DRIVING BUSINESS VALUE FROM IT

OPTIMIZING THE NEW IT ENVIRONMENT

A SURVEY AND WHITE PAPER PRODUCED IN CO-OPERATION WITH THE ECONOMIST INTELLIGENCE UNIT

MERCURY™

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ACKNOWLEDGEMENTS

This report was prepared by Mercury in co-operation with The Economist Intelligence Unit. The author of the report was John Gauntt, and the editor was Gareth Lofthouse.

The report is based on the findings of a survey of 758 IT professionals based in Europe, the Middle East and Asia-Pacific. The survey was designed by Mercury and The Economist Intelligence Unit, and executed by Vanson Bourne. Our sincere thanks go to the survey participants for sharing their insights on this topic.

About Mercury Interactive

Mercury Interactive is the global leader in business technology optimization (BTO). We are committed to helping customers optimize the business value of IT.

About the Economist Intelligence Unit

The Economist Intelligence Unit is a division of The Economist Group. Sister companies include The Economist newspaper, CFO magazine, and an array of other specialist publications.

The Economist Intelligence Unit has been providing information and advisory services to the global business community for more than 50 years through many channels, including print publications, electronic media, and conferences and client meetings organized under The Economist Conferences brand.

Executive summary

With technology spending devouring as much as one half of capital expenditure in some organizations, the need to drive business value out of IT has become a top corporate priority. This is no easy task at a time when the IT environment is becoming ever more complex. Companies are having to optimize a mix of in-house and outsourced IT services against exacting business requirements. A raft of regulations are also forcing them to revisit their systems and processes, and to find ways of turning compliance from a pure cost into a business benefit. At the same time, the application environment is changing, with many organizations needing to attract new skill sets to support a complex mix of packaged and custom applications.

A major new survey conducted by the Economist Intelligence Unit for Mercury sheds light on how business trends such as outsourcing, compliance, and the new application environment are impacting corporate IT departments. In particular, it reveals some of the key challenges and risks companies face in optimizing technology initiatives in three key areas:

1. Strategic Sourcing for IT
The survey reveals that specialist skills and service quality are at least as important as reducing costs in outsourcing decisions, with IT quality being seen as a key challenge for 64 percent of IT managers. IT executives believe transparency and scalability are the most important factors in a successful outsourcing relationship. The major obstacles to success are concerns over service quality, dependency on third parties, and visibility of dispersed IT operations.

2. Regulatory compliance and its impact on IT
Companies hope to obtain a range of benefits from compliance, including more accurate financial reporting and improved visibility of enterprise risk. However, these benefits are only likely to be achieved if IT compliance initiatives are adequately resourced: in the survey, 39 percent of IT executives complained that lack of budget is a major obstacle to compliance success.

3. Complexity in the application environment
The application environment is becoming more complex, creating the need for multiple technical skill sets. IT managers believe business value depends on optimizing the full application lifecycle spanning application design and development, testing and ongoing management. A total of 60 percent of survey participants rate application testing as the key driver of business value – yet only 37 percent of companies use automated testing procedures, with the rest using manual testing or no testing at all.

Outsourcing, value-driven compliance strategies, and improving quality across the application lifecycle are three areas where IT departments are attempting to deliver greater value to the business. Success will depend on finding better ways to measure the business value of IT across a complex range of in-house and outsourced services, and on implementing robust IT governance to ensure tough targets are consistently attained.

ABOUT THE SURVEY

The survey reached a total of 758 executives drawn from a range of small and large organizations. A total of 60 percent of executives were based in Europe and the Middle East, with the rest coming from the Asia-Pacific regions. Participants were drawn from a cross-section of industries, including financial services, manufacturing, high-tech, pharmaceuticals, retail, distribution, transport, telecoms, utilities and business services. The survey was conducted during September and October 2004.

Introduction

Information technology (IT) drives business processes much like a factory drives the production of physical goods. But while it is straightforward to measure how a factory contributes value to an organization, the same cannot be said of IT.

Despite technology's key role in tracking financials, integrating supply chains, managing employees and performing a host of other vital functions, measuring IT's contribution to value creation remains more of a black art than a science. But the disconnect between business objectives and IT resources cannot endure. New models for IT outsourcing, increased complexity in application environments, and the pressure of regulatory compliance means companies need to create a clearer link between IT investments and business outputs. This challenge has spawned a set of techniques and technologies for measuring, managing and maximizing the final product that rolls off the IT assembly line — a high-quality, low-cost business process.

One of the more recent initiatives for lashing IT tighter to business outcomes is Business Technology Optimization (BTO), a concept that encourages companies to run IT like the rest of the business. Instead of managing IT on technology measures such as systems availability, network or database latency, or even numbers of management reports processed, BTO evaluates IT according to business metrics such as its ability to raise revenue, reduce costs, satisfy customers, or improve profitability.

The adoption of BTO strategies is one example of how companies are seeking to align IT more closely with their business goals. But are these attempts proving successful? This report provides quantitative data on how leading firms are attempting to draw value from IT in three main areas: strategic sourcing, regulatory compliance, and the new application environment. It also provides a timely assessment of how ready IT operations are to meet the key technology-related challenges facing their organizations.

Strategic Sourcing for IT

Political backlashes notwithstanding, the outsourcing of IT services and applications is set to continue. The twin attractions of specialist skills and lower costs offered by the leading offshore destinations are too powerful for companies to ignore. The scope of outsourcing is also growing as more business processes are digitized and automated. As the range of outsourcing opportunities increases, there is a greater need for decision-makers to understand and measure the business value of IT to help decide what to outsource, and how to do so most effectively.

While IT managers have to balance a number of business and IT demands in their outsourcing decisions, the biggest challenge is the need to improve the quality of IT, according to 64 percent of respondents. This issue is particularly crucial to larger organizations: in the survey, 45 percent of companies with over US$8 billion in annual revenues cited IT quality as critical, compared with 20 percent of companies with annual revenues under US$250 million.

A total of 40 percent of executives believe IT quality is the area where outsourcing could deliver the greatest benefit over the next two years. Improving quality also partly depends on gaining access to new skills and talent, with just under half of executives seeing this as a key benefit of outsourcing. These findings suggest a mature view of outsourcing, in which adding value through better quality IT services and access to scarce skills is at least as important as reducing costs. Executives listed service quality issues, the risks of depending on third parties, and maintaining visibility of dispersed IT operations as the three primary obstacles to successful outsourcing.

"Companies are concerned about how they maintain visibility and control in this much more complex and distributed IT value chain and, related to this, how to see where the sourcing model is delivering business value, and where it isn't," said David Murphy, vice president of corporate development at Mercury.

Key points:

- In outsourcing decisions, specialised skills and service quality are at least as important as reducing costs
- IT executives believe transparency and scalability are the most important factors in a successful outsourcing relationship
- The major obstacles to success in strategic IT sourcing cited by executives are concerns over service quality, dependency on third parties, and visibility into dispersed IT operations

WHICH OF THE FOLLOWING ACTIVITIES REPRESENT THE BIGGEST CHALLENGE FOR IT MANAGEMENT IN YOUR ORGANISATION TODAY?

	Lower importance	Moderate importance	High importance
Reducing IT costs	15%	33%	52%
Improving the quality of IT	9%	26%	64%
Obtaining specialist IT skills that are not available in house	40%	33%	27%
Implementing regulatory compliance programmes	32%	32%	36%
Measurability of IT business value	16%	30%	54%
Securing and protecting critical data	26%	19%	55%
Retaining IT staff worried about career prospects	40%	27%	33%

WHERE DO YOU BELIEVE IT OUTSOURCING COULD OFFER THE GREATEST BENEFIT TO YOUR BUSINESS IN THE NEXT TWO YEARS?

	Lower importance	Moderate importance	High importance
Reducing IT costs	29%	27%	44%
Improving the quality of IT	31%	30%	40%
Obtaining specialist IT skills that are not available in house	24%	27%	48%
Implementing regulatory compliance programmes	41%	33%	27%
Measurability of IT business value	35%	29%	36%
Securing and protecting critical data	48%	19%	33%

The survey suggests that even though the range of IT activities that can be outsourced is expanding, there are limits to what they will entrust to a third party. Outsourcing only makes sense when the rewards outweigh the risks. Eugene Goland, president of DataArt, a provider of IT sourcing services and application development to hedge funds, believes most of his clients want to keep hold of applications that directly impact customers, to ensure the best level of experience and support. “They also prefer to keep applications that are either security sensitive or subject to regulations inside,” said Goland. “It boils down to the total cost of ownership and the enterprise risk exposure for determining what a company will keep inside and what they will outsource.”

Companies expect IT service providers to offer significant and ongoing visibility into how they execute outsourced business processes, with well over 50 percent of executives in the survey citing transparency as the key driver for ensuring a successful outsourcing relationship. The ability of an outsourced IT provider to scale their operations comes a close second, suggesting that flexibility to support long term growth has become a key consideration in outsourcing deals. Finally, survey participants agreed that the ability to prioritize outsourcing tasks is a major factor for success.

“We've experienced a major shift in customers' expectations from a pure cost-driven model to one that provides value through enhanced quality improvements in service delivery and management of

WHAT DO YOU PERCEIVE AS THE BIGGEST OBSTACLES TO IT OUTSOURCING?

Dependency on third parties	53%
Risk of degradation in service quality	53%
Maintaining visibility of dispersed IT operations	46%
Ensuring services comply with regulations	40%
Lack of clarity on business value	37%
Security for corporate data	31%
Public opposition to offshoring of IT jobs	30%

WHAT, IN YOUR VIEW, ARE THE MOST IMPORTANT FACTORS IN ENSURING A SUCCESSFUL OUTSOURCING PARTNERSHIP?	
Transparency of service levels	57%
The service provider can scale to meet future requirements	55%
Prioritising the right tasks	49%
Clear, measurable business targets	47%
Skills transfer between your company and the service provider	47%
Sharing the risks and rewards with the service provider	40%

their IT estate," said Sudip Banerjee, president of Enterprise Solutions at Wipro Technologies, a leading IT services provider based in India. "Customers demand that we continuously improve visibility into their operations on their behalf."

That need for visibility means IT leaders are seeking robust and unambiguous metrics to measure outsourcing's contribution to the business. Technical metrics are also becoming less important than business measures in Service Level Agreements (SLAs). An increasingly common practice is to describe outsourcing milestones in terms of the overall customer experience (for example, "95 percent of new customer accounts will be opened within 24 hours", or, "The customer shall be connected to a service representative within three rings").

"This is a clear mind-shift on behalf of outsourcing clients from delivering only cost savings toward delivering business value measured in real business terms," said Murphy.

Regulatory compliance and its impact on IT

A wave of regulations (see box) are forcing CIOs to embark on complex compliance programmes that impact both their in-house and outsourced IT applications and services. Complying with these regulations affects the business on two different levels. There are formal compliance requirements, such as financial reporting, under which applications report information according to precise procedures for accuracy, presentation and timeliness to prove that a business process is compliant. But in some instances regulation can mean that entire business processes need to be redesigned.

Compliance is an area where the survey revealed a gulf between industries in terms of how they are responding to the challenge. IT professionals in historically regulated industries such as finance or pharmaceuticals are highly focused on compliance issues, as one might expect. However, other highly regulated industries such as utilities and telecommunications appear unsure of how new cross-industry regulations will affect them from an IT perspective. While 43 percent of financial organizations stated that the USA's Sarbanes-Oxley Act will impact their IT operations significantly, only one percent of utility and telecom companies felt the same.

The survey emphasizes that the burden of compliance falls on some companies much more heavily than on others. Thus, many respondents' low levels of concern over the impact of Sarbanes-Oxley is partly explained by the fact that this regulation only affects those companies doing business in the US.

Key points:

- Companies hope to obtain a range of benefits from compliance on top of meeting their obligations; there is less clarity on how these benefits will be achieved
- Lack of budget and poor communications between IT and other business functions are the biggest barriers to delivering compliance in most industries
- IT executives in financial services and pharmaceutical companies see compliance as a critical issue; in other industries, readiness for key compliance programmes such as International Accounting Standards is much lower

A COMPLIANCE TAXONOMY

The following are a sample of some of the initiatives that represent significant challenges to IT departments.

BASEL II: This framework was developed by the Bank of International Settlements (BIS) to govern risk management practices by financial institutions. It consists of three main pillars: minimum capital requirements, review of capital adequacy by an outside supervisory committee, and transparent public disclosure of capital reserve positions. For IT, Basel II requires that this information is not only stored on a rolling, three year basis, but it must be stored in one place. This is not a trivial exercise for globalized operations.

IAS: International Accounting Standards (IAS) is a set of globally recognized accounting standards and procedures relating to the presentation of financial statements by public companies. They are considered international benchmarks in accounting rules. They are set by the International Accounting Standards Board (IASB), an independent, privately funded organisation based in the UK.

SARBANES-OXLEY/LSF: The Sarbanes-Oxley (SOX) Act of 2002 establishes new standards for corporate accountability as well as penalties for corporate wrongdoing. It legislates acceptable conduct regarding the retention of records. For IT, these mean that digital transactions and communications have become part of the financial and legal underpinning required by auditors, regulators, and boards. The Loi de la Securite Financiere (LSF) is a French version of SOX that covers public companies operating in France and French territories.

ANTI MONEY LAUNDERING (AML): AML is an enterprise-wide risk monitoring process that invoked suspicious activity reporting (SAR) to prevent and report activities that try to conceal the source, ownership and location of assets obtained from criminal activity. The global war on terrorism has added national security imperatives to AML functions.

WHICH OF THE FOLLOWING ISSUES WILL HAVE THE BIGGEST IMPACT ON YOUR IT OPERATIONS IN THE NEXT THREE YEARS?

	Lower impact	Moderate impact	High impact
Sarbanes-Oxley	65%	15%	20%
Basel II	63%	16%	20%
International Accounting Standards (IAS/IFRS)	36%	27%	37%
Data privacy laws	28%	21%	52%
Anti-money laundering legislation	58%	21%	22%
Country-specific compliance	36%	30%	35%

Basel II is a challenge primarily for IT executives in the banking sector, whereas International Accounting Standards (IAS) affects all publicly listed companies in Europe. Hence the largest companies have the greatest interest in optimising IAS compliance, with 32 percent of organizations with over US$8 billion reporting that IAS has a major impact on their IT operations. An even greater area of concern involved Data Privacy legislation. Compliance with various privacy initiatives significantly impacts IT operations for over 50 percent of those surveyed.

IT executives believe compliance can be a benefit as well as a burden. For example, organizations are expecting similar, if not better, operational performance from their IT systems after completing their compliance initiatives. In total, 61 percent of respondents predict that compliance will improve the accuracy of financial reporting. Executives also believe their compliance programmes will deliver better visibility into enterprise risk (56 percent) and improved process efficiency (44 percent).

Whether these hopes are fulfilled is more doubtful. A total of 39 percent of IT executives complain that lack of budget is the key obstacle to their compliance programmes. That suggests that some

WHEN COMPLETED, HOW WILL YOUR COMPLIANCE INITIATIVES AFFECT YOUR BUSINESS IN THE FOLLOWING AREAS?

	Better	The same	Worse
Process efficiency	44%	39%	9%
Accuracy of financial reporting	61%	32%	2%
Visibility of enterprise risk	56%	33%	4%
Measurability of IT's business value	36%	43%	10%
IT Governance	50%	31%	9%
Application quality and availability	37%	40%	12%
Alignment of IT and business objectives	38%	39%	11%

IT QUALITY INITIATIVES

There is no definitive recipe for building compliant IT applications. Instead there are frameworks that purport to offer best practices. The following frameworks cover many IT environments.

CMMI: The Capability Maturity Model Integration (CMMI) framework is published and developed by the Software Engineering Institute in Pittsburgh, Pennsylvania. CMMI is best known for its five levels of "organizational maturity," where each level represents a set of best practices that organizations are expected to implement as they become better at developing software. For each maturity level, there are a number of process areas containing detailed checklists of goals and activities.

ITIL: The IT Infrastructure Library (ITIL) is a worldwide standard for IT service management. Originally developed by the UK Government, the overall goal of the ITIL is to provide organizations with a set of best practices to ensure quality as IT systems grow in scale and complexity. ITIL encompasses a range of IT functions including service support, service delivery, managerial, software support, IT operations and security management.

COBIT: COBIT, which stands for Control Objectives for Information and related Technology, is based on numerous sources ranging from ISO standards to codes of conduct issued by the Council of Europe. COBIT looks at technology projects from a business viewpoint, and provides guidance to help organizations implement effective governance over IT.

companies are not on track even to meet the basic requirements of compliance, let alone to deliver better quality IT services. (These delays are thought to be one reason why regulators recently extended deadlines for Sarbannes Oxley and IAS.) By contrast, those companies that have already invested resources in optimizing their compliance efforts can expect to be rewarded. "If they are taking a truly integrated approach to this area, they are able to calculate risks better and be more agile than before," said Sonny Sonnenstein, a director at PricewaterhouseCoopers' Governance, Risk and Compliance practice.

Complexity in the application environment

IT managers may dream of being able to outsource non-core applications, develop strategic applications internally, and have it all come together in a neat package, but the reality is messier. IT environments are becoming significantly more complex, with a heterogeneous mix of legacy, package and custom applications, all of which need to be managed across the full application lifecycle. Four out of five IT managers in the survey now have to manage a mix of three or more application environments, ranging from packaged software to customized applications and Web services.

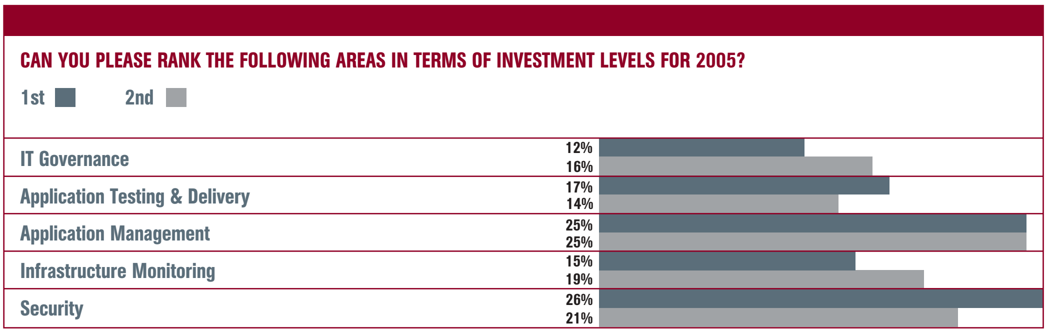
Composite applications, which are part packaged and part custom-made applications, are a particular headache: over 40 percent of companies with over US$8 billion in annual revenue say composite applications are the most difficult to manage. A total of 83 percent of survey respondents said their IT environment now includes composite applications. Companies need multiple skill sets to support these mixed application environments – one reason why many companies increasingly look outside for specialist skills.

Key points:

- The application environment is becoming more complex, creating the need for multiple technical skill sets
- IT managers believe business value depends on optimizing the full application lifecycle (application design and development, testing and ongoing management)
- 60 percent of survey participants rate application testing as the key driver of business value – yet only 37 percent of companies use automated testing procedures, with the rest using manual testing or not testing at all

“The application environment has changed substantially in the last 18-24 months,” said Murphy. “IT and business managers are dealing with Web services, or Service Oriented Architecture, that cut across business processes as well as application environments like .NET and J2EE, which allow far faster custom development. The end result is a ‘soup’ of legacy, packaged, custom and network-delivered applications.”

Increased complexity might explain why 50 percent of companies in the survey say managing applications is their first- or second-highest priority for investment in 2005. This trend is especially prevalent in the largest firms, with one-third of companies with over US$8 billion listing application management as their number one investment priority. Following close behind is security, with 23 percent of the largest organizations identifying it as the top investment priority for 2005.



WHAT APPLICATIONS ARE THE MOST DIFFICULT TO MANAGE ACROSS THE APPLICATION LIFECYCLE?

	Less difficult	Moderately difficult	More difficult	Don't know
Packaged enterprise applications (such as CRM, ERP, SCM, back office)	29%	36%	30%	6%
Customised applications such as J2EE, .NET	21%	29%	39%	10%
Composite applications (mixture of legacy, packaged and custom)	13%	25%	54%	8%
Web services	40%	31%	23%	7%

Most IT executives in the survey believe it is crucial to get things right early in the design and testing process. A total of 60 percent of survey participants rated application testing for quality and performance as an important driver of business value, just slightly ahead of application design and development at 55 percent. Given this answer, it is surprising that 37 percent of companies use no automated solutions whatsoever to test any of their applications.

Other areas rated as important for driving value included ongoing management of applications (rated by 50 percent as important) and infrastructure monitoring (rated by 48 percent as important).

The ability to deliver better-quality IT applications also depends on planning and allocating resources to projects early. Demand management for IT services continues to be a major area for future development. "IT needs to think of itself as, and then become, a service provider to other parts of the organization, which means having a centralized and strategic approach to management," says Stein Tumert, senior executive global IT for adidas-Salomon, a Mercury customer.

WHICH OF THE FOLLOWING ACTIVITIES ARE MOST IMPORTANT IN ENSURING YOUR APPLICATIONS DELIVER BUSINESS VALUE?

	Least important	Moderately important	Most important
Application design and development	16%	27%	55%
Application testing for quality and performance	17%	22%	60%
Ongoing application management	4%	34%	50%
IT Governance	21%	34%	44%
Systems management	18%	33%	47%
Infrastructure monitoring	23%	28%	48%

Optimizing IT value

Are IT managers ready to respond to the business challenges identified in the survey? And are strategies to increase the value of IT, such as business technology optimization or more robust IT governance, being implemented in practice?

The answer to both these questions is yes and no. Certainly most IT managers are strongly committed to improving the quality of IT and one way they can do this is by finding the right strategy for IT sourcing. It is encouraging to see that specialist skills and service quality issues are as important to CIOs as driving down costs in their outsourcing decisions. However, IT managers still harbour concerns over whether outsourced service providers will deliver better quality in practice. The only way to allay these fears is to introduce greater transparency and accountability into outsourcing relationships.

Managing internal IT processes also remains a significant challenge. As detailed above, application environments are becoming more complex. Companies need to access new IT skills and at the same time keep a lid on costs; clearly outsourcing can help. But there is also a need to improve the quality of IT processes, from designing IT applications through to testing them and managing them once they are deployed. The fact that most IT managers in the survey see application management as a key priority for investment bodes well for the future.

In other areas, the picture is far less rosy. Many companies' optimism over compliance will prove ill-founded unless adequate resources are made available for these crucial projects. And while issues of IT quality are well understood, far fewer companies have fully embraced strong IT governance as the means to deliver better value from technology. The survey shows that IT governance accounts for a relatively small proportion of planned IT spending for 2005, though this is likely to grow in the future.

Of course, it is difficult to manage IT value unless you can measure it. A total of 22 percent of executives see the ability to measure business value as a critical challenge for the future. If anything, the survey suggests that this is getting harder as more IT processes are passed to external service providers, and as the application environment becomes more complex. Some of the best practice and quality initiatives for managing IT will help in this respect. But until the IT department achieves the same standards of governance as other areas of the business, there will be plenty of room left for improving value.

In summary, IT departments will face a plethora of challenges in 2005. The strategic sourcing model has prompted companies to re-evaluate the role and value of IT. New regulations are forcing companies to rebuild IT processes and systems, and to seek opportunities to turn the cost of compliance into a business return. Finally, the application environment is becoming more complex, forcing companies to pursue new skills sets and new ways of managing application quality. Success in each of these areas will increasingly depend on the CIO's ability to measure and optimize the value of IT to the business.

Appendix
Survey results

The survey was designed by the Economist Intelligence Unit for Mercury and conducted by Vanson Bourne in September and October 2004. A total of 758 IT managers participated in the survey.

WHICH OF THE FOLLOWING ACTIVITIES REPRESENT THE BIGGEST CHALLENGE FOR IT MANAGEMENT IN YOUR ORGANISATION TODAY?

	1 Low priority	2	3	4	5 Critical Priority
Reducing IT costs	4%	11%	33%	32%	0%
Improving the quality of IT	1%	8%	26%	35%	29%
Obtaining specialist IT skills that are not available in house	10%	30%	33%	19%	8%
Implementing regulatory compliance programmes	10%	22%	32%	23%	13%
Measurability of IT business value	5%	11%	30%	32%	22%
Securing and protecting critical data	9%	17%	19%	26%	29%
Retaining IT staff worried about career prospects	14%	26%	27%	22%	11%

WHERE DO YOU BELIEVE IT OUTSOURCING COULD OFFER THE GREATEST BENEFIT TO YOUR BUSINESS IN THE NEXT TWO YEARS?

	1 Low priority	2	3	4	5 Critical Priority
Reducing IT costs	10%	19%	27%	26%	18%
Improving the quality of IT	9%	22%	30%	27%	13%
Obtaining specialist IT skills that are not available in house	6%	18%	27%	29%	19%
Implementing regulatory compliance programmes	16%	25%	33%	17%	10%
Measurability of IT business value	14%	21%	29%	24%	12%
Securing and protecting critical data	23%	25%	19%	17%	16%

WHAT DO YOU PERCEIVE AS THE BIGGEST OBSTACLES TO IT OUTSOURCING?

Dependency on third parties	53%
Risk of degradation in service quality	53%
Maintaining visibility of dispersed IT operations	46%
Ensuring services comply with regulations	40%
Lack of clarity on business value	37%
Security for corporate data	31%
Public opposition to offshoring of IT jobs	30%

Appendix
Survey results

WHAT, IN YOUR VIEW, ARE THE MOST IMPORTANT FACTORS IN ENSURING A SUCCESSFUL OUTSOURCING PARTNERSHIP?	
Transparency of service levels	57%
The service provider can scale to meet future requirements	55%
Prioritising the right tasks	49%
Clear, measurable business targets	47%
Skills transfer between your company and the service provider	47%
Sharing the risks and rewards with the service provider	40%

WHICH OF THE FOLLOWING ISSUES WILL HAVE THE BIGGEST IMPACT ON YOUR IT OPERATIONS IN THE NEXT THREE YEARS?

	1 no impact	2	3	4	5 Major Impact
Sarbanes-Oxley	41%	24%	15%	10%	10%
Basel II	41%	22%	16%	10%	10%
International Accounting Standards (IAS/IFRS)	20%	16%	27%	21%	16%
Data privacy laws	12%	16%	21%	24%	28%
Anti-money laundering legislation	33%	25%	21%	11%	11%
Country-specific compliance	16%	20%	30%	21%	14%

WHAT ARE THE TWO BIGGEST OBSTACLES TO ACHIEVING YOUR COMPANY'S COMPLIANCE OBJECTIVES?	
Budgetary constraints	39%
IT's lack of awareness of wider business issues relating to compliance	37%
In-house skills required to implement compliance programmes	29%
Deadlines for compliance projects	28%
IT staff not involved in decisions/planning	26%
Enforcing IT Governance	22%
Compliance of third party suppliers	17%

WHEN COMPLETED, HOW WILL YOUR COMPLIANCE INITIATIVES AFFECT YOUR BUSINESS IN THE FOLLOWING AREAS?

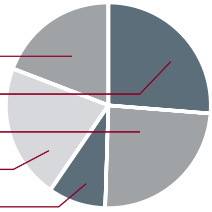
	1 Better	2 The Same	3 Worse	4 Don't Know
Process efficiency	44%	39%	9%	8%
Accuracy of financial reporting	61%	32%	2%	5%
Visibility of enterprise risk	56%	33%	4%	6%
Measurability of IT's business value	36%	43%	10%	11%
IT Governance	50%	31%	9%	11%
Application quality and availability	37%	40%	12%	11%
Alignment of IT and business objectives	38%	39%	11%	11%
Or do you believe that compliance has no effect on the business – 5%				

Appendix
Survey results

WHAT PERCENTAGE OF YOUR APPLICATION ENVIRONMENT IS MADE UP OF THE FOLLOWING?

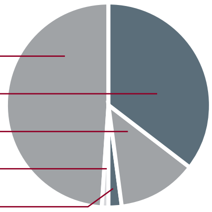
Packaged enterprise applications (such as CRM, ERP, SCM, back office)

0 – 20%	19%
21 – 40%	26%
41 – 60%	24%
61 – 80%	21%
81 – 100%	9%



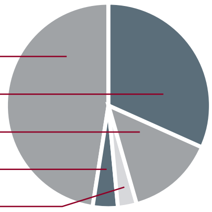
Customised applications such as J2EE, .NET

0 – 20%	47%
21 – 40%	34%
41 – 60%	12%
61 – 80%	1%
81 – 100%	2%



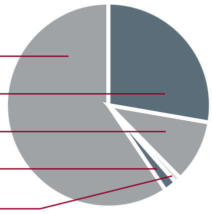
Composite applications (mixture of legacy, packaged and custom applications)

0 – 20%	48%
21 – 40%	32%
41 – 60%	14%
61 – 80%	4%
81 – 100%	3%



Web services total

0 – 20%	60%
21 – 40%	28%
41 – 60%	10%
61 – 80%	2%
81 – 100%	1%



WHAT APPLICATIONS ARE THE MOST DIFFICULT TO MANAGE ACROSS THE APPLICATION LIFECYCLE?

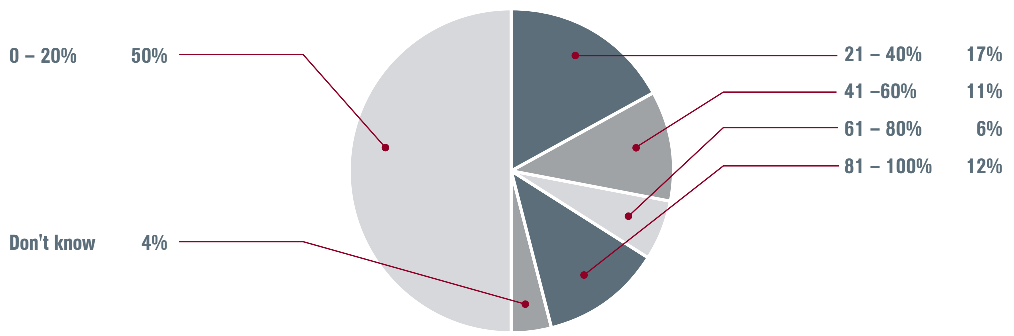
	1 Least difficult	2	3	4	5 Most difficult	Don't Know
Packaged enterprise applications (such as CRM, ERP, SCM, back office)	7%	22%	36%	20%	10%	6%
Customised applications such as J2EE, .NET	6%	15%	29%	26%	13%	10%
Composite applications (mixture of legacy, packaged and custom)	3%	10%	25%	26%	28%	8%
Web services	10%	30%	31%	18%	5%	7%

Appendix
Survey results

WHICH OF THE FOLLOWING ACTIVITIES ARE MOST IMPORTANT IN ENSURING YOUR APPLICATIONS DELIVER BUSINESS VALUE?

	1 Least important	2	3	4	5 Most important for business value	Don't Know
Application design and development	4%	12%	27%	32%	23%	2%
Application testing for quality and performance	4%	13%	22%	34%	26%	1%
Ongoing application management	1%	3%	34%	34%	16%	1%
IT Governance	3%	18%	34%	29%	15%	2%
Systems management	2%	16%	33%	31%	16%	1%
Infrastructure monitoring	5%	18%	28%	32%	16%	2%

WHAT PERCENTAGE OF NEW APPLICATIONS GOING INTO PRODUCTION DO YOU TEST USING AUTOMATED TESTING APPROACHES?



WITHIN YOUR ORGANISATION, WHICH OF THE FOLLOWING FUNCTIONS ARE THE MOST STRATEGIC?

	1 Most Strategic	2	3	4	5	6 Least Strategic	7	n/a
Finance	16%	15%	17%	14%	17%	10%	9%	2%
IT	13%	15%	21%	20%	15%	10%	3%	3%
HR	4%	7%	12%	19%	19%	17%	12%	9%
Sales	24%	18%	13%	11%	8%	6%	5%	16%
Marketing	14%	23%	16%	15%	9%	8%	3%	11%
Research & Development	14%	11%	11%	7%	7%	8%	7%	34%
Production or Operations	19%	13%	10%	9%	8%	7%	9%	25%

Appendix
Survey results

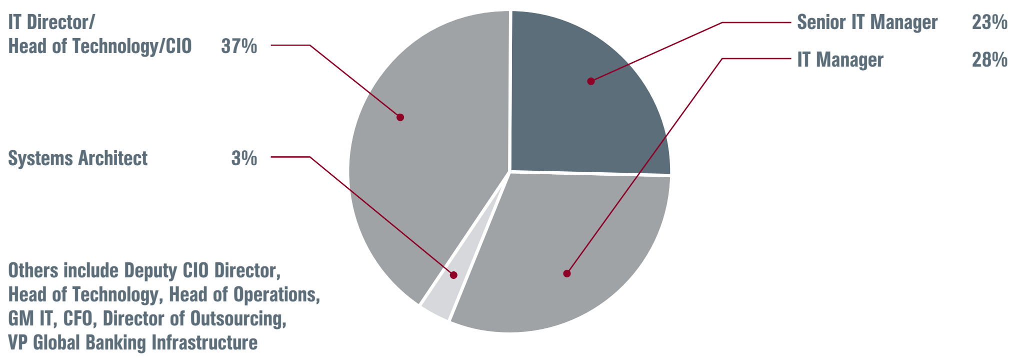
CAN YOU PLEASE RANK THE FOLLOWING AREAS IN TERMS OF INVESTMENT LEVELS FOR 2005?

	1st	2nd	3rd	4th	5th	Don't Know
IT Governance	12%	16%	17%	20%	27%	8%
Application Testing & Delivery	17%	14%	17%	19%	25%	8%
Application Management	25%	25%	19%	14%	10%	7%
Infrastructure Monitoring	15%	19%	21%	20%	17%	8%
Security	26%	21%	21%	16%	9%	7%

WHERE IS YOUR COMPANY BASED?

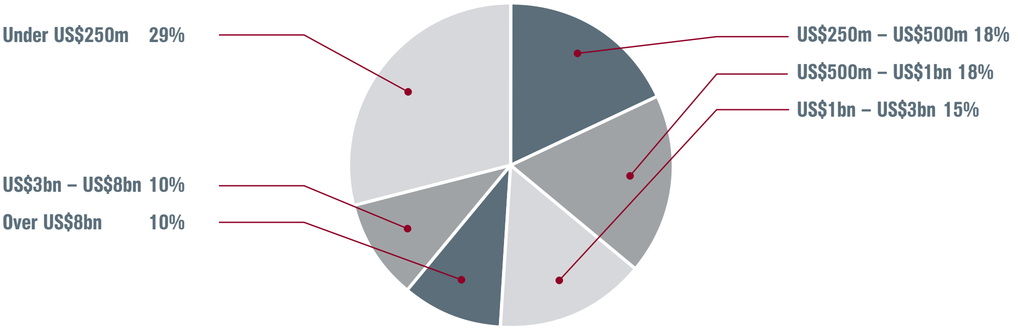
Australia	50	Finland	30
China	51	France	50
India	55	Germany	50
Japan	50	Israel	30
Korea	51	Italy	30
Singapore	51	Norway	30
Austria/Switzerland	30	Spain	30
Belgium/Netherlands	30	Sweden	30
Czech Republic	30	United Kingdom	50
Denmark	30		

WHICH OF THE FOLLOWING JOB TITLES BEST DESCRIBES YOUR JOB?



Appendix
Survey results

WHAT IS YOUR COMPANY'S ANNUAL TURNOVER?



WHAT IS YOUR COMPANY'S AREA OF BUSINESS?

Finance	15%
Manufacturing	20%
Retail, Distribution or Transport	19%
Utilities or Telecoms	11%
Business Services	10%
Pharmaceuticals & Chemicals	10%
Technology	9%

PERCENTAGE OF CAPITAL EXPENDITURE SPENT ON IT