

## WHITE PAPER

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# Is Your Company at Risk? Preparing a Strategy for Information Management

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## IDC OPINION

Each year, IDC publishes a forecast of the growth of the digital universe, generally defined as the sum of all the bits and bytes of information created, captured or replicated in digital form on the planet. Despite the global recession beginning in late 2008, the most recent study shows that the volume of information passed over the Internet, phone networks, and airwaves actually picked up during this economically challenging time. The amount of information created in 2008 came in ahead of what IDC forecast last year by 16 petabytes, or 3%.

This is a problem. While digital content and information creation is up, IT budgets are down. IDC forecasts that worldwide spending on servers and storage, where the heavy lifting of information management and storage takes place, will be down 6% in 2009. In fact, over the next four years, while the digital universe grows by a factor of almost five, total IT budgets worldwide will only grow by a factor of 1.2, and IT staff by a factor of 1.1.

Traditionally, companies have looked at their corporate information management requirements in a siloed manner without a formal strategy for managing all of their company's data and information. Solutions have typically been implemented in a piecemeal fashion, and IT executives have been forced to spend an inordinate amount of time trying to integrate and maintain these disparate systems.

The absence of a comprehensive information management and infrastructure strategy creates a long list of challenges for the business. First, and most damaging, companies are at risk for introducing inefficiencies and waste into the organization. As a matter of fact, according to a recent IDC study, up to 13 hours per work week per employee is spent on non-productive activities resulting from working with company information, such as:

- Unsuccessful searches for information
- Re-creating content that cannot be found
- Re-publishing content to multiple applications/repositories
- Unraveling information/document version control issues
- Translating from one language to another

Second, new inefficiencies in the IT department are beginning to appear. Precious time and resources are spent trying to maintain, integrate, store, and secure information across all of these disconnected systems and repositories. New security issues will emerge as remote employees continue to access and use company information outside the firewall. And, as IT departments become less efficient, individual departments become impatient and begin to deploy their own software and services. A vicious cycle of inefficiency is born.

Lastly, greater frustration occurs at the front line of the business – where information is needed most – as employees find it difficult to navigate through the labyrinth of systems, applications and repositories to find the information they need to do their jobs.

Given this explosion of information generated from both consumers as well as the enterprise, executives in all industries will need to relook at their strategy to managing corporate information, holistically. And, it is not just a challenge for the IT department either. Department, line of business (LoB), and senior executives will need to assess how better information management can create efficiencies in business processes and workflows, improve customer service, and decrease risk in the operation.

## **SURVEY METHODOLOGY**

IDC collected information via phone, email, and face-to-face interviews from IT executives in 405 companies, across the five nations of India, Malaysia, Philippines, Singapore, and Thailand (see Figure 1).

The goal of the study was to explore how companies are coping with the increase in information created in the enterprise, what strategic objectives that companies are undertaking in the near term, the business challenges that they are facing, and how these will impact information creation and information use in the enterprise.

The study also explored how IT departments are coping with this information explosion, and specifically how IT budgets are being allocated to manage all of this corporate data.

Lastly, the study aimed to better define strategies for information management and infrastructure. These particular countries were chosen because of their unique characteristics of encompassing a collection of emerging markets with a developing appetite for IT investments, while at the same time being traditionally conservative in IT expenditures.

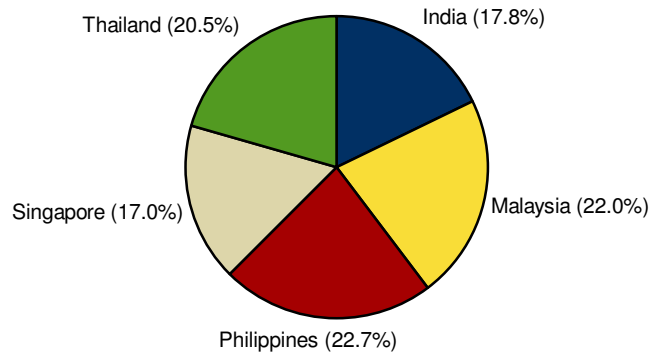
### ***Study Demographics***

Data collection for this study was completed in June 2009. This time period was selected as the effects of the economic downturn had well filtered through to companies' IT investment plans, and government stimulus announcements had been made.

All companies had between 200 and 999 employees and were located in India, Malaysia, Philippines, Singapore, or Thailand.

**FIGURE 1**

Respondent Distribution by Country



n = 405

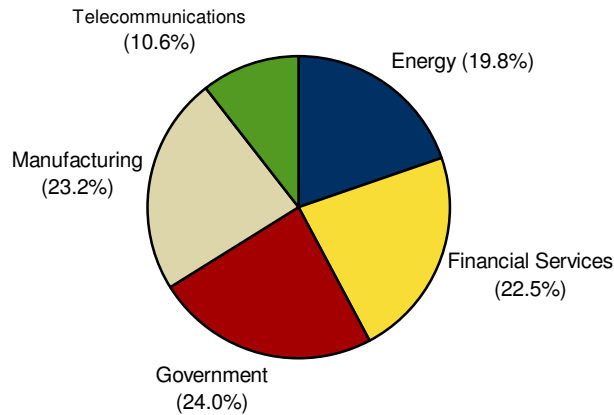
Source: IDC Industry Information Infrastructure Survey, 2009

The survey also concentrated on companies in five different industries: financial services (banking, financial markets, insurance), manufacturing (discrete and process), government (public sector, education), telecommunications (telecommunications and Web hosting companies), and energy (oil & gas and utilities).

Survey respondents were primarily IT executives, with the title or designation of "IT Manager" and above, and all must either influence or make IT purchasing decisions for their organization.

**FIGURE 2**

**Respondent Distribution by Industry**



n = 405

Source: IDC Industry Information Infrastructure Survey, 2009

**THREE GAPS IN CORPORATE STRATEGIES FOR INFORMATION MANAGEMENT**

The survey identified three areas where gaps or blind-spots exist in corporate information management strategies. These areas include:

- Data security
- Storage, backup, and recovery
- Disaster recovery and business continuity

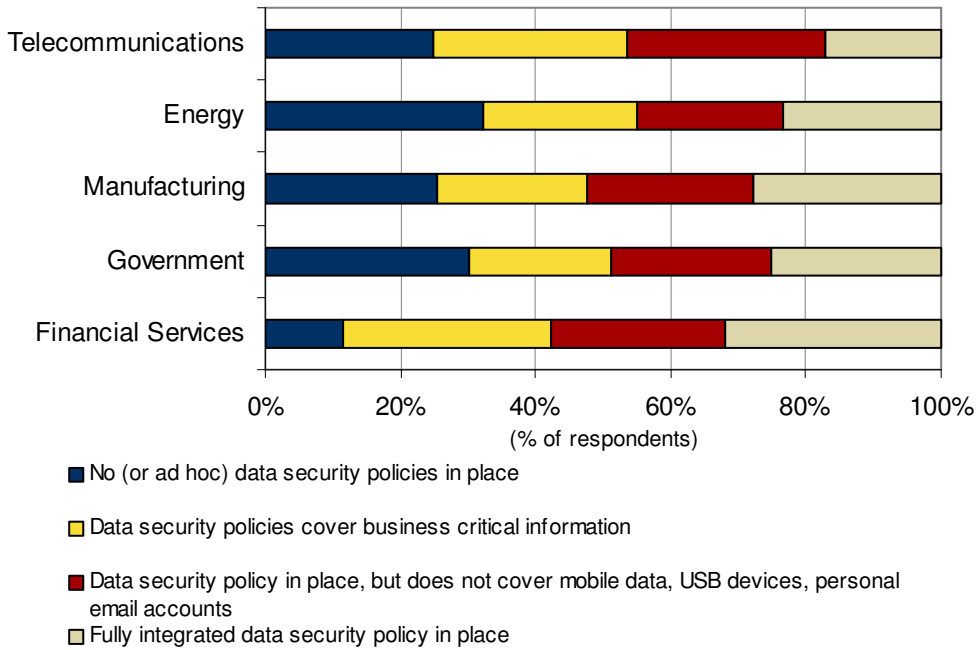
***Data Security: Missing from Information Strategies***

Data security can be defined as the management of data, from creation to disposal, from the perspective of backup and recovery, access control and rights management. In our survey, one of the more sobering findings was the state of readiness of the enterprise for securing company and customer information.

Sadly, 22% of the survey respondents confided that they either had no data security policies or distributed/ad hoc data security policies in place. As few as 23% of the companies surveyed had policies in place just covering business critical information. Clearly, these businesses have some room for improvement in securing and protecting the vital information of their enterprise.

**FIGURE 3**

Rate your organization's data security policies



n = 405

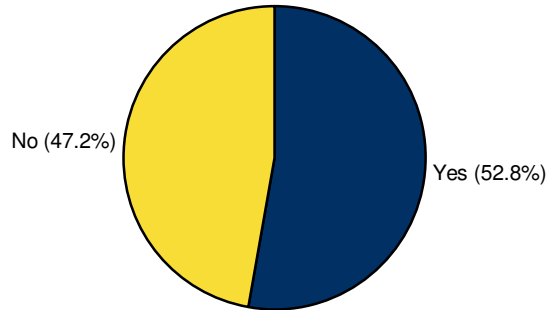
Source: IDC Industry Information Infrastructure Survey, 2009

***Storage, Backup and Recovery Policies Are Inconsistent***

The study also highlighted inconsistent policies with regard to storage, backup and recovery in the region. While many companies back up information on servers, nearly half (47%) of those IT executives surveyed had no solutions in place to store or back up company information located on employee laptop and desktop PCs (see Figure 4). This is a major accident waiting to happen for many companies, particularly with the trend of desktop PCs being replaced by laptops PCs and the increasing trend for mobile or remote employees.

**FIGURE 4**

Does your organization have solutions in place to back up data on PCs (notebook/desktops)?



n = 405

Source: IDC Industry Information Infrastructure Survey, 2009

***Disaster Recovery: Your Company at Risk***

Often, we think of natural disasters when thinking about disaster recovery. However, for corporate information, disasters can also include accidental deletion of data by staff, internal misuse of data by employees, or insufficient data recovery times.

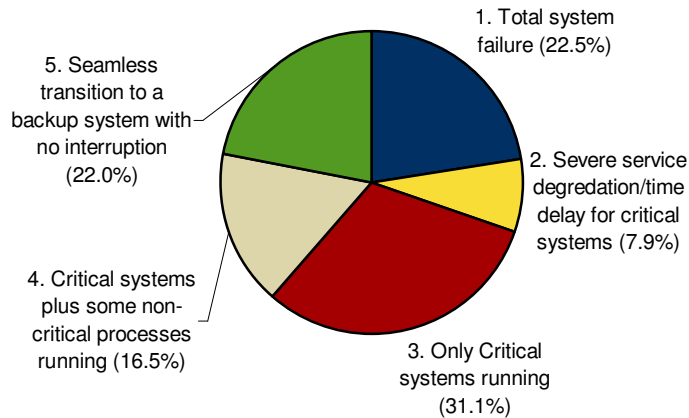
When asked how well the organization could cope with a major disaster, about one-third of executives said their company would experience total IT system failure or a severe degradation in service. Only about 22% of executives felt they had systems in place to provide a seamless transition to a backup IT system that would have little impact on customer service levels (see Figure 5).

In this era of increased frequency of natural disasters, political instability, and other man-made disruptions, businesses cannot afford to not have disaster recovery solutions in place. In fact, with so few firms implementing such solutions, companies can use a disaster recovery solution as a competitive advantage. Partners, suppliers, OEMs, distributors, and certainly customers in all industries would value doing business with a firm that can ensure business continuity versus one playing Russian Roulette.

**FIGURE 5**

**Assessment on organizations coping with a major disaster**

*Q. How well do you think your organization could cope with a major disaster? Please use the following scale of 1 – 5, where 1 is the worst scenario and 5 is the best scenario.*



n = 405

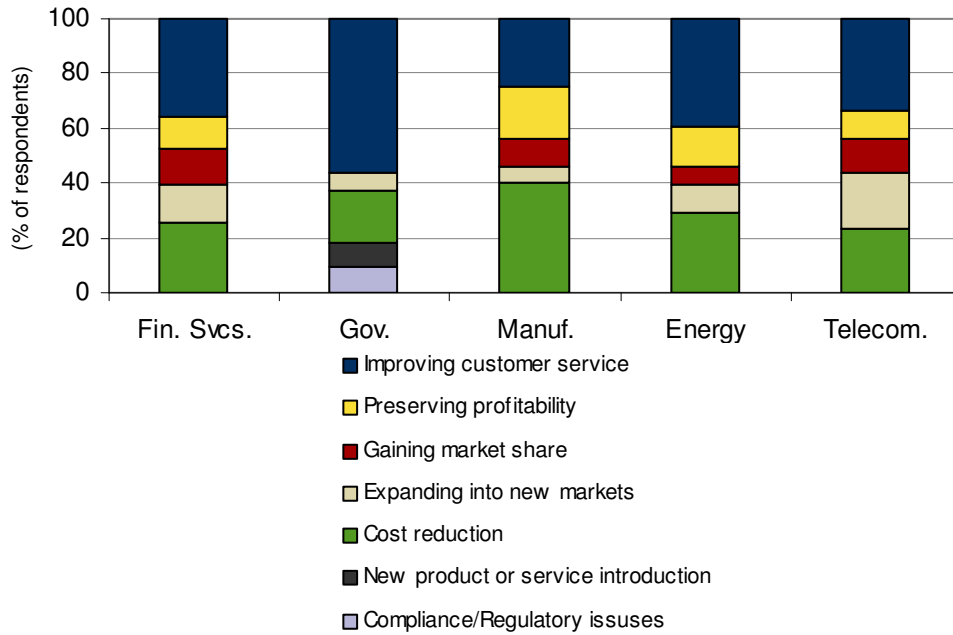
Source: IDC Industry Information Infrastructure Survey, 2009

**Business Challenges and Priorities Driving Information Strategies**

According to the 405 respondents of our survey, three key business challenges emerged that are impacting strategies for management of information growth in the enterprise. Although they will have different flavors in each industry, these business challenges (or drivers) can be generally categorized as:

- ☒ **Improving customer service.** Companies are generally seeing customer service as a competitive advantage and product differentiator, as well as a major challenge to the business.
- ☒ **Decreasing costs.** In the face of decreased demand on the international export market, companies are looking for ways to keep costs low in preparation for the economic upturn.
- ☒ **Expanding into new markets/gaining market share.** Despite the generally depressed economic market sentiment, companies are challenged to move into markets outside of their home territory as well as take market share from competitors.

Let us take a look at each industry, to see how these three drivers emerge and what specific business issues are impacting information use in the enterprise.

**FIGURE 6****Top Five Business Challenges in the Next 6 Months**

n = 405

Source: IDC Industry Information Infrastructure Survey, 2009

***Financial Services Business Drivers***

Customer-centricity features quite prominently as a focus of the financial services segment. According to the survey results, as seen in Figure 6, improving customer service was the most frequently mentioned business objective for banks in the next six months. Clearly, banks continue to get closer to their customers by increasing the number of branches and ATMs, improving online banking services, and creating new products tailored to niche customer demographics.

Cost management has quickly risen to the top of the agenda among banks across the entire Asia/Pacific region, and was the second most mentioned business objective in the next six months in our survey. We see this in their intentions to closely scrutinize where technology investments are being made and to more thoroughly define the intended benefits of IT projects.

***Manufacturing Business Drivers***

In the recent global recession, almost every manufacturer cut down on their revenue projections, with automotive and electronics being particularly hard hit. Cost management will become a major mantra for the next 12 months for manufacturers in Asia. In our survey, cost reduction was the most cited challenge to the manufacturers' business in the near term.

Recent research from IDC Manufacturing Insights shows that the CIO is facing a paradox — he has to reduce his costs, while delivering more and more strategic applications to support the business. This means that CIOs have no choice but to focus on IT investments on a need-to-have basis. The typical approach to justify an IT investment will be based on total cost of ownership (TCO) in the medium term over the next two to three years, rather than return on investment (ROI).

### ***Government Business Drivers***

The weakening global economy will continue to constrain public sector budgets, even as governments are seen as a lender of last resort to stimulate their national economies. Government organizations should expect all investments, including IT, to be scrutinized for their ability to optimize cost effectiveness (particularly in economic stimulus programs) and to enhance service delivery to citizens.

Despite this focus on budgets, improving service to the citizen was the most frequently cited challenge to governmental organizations in the near term in our survey. These imperatives have IT executives in the public sector examining solutions in business-like management technologies, such as comprehensive dashboards and advanced modeling and planning tools. Such information-intensive solutions will help government agencies take historical, current and predictive views of their operations and to leverage data mining, analysis, reporting, and integration features to enhance back-office processes and service delivery. Managing this flow of information will require a robust information infrastructure at all levels of government.

### ***Telecommunications Business Drivers***

Telecom carriers have never been renowned for demonstrating a high level of customer service because of the legacy monopolistic nature of the industry. As such, it is not surprising that improvements to customer service was the most frequently cited challenge to the business in the near term in our survey. There is now a belief that with improved customer stickiness, telecom carriers can understand their customers better and grow their wallet share accordingly.

To accomplish this, telecom carriers will need to further segment their customer information to create products and services targeted at specific demographic groups. In addition, customers used to the 24/7 nature of the telecom industry will come to expect the same levels of service for all products offered. This will require a strong information management and infrastructure strategy for telecom carriers.

### ***Energy Business Drivers***

Utilities will increase their investments in technologies that enable energy efficiency programs including intelligent grid components (e.g., sensors and communications networks), smart metering, home area networks, in-home displays, smart thermostats, and consumer Web portals. Additional investments will need to be made in back-office systems as well, including customer relationship management (CRM), billing, business intelligence and meter data management. All of this activity is meant to improve customer service levels, which was the most cited challenge to the industry in the near term.

Utility and oil & gas companies will look to IT to provide analytics, such as complex simulations with cost of carbon as one of the parameters, to test changes to their portfolio of assets. Additionally companies will look to analytics to help increase the efficiency of plant operations in an effort to grab some emissions reductions. These initiatives validate our survey findings that decreasing cost and creating efficiencies was the second most cited challenge to the business in the near term.

## DEFINING AN INFORMATION-CENTRIC INFRASTRUCTURE

It is clear that most organizations do not have a specific strategy in place to holistically manage the firm's most valuable asset — information. Further, it is quite difficult to define a one-size-fits-all information management strategy that would be applicable to all companies in all industries. However, we can look at the places where companies are investing in specific types of information-related IT solutions to see how they are dealing with the information explosion.

We asked 405 IT executives to disclose the percentage of their overall IT budget that is allocated to technologies (hardware, software, and services) used in four key areas primarily associated with information creation and management:

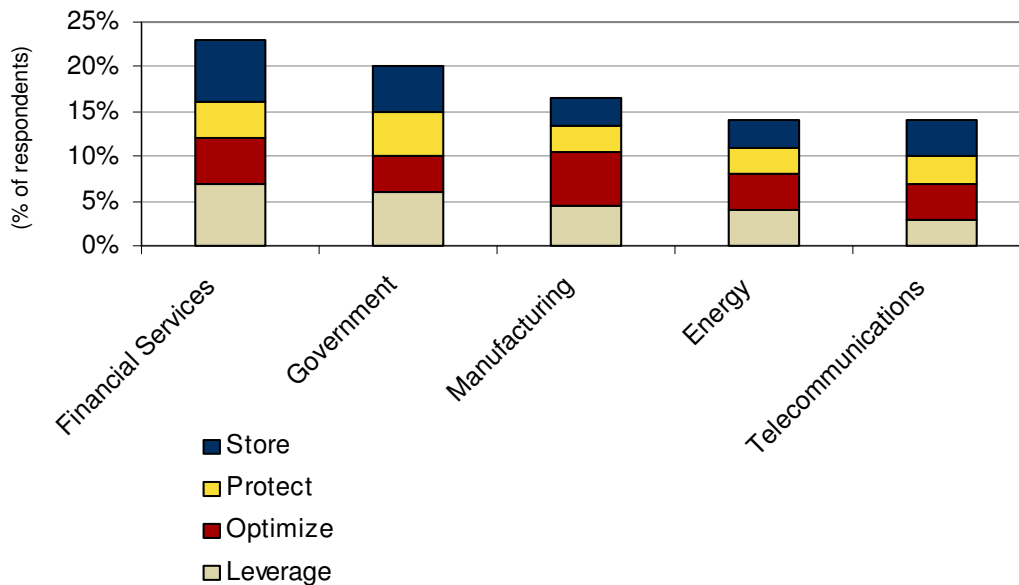
- ☒ **Storage.** Technologies used for storage and archival of information. This category commonly includes solutions with solid state drives (SSD), storage area networks (SAN), and network available storage (NAS).
- ☒ **Protection.** Technologies used for security and availability of information. For example, data replication solutions and data level security applications are commonly utilized in this area. These types of solutions replicate sets of information, usually in real time, across multiple, physically remote locations for disaster recovery situations, remote office data consolidation for consolidated backups, and protection from data loss after any power or service outages.
- ☒ **Optimization.** Technologies used for virtualization and resource management that manage the physical storage of information. Often, features of these solutions include the ability to manage and monitor large, complex physical and virtual infrastructures. Particularly, these solutions focus on content/data archival and storage, as well as solutions to optimize LAN/WAN performance when moving large volumes of data over a network.
- ☒ **Leverage.** Technologies used for information management, content management, and search. These applications are used to manage and create content so that it can be indexed, searched, and easily retrieved. Often, these solutions will also incorporate work flows and business process rules to automate these processes, particularly so teams can work collaboratively using the same document or set of information. Advanced systems can manage content of any type, whether it is data in spreadsheets, documents, email, pictures, video or audio files.

Key survey findings include (see Figure 7):

- ☒ As an overall percentage, companies only allocate between 14% and 23% of total IT budgets for information infrastructure related investments, including expenses from hardware, software, and services.
- ☒ Financial services firms allocate almost 23% of IT budgets toward solutions across the four information infrastructure areas, the highest percentage of the five industries surveyed.
- ☒ Government organizations generally allocated about 20% of IT budgets toward information infrastructure solutions, while manufacturers in the region averaged 17%. Energy and telecommunications firms averaged 14%, respectively.

**FIGURE 7**

Percentage of IT Budgets Allocated to Information Infrastructure Components



n = 405

Source: IDC Industry Information Infrastructure Survey, 2009

It is important to note that this is a measure of the percentage of the total IT budget allocated to information infrastructure related solutions, and not a measurement of the dollar value of the allocation. In other words, although energy and telecommunications firms had the lowest percentage of information infrastructure budget allocations, they may have high dollar values as their total IT budgets may be larger than other industries.

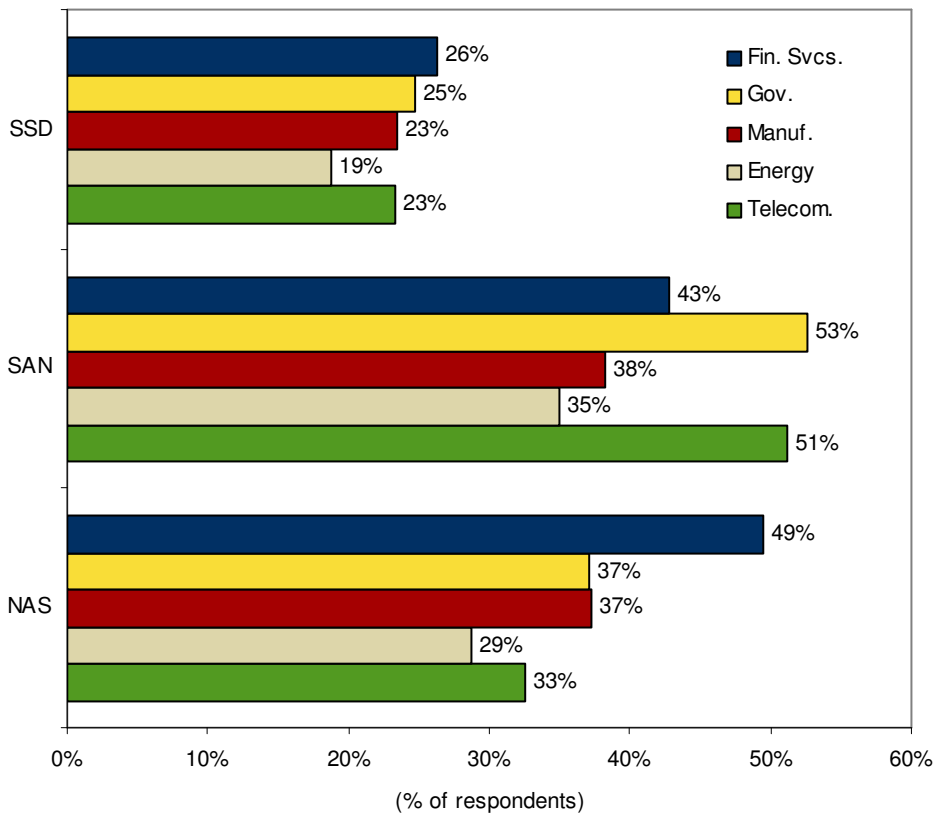
## Information Infrastructure: Store

We used to think 100 megabytes of storage was more than we would ever need. Then it was a gigabyte. Now, it seems that a terabyte of storage will not be enough to satiate our storage requirements. The survey results show governments, financial services firms, and telecommunications companies leading in the adoption of these storage-related solutions (see Figure 8). These three industry categories are also leading in server consolidation and virtualization initiatives, so it is not surprising that there are higher levels of activity in these types of businesses.

It is also notable that investments in SSD remain lower than other categories of storage. While true at the moment, we anticipate that investments in SSD will increase over time. In addition to being lighter and smaller, SSD also runs cooler and more efficiently than HDD solutions, making it more suitable for highly mobile use cases.

**FIGURE 8**

### Respondents Using Technology to Store Information



n = 405

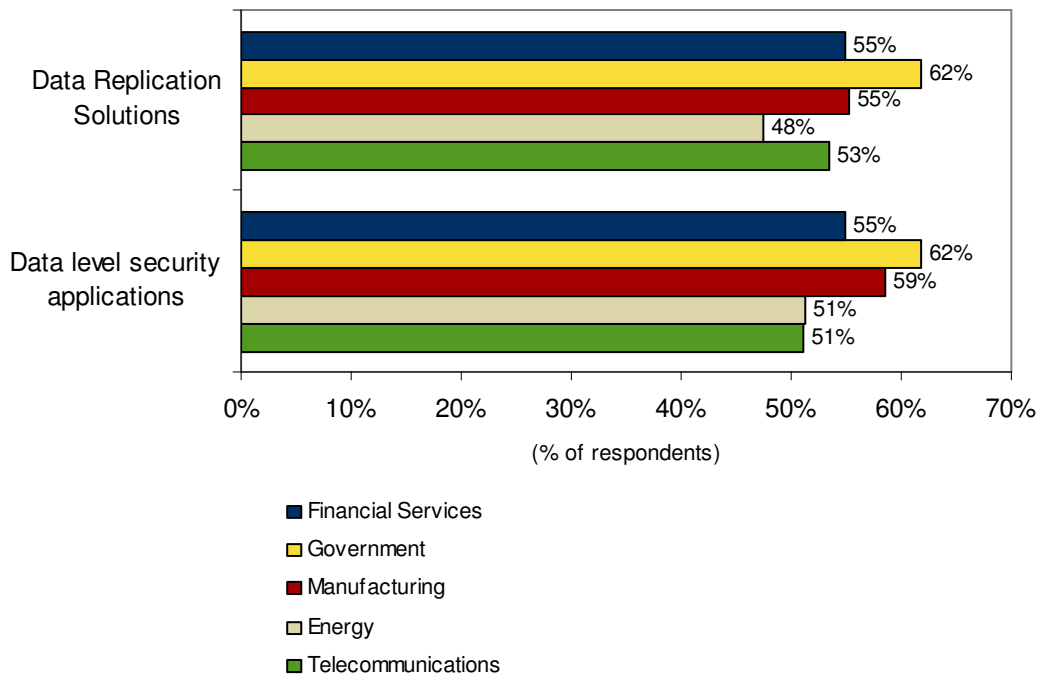
Source: IDC Industry Information Infrastructure Survey, 2009

## Information Infrastructure: Protect

The survey results show that over half of the companies in all five industry segments are adopting technologies for data protection. Specifically, governments are heavily turning to these solutions as they inherently need to protect data and be prepared for the continuity of citizen service in the event of a national disaster. Companies in the financial services and manufacturing segments are also adopting these technologies as financial services firms are often working in a 24/7 global environment and manufacturers are designing products in one location, manufacturing them in other, with suppliers spread out around the world. However, we find that many industries only have partial information protection strategies in place. Despite the strong levels of adoption, as seen from Figure 9, many firms data are not completely protected.

**FIGURE 9**

Respondents Using Technology to Protect Information



n = 405

Source: IDC Industry Information Infrastructure Survey, 2009

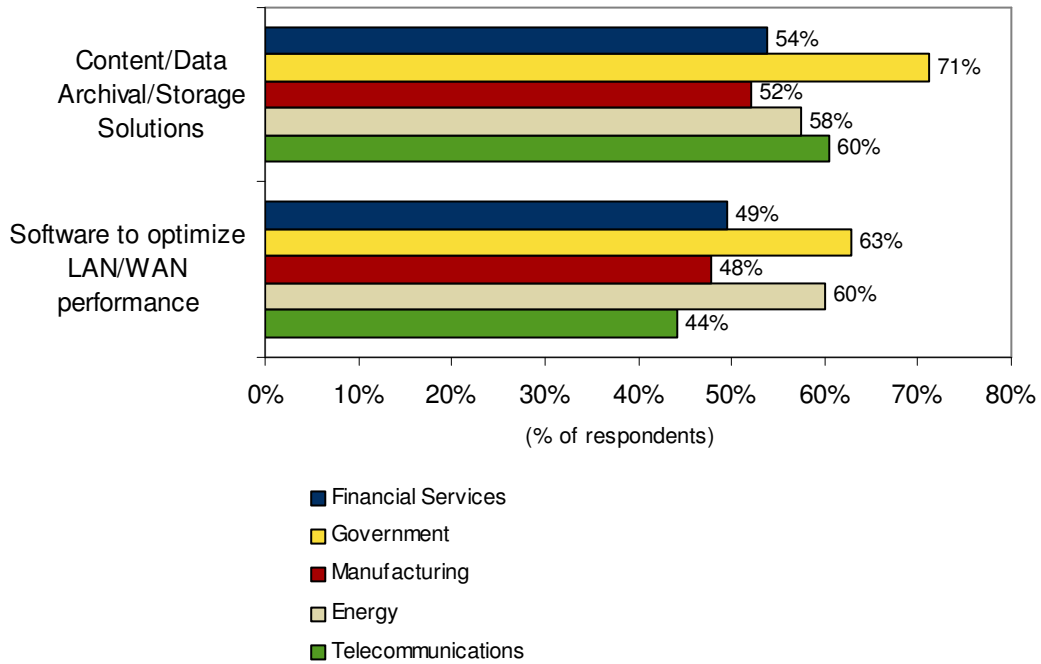
## Information Infrastructure: Optimize

According to the survey data, the largest users of these solutions are in the government, which includes public education, healthcare, as well as federal and local governments. As governments collect more and more information, and as they begin to share large volumes of information across ministries and agencies, the ability to archive and retrieve stored information quickly across networks is paramount. We also see governments increasingly sharing large amounts of data between

themselves. Manufacturers, on the other hand, are seen to be lagging other industries in this area, as seen in Figure 10.

**FIGURE 10**

Respondents Using Technology to Optimize Information



n = 405

Source: IDC Industry Information Infrastructure Survey, 2009

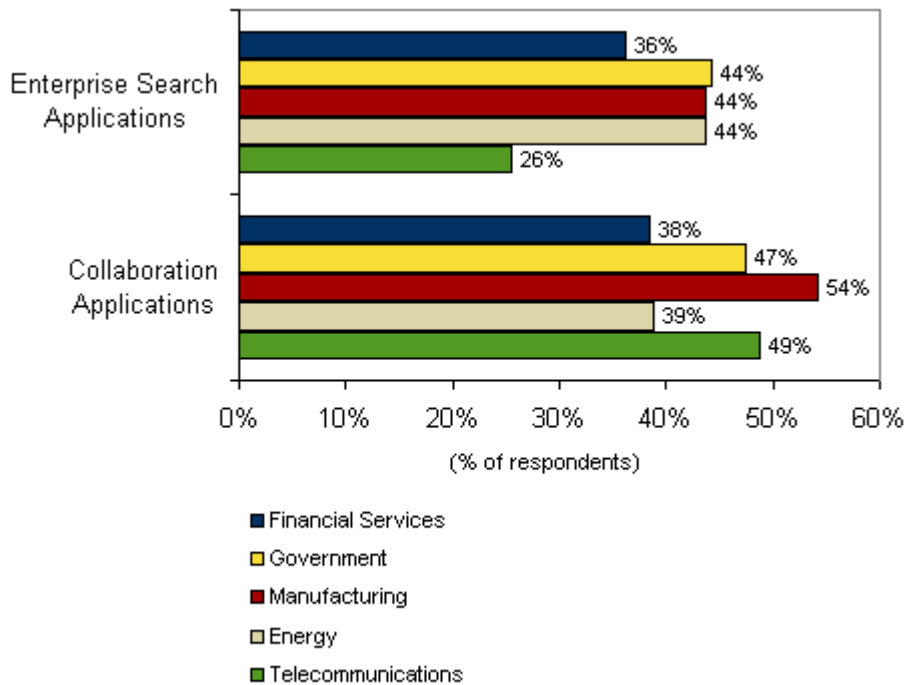
**Information Infrastructure: Leverage**

The survey asked IT executives if they were adopting specific types of solutions to search for information, or for collaboration purposes. Although adoption varies by industry, the majority of firms interviewed are incorporating these types of solutions into their organizations.

Not surprisingly, manufacturers have the highest adoption of technologies in the Leverage component, as seen in Figure 11. This is being driven largely by the need to share and collaborate on information between manufacturing processes (research and development to the shop floor) or between steps in the supply chain (from component manufacturer to OEM). Searching and managing information on CAD/CAM designs, product specifications, and shipping information all contribute to information being generated by the manufacturing sector for the Leverage component.

**FIGURE 11**

**Respondents Using Technology to Leverage Information**



n = 405

Source: IDC Industry Information Infrastructure Survey, 2009

## **AN ANALYSIS OF INFORMATION INFRASTRUCTURE USE BY COUNTRY**

In addition to examining information infrastructure investment trends by different types of industries, an analysis by the individual five countries of India, Malaysia, the Philippines, Singapore, and Thailand also provides some interesting observations (see Figure 12).

Across the five countries, as a percentage of total IT budget, companies in Singapore allocate the smallest percentage of IT budgets toward information infrastructure components (about 14%), while companies in the Philippines allocate the most (about 22%). At first glance, these results are surprising, as companies in more mature markets such as Singapore, would be expected to spend a lot on information-related technologies. However, two factors could explain the results of this particular trend:

- ☒ The data measures the percentage of total IT budget, not total monetary value. In other words, companies in more mature markets are most likely to have larger IT budgets and invest in a wider array of IT products and services than less mature countries. Therefore, the portion of the overall budget allocated to information infrastructure is less.

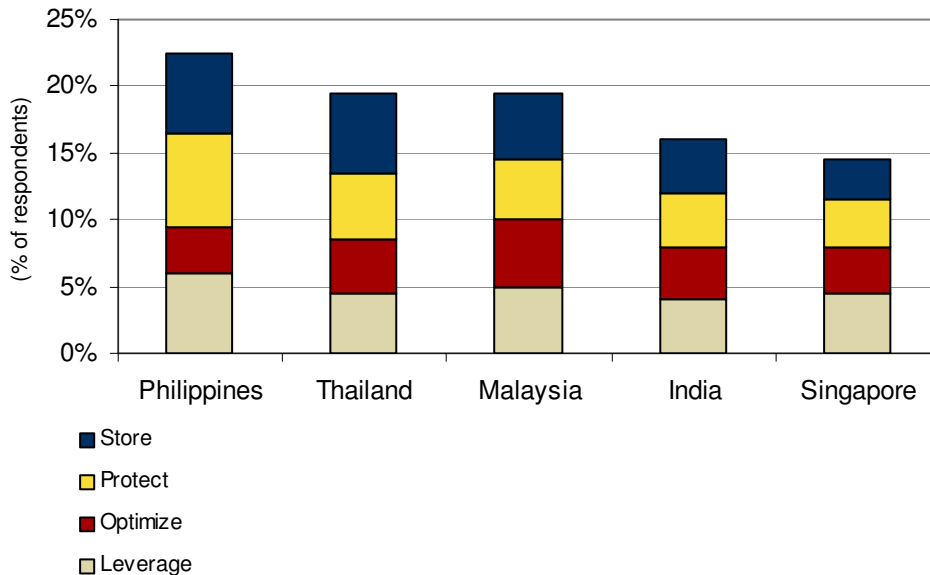
- ☒ In the emerging markets such as the Philippines and Thailand, IT budgets are allocated towards classic IT infrastructure elements such as servers, storage and networking. Applications such as business intelligence, data mining, and disaster recovery/business continuity could be seen as more of a luxury or cutting-edge technology, and therefore less budget has been allocated to those types of solutions.

Although there is no single, universally correct percentage of budget that should be allocated towards information management and infrastructure related solutions, we expect these percentages to increase year over year for the following reasons:

- ☒ Pricing for certain types of IT products like PCs and servers will continue to come under pressure, thus requiring less of the overall IT budget expenditure as other categories of spend rise.
- ☒ Business drivers, such as increasingly complex compliance and regulatory requirements, as well as globalization and new market entry, will require new IT solutions and expenditure to manage corporate information.
- ☒ As enterprises move from transaction- to information-based platforms, the need to unify and access multiple information silos and enable analysis across formats and repositories will require new solutions and budgetary expenditure.

**FIGURE 12**

Percentage of IT Budgets Allocated to Information Infrastructure Components - By Country



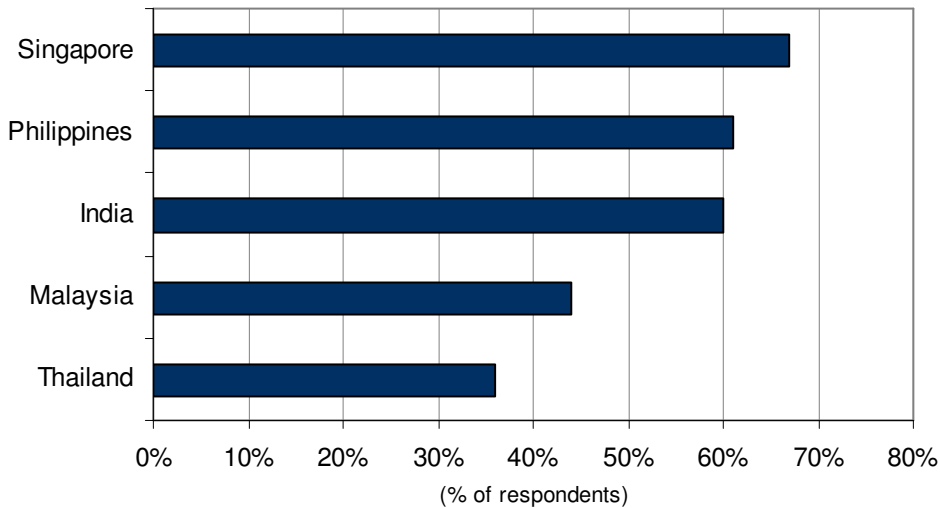
n = 405

Source: IDC Industry Information Infrastructure Survey, 2009

The survey results also compared the countries' adoption of solutions for data backup and recovery, specifically on laptops and desktops. The results were interesting: India and Singapore are seen to be leading in the adoption of these solutions, with nearly 60% of firms mentioning they had such solutions in place. Companies in Thailand and Malaysia are lagging others in the region in the use of such solutions (see Figure 13).

**FIGURE 13**

Does your organization have solutions in place to back up data on PCs (notebook/desktops)?



n = 405

Source: IDC Industry Information Infrastructure Survey, 2009

Let us now take a country-by-country look at the business challenges and IT priorities most commonly mentioned by survey respondents.

## India

India has the fourth highest level of investment in IT products and services in the Asia/Pacific region after Japan, China and Australia. However, the growth rate of India's spending on IT products and services, one of the highest in the region, is forecast to grow at an average of 13% over the next five years. This fast growth presents both opportunities and challenges to the IT executive in India who has to balance the growth of the businesses along with the growth of the support and services expected from the IT department.

### Short- and Medium-Term Business Challenges in India

IT executives in India felt that, over the next six months, improvement in customer service posed one of the biggest challenges. As a matter of fact, Indian IT executives mentioned customer service improvements as a key challenge to their business more frequently compared to their counterparts in the other countries surveyed. This is surprising, as we expect that the depressed economy would create more challenges

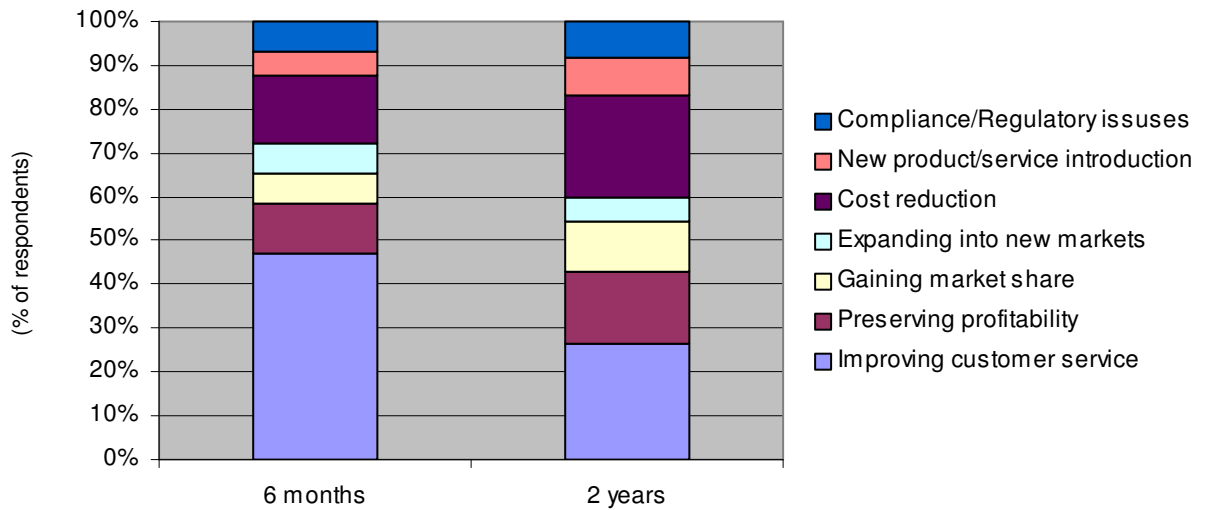
associated with managing costs in the short term, which was the second most mentioned business challenge.

In the medium term (next two years), we see India's companies continuing to worry about customer service; however, attention will focus more on cost reduction and maintaining profitability (see Figure 14).

**FIGURE 14**

**Business Challenges - India**

*Q. Which of the following do you think will pose the biggest challenge to your business - next 6 months and two years?*



n = 405

Source: Source: IDC Industry Information Infrastructure Survey, 2009

**IT Priorities in India**

India's business challenges, mentioned earlier, will drive investment of information infrastructure related technologies. However, so will the priorities of the CIO and the IT department. IT executives participating in the survey indicated that they will, on the one hand, look to streamline and consolidate the number of applications that are in use, and, on the one hand, continue to deploy strategically focused applications. Controlling costs of the IT organization was also frequently mentioned.

In Table 1, we list the top five most frequently mentioned IT priorities by IT executives in India. We have also listed the most likely technology component that can be used by IT executives to achieve their goals.

**TABLE 1****Top 5 IT Priorities – India**

Rank	IT Priority	Technology Component
1	Consolidating or streamlining of applications	Optimize
2	Deploying new strategic applications	Leverage, Optimize
3	Cutting or controlling costs	Optimize, Store
4	Reducing IT headcount	Optimize, Store, Leverage
5	Improving robustness of IT infrastructure	Protect, Store
n =	72	

Source: IDC Industry Information Infrastructure Survey, 2009

**Malaysia**

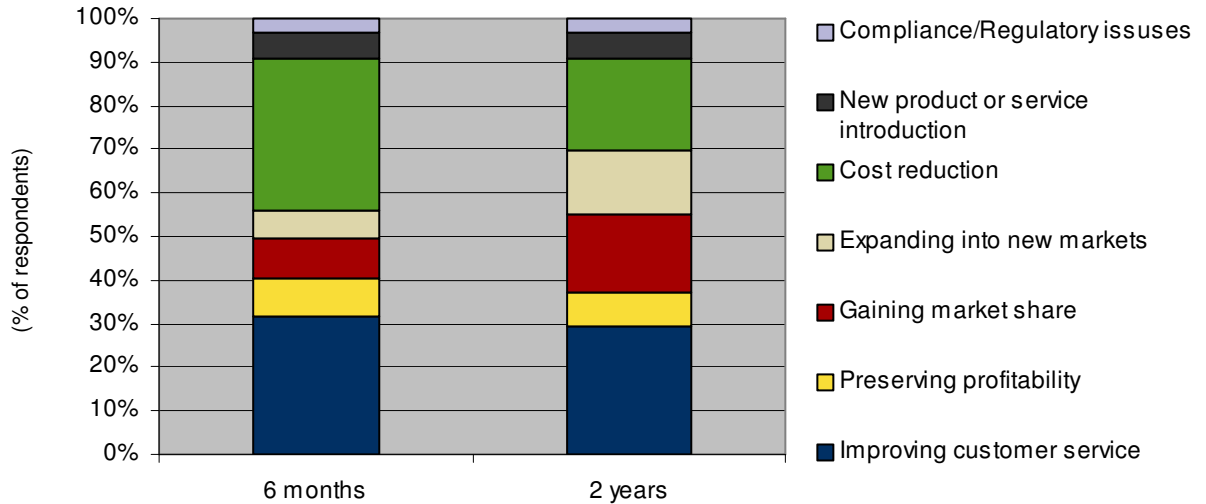
Malaysia's export-driven economy has been particularly sensitive to the global economic crisis. Despite the downturn, expectations are that the nation's economy will begin to recover in mid-2010, returning to a pre-crisis level in 2011. As such, survey respondents listed cost reduction as the biggest challenge to their business in the near term. Right-sizing the business for a slower economy will continue to challenge executives for the next six months.

In the medium term, once the economy is no longer a concern, executives believe that customer service improvements will be the biggest challenge to the business. Executives in Malaysia expect a more optimistic business environment and thus anticipate more challenges associated with expansion and growth (see Figure 15).

**FIGURE 15**

**Business Challenges - Malaysia**

Q. Which of the following do you think will pose the biggest challenge to your business - next 6 months and two years?



n = 89

Source: IDC Industry Information Infrastructure Survey, 2009

**IT Priorities in Malaysia**

In addition to being a top challenge to the business in the near term, cost control is also the top priority of the IT department of Malaysian companies. According to another recent survey from IDC, although IT executives will look to purchase fewer IT products and services, they will also look to deploy IT products and services in new and innovative ways. This explains the second-rated priority of deploying new strategic applications. Executives will want to maintain budgets but use technology to deliver more value to the business, as seen in Table 2.

**TABLE 2**

## Top 5 IT Priorities - Malaysia

Rank	IT Priority	Technology Component
1	Cutting or controlling costs	Optimize, Store
2	Deploying new strategic applications	Leverage, Optimize
3	Consolidating or streamlining of applications	Optimize
4	Consolidating or streamlining of hardware	Store, Optimize
5	Outsourcing IT	Leverage, Protect
n =	89	

Source: IDC Industry Information Infrastructure Survey, 2009

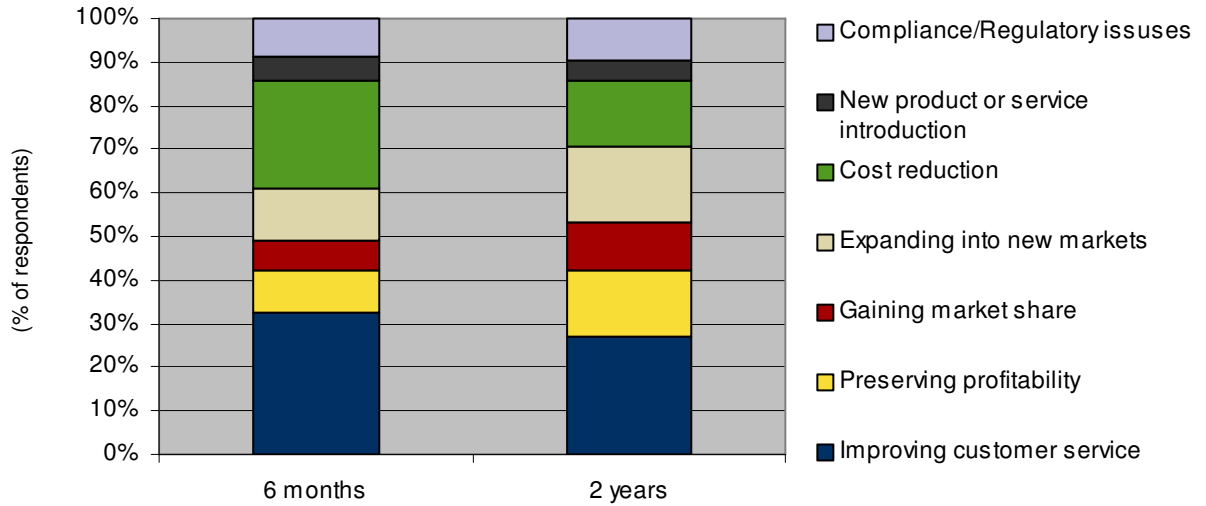
**Philippines**

Despite being one of the smaller Asia/Pacific countries in terms of total IT expenditure, the Philippines has one of the higher growth rates of IT spending in the region. Executives are increasingly turning towards IT to solve key challenges to the business as the domestic economy grows. Survey respondents in the Philippines mentioned customer service improvements and controlling costs most frequently when asked what will pose the biggest challenges to the business in the next six months. In the two-year timeframe, customer service challenges still remain in focus; however, expanding into new markets also comes into view (see Figure 16).

**FIGURE 16**

**Business Challenges - Philippines**

Q. Which of the following do you think will pose the biggest challenge to your business - next 6 months?



n = 92

Source: IDC Industry Information Infrastructure Survey, 2009

**IT Priorities in the Philippines**

Despite the challenge of decreasing costs in the organization, IT executives in the Philippines see the deployment of new strategic applications as their top IT priority, followed by improving the robustness of the companies IT infrastructure (see Table 3). The survey shows that IT executives in the Philippines are taking a more optimistic, proactive view of IT investments, despite the current economic condition. This approach will allow them to get more value from IT investments and also fits well within the information infrastructure approach.

**TABLE 3**

## Top 5 IT Priorities – Philippines

Rank	IT Priority	Technology Component
1	Deploying new strategic applications	Leverage, Optimize
2	Improving robustness of IT infrastructure	Protect, Store
3	Cutting or controlling costs	Optimize, Store
4	Consolidating or streamlining of applications	Optimize, Store
5	Consolidating or streamlining of hardware	Optimize, Store
n =	92	

Source: IDC Industry Information Infrastructure Survey, 2009

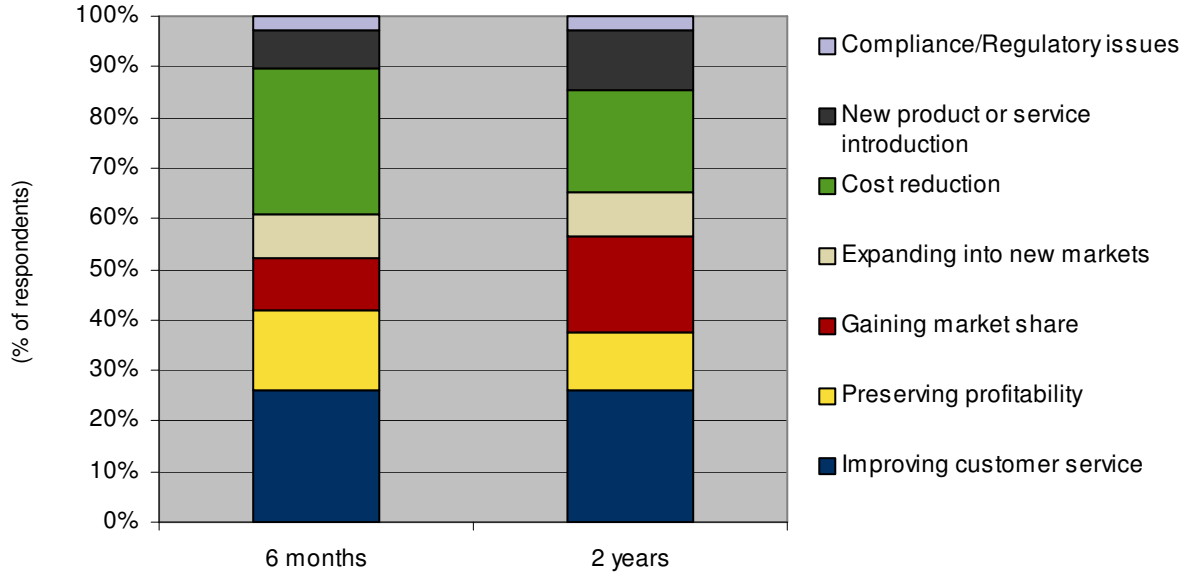
**Singapore**

IT executives in Singapore noted that in both the short and the medium term, reducing costs and improving customer service will pose the biggest business challenges. As the country's economy is heavily dependent on the health of the global economy, the recent economic downturn has pushed cost control to the top of the list. As the economic outlook improves, survey respondents from Singapore indicated that gaining market share and introducing new products and services into the market will emerge as larger challenges in the next two years, as seen in Figure 17.

**FIGURE 17**

**Business Challenges - Singapore**

Q. Which of the following do you think will pose the biggest challenge to your business - next 6 months?



n = 69

Source: IDC Industry Information Infrastructure Survey, 2009

**IT Priorities in Singapore**

Singapore companies will spend nearly US\$6 billion on IT products and services in 2009. The pace of spending will remain fairly conservative, registering a compound annual growth rate of about 3% over the next five years. In this fairly conservative environment for IT investment, cost control remains at the top of the agenda for IT departments and is ranked first on the list of priorities. Deploying new strategic applications remains on the agenda, followed by a consolidation of applications, as seen in Table 4. Clearly, IT executives are looking to create a less complex operating environment while, at the same time, delivering more value to the enterprise from the IT department.

**TABLE 4**

## Top 5 IT Priorities – Singapore

Rank	IT Priority	Information Infrastructure Component
1	Cutting or controlling costs	Optimize, Store
2	Deploying new strategic applications	Leverage
3	Consolidating or streamlining of applications	Optimize
4	Consolidating or streamlining of hardware	Store, Optimize
5	Outsourcing IT	Leverage, Protect
n =	69	

Source: IDC Industry Information Infrastructure Survey, 2009

**Thailand**

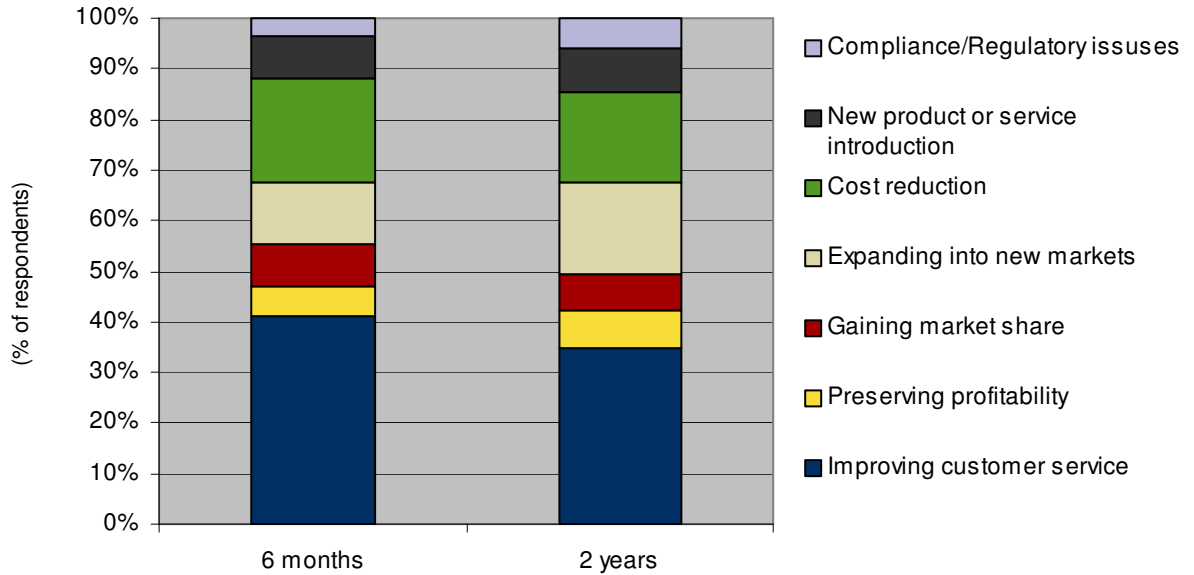
In Thailand, IT executives overwhelmingly felt that improvements in customer service is the largest challenge to the business in the near term. It was mentioned almost twice as often as the next business challenge of cost reduction in the enterprise. This could be interpreted that IT executives do not see global economic challenges impacting Thailand's businesses that severely, and thus are focused on other business challenges. This challenge will remain for the next two years, as it was mentioned as the biggest challenge to the business in the medium term, as well (see Figure 18).

Thailand will spend over US\$6 billion on IT products and services in 2009 and is expected to maintain a strong level of investment, growing at a compound annual growth rate of 9% over the next five years.

**FIGURE 18**

**Business Challenges - Thailand**

Q. Which of the following do you think will pose the biggest challenge to your business - next 6 months?



n = 83

Source: IDC Industry Information Infrastructure Survey, 2009

**IT Priorities in Thailand**

Despite the perception that improving customer service is the biggest challenge to the business for companies in Thailand, IT executives seem to be facing different challenges in the IT department. Cost control in the IT department was the most often mentioned priority, followed by improving the robustness of the company's IT infrastructure of the company (see Table 5). IT executives will be able to use key elements of information infrastructure to address both of these top priorities.

**TABLE 5**

## Top 5 IT Priorities – Thailand

Rank	IT Priority	Information Infrastructure Component
1	Cutting or controlling costs	Optimize, Store
2	Improving robustness of IT infrastructure	Protect, Store
3	Deploying new strategic applications	Leverage
4	Outsourcing IT	Leverage, Protect
5	Consolidating or streamlining of hardware	Store, Optimize
n =	83	

Source: IDC Industry Information Infrastructure Survey, 2009

## CONCLUSION AND RECOMMENDATIONS

The growth of information in the enterprise will not slow, and neither will the increasing number of requirements and expectations on the IT executive – not only to respond to this increase in corporate information, but to capitalize on its availability and use. Unfortunately, IT budgets will not grow at the same pace. The CIO will need to have a strategy in place to deliver more value to the company by reallocating budgetary expenses. A well-defined information management and infrastructure strategy is an effective way to meet this objective. A holistic view looking at the concepts of store, protect, optimize, and leverage is an effective approach.

For the business executive, we can expect increased pressures to bring the business closer to the customer. This can be achieved by creating customized products and services and further segmenting of customer information. Compliance and regulatory issues, as well as the need to compete in markets abroad will also drive increased growth of company information. The business executive needs to ensure that the right company information is available at the right time and in the right place to maintain a competitive edge.

Our study highlights several key points that executives should keep in mind as we enter 2010:

- ☒ A holistic strategy for information management is required. IT executives should look not only at the IT aspects of their information requirements (hardware and software) but at how information is used in the company. Define use cases, business processes, and work flows.

- ☒ Review IT investments categorized by store, protect, optimize, and leverage, rather than the traditional hardware, software, services method. Are the investment levels in these categories aligned with the appetite for risk the company is willing to accept?
- ☒ Companies will be increasingly dependent on access, analysis and management of information to succeed. Information will be as valuable as any asset on the company's balance sheet. To do so, new tools will need to be deployed over and above any existing applications that may reside in current enterprise resource planning (ERP) or customer relationship management (CRM) implementations.
- ☒ Executives should engage with IT suppliers that are able to provide holistic solutions for information management and infrastructure. Ensure your IT providers understand your business processes and workflows, as well as business challenges and priorities. Without this solid understanding, no solution provider will be able to help you create an effective information infrastructure strategy.
- ☒ Budgetary challenges will continue to place extraordinary pressures on IT budgets. Business challenges and priorities will dramatically drive increased information creation and use in the enterprise.
- ☒ When IT budgets are viewed from an information management and infrastructure perspective, businesses are earmarking about 15%-25% of IT budgets to technology solutions involving corporate information. We expect these percentages to rise over time.

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