interest

Cross-referencing the initiatives implemented in response to the economic downturn and the importance of IT to the delivery of the overall business strategy or vision reveals that the following initiatives were more frequently mentioned by respondents in whose enterprise IT is not considered important to delivery of the business strategy or who gave an ambivalent response (neither/nor) to the question than by respondents in whose enterprise IT is considered important or very important to business strategy delivery:

- Reduction in application licences (22.5 percent vs. 12.2 percent)
- Redefinition of service level agreements (SLAs) with the business to better manage business demand (15.4 percent vs. 7.2 percent)
- Change in the GEIT approach (17.4 percent vs. 7.9 percent)

Conversely, the following initiatives are mentioned by more respondents in whose enterprise IT is considered important or very important to delivery of business strategy than by respondents in whose enterprise IT is not considered important or who gave an ambivalent response (neither/nor):

- Optimisation of the project portfolio (14.9 percent vs. 3.1 percent)
- Investment in technologies that can reduce process or business cost (16.0 percent vs. 4.1 percent)
- Consolidation of sites/data centres (12.2 percent vs. 3.1 percent)
- Consolidation of infrastructure, e.g., servers, networks (18.9 percent vs. 8.2 percent)

An analysis of initiatives implemented to respond to the economic downturn by current sourcing situation showed that a reduction in permanent staff numbers, optimisation of the project portfolio and the implementation of stricter investment evaluation measures were mentioned more frequently by respondents in enterprises not currently outsourcing any IT services (including both partial and full outsourcing). Conversely, a reduction in contractor staff numbers, consolidation of sites/data centres, consolidation of the application portfolio, redefinition of SLAs with the business, and an investment in technologies that can reduce process or business cost were mentioned more frequently by respondents whose enterprises are currently outsourcing some IT services (**figure 38**).

5.4 Mechanisms to Promote IT Innovation

Only the IT respondents were asked the question about mechanisms their enterprises had already implemented or planned to implement to promote IT innovation. Monitoring emerging technologies and working collaboratively with business staff to explore innovation were the most frequently identified planned or implemented mechanisms. Between one-fourth and one-third of respondents' enterprises have implemented or plan to implement a broad range of mechanisms and the percentages do not vary widely amongst the different responses (**figure 39**).

Cross-analysis

With the exception of 'Allocation of time to spend working on experiments or trying out ideas', all responses were cited by more IT respondents from large enterprises than small enterprises (response rate of 10 percent or higher).

The responses on planned or implemented mechanisms to promote IT innovation were cross-referenced to the responses on the importance of IT to the delivery of the overall business strategy or vision. The results show that 'Training for IT managers to better understand how IT innovations can create business opportunities' is mentioned by more respondents in enterprises that consider IT important or very important to delivery of business strategy than respondents in enterprises that do not consider IT important in delivering business strategy or who gave an ambivalent response (neither/nor)—35.6 percent vs. 6.7 percent. Conversely, 'Special investment appraisal and funding mechanisms to perform pilots with emerging technologies' was cited by more respondents whose enterprises do not consider IT important in delivering business strategy or who gave an ambivalent response than by respondents in enterprises that consider IT important or very important to the delivery of business strategy (66.2 percent vs. 26.5 percent).



5. Topics of Special Interest

Figure 38—Initiatives Implemented in Response to the Economic Downturn by Current IT Sourcing Situation

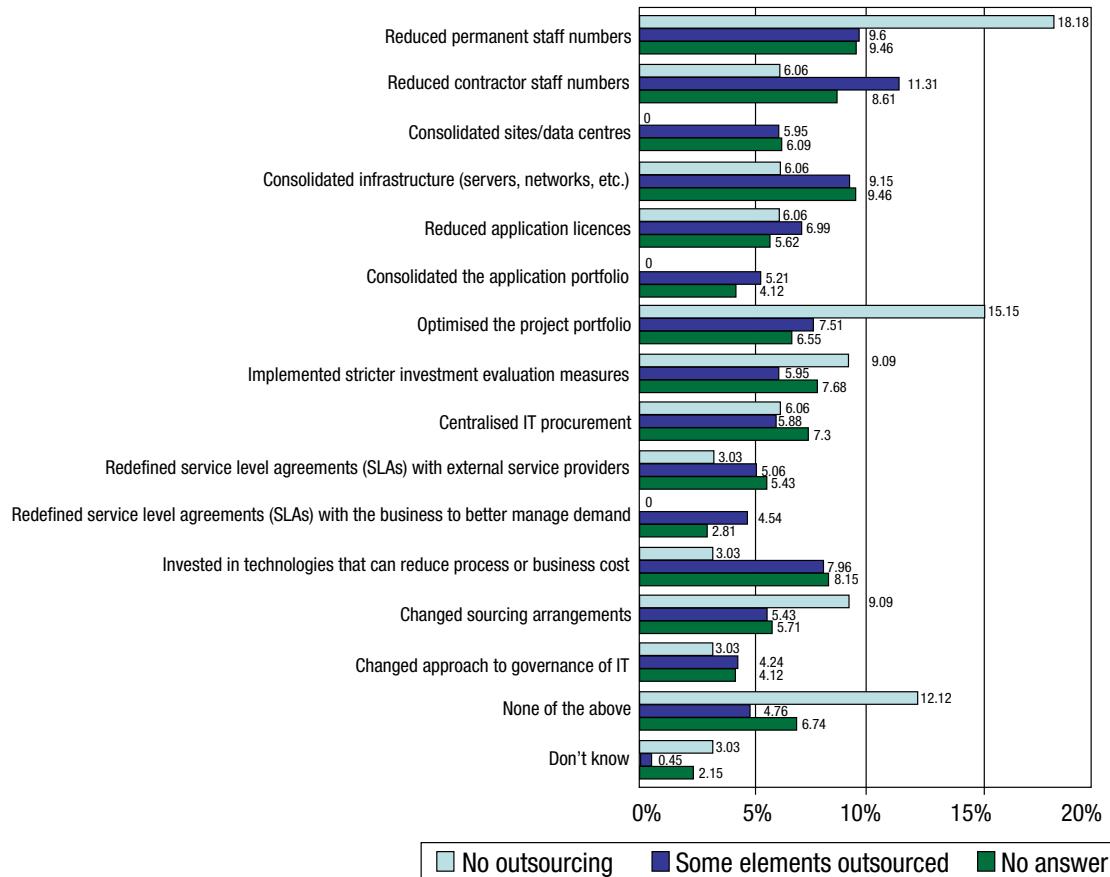
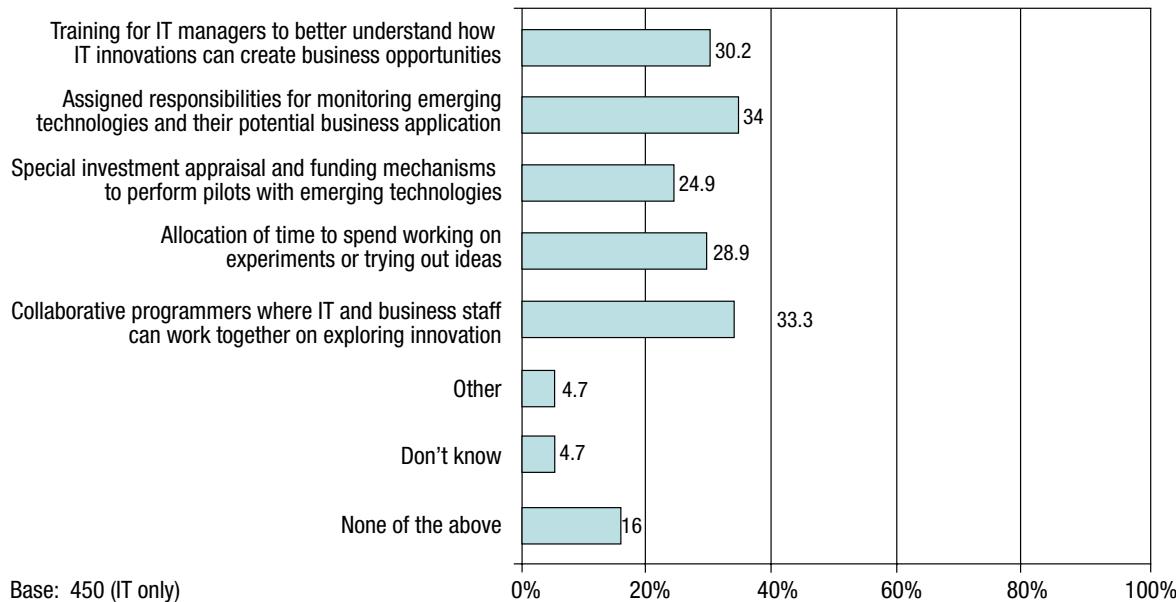


Figure 39—Planned or Implemented Mechanisms to Promote IT Innovation



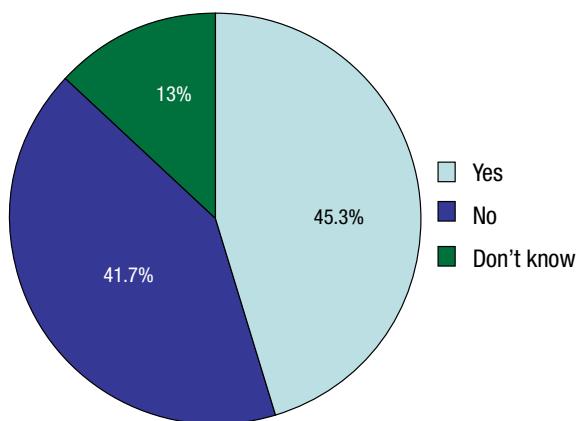


5. Topics of Special Interest

5.5 Business Respondents' Views on IT Innovation

Business respondents were asked whether their enterprises had implemented or were planning to implement initiatives to promote IT innovation (without specifying the nature of the initiatives). Forty-five percent indicated that their enterprises had implemented or were planning to implement such measures, while a similar proportion indicated no plans to implement any such initiatives (**figure 40**).

Figure 40—Business Respondents Whose Enterprises Have Implemented or Are Planning to Implement Initiatives to Promote IT Innovation

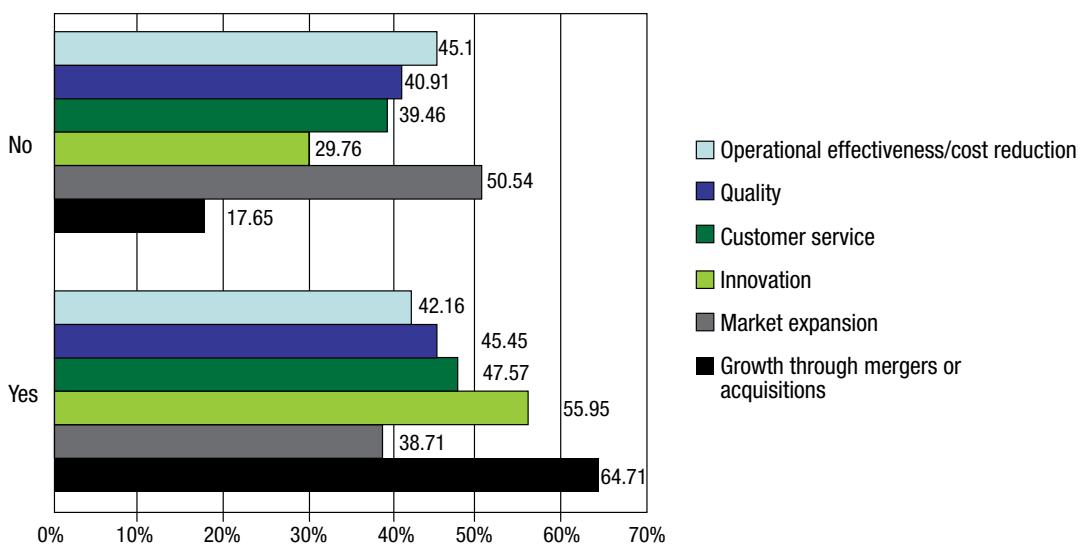


Cross-analysis

Slightly more than half of large enterprises have implemented or plan to implement initiatives to promote IT innovation, compared with 40.3 percent of small enterprises.

By cross-referencing the responses to the IT innovation question to the most important drivers of respondents' business strategy, it can be noted that IT innovation initiatives have been implemented or are planned by more respondents that indicate growth through mergers or acquisitions or innovation as important drivers for business strategy (**figure 41**).

Figure 41—IT Innovation Initiatives and Drivers for Business Strategy





5. Topics of Special Interest

Comparing the responses to the IT innovation question to the responses on the importance of IT to the delivery of the overall business strategy or vision, it is perhaps no surprise to note that none of the respondents' enterprises that consider IT not important at all to delivery of business strategy have implemented or are planning to implement IT innovation initiatives. Conversely, IT innovation initiatives have been implemented or are planned for implementation by 55.0 percent of enterprises that consider IT very important to delivery of business strategy, 36.8 percent of enterprises that consider IT important, 27.3 percent of those with ambivalent views (neither/nor), and one-third of those that do not consider IT important.

Similarly, 57.5 percent of enterprises where IT has a pro-active role are planning or have implemented IT innovation initiatives, compared with 36.6 percent of enterprises where IT has a reactive role.

5.6 The Governance of Enterprise Architecture

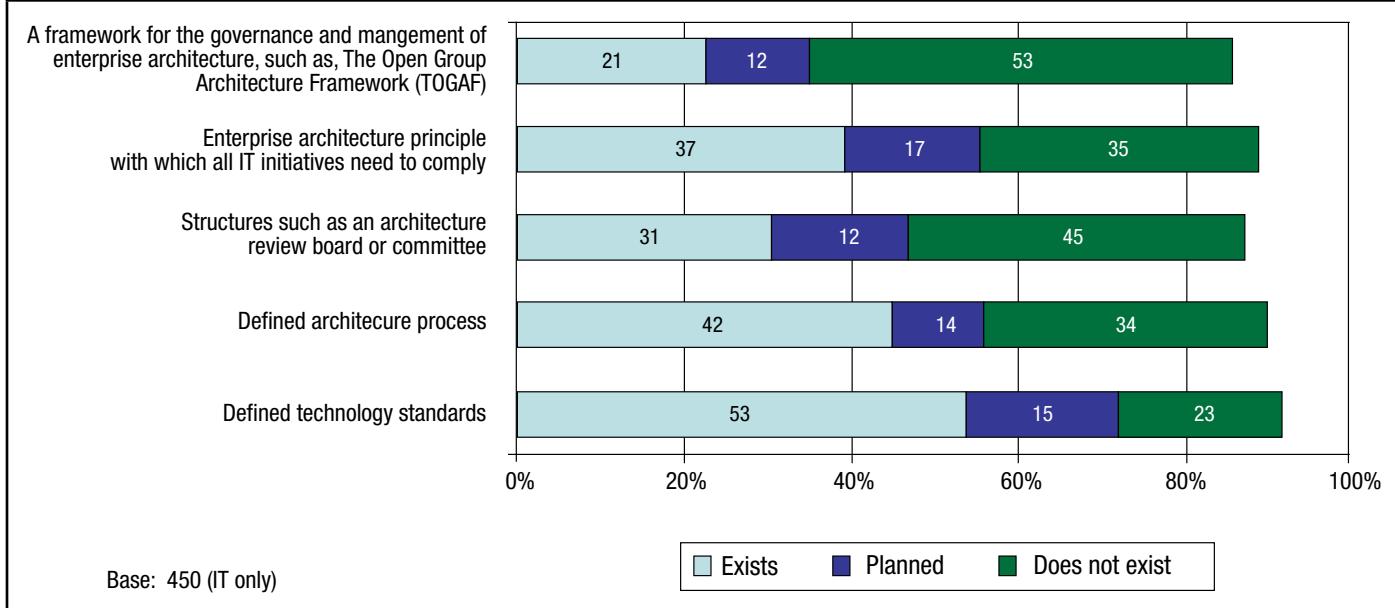
'Defined technology standards' was the most commonly cited measure used to govern enterprise architecture, with more than half of the respondents' enterprises having this in place (**figure 42**). A significant number also indicated having defined architecture processes and enterprise architecture principles. Frameworks for the governance and management of enterprise architecture are the least used measure to govern the enterprise architecture environment.

Cross-analysis

All measures for governing enterprise architecture are cited more frequently by:

- Large enterprises vs. small enterprises (response rate 10 percent or more higher)
- Enterprises that are predominantly publicly owned or owned by financial institutions vs. enterprises with other ownership structures (more than 50 percent government owned or more than 50 percent privately owned)
- Enterprises in which IT has a pro-active role vs. those in which it has a reactive role
- Enterprises that name growth through mergers or acquisitions as the most important driver of business strategy

Figure 42—Measures to Govern Enterprise Architecture

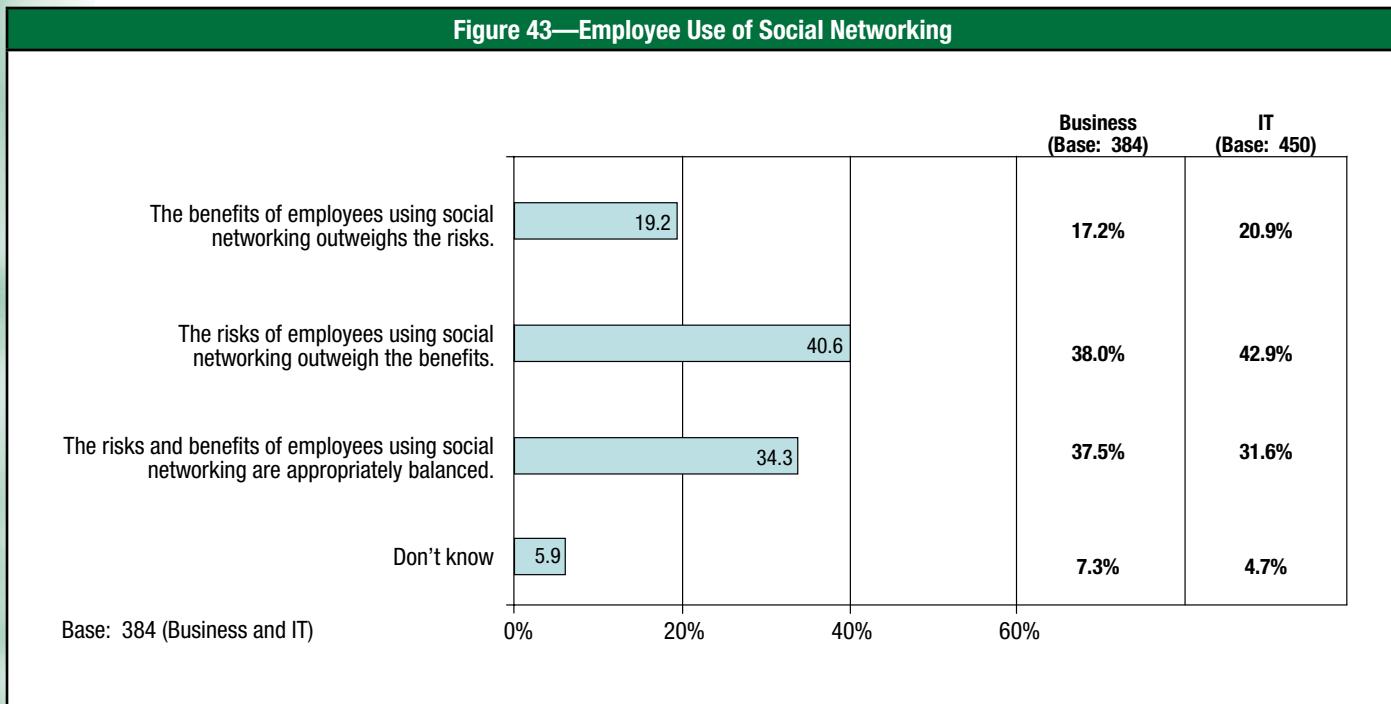




5. Topics of Special Interest

5.7 Views on Employee Use of Social Networking

Only one in five respondents believes that the benefits of social networking by employees outweigh the risk. Twice as many believe the opposite: that the risks outweigh the benefits. Another one-third take the middle ground, believing that the risks and benefits of employee use of social networking are appropriately balanced (**figure 43**).



Cross-analysis

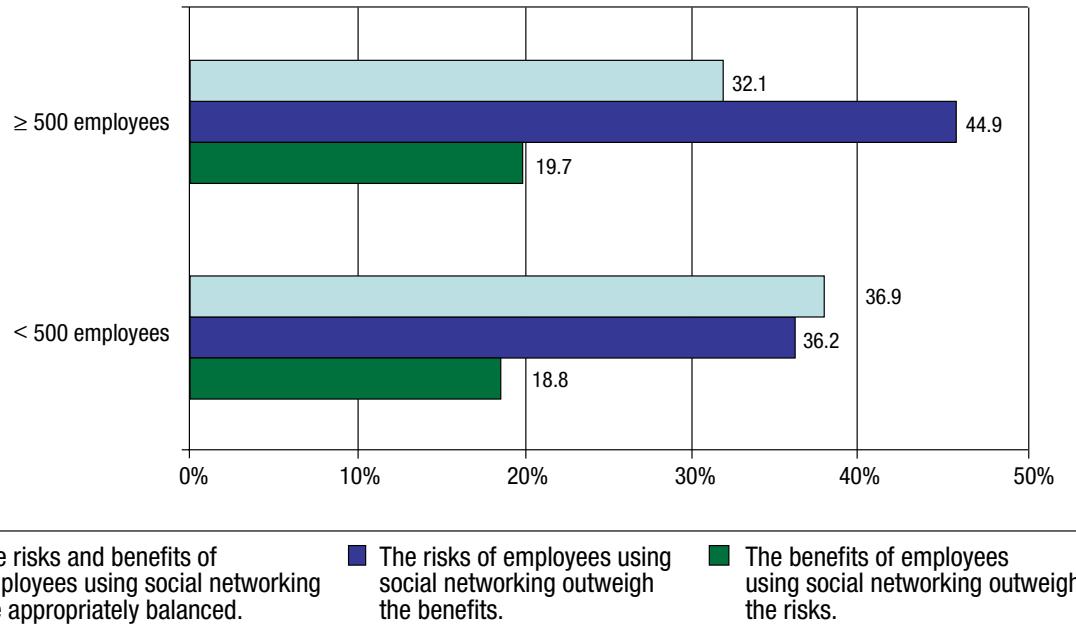
As can be seen in **figure 43**, IT respondents have a slightly more positive view than business respondents on the benefits of employee use of social networking outweighing risks, whereas more business respondents feel that the risks and benefits are appropriately balanced.

Figure 44 illustrates that a higher percentage of respondents from large enterprises believe that the risks outweigh the benefits, while respondents from small enterprises are more likely to believe that the benefits and risks are appropriately balanced.



5. Topics of Special Interest

Figure 44—Employee Use of Social Networking, by Enterprise Size



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6. Conclusion and Recommendations

This final section builds on the findings from the survey and translates them to conclusions and recommendations that enable practical use of the material.

6.1 Leveraging GEIT Mechanisms to Make IT's Role More Pro-active

Fifty-five percent of respondents indicated that IT has a pro-active role in their enterprises. That implies there are still significant opportunities for many enterprises to transition IT's role to a more pro-active one, which could constitute a focus area for their GEIT initiatives. For example, this could be enabled through GEIT structures that promote dialogue between the appropriate business and IT stakeholders. Mechanisms such as business relationship managers within the IT organisation can also be very successful for enabling IT to maintain a solid understanding of the business environment and context, and to drive communication with the business on how IT solutions or services can create business opportunities or solve emerging business issues.

It should be noted that the business respondents were more likely than the IT respondents to describe IT's role as reactive. Establishment of the necessary communication platforms to increase transparency on the role that IT is playing might help address that perception, and should be amongst the IT organisation's priorities.

There is a clear relationship between the head of IT's membership on the senior executive team and IT's pro-active role: 80 percent of respondents who indicated a pro-active role for IT also reported that the enterprise's head of IT is on the senior executive team. Having the head of IT on the senior executive team may facilitate better communication and transparency of how IT can enable greater business value, thus positioning IT to play more of a pro-active role. It also goes both ways. IT having a pro-active role as a value driver and enabler of the business will increase the likelihood of IT being represented in the senior executive team.

6.2 GEIT's Role in Helping Enterprises Address Current Issues

When asked what IT-related issues they had experienced in the past 12 months, respondents most often pointed to increasing IT costs and an insufficient number of IT staff. Respondents were also asked what initiatives they had implemented in response to the economic downturn; a reduction in contractor and permanent staff numbers and the consolidation of infrastructures were the most frequent responses. These findings could be related: infrastructure consolidation could have been undertaken to respond to increasing costs, and staff could have been reduced to the point of leaving an insufficient number to get the work done.

The focus on cost was also confirmed by the question on drivers for GEIT activities, to which the second most commonly cited response was 'Managing costs'.

These issues point to an area in which GEIT could have a significant impact—improving the management of IT demand vs. supply. Enterprises should ensure that they have the right enablers to ensure transparency of demand and supply so that decisions on demand and its prioritisation can be made, involving all the right stakeholders. GEIT can also help to highlight and bring forward synergies between geographic locations or business units, by ensuring an enterprise-wide portfolio view is taken across projects and initiatives.

When survey respondents were asked to identify the main initiatives planned in the next 12 months, IT cost reduction was one of the top three responses, which can be seen as a response to the 'Increasing cost' issue being experienced by many respondents. The other top two initiatives identified were data or information initiatives and major IT system implementations or upgrades. These types of initiatives are typically characterised by complex business and IT stakeholder environments, and as such are areas where effective governance arrangements can add significant value, e.g., by defining and making transparent the roles, responsibilities and accountabilities for decision making and execution.



6. Conclusion and Recommendations

6.3 GEIT Focus on IT Supporting the Business Strategy

Respondents were asked about the drivers to implement GEIT measures and pointed most often to ensuring that current IT functionality be aligned with current business needs (37.9 percent of respondents), following by 'Managing costs' (20.1 percent). These results were then compared to responses to a question on respondents' perceptions of the contribution of IT to the business. It is interesting to note that current perceptions on alignment are very positive: 32.6 percent of respondents strongly agreed that IT is supporting the business strategy and a further 53.4 percent agreed with the statement. Alignment is clearly an important focus area for GEIT.

GEIT enablers such as structures, processes, frameworks, principles and practices need to be designed and operated to ensure that the business environment is well understood, the right interactions occur between the right business and IT stakeholders, and an enterprise-wide view of IT is taken. A focus on alignment could also have a positive effect on perceptions of IT's role as pro-active vs. reactive.

However, it is critical that a balanced view be taken of GEIT objectives. Fundamentally, GEIT is concerned with two objectives: IT value delivery to the business and the mitigation of IT-related risks. This is enabled by the strategic alignment of IT to the business, the availability and management of adequate resources, and the measurement of performance to monitor progress toward the desired goals. ITGI identifies five focus areas of GEIT:⁷

- **Strategic alignment**—Achieving the goals and strategies of an enterprise through the coherent undertaking of activities by the different governance structures or management levels within an enterprise. A culture of business and IT partnership should be developed, supported by IT's interest in and understanding of the business, and sharing of technology-related issues and opportunities.
- **Value delivery**—Creating new value for the enterprise through IT, maintaining and increasing value derived from existing IT investments, and eliminating IT initiatives and assets that are not creating sufficient value for the enterprise. The basic principles of IT value are delivery of fit-for-purpose services and solutions on time and within budget, and generating the financial and non-financial benefits that were intended.
- **Risk management**—IT risk is the business risk associated with the use, ownership, operation, involvement, influence and adoption of IT within an enterprise. IT risk consists of IT-related events that could potentially impact the business. While value delivery focuses on the creation of value, risk management focuses on the preservation of value.
- **Resource management**—Ensuring that the right capabilities are in place to execute the strategic plan and sufficient, appropriate and effective resources are provided. Resource management ensures that an integrated, economical IT infrastructure is provided, new technology is introduced as required by the business, and obsolete systems are updated or replaced. It recognises the importance of people, in addition to hardware and software, and, therefore, focuses on providing training, promoting retention and ensuring competence of key IT personnel.
- **Performance measurement**—Tracking the achievement of the objectives of the enterprise's IT-related services and solutions and compliance with specific external requirements. Without establishing and monitoring performance measures, it is unlikely that the previous focus areas will achieve their desired outcomes. It provides a link back to the other focus areas by monitoring that the required direction is being followed and creates the opportunity to take timely corrective measures, if needed.

GEIT objectives are inter-related, e.g., an emphasis on value delivery impacts resource management. Any GEIT initiative, therefore, requires a holistic consideration of these five areas in an integrated way. More guidance on GEIT objectives is available in ITGI's *Board Briefing on IT Governance, 2nd Edition*.

⁷ ITGI, *Board Briefing on IT Governance, 2nd Edition*, USA, 2003, www.isaca.org/bookstore



6. Conclusion and Recommendations

6.4 GEIT's Effect on Project Selection and Completion

One-fifth of respondents reported ending an IT-related project before it was fully implemented. The main reasons stated were that the project was not delivering as promised or was exceeding the budget, or there was a change in business needs.

The root causes of these issues could reside in the investment management process (e.g., an insufficient level of rigour in assessing requests and business cases for new initiatives) or they could result from problems with the governance of projects (e.g., level of oversight over projects). Both of these areas could be positively affected by GEIT initiatives, such as ensuring use of the right gating process and assessment criteria when assessing new requests and enabling an appropriate level of governance and oversight over projects. Enterprises wishing to address these areas may benefit from ISACA's Val IT framework⁸ and supporting publications, which provide guidance on the governance of IT-enabled business investments.

6.5 GEIT Structures as an Opportunity to Improve GEIT Mechanisms

Only five percent of the survey's respondents reported that they do not find it important to exercise governance over IT. A further 23 percent understand that it is an issue but are only starting to assess what needs to be done.

GEIT's maturity level tends to be lower in enterprises that do not consider IT important to the delivery of the business strategy or vision. Perhaps such enterprises are less willing to invest in GEIT measures, leading to the lower maturity level.

Enterprises with a decentralised IT organisation structure also have a lower level of maturity. Decentralised structures are often put in place to provide freedom to and increase agility in local business units. The very nature of decentralised structures implies a low level of central control, and where governance mechanisms do exist, they are often duplicated within each of the business units or geographic locations—which could account for the lower maturity level for enterprises with this organisation structure.

The most commonly mentioned GEIT practices are IT policies and standards (mentioned by almost 60 percent of respondents) and defined and managed IT processes (44 percent). GEIT structures such as relevant steering committees score relatively low, indicated by only 21 percent of respondents. This is a potential opportunity for enterprises to increase their GEIT maturity level. Structures can be an important governance measure, ensuring the inclusion of all relevant business and IT stakeholders in key decisions.

A GEIT framework was selected by only one-third of respondents as a current GEIT practice. However, the responses to the question asking for the most effective GEIT enablers showed GEIT-related frameworks/standards to be the second most frequently cited enabler (mentioned by 63 percent of IT respondents). It could be that many enterprises have recognised the importance of GEIT frameworks or standards, but have not yet implemented them. Most enterprises base their GEIT approach on ITIL, ISO 20000 or on ISO 27000, the Information Security Framework or other security standards. COBIT was mentioned by 12.9 percent of respondents as the framework on which they base their approach. Whereas most of the other frameworks are focused on specific domains such as information security or service management, COBIT covers all IT domains and can therefore serve as an integrator of other IT-related standards, frameworks and practices to support stronger alignment to enterprise governance arrangements and business objectives.

⁸ ISACA, *Enterprise Value: Governance of IT Investments, The Val IT Framework 2.0*, USA, 2008, www.isaca.org/valit



6. Conclusion and Recommendations

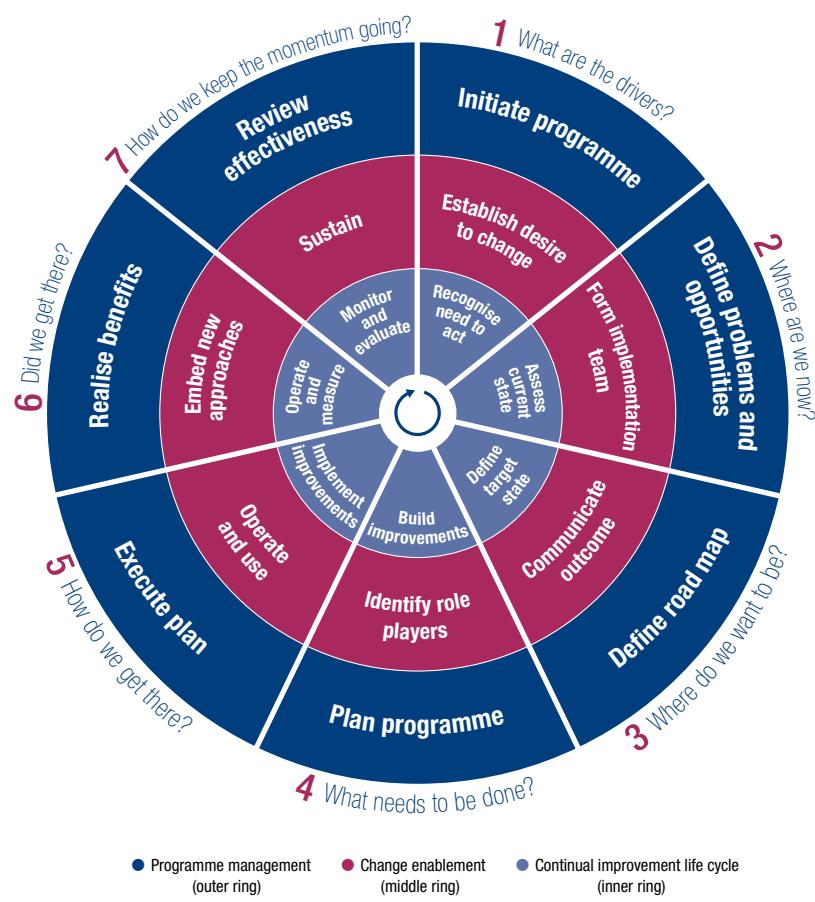
6.6 Change Management and Proper Scoping Critical to GEIT Implementation

The main challenges respondents reported in implementing GEIT mechanisms were communication, change management and trying to do too much at once. In response to a separate question on factors influencing GEIT implementations, half of the respondents selected ‘The culture of the organisation, its way of working and human factors’. This confirms the importance of change management and communication during GEIT implementation. Similarly, the implementation needs to be properly scoped and managed to ensure that the objectives are achievable and the envisioned changes can be absorbed by the enterprise.

ISACA’s *Implementing and Continually Improving IT Governance* publication defines three inter-related components to an implementation life cycle (**figure 45**): a core GEIT continual improvement life cycle, the enablement of change (addressing the behavioural and cultural aspects of the implementation or improvement), and the management of the programme (which includes proper scoping and ongoing management and oversight of the programme). Implementation is depicted as continual life cycles to emphasise the fact that these are not one-off activities but part of an ongoing process of implementation and improvement.

‘Getting required business participation’ was mentioned as a challenge by only one in four respondents. Since this is a critical success factor for GEIT implementations, it is encouraging that it is not being experienced as a challenge by many respondents’ enterprises.

Figure 45—Integrated GEIT Implementation Life Cycle





6. Conclusion and Recommendations

6.7 GEIT as Support to Cost Reduction and Improvement of Business Competitiveness

The most commonly experienced outcomes of GEIT practices are the improved management of IT-related risk (mentioned by 42.2 percent of respondents) and improved communication and relationships between business and IT (37.3 percent). In addition to these intangible benefits are some tangible ones, such as lower cost (noted by four out of 10 respondents) and improved business competitiveness (three out of 10).

Comparing these results to perceptions on IT's contribution to the business, it is interesting to note that 86 percent of respondents strongly agreed or agreed that IT supports the business strategy, yet only 37.3 percent of respondents mentioned improved delivery of business objectives as an outcome of GEIT practices. It could be that enterprises do indeed experience IT's support of the business strategy, but respondents do not necessarily attribute this outcome to GEIT practices. A similar situation exists for 'Improved return on investments', which is mentioned as an outcome of GEIT practices by only 27.1 percent of respondents, while 90.3 percent of respondents agreed or strongly agreed that IT investments create value for the business.

6.8 Outsourcing—Source of Benefits, Needs GEIT Focus

Outsourcing is highly prevalent: 93 percent of respondents indicated that they have fully or partially outsourced some IT activities. The survey results show that enterprises in which some IT activities are fully or partially outsourced are more likely to:

- Have a pro-active rather than reactive role of IT
- Have a better perception of IT service levels meeting business needs
- Not be experiencing issues relating to an insufficient number of IT staff

Sourcing decisions typically have a significant impact on the effectiveness and efficiency of IT within the enterprise and, therefore, are an important focus area for GEIT. Optimal governance enablers need to be in place to ensure direction and monitoring of areas such as:

- The review of IT supply and demand and decisions on sourcing models for different IT activities
- Procurement of services and definition of service level agreements
- Vendor performance monitoring and management

Some enterprises have put in place dedicated governance structures, such as an external service management committee, to report on, oversee and co-ordinate third-party services and delivery on an enterprise-wide level; ensure compliance with corporate, legal and regulatory requirements; prevent value leakage and mitigate outsourcing risks. The committee can also assist in ensuring that third-party service providers and their delivery are regularly monitored and issues are appropriately acted on.

6.9 GEIT as an Enabler for Cloud Computing Adoption

The current and planned use of cloud computing is higher for non-mission-critical IT services vs. mission-critical IT services (roughly 60 percent vs. 40 percent). Respondents who are not planning to use cloud computing identified data privacy and security concerns as the main reasons.

More than one-third of respondents have significant legacy infrastructure investments that are inhibiting their cloud computing plans. This could be an area in which GEIT can supply benefits. Enterprises will need to plan which and how legacy infrastructure investments should be managed and retired over time. These are complex decisions that require the involvement of many different stakeholders from different areas of the business. Having a clear decision model that delineates the responsibilities and accountabilities of these stakeholders could be a significant advantage.



6. Conclusion and Recommendations

6.10 Potential Benefits of GEIT in Responding to the Economic Downturn

The main initiatives implemented to combat the economic downturn are a reduction in contractor and permanent staff numbers and consolidation of infrastructure. In addition, one in four respondents invested in technologies that can reduce process or business cost. In periods of increased focus on managing cost, GEIT mechanisms can ensure that this focus is balanced with a view on investments that can generate cost savings and are ultimately self-funding.

Another measure implemented to respond to the economic downturn, selected by one in five respondents, is optimisation of the project portfolio. Identifying and exploring synergies between business units or geographic locations is an area in which GEIT can generate significant benefits by obtaining involvement from multiple stakeholders in an optimal way.

6.11 GEIT-enabled IT Innovation and a Pro-active Role for IT

Forty-five percent of the business respondents surveyed indicated that they have implemented or are planning to implement initiatives to promote IT innovation. Analysing this figure against IT's role in the enterprise reveals that 57.0 percent of respondents in whose enterprises IT has a pro-active role have implemented or are planning to implement these initiatives, compared to 37.0 percent of respondents' enterprises in which IT has a reactive role.

However, a greater emphasis on IT innovation is one of the ways in which IT can play a more pro-active role in the enterprise. GEIT enablers such as investment processes or project selection structures can play a role by ensuring that there is an adequate balance between IT innovation and 'run-the-business' initiatives.

6.12 Use of Frameworks and Structures to Improve Governance of Enterprise Architecture

Respondents' most frequently cited current measure to govern enterprise architecture is defined technology standards. Measures that scored lower included frameworks for the governance and management of architecture (existing in 21.1 percent of respondents' enterprises) and structures such as an architecture review board or committee (existing in 30.9 percent of respondents' enterprises).

Although 'Increasing agility to support future changes in the business' was mentioned as a driver for GEIT activities by only 11.6 percent of respondents, it is an area in which IT can contribute important business value. The right GEIT mechanisms can ensure the appropriate steering and direction over enterprise architecture so that agility can improve over time.

Respondents in enterprises in which growth through mergers or acquisitions is an important driver for the business strategy tended to select all measures for the governance of enterprise architecture more frequently than other respondents. This supports the above argument: enterprises that grow through mergers and acquisitions have an especially high need for agility and open architectures, so they can rapidly include the architecture landscapes of acquisitions and merger partners.

Governance of enterprise architecture measures that were cited by fewer respondents (frameworks and governance structures) are potential focus areas for enterprises. Frameworks such as TOGAF provide valuable guidance on the governance and management of the enterprise architecture function. Similarly, structures such as an architecture review board can drive benefits such as improving re-use and synergies amongst initiatives, ensuring that total cost of ownership is considered, and reducing complexity and increasing agility over time.

Appendix A: Survey Questionnaire

F1. Please select your role within your company.

Please select only one response.

	Yes	No
Non-IT-related executive working at a strategic level (such as CEO/CFO/COO/MD or equivalent)		
Main IT decision maker or Head of IT working at an operational level		

DA1. What is your main area of responsibility? [Business and IT]

Please select only one response.

General management	
Information technology	
Finance	
Administration	
Operations	
Other (please specify)	

DA2. Are you part of the senior management team? [Business and IT]

Please select only one response.

Yes	
No	

Q1. What are the TWO most important drivers of your business strategy? [Business and IT]

Please select only TWO responses.

Operational effectiveness/cost reduction	
Quality	
Customer service	
Innovation	
Market expansion	
Growth through mergers or acquisitions	
<i>Don't know</i>	

Q2. Thinking about your overall business strategy and vision, how important or unimportant do you consider IT to be to successful delivery? [Business and IT]

Please select only one response.

Very important	Important	Neither/nor	Not important	Not important at all	<i>Don't know</i>

Appendix A: Survey Questionnaire

- Q3. Thinking of the organisation of IT within your business, please indicate to what extent you agree or disagree with each of the following statements? [Business and IT]**

Please select only one response for each statement.

	Strongly Agree	Agree	Neither/nor	Disagree	Strongly Disagree	Don't know
IT investments create value for the business						
IT service levels meet the business needs						
IT supports the business strategy						
IT enables rapid business change						
IT supports business regulation and compliance						

- Q4. What IT organisation model exists in your business? [Business and IT]**

Please select only one response.

Centralised (There is (one) central IT organisation that provides services to all functions or business units.)	
Decentralised (There are multiple IT organisations that provide services to various functions or business units [typically one in each business unit].)	
Federated (A hybrid of the centralised and decentralised models; there is a central IT organisation providing some IT services [e.g., infrastructure] but also IT organisations in some or all of the business units or functions.)	
<i>Don't know</i>	

- Q5. Is the head of IT a member of the senior management team? [Business and IT]**

Please select only one response.

Yes	
No	

- Q6. What are the reasons for this? [Business and IT]**

Please select ALL the options that apply.

We have a small executive team.	
IT is not seen as a high enough priority.	
IT is a support function; there is no need for senior executive team representation.	
IT is adequately represented by another member of the senior executive team (CFO, COO, other).	
Other (please specify)	

Appendix A: Survey Questionnaire

Q7. How would you describe the current role of IT in your organisation? [Business and IT]

Please select only one response.

Reactive (Responding to business needs. IT is technically focussed on keeping the environment running and available.)	<input type="checkbox"/>
Pro-active (Partnering with the business to help it innovate and achieve strategic objectives)	<input type="checkbox"/>
<i>Don't know</i>	<input type="checkbox"/>

Q8. Which of the following initiatives is your organisation planning to implement in the next 12 months? [Business and IT]

Please select ALL that apply.

Green IT/sustainability initiatives	<input type="checkbox"/>
Outsourcing IT services	<input type="checkbox"/>
Changing internal IT costing arrangements such as implementing chargeback of IT costs to departments	<input type="checkbox"/>
Data or information initiatives	<input type="checkbox"/>
IT-supported regulatory compliance initiatives	<input type="checkbox"/>
IT risk management initiatives	<input type="checkbox"/>
IT cost reduction initiatives	<input type="checkbox"/>
Major IT system implementations or upgrades	<input type="checkbox"/>
Major IT infrastructure initiatives	<input type="checkbox"/>
<i>Don't know</i>	<input type="checkbox"/>
<i>None of the above</i>	<input type="checkbox"/>

Q9. Which of the following IT-related issues have you experienced in the past 12 months? [Business and IT]

Please select ALL that apply.

Increasing IT costs	<input type="checkbox"/>
Return on IT investment not as expected	<input type="checkbox"/>
Serious operational IT incidents	<input type="checkbox"/>
IT security or privacy incidents	<input type="checkbox"/>
Problems with external IT service providers	<input type="checkbox"/>
Insufficient number of IT staff	<input type="checkbox"/>
Insufficient IT skills	<input type="checkbox"/>
Problems implementing new IT systems	<input type="checkbox"/>
IT disaster recovery or business continuity issues	<input type="checkbox"/>
<i>Don't know</i>	<input type="checkbox"/>
<i>None of the above</i>	<input type="checkbox"/>

Appendix A: Survey Questionnaire

Q10. Has your organisation recently ended an IT-related project before it was fully implemented?
[Business and IT]
Please select only one response.

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
<i>Don't know</i>	<input type="checkbox"/>

Q11. What was the main reason why the project wasn't completed? [Business and IT]
Please select only one response.

Exceeded budget	<input type="checkbox"/>
Fell behind schedule	<input type="checkbox"/>
Did not deliver as promised	<input type="checkbox"/>
Business needs changed	<input type="checkbox"/>
No longer a priority	<input type="checkbox"/>
Did not support business strategy	<input type="checkbox"/>
Other (please specify)	<input type="checkbox"/>

Q12. What do you consider to be the TWO most important enablers required for effective governance of IT?
[IT only]
Please select only TWO responses.

Frameworks/standards related to governance of IT (e.g., COBIT, ISO 38500)	<input type="checkbox"/>
Other IT best practice frameworks /standards (e.g., ITIL)	<input type="checkbox"/>
Tool kits to support the implementation or improvement of the governance of IT	<input type="checkbox"/>
Benchmarking capabilities	<input type="checkbox"/>
White papers or other governance of IT research	<input type="checkbox"/>
Certifications related to governance of IT (e.g., CGEIT)	<input type="checkbox"/>
Face-to-face networking (symposia, seminars, workshops)	<input type="checkbox"/>
Electronic networking (e-symposia, social networking sites, communities of interest, discussion forums)	<input type="checkbox"/>
<i>Don't know</i>	<input type="checkbox"/>

Appendix A: Survey Questionnaire

Q13. Thinking of the organisations that provide or implement guidance or solutions in governance of IT, please rate the capability of those you are aware of. [IT only]

Please select only one response in each row.

	Very good capability	Good capability	Neither/nor	Poor capability	Very poor capability	Don't know
Market analysts (e.g. Gartner, Forrester, IDC)						
Big 4 firms (PricewaterhouseCoopers, Deloitte, Ernst & Young, KPMG)						
ISACA						
ITGI						
Software vendors						
Large IT and consultancy firms (e.g., Accenture, IBM, HP, Capgemini)						
Smaller or niche IT consultancy firms						
Universities						
Strategy consultancies (e.g., McKinsey, Boston Consulting Group)						
Local professional or governmental organisations (e.g., Office of Government Commerce in the UK)						

Q14. Of the following, which is the most important driver for your enterprise's IT-related governance activities? [Business and IT]

Please select only one response.

Avoiding negative incidents	
Managing costs	
Ensuring that current IT functionality is aligned with current business needs	
Increasing agility to support future changes in the business	
Achieving better balance between innovation and risk avoidance to improve return	
Complying with industry and/or governmental regulations	
<i>Don't know</i>	

Q15. How would you assess your organisation's maturity level on the governance of IT? [Business and IT]

Please select only one response.

We do not think this is important.	
We understand this is an issue but are just starting to assess what needs to be done.	
We are well aware this is important and we have a number of <i>ad hoc</i> measures in place.	
We have well-defined governance of IT measures and processes in place.	
We have well-functioning governance of IT processes and a performance measuring system in place.	
Our processes relating to governance of IT are continuously optimised based on performance measurement results.	
<i>Don't know</i>	

Appendix A: Survey Questionnaire

Q16. Which of the following measures are included in your organisation's current practices related to governance of IT practices? [Business and IT]

Please select ALL that apply.

IT governance framework	<input type="checkbox"/>
IT principles	<input type="checkbox"/>
IT policies and standards	<input type="checkbox"/>
Defined and managed IT processes	<input type="checkbox"/>
Overall IT performance monitoring practices	<input type="checkbox"/>
Mechanisms to specifically measure performance/progress towards improved governance of IT	<input type="checkbox"/>
Governance of IT structures, such as relevant steering committees	<input type="checkbox"/>
<i>Don't know</i>	<input type="checkbox"/>

Q17. Which of the following factors have most influenced the implementation of practices related to governance of IT in your organisation? [Business and IT]

Please select ALL that apply.

The culture of the organisation, its ways of working and human factors (organisational change management considerations)	<input type="checkbox"/>
The regulatory environment and specific compliance requirements	<input type="checkbox"/>
The business objectives or strategy	<input type="checkbox"/>
Industry or market forces	<input type="checkbox"/>
<i>Don't know</i>	<input type="checkbox"/>

Q18. On which of the following external frameworks or standards is your approach to governance of IT based? [IT only]

Please select ALL that apply.

COBIT (ISACA)	<input type="checkbox"/>
Val IT (ISACA)	<input type="checkbox"/>
Risk IT (ISACA)	<input type="checkbox"/>
BMIS (Business Model for Information Security, ISACA)	<input type="checkbox"/>
IT Assurance Framework (ISACA)	<input type="checkbox"/>
ISO 17799, ISO 27000, Information Security Framework or other security standards	<input type="checkbox"/>
ITIL or ISO 20000	<input type="checkbox"/>
ISO 38500	<input type="checkbox"/>
TOGAF	<input type="checkbox"/>
PRINCE2	<input type="checkbox"/>
PMI/PMBOK	<input type="checkbox"/>
Six Sigma	<input type="checkbox"/>
COSO ERM	<input type="checkbox"/>
CMM or CMMI	<input type="checkbox"/>
Other (please specify)	<input type="checkbox"/>
<i>Don't know</i>	<input type="checkbox"/>

Appendix A: Survey Questionnaire

Q19. Please indicate for each framework how your organisation is using it. [IT only]

Please select only one response in each row.

	FULLY applying it	MAIN source of guidance or reference	ONE of the sources of guidance or reference	Don't know
COBIT				
Val IT				
Risk IT				
BMIS (Business Model for Information Security)				
IT Assurance Framework				

Q20. How well do you know any of the following ISACA frameworks? [Business only]

Please select only one response in each row.

	I have a good understanding of this framework.	I have some understanding of this framework.	I don't know this framework.
COBIT			
Val IT			
Risk IT			
BMIS (Business Model for Information Security)			
IT Assurance Framework			

Q21. How aware are you of the following IT related certifications? [IT only]

Please select only one response in each row.

	A significant number of our IT employees have this certification.	Some of our IT employees have this certification.	Aware but no one in our organisation is certified.	Not aware of the certification.
Certified in the Governance of Enterprise IT (CGEIT)				
Certified Information Systems Auditor (CISA)				
Certified Information Security Manager (CISM)				
ITIL Foundation				
ITIL Service Manager				
PRINCE2 Foundation				
PRINCE2 Practitioner				
TOGAF 9 Foundation				
TOGAF 9 Certification				
Certified Associate in Project Management				
Project Management Professional (PMP)				
Certified Information Systems Security Professional (CISSP)				

Appendix A: Survey Questionnaire

Q22. Our practices related to governance of IT have led to: [Business and IT]

Please select ALL that apply.

Improved management of IT-related risk	<input type="checkbox"/>
Improved return on IT investments	<input type="checkbox"/>
Lower IT costs	<input type="checkbox"/>
Improved transparency of IT and its activities	<input type="checkbox"/>
Improved communication and relationships between business and IT	<input type="checkbox"/>
Improved tracking and monitoring of IT performance	<input type="checkbox"/>
Improved IT innovation	<input type="checkbox"/>
Improved IT delivery of business objectives	<input type="checkbox"/>
Improved business competitiveness	<input type="checkbox"/>
<i>Don't know</i>	<input type="checkbox"/>
<i>None of the above</i>	<input type="checkbox"/>

Q23. When implementing mechanisms related to governance of IT, which of the following are barriers or challenges to the success of the implementation? [Business and IT]

Please select ALL that apply.

Change management	<input type="checkbox"/>
Communication issues	<input type="checkbox"/>
Lack of senior management commitment and support	<input type="checkbox"/>
Difficulty demonstrating value and benefits	<input type="checkbox"/>
Getting required business participation	<input type="checkbox"/>
Ineffective current enterprise governance	<input type="checkbox"/>
High levels of organisation complexity (operating model, organisational)	<input type="checkbox"/>
Trying to do too much at once	<input type="checkbox"/>
<i>Don't know</i>	<input type="checkbox"/>
<i>None of the above</i>	<input type="checkbox"/>

Q24. Which, if any, of the following IT activities have been outsourced by your organisation? [IT only]

Please select only one response in each row.

	Fully outsourced	Partially outsourced	Not outsourced
Infrastructure provisioning (networks, servers, data centres)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infrastructure maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Application development and/or maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IT help desk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
End-user support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Don't know</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix A: Survey Questionnaire

Q25. Are you aware of cloud computing? [IT only]

Please select only one response.

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

Q26. To what degree are you currently using or planning to use cloud computing? [IT only]

Please select only one response in each row.

	Currently using	Planning to use	Not planning to use
For non-mission-critical IT services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For mission-critical IT services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q27. What are the main reasons you are not planning to use cloud computing? [IT only]

Please select ALL that apply.

Security concerns	<input type="checkbox"/>
Data privacy concerns	<input type="checkbox"/>
Compliance concerns	<input type="checkbox"/>
Reliability concerns	<input type="checkbox"/>
Legacy infrastructure investments	<input type="checkbox"/>
Other (please specify)	<input type="checkbox"/>

Q28. What initiatives, if any, did you implement in the IT organisation in 2009 or 2010 in response to the economic downturn? [Business and IT]

Please select ALL that apply.

Reduced permanent staff numbers	<input type="checkbox"/>
Reduced contractor staff numbers	<input type="checkbox"/>
Consolidated sites/data centres	<input type="checkbox"/>
Consolidated infrastructure (servers, networks, etc.)	<input type="checkbox"/>
Reduced application licenses	<input type="checkbox"/>
Consolidated the application portfolio	<input type="checkbox"/>
Optimised the project portfolio	<input type="checkbox"/>
Implemented stricter investment evaluation measures	<input type="checkbox"/>
Centralised IT procurement	<input type="checkbox"/>
Redefined service level agreements (SLAs) with external service providers	<input type="checkbox"/>
Redefined service level agreements (SLAs) with the business to better manage demand	<input type="checkbox"/>
Invested in technologies that can reduce process or business cost	<input type="checkbox"/>
Changed sourcing arrangements	<input type="checkbox"/>
Changed approach to governance of IT	<input type="checkbox"/>
<i>Don't know</i>	<input type="checkbox"/>
<i>None of the above</i>	<input type="checkbox"/>

Appendix A: Survey Questionnaire

- Q29. Have you implemented, or are you planning to implement in 2010, any initiatives to promote IT innovation? [Business only]**

Please select only one response.

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
<i>Don't know</i>	<input type="checkbox"/>

- Q30. Please indicate the mechanisms your business has implemented, or plans to implement in 2010, to promote IT innovation? [IT only]**

Please select ALL that apply.

Training for IT managers to better understand how IT innovations can create business opportunities
Assigned responsibilities for monitoring emerging technologies and their potential business application
Special investment appraisal and funding mechanisms to perform pilots with emerging technologies
Allocation of time to spend working on experiments or trying out ideas
Collaborative programmes where IT and business staff can work together on exploring innovation
Other (please specify)
Don't know
None of the above

<input type="checkbox"/>

- Q31. Please indicate whether you have implemented, or are planning to implement in 2010, any of these measures to govern your enterprise architecture environment. [IT only]**

Please select only one response in each row.

A framework for the governance and management of enterprise architecture, such as
The Open Group Architecture Framework (TOGAF)
Enterprise architecture principles with which all IT initiatives need to comply
Structures such as an architecture review board or committee
Defined architecture processes
Defined technology standards

Planned	Exists	Does not exist	<i>Don't know</i>

- Q32. What is your view on employee use of social networking? [IT only]**

Please select only one response.

The benefits of employees using social networking outweigh the risk.
The risks of employees using social networking outweigh the benefits.
The risks and benefits of employees using social networking are appropriately balanced.
Don't know

<input type="checkbox"/>

Appendix A: Survey Questionnaire

DB1. In which industry sector(s) does your company operate? [Business and IT]

Please select ALL that apply.

Financial services	<input type="checkbox"/>
Manufacturing	<input type="checkbox"/>
Retail	<input type="checkbox"/>
Healthcare/pharmaceuticals	<input type="checkbox"/>
Telecommunications	<input type="checkbox"/>
Technology	<input type="checkbox"/>
Energy	<input type="checkbox"/>
Mining and construction	<input type="checkbox"/>
Transportation	<input type="checkbox"/>
Education	<input type="checkbox"/>
Other (please specify)	<input type="checkbox"/>

DB2. How many employees (full-time equivalents) does your company employ globally? [Business and IT]

Please select only one response.

< 500	<input type="checkbox"/>
500 – 5,000	<input type="checkbox"/>
5,001 – 50,000	<input type="checkbox"/>
> 50,000	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

DB3. In US dollars, what was your latest available revenue figure? [Business and IT]

Please select only one response.

< \$100 million	<input type="checkbox"/>
\$101 – \$500 million	<input type="checkbox"/>
\$501 million - \$1 billion	<input type="checkbox"/>
\$1.1 – \$5 billion	<input type="checkbox"/>
> \$5 billion	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

DB4. What is the ownership structure of your company? [Business and IT]

Please select only one response.

> 50% government owned	<input type="checkbox"/>
> 50% privately owned	<input type="checkbox"/>
> 50% owned by financial institutions (banks, investment houses, private equity houses, funds)	<input type="checkbox"/>
> 50% publicly owned	<input type="checkbox"/>
None of the above/mixed ownership	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

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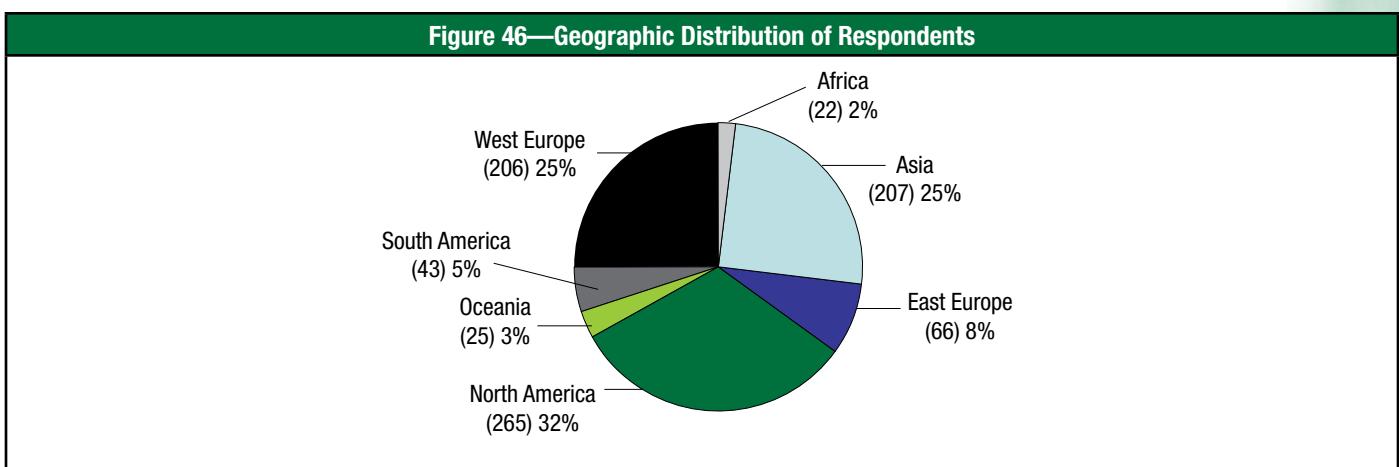
Appendix B: Profile of Survey Respondents

The size of the respondent base was 834, an increase from previous survey reports (749 in 2008, 695 in 2006 and 276 in 2004). Of this base, 450 were heads of IT (CIOs and IT managers) and 384 were business executives (CEOs, CFOs, COOs, managing directors [MDs] or equivalent). This 54:46 split is close to the 50:50 that was targeted.

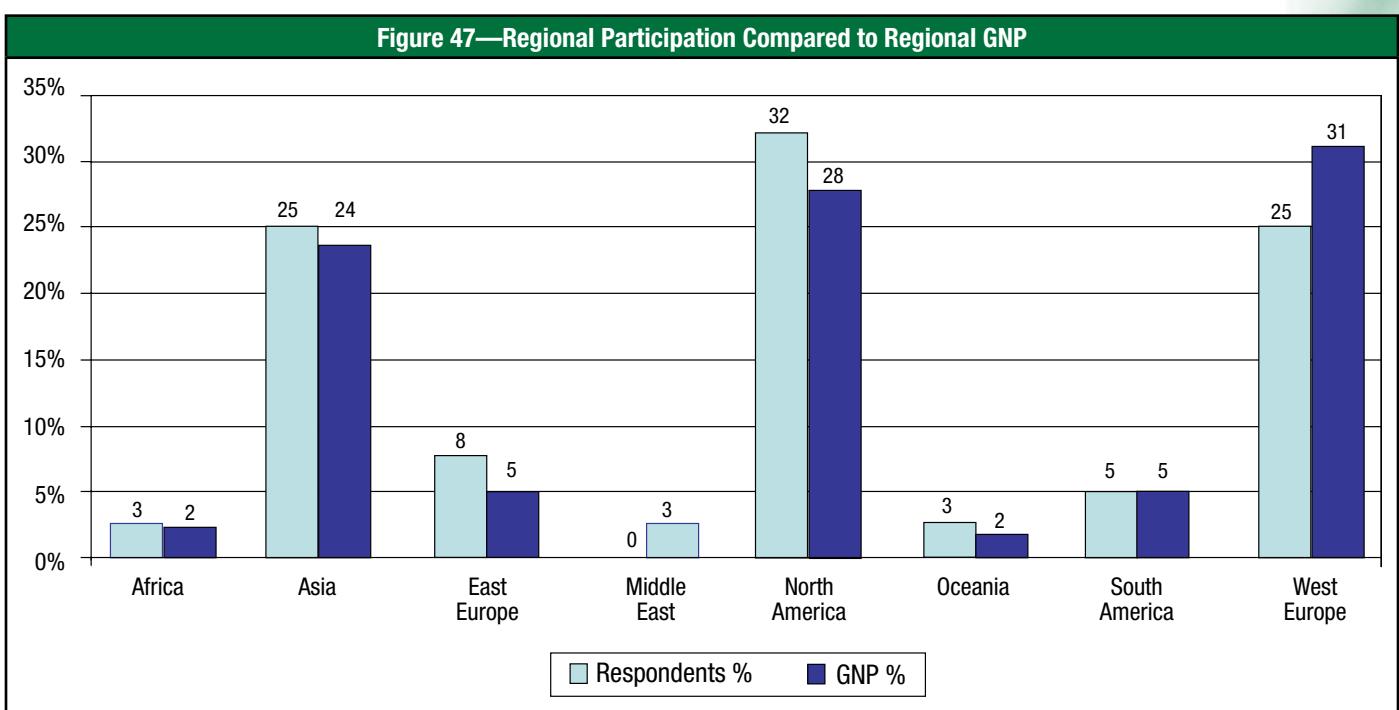
Executive management was amply represented with 79.1 percent of the respondents being part of the senior management team in their enterprises.

The ISACA membership base was not specifically targeted, although some respondents were ISACA members.

The geographic distribution is indicated in **figure 46**. The areas with the greatest participation were North America, Asia and West Europe, and targeted global representation was achieved.

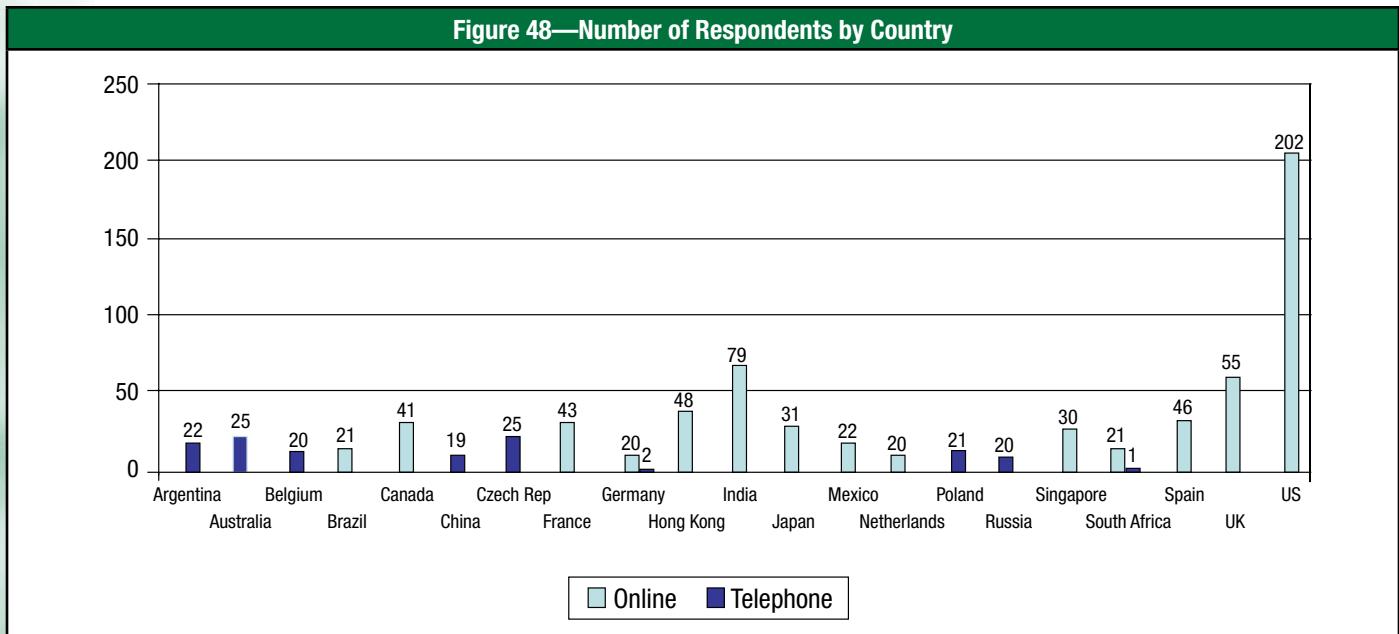


The regional representation of the survey was also in line with the gross national product (GNP) of the respective regions (**figure 47**).

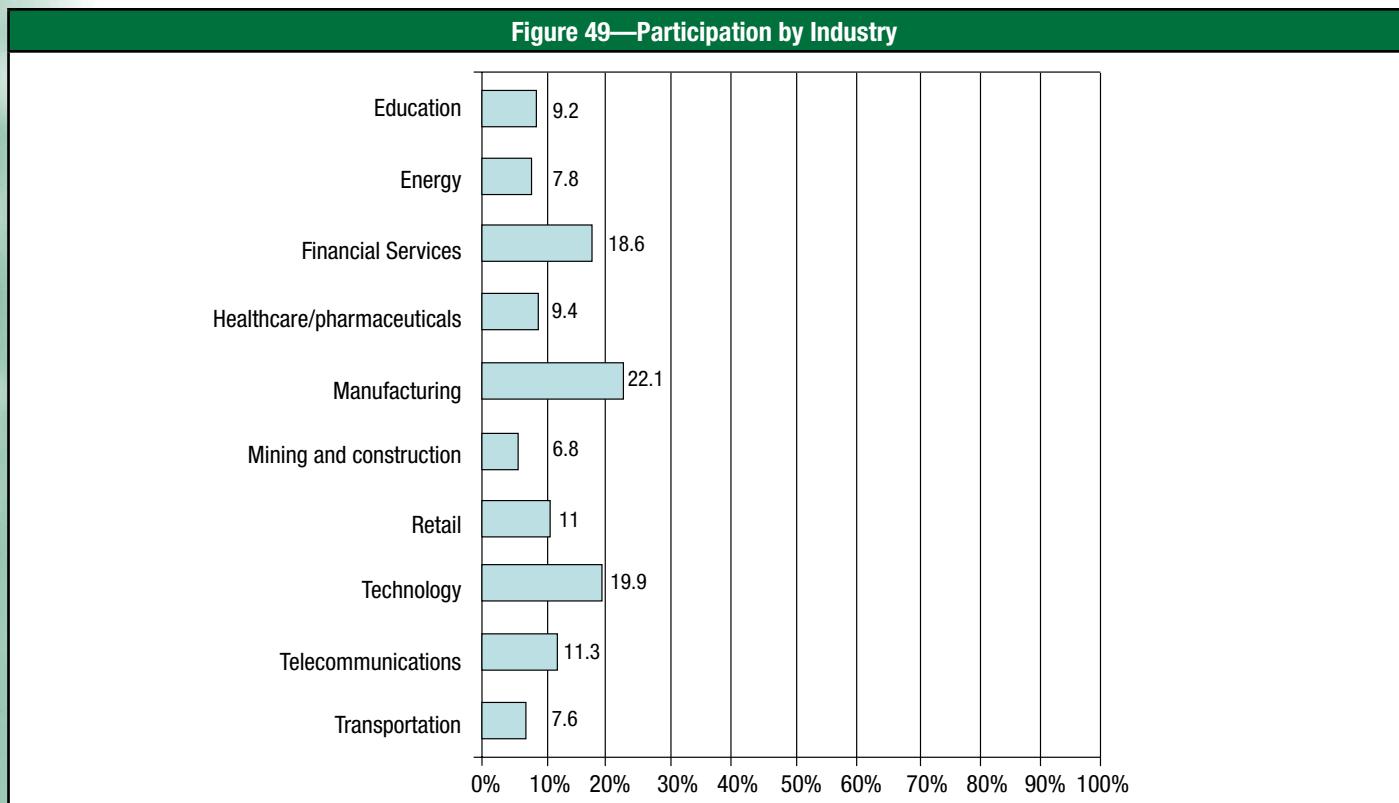


Appendix B: Profile of Survey Respondents

The number of respondents by survey method and by geographic location is shown in **figure 48**.

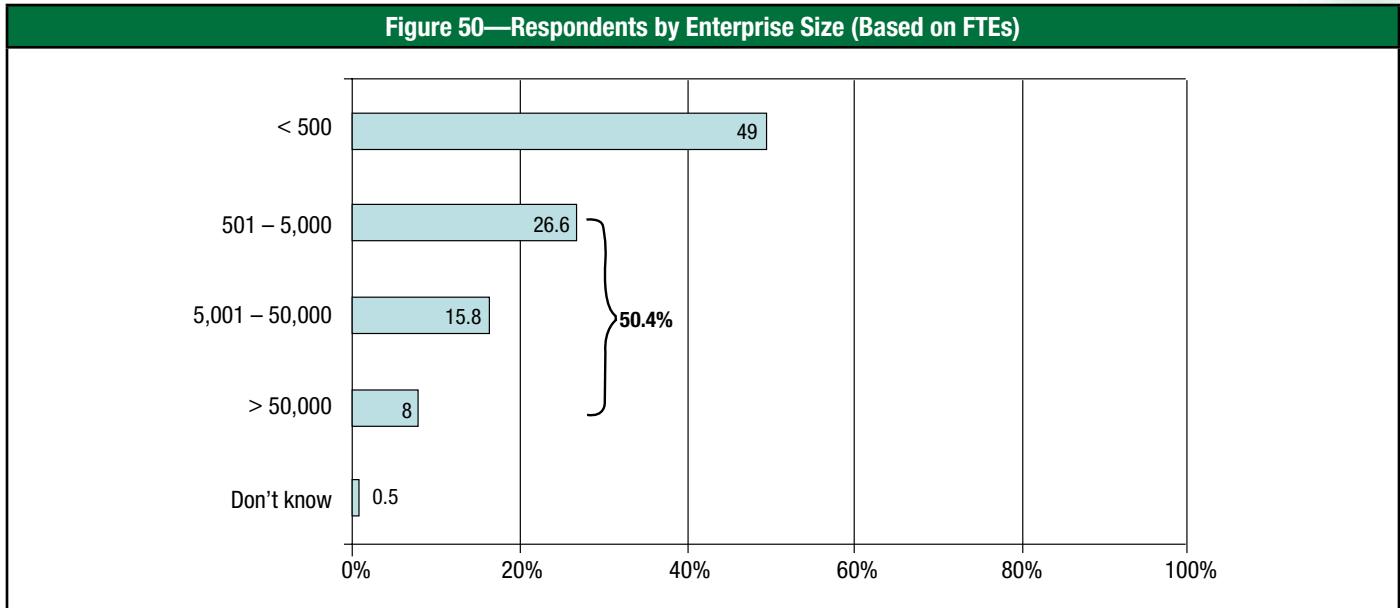


Broad representation across industries was achieved, as shown in **figure 49**. Some enterprises operate in multiple industries and the sum of the percentages exceeds 100 percent.

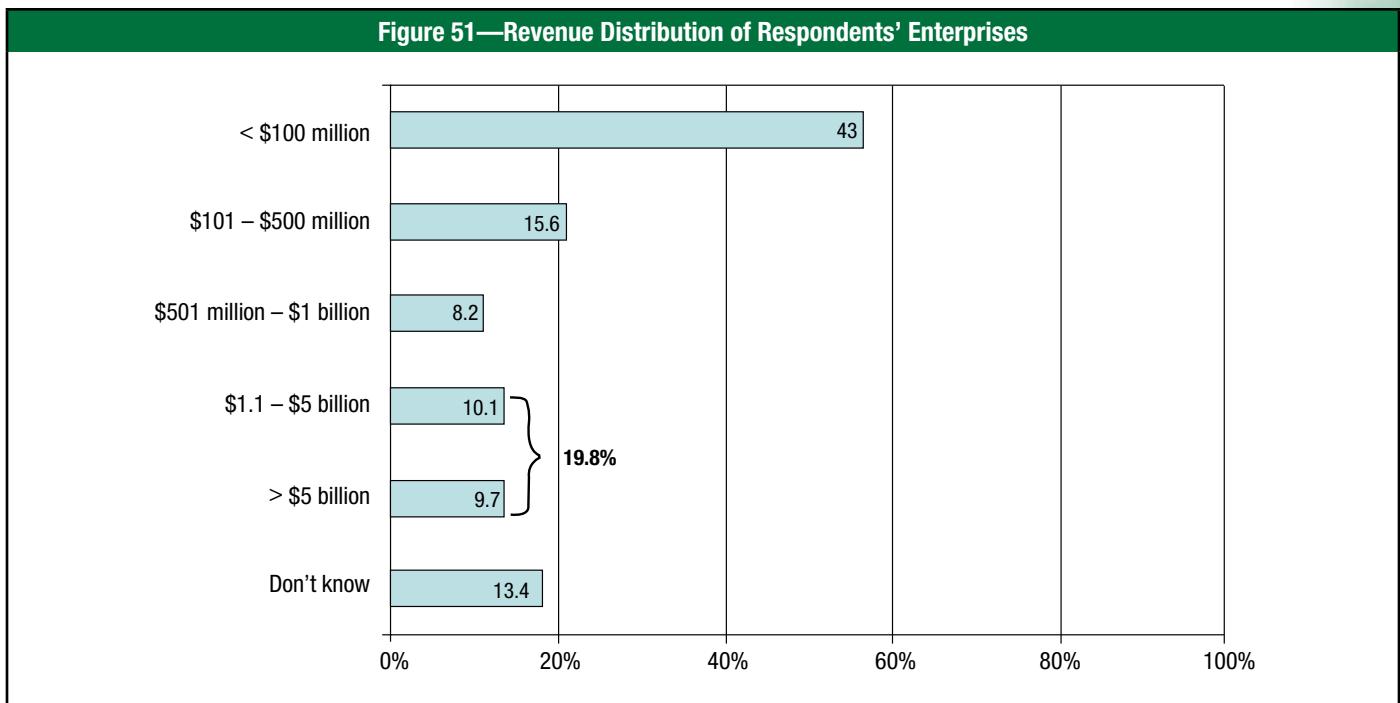


Appendix B: Profile of Survey Respondents

Large and small enterprises (based on FTEs) were represented in the respondent base to a nearly equal degree (**figure 50**).

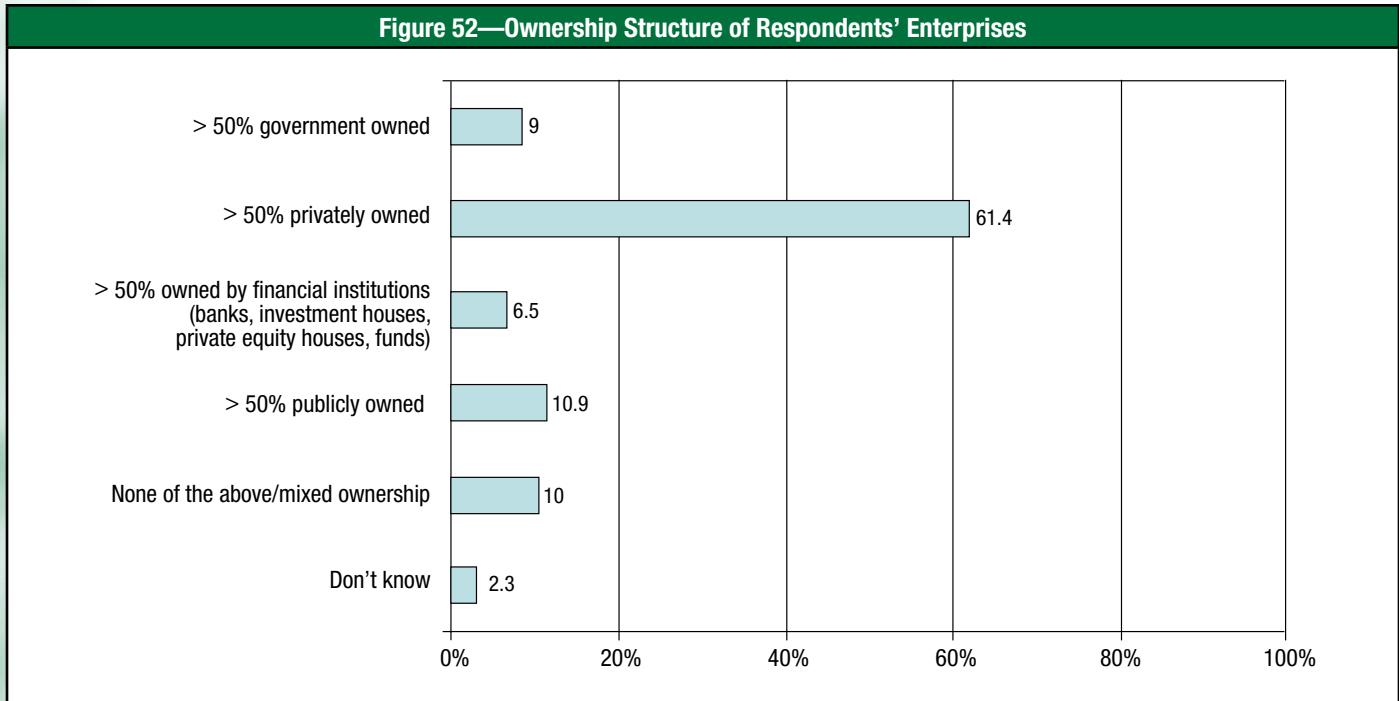


As shown in **figure 51**, approximately one-fifth of respondent enterprises have revenue of US \$1 billion or more. Overall, the distribution across revenue categories is adequate to portray the global picture accurately.

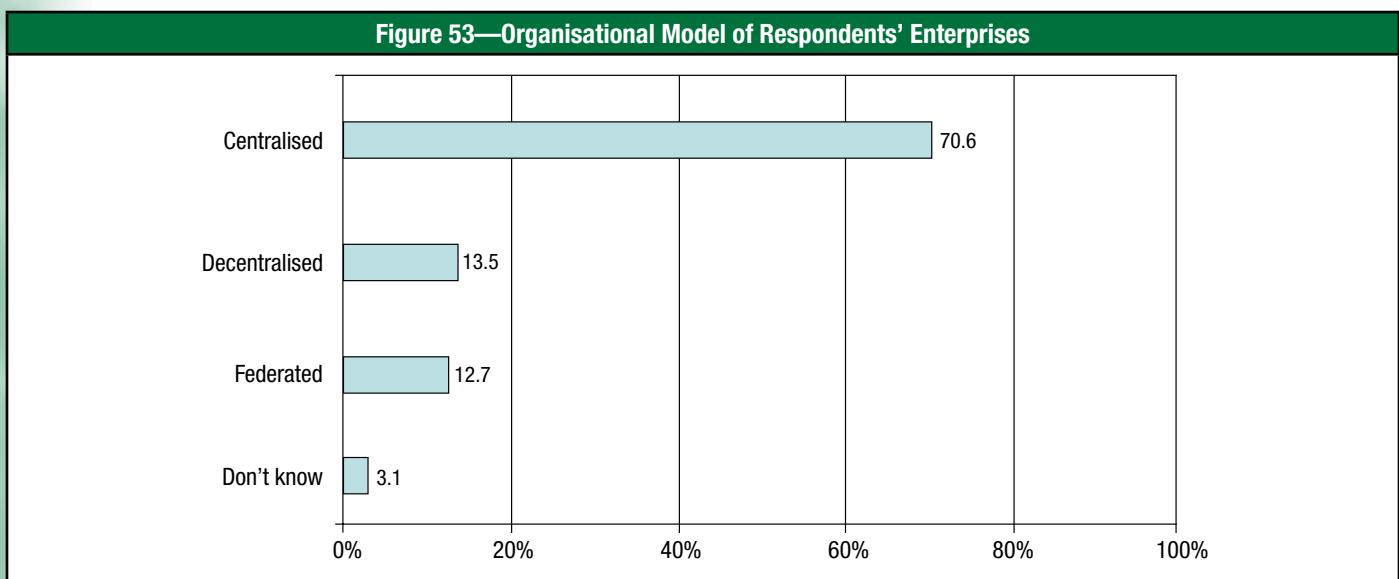


Appendix B: Profile of Survey Respondents

The majority of the respondents' enterprises are more than 50 percent privately owned (**figure 52**).



A centralised IT organisation was the most prevalent model amongst respondents, as indicated in **figure 52**.



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