The Economics of Business Technology

HP Research Report

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Executive Summary of Interview Results

PREFACE

A downturn sorts winners from losers:

"Recessions lead to a significant re-shuffling of industry leaders . . . Only 60% of companies that were top-quartile before the (last) recession retained their leadership position after the recession."

McKinsey on Finance, Number 23, Spring 2007

GLOBAL FINDINGS

Globally, 38% of respondents indicate that they see the current economic climate as an **opportunity to restructure for the future.** Led by respondents in Latin America at 53% and Asia Pacific at 48%, these individuals are ready to position their companies to come out of the economic downturn winners. The 53% of respondents who are simply cutting costs across the board may run the risk of ending up with IT that is inefficient, outdated and unable to provide competitive advantage to their company.

Both Business Side and Technology Executives recognize that by reprioritizing technology spending into focused investments to improve efficiency and make IT more cost effective, their company can emerge from the current economic downturn stronger and more competitive. As one Technology Executive from Europe expressed it, "After years without investment in IT, it needs renewal or at least reorganisation. This might allow us to emerge from the recession stronger than before even if [it is] associated with major investment."

Sixty-nine percent of all respondents feel that in today's economic climate it is more important than ever to have good alignment between technology and the organization's business goals. As one respondent from Asia-Pacific indicated, "We would like to focus on, first, supporting our traditional business development; second, increasing our competitiveness; third, enhancing our technology and storage; and finally, making use of information technology in order to make greater profit for the enterprise."

Among the key business goals that technology needs to align with, respondents mention:

- 1. Application of technology to maintain current revenue streams or to generate new revenue through increased business opportunities or improved delivery of services.
- 2. Providing improved resources and support to other business units.

At the same time they are working to achieve these goals, technology departments are facing increased direction from their CEOs to be more efficient and cost effective.

The demands on technology departments remain high but the resources – both financial and employee head count – that they must use, are in some cases decreasing. **Technology Executives who anticipate reduced spending on business technology indicate that the goal is not simply to spend less but instead to spend smarter.** One Technology Executive from the United States stated "[The CEO] wants IT to find ways to be more efficient, so that... even with less money you can still deliver the strategy."

Technology Executives want to improve their contribution to the company's strategic goals by reducing unnecessary spending and pursuing new efficient technologies. For many, the first step in restructuring to respond to the economic climate is cutting discretionary spending through prioritizing projects, consolidation and by extending the useful life of their current technology. As one Asia-Pacific respondent stated, "We're holding off on replacements, but spending wisely where we're investing for the future..."

For 21% of Technology Executives, the current economic climate has made them more likely to consider moving away from using mainframes. Technology Executives mentioned many reasons for their companies moving away from mainframes. Across all regions, a main driver is the high cost associated with mainframe maintenance and licensing. Many respondents are moving away from mainframes because using an alternative allows for increased flexibility. Respondents say these alternatives save money, time and space while addressing the needs of their current IT environment.

Even though many respondents are facing potential budget cuts due to the current economy, there are some IT investments that remain high priorities. Many say that a variety of capital expenditures in areas like server and storage consolidation (56%), virtualization (49%), application modernization or consolidation (45%) and automation (41%) will stay on their list of priorities to be considered for implementation over the next twelve months. Respondents indicate that they intend to pay for these using a combination of strategies, primarily cash on hand (59%) followed by financing (27%). Technology Executives expect these investments to deliver three key business outcomes: cost reduction, increased efficiency and a strong contribution to the company's strategic goals. Many respondents say they are happy with the capabilities of their internal technology environment. However, the emphasis on spending wisely and delivering business outcomes can require Technology Executives to act more aggressively to reduce operating costs by consolidating operations and cutting in-house staff.

Given the current economic environment, 38% of respondents see outsourcing as a more attractive solution that allows them to expand or improve IT's capability and capacity. As one respondent in Latin America expressed, "At this moment in time...outsourcing allows us not to have to invest in technology continuously to be up to date.... We would rather have an outsourcing company and not to have to re-invest in three years, considering how fast technology is renewed."

For most, the decision to outsource is influenced by how cost effective it will be, the quality of service and solutions, the increased flexibility, manageability and efficiency it offers, or by specific project requirements with a need for specialized skills. As one respondent in the United States expressed, "Simply from a standpoint of cost savings, with some of the highly specialized skill sets and what they cost on the market, we're finding it's more attractive in certain situations to outsource as opposed to adding bodies to the staff with specialized knowledge." Anecdotally, respondents are less likely to outsource functions that are strategically significant. In some cases that tendency is because of the deep business knowledge and learning curve required for those activities, and other concerns are more security and risk focused.

Technology Executives also indicate that while the current economic climate may not directly impact the vendors with whom they want to work, it does mean that finding experienced vendors is important. Respondents say that it is more essential than ever that the vendors they use are cost effective and provide high quality, reliable, manageable and efficient services.

Regionally, Business Side and Technology Executives in the United States & Canada are the most focused on aligning IT with their strategic business objectives. These individuals say it is critical that any spending cuts or new investments IT makes will deliver clear business value to reach strategic goals. Respondents in Europe & the Middle East are the most conservative in their estimates of spending reductions and the least likely to be looking to aggressively restructure IT for the future. In general, they are focused on making their business technology more efficient and optimized, and they are more likely to plan on using their current staff rather than pursuing alternatives like outsourcing.

Business Side and Technology Executives in Asia-Pacific are the most likely to anticipate increasing IT spending. They are eager to restructure and update their existing technology and willing to look outside their own companies for resources that will help them improve the company's IT to gain a competitive advantage. Respondents in Latin America see the most potential to restructure IT for the future during the current economic downturn. While they do

anticipate reducing IT spending, Technology Executives anticipate being able to deliver some of those cuts through increased automation or virtualization that helps improve efficiency across the company. They are the most likely to be looking for cost effective solutions to improve IT (whether it be outsourcing or financing) so that IT can become more efficient, offer more resources and support other business units to help the company generate increased revenue.

The majority of respondents want to see **cost effective (37%)**, **optimized (29%)** and **efficient (28%)** IT that can deliver strong business outcomes when the economy emerges from the current downturn. In the words of one respondent from Europe, "Clearly [we want to see] increased revenue, increased productivity, lower costs to the business, and faster turnaround which helps us deliver business products to market for our clients more efficiently and more effectively. 'Faster, better, cheaper' is what we're always aiming for."

For many of the Business Side and Technology Executives interviewed for this study, the decisions they are making are not just about reducing spending but are instead about upgrading and streamlining their company's technology environment. Their desired outcome is to be more **cost effective**, **optimized** and **efficient** in order to help their companies achieve strategic goals and be as **competitive** as possible. As one Technology Executive in Asia Pacific explained, "[Now] is the time to improve the efficiency of the IT system itself. In short, we think we have established what is necessary for our business and we now have to look into making our IT system itself more effective."

REGIONAL FINDINGS

UNITED STATES & CANADA

Thirty-three percent of Business Side and Technology Executives in United States & Canada believe that the current economy offers an opportunity to restructure IT for the future.

The potential for technology to help achieve strategic business objectives is a theme that is discussed more frequently in United States & Canada than in any other region. **61% of Business Side Executives and Technology Executives in United States & Canada consider it more important** than ever to have good alignment between technology and their organization's business goals. One Business Side Executive commented, "You want IT to really serve the strategy of the business and the processes that are important to fulfilling that strategy."

Business Side Executives and Technology Executives in the region feel the best description of their current technology environment is **efficient**, **lean** and **standardized**. Yet, respondents say that the CEO of their company is tasking IT with becoming even more efficient. In keeping with that goal, **52% of respondents state that they anticipate moderate decreases in technology spending this year**. Technology Executives say that to achieve these savings they will **focus on cutting discretionary spending**, **consolidating existing technology**, **and using current staff more efficiently**. Among Technology Executives in the United States & Canada, 22% were *more likely to move away from mainframes*.

Over the next twelve months, Technology Executives in the United States & Canada anticipate considering investments in technology upgrades to increase efficiency and to improve technology tools available to other business units. *Virtualization* tops the list of possible investments at 69% followed by server and storage consolidation at 65%. Respondents expect to see cost reduction, increased efficiency and a strong contribution to the company's strategic goals as the key outcomes of these technology investments. While the majority (75%) of Technology Executives in United States & Canada plan to pay for all or part of their technology investments using capital on hand, they are more likely than respondents in other regions to reallocate budget from other areas, primarily from within IT.

A third of the respondents in United States & Canada find outsourcing part, or all, of their information technology environment to be a more attractive option in today's economic climate. One respondent pointed out "[At] the end of the day... outsourcing gives you more flexibility, and in uncertain economic times, that's pretty important." However, loss of control over strategic IT operations was seen as a key barrier to outsourcing by some respondents.

Technology Executives in the United States & Canada were more likely to consider Application Service outsourcing than respondents in any other region. Within the larger category of IT Outsourcing virtualization and automation, were seen as the most acceptable

alternatives since these were perceived as less important for in-house technology departments to control.

Of the 25% of respondents who say that the economy impacts their vendor choice, cost effective was the adjective they most associate with vendors they want to work with.

United States & Canada Business Side and Technology Executives agree that they would like their technology departments to be **cost effective** and **efficient** but they were also more drawn to IT descriptors that had strategic implications such **agile**, **lean** and **strong** than respondents in any other region. As one respondent put it "Operationally, we have to be efficient and agile and ready to support the business, but it would be desirable to participate in new initiatives and handle new projects that would enable the business to grow revenue and get into new business."

EUROPE & THE MIDDLE EAST: United Kingdom, France, Germany, Denmark, Russia, Czech Republic, United Arab Emirates

Twenty-six percent of Business Side and Technology Executives in Europe & the Middle East specifically state that the current economy offers an opportunity to restructure IT for the future. As one respondent states, "We need to analyse our IT and improve it to get us over the recession and prepare for the subsequent upswing as well as keeping us competitive."

However, they still believe that it is more important than ever to have good alignment between technology and their organization's business goals. Seventy percent agree that good alignment is more important. For individuals in this region, technology departments should upgrade and strategically invest in order to be efficient, cost effective and automated, helping their company achieve its strategic goals. As one Business Side Executive explained, they are interested in "Levering technology to make our operations more efficient." The majority of respondents in Europe & the Middle East would like their technology departments to focus on increasing efficiency while cutting costs during the economic downturn.

Over half of respondents (57%) in Europe & the Middle East say that the current economic climate has led to company-wide cost cutting and IT is no different. Among those in the region who are anticipating decreasing technology expenditures, cutting discretionary spending and cutting staff were the actions most frequently mentioned. In Europe & the Middle East, 11% of Technology Executives were motivated by the economy to make a shift away from mainframes.

In Europe & the Middle East, Technology Executives say the largest strategic technology investments they are considering are server and storage consolidation (49%) followed by application modernization or consolidation (37%). More respondents in Europe & the Middle East also mentioned security, anecdotally, as an investment priority than in any other region. Technology Executives in the region typically expect to see cost reduction and increased efficiency as a result of these investments. Forty-six percent of Technology Executives in Europe & the Middle East say they will be paying for these investments with cash on hand.

Thirty percent of respondents in Europe & the Middle East say outsourcing is more appealing in the current economic climate. However, some respondents in this region say they are satisfied with current in-house IT operations and thus are less interested in outsourcing. As one Technology Executive said, "The company has an efficient setup, hence [outsourcing is] not required." Among interested respondents, many mentioned cost and specialized skills and talents of outsourced labor as attractive. By comparison quality, and more anecdotally, security were the main concerns about outsourcing.

Respondents in this region were the least likely to be interested in changing vendors, even given the current economy.

Respondents in Europe & the Middle East want to end up with **cost effective**, **optimized** technology environments and are also more interested than their global peers in **automation** to help their company achieve its strategic goals and be more competitive.

ASIA-PACIFIC: China, Japan, Philippines, Australia, India

Business Side Executives and Technology Executives in Asia-Pacific were more likely (48%) than their peers in the United States & Canada and Europe & the Middle East to view the economic downturn as a catalyst that motivates significant restructuring of IT with an eye towards the future.

These respondents were also the most likely (75%) to feel that good alignment between technology and the organization's business goals is *more important* given the current economy. Individuals in this region believe technology departments should upgrade and strategically invest in order to be efficient and cost effective and help their company achieve its strategic goals and become more competitive.

Among those anticipating decreases in technology spending within the region, cutting discretionary spending and extending the life of current equipment were most frequently

mentioned. In Asia-Pacific, 29% of Technology Executives are more likely to consider moving away from mainframes in today's economic climate.

Respondents in Asia-Pacific Technology Executives in the region are still considering common strategic technology investments with an eye to becoming more **competitive**. Chief among them are strategic applications, upgrading hardware and software, or implementing virtualization and automation. In the words of one respondent, the investments "[Will] place the company in a more competitive position based on improved systems." Most respondents expect to see increased efficiency, less overhead, and a contribution to business strategy as a result of these investments. To pay for technology investments, 62% of Technology Executives were more likely to use cash on hand than any other method.

The majority of respondents in Asia-Pacific (52%) find outsourcing more attractive in the current economic situation. As one Technology Executive put it, "Owing to our insufficient technical strength, we need the help of outsourcing companies and their resources to complete some upgrading or optimizing tasks. To us, outsourcing can save our costs and their technical strengths are higher as they have specific professionals in specific fields, hence, their end products or results are usually better than doing [it] ourselves." While most respondents mentioned lower costs as the main advantage of outsourcing, many are particularly concerned that the lower price tag on outsourced work is paired with lower quality execution than inhouse work.

Of the one-fourth of respondents in this region who say the current economy impacts their vendor choice, many say *cost effective* and *capabilities* are what they most associate with the vendors they want to work with.

At the end of the day, both Business Side and Technology Executives in Asia-Pacific expect that their technology departments should be more **efficient** and **cost effective** as a result of decisions they make during the economic downturn.

LATIN AMERICA: México, Brazil

Business Side Executives and Technology Executives in Latin America are the most likely (53%) to say the economic downturn will motivate significant restructuring of IT with an eye towards the future.

Respondents in Latin America feel strongly (71% agree) that it is *more important* than ever to have good alignment between technology and their organization's business goals. They believe IT should be strategically investing in upgrades to become more efficient, optimized, and standardized to help their company achieve its strategic goals and become more

competitive. One Business Side Executive explained their goals saying they wanted to, "Increase the speed of information within the company; make it more efficient and quick to meet the market needs."

Among those anticipating technology spending cuts, reducing discretionary spending, cutting staff, extending equipment life and renegotiating with vendors were all mentioned. When thinking about the economy's impact on their decision to stay with or move away from mainframes, Technology Executives Latin America fall in just below the United States & Canada with 20% more likely to move away from mainframes.

Technology Executives in the region are still planning common strategic technology investments with an eye to becoming more **competitive** and **standardized**. For Technology Executives in Latin America, **the most common strategic IT investment planned this year is automation** (44%). Most respondents expect to see cost reduction, increased efficiency, a contribution to business strategy and increased reliability and accuracy as a result of these investments. Thirty-four percent of Technology Executives in the region intend to use financing to pay for these technology investments – more than in any other region.

Most respondents in Latin America say they are satisfied with current in-house IT operations and do not see a need to outsource. Most respondents mentioned lower costs as one of the few advantages they could see to outsourcing. More specifically, respondents in Latin America were the least likely to be interested in business process or IT outsourcing.

Respondents in Latin America were the most likely to be interested in changing the vendors they work with based on the current economy at 32%. Among these respondents, cost effective and quality service were the adjectives they most associate with vendors they want to work with.

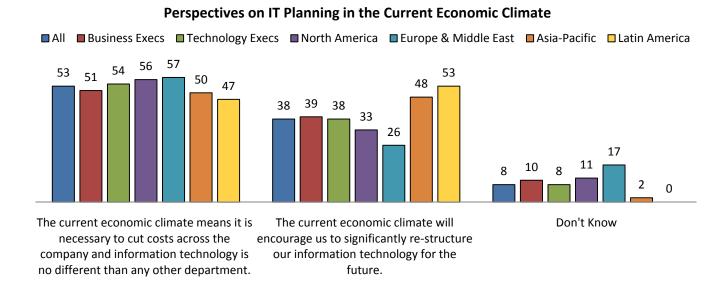
At the end of the day, both Business Side and Technology Executives in Latin America want their technology environments to be **efficient** and **optimized** but also expressed more interest in seeing their company's IT become **competitive** and **standardized** than their global peers.

Detailed Findings

The Economics of Business Technology

Globally, 38% of respondents see the current economic climate as an opportunity to restructure for the future. Just over half of respondents say that the current economic climate has led to company-wide cost-cutting and IT is no different than any other department. Respondents in Latin America (53%) and Asia-Pacific (48%) were the most likely to view the economic downturn as a catalyst that motivates significant restructuring of IT with an eye towards the future. Respondents in Europe & the Middle East were the least likely to perceive any potential to restructure for the future.

Which of the following statements is most aligned with your organization's perspective?



69% of all respondents feel that in today's economic climate it is more important than ever to have good alignment between IT and the organization's business goals. Business Side Executives are slightly more likely than Technology Executives (52% vs. 47%) to feel that it is much more important for IT to be aligned with the company's business goals.

Sixty-one percent of respondents in the United States & Canada say that the current economic climate means good alignment between IT and business goals is to them is more important than ever. Among those in the United States & Canada who say there is no change the contention for some is that good alignment has always been important. As one Business Side Executive expressed; "For us, it [alignment] has always been an extremely important item. It is equally important in 2009 as it was last year. I don't really see any change because we were already at a very high level." Seventy percent of respondents in Europe & the Middle East and

71% in Latin America feel good alignment is more important. Respondents in Asia-Pacific were the most likely at 75% to feel that good alignment was more important given the current economy.

In today's economic climate, how important is it to align		Audi	ence	Region					
information technology to your organization's business goals?	All	Business Execs	Tech. Execs	United States & Canada	Europe & Mideast	Asia- Pacific	Latin America		
Good alignment is much more important now	49	52	47	48	41	55	53		
Good alignment is somewhat more important	20	18	21	13	29	20	18		
No change	28	26	29	37	28	20	24		
Alignment is somewhat less important	2	2	2	1	1	5	3		
Alignment is much less important	1	1	1	0	0	1	3		
Don't know	0	1	0	1	1	0	0		

What Should IT Be Focusing On In This Economic Climate

Despite largely positive perceptions of their company's current IT, both Business Side Executives and Technology Executives agree that during the economic downturn increasing efficiency is a CEO priority. As one respondent from the United States & Canada put it, "[The CEO] wants IT to find ways to be more efficient, so that... even with less money you can still deliver the strategy." Many respondents also indicate that cutting costs is a high priority as well; however, some voice the caveat that this is not a factor of the economy specifically but rather an entrenched attitude about cost reduction as a priority for IT.

Business Side and Technology Executives specify that through optimizing, standardizing and automating their IT departments and processes, their companies can both enhance efficiency and lower operating costs to strengthen the company despite the current economic downturn. One Technology Executive in Asia-Pacific pointed out that the goal should be to, "Optimize [the] use of all IT applications and infrastructure, implementing cost effective and efficient new technologies. We should…keep our priorities right… The economic downturn shouldn't be a reason to drop our investments in upgrading our technology as long as it enhances performances and provide better cost effectiveness."

Some respondents indicated in more detail that the economy is also serving as a catalyst to refocus IT on meeting the company's strategic goals and providing a competitive advantage. The two key elements respondents mention most frequently are: 1. Application of technology to maintain current revenue streams or to generate new revenue through increased business opportunities or improved delivery of services and 2. Providing improved resources and support

to other key business units. A Technology Executive from Asia-Pacific, explains, "We would like to focus on, first, supporting our traditional business development; second, increasing our competitiveness; third, enhancing our technology and storage; and finally, making use of information technology in order to make greater profit for the enterprise."

Finally, some respondents indicate that increasing virtualization has become a higher priority to help reduce redundancy, inefficiency, manpower and long-term overhead.

What do you [your CEO] want your company's information technology department to focus on during the economic downturn?

Increasing Efficiency

United States & Canada

- "[The CEO] wants IT to find ways to be more efficient, so that... even with less money, you can still deliver the strategy." – Technology Executive, US & CA
- "Improved efficiency and return on our investment for the technology tools we use." –
 Technology Executive, US & CA
- "Just to keep us efficient in our operations, more than anything else. Eliminate waste. IT is more than capable of doing that." Business Side Executive, US & CA
- "Efficiency and better information. That's clearly our directive. We're looking to improve our cost structure through efficiencies in the next three years." – Technology Executive, US & CA
- "Our main focus now is more of efficiency with what we have rather than buying new...We just need to work more efficiently and smarter with what we have." – Technology Executive, US & CA

Europe & Middle East

- "Leveraging technology to make our operations more efficient." Business Side Executive, EMEA
- "IT must remain highly efficient even in recession and be an instrument for cost-cutting and business process improvement." – Technology Executive, EMEA
- "Maximum usefulness and efficiency despite less investment." Technology Executive, EMEA
- "An efficient system avoiding additional administrative costs and permitting optimised functions." – Technology Executive, EMEA
- "Efficiency of [the] information system." Technology Executive, EMEA

Asia-Pacific

- "Efficiency of IT capabilities. Up till now, to make the work flow effective, we have increased IT spending. Now it is the time to improve the efficiency of the IT system itself. In short, we think we have established what is necessary for our business and we now have to look into making our IT system itself more effective." Technology Executive, APAC
- "We will focus on how to optimize the work flow, provide effective technical support for new branches, and update the online system comprehensively, in order to raise our efficiency." – Technology Executive, APAC
- "Probably to use whatever we have to be more efficient and to reduce the amount of waste for this downturn." – Technology Executive, APAC
- "To produce increased efficiency and productivity." Technology Executive, APAC

Latin America

 "Mainly in the efficiency of the structure we currently have, and to achieve effectiveness in the entire network." – Technology Executive, LA

Cut Costs

United States & Canada

- "Cost is where IT always focuses." Business Side Executive, US & CA
- "Of course [we are trying to] save money and expenses." Business Side Executive, US & CA
- "The challenge is to maintain, or to keep moving forward, but to lower costs. That's a challenge system-wide, not just for IT." – Technology Executive, US & CA
- "Obviously we've got to focus on cost[s] that is number one in this environment." Technology Executive, US & CA

Europe & Middle East

- "Cost-efficient functioning whilst ensuring that little or no technical administration or system cost is incurred." – Technology Executive, EMEA
- "Avoidance of unnecessary investments but nevertheless technology renewal / implementation of new systems to cut costs." – Technology Executive, EMEA
- "Reduced operating costs." Business Side Executive, EMEA
- "IT must remain... an instrument for cost-cutting." Technology Executive, EMEA
- "Achieving goals with minimal costs." Technology Executive, EMEA
- "Obviously cost minimization." Business Side Executive, EMEA

Asia-Pacific

- "We would like to focus on, firstly, saving costs and expenses. This is because every industry is suffering under the poor economy, [and] it is necessary to lower costs in order to make our IT work more economical." – Technology Executive, APAC
- "The biggest issue right now is cost reduction for all IT-related areas. The CEO does not want to spend [the] same amount of money on [the] IT department as before." — Technology Executive, APAC
- "Optimizing cost within the business." Technology Executive, APAC
- "To manage cost-cutting and run operations smoothly at a minimal cost." Technology Executive, APAC

Latin America

- "Focus on reducing costs of the company overall." Technology Executive, LA
- "Reduce costs." Business Side Executive, LA

Optimize

United States & Canada

- "Really to optimize and utilize our existing systems that are in place at this time." Technology Executive, US & CA
- "We want to achieve optimized results for less." Technology Executive, US & CA

Europe & Middle East

- "Would like to focus on optimization of existing structures, optimization of existing system and fine-tuning. Improvement of the existing security and optimization of existing information systems, like monitoring tools." – Business Side Executive, EMEA
- "Minimize cost [and] optimize the IT system." Technology Executive, EMEA
- "To optimize business process and to improve the service levels." Technology Executive, EMEA
- "IT environment optimization." Business Side Executive, EMEA
- "The technology needs optimizing." Business Side Executive, EMEA

- "Adjust the cost structures anticipated and primarily be focused on optimizing work processes." Business Side Executive, EMEA
- "Drafting the most effective solutions optimizing company IT processes and making them as economical as possible." — Technology Executive, EMEA
- "Continuing to optimize business processes but now mainly using extant resources as costs have to be saved here too." – Technology Executive, EMEA
- "Focus on using their IT to optimize their business as much as possible." Technology Executive,
 EMEA

Asia-Pacific

- "To optimize use of all IT applications and infrastructure, [IT is] implementing cost effective and efficient new technologies. [We] should ignore the economic downturn and make sure that we keep our priorities right and that the balance is respected. The economic downturn shouldn't be a reason to drop our investments in upgrading our technology as long as it enhances performance and provides better cost effectiveness." Technology Executive, APAC
- "Also, we have to optimize the organization of resources which includes checking whether the system tools are functioning properly, the restriction of data flow and increasing the investment on software." – Technology Executive, APAC
- "We will focus on how to optimize the work flow." Technology Executive, APAC
- "Optimizing cost within the business." Technology Executive, APAC
- "Primarily [to] take a role in helping other business functions optimize their performance." –
 Technology Executive, APAC

Latin America

- "In the business field, improve operation processes [and] optimize the processes." Technology Executive, LA
- "To optimize the resources we have at the moment." Business Side Executive, LA
- "Optimizing processes [and] spending as little as possible, trying to make the company save." –
 Technology Executive, LA

Help the Line of Business to Meet Strategic Objectives

United States & Canada

- "Operationally, we have to be efficient and agile and ready to support the business, but it would be desirable to participate in new initiatives and handle new projects that would enable the business to grow revenue and get into new business." – Business Side Executive, US & CA
- "Making us leaner, quicker and more agile to act to the needs of the market and customer focus." – Business Side Executive, US & CA
- "[You] want IT to really serve the strategy of the business and the processes that are important to fulfilling that strategy." Business Side Executive, US & CA
- "Strategically aligned projects. The governance is spending a lot of time trying to make sure that all activities can be brought back to strategic initiatives." – Technology Executive, US & CA
- "[The CEO is] interested in us achieving a couple objectives. One is 'Don't break the business.' Two, 'Get the most value for the dollars that we do decide to spend,' and three, 'Preserve and enhance our future competitiveness and position,' and four, 'Spend in a way that preserves human jobs." Technology Executive, US & CA

Europe & Middle East

- "The focus must be on company competitiveness. We will therefore have to keep investing in the latest technology as our hardware and software standards have to be very high." – Technology Executive, EMEA
- "We're focusing on being cutting-edge leaders. We're putting resources into it, looking for a competitive edge." – Technology Executive, EMEA
- "Preservation of competitive advantage." Technology Executive, EMEA
- "There is focus on value creation instead of maintenance [and] effectiveness and productivity." –
 Technology Executive, EMEA
- "After years without investment in IT, it needs renewal or at least reorganisation. This might allow us to emerge from the recession stronger than before even if [it is] associated with major investment." – Technology Executive, EMEA

Asia-Pacific

- "We would like to focus on, first, supporting our traditional business development; second, increasing our competitiveness; third, enhancing our technology and storage; and finally, making use of information technology in order to make greater profit for the enterprise." Technology Executive, APAC
- "I would like our IT department to focus more on [the] strategic side." Business Side Executive, APAC

Latin America

- "Increase the speed of information within the company; make it more efficient and quick to meet the market needs." – Business Side Executive, LA
- "To have the availability of administrative and statistical elements that enables us to understand the current situation of the company." – Technology Executive, LA

Standardize

United States & Canada

- "Standardization." Technology Executive, US & CA
- "Standardization, in an effort to reduce costs. We have different business units that have different technologies, so standardizing might be an opportunity to save some money." – Technology Executive, US & CA

Europe & Middle East

- "We are implementing a standardized information computerized system for all of us." Business Side Executive, EMEA
- "Utilise system conditions and maintain the essential technology standards and adapt same where possible." – Business Side Executive, EMEA

Asia-Pacific

- "We would like to focus on our current infrastructure, so as to make our management more standardized." – Business Side Executive, APAC
- "We are implementing a standardized information computerized system for all of us." Business Side Executive, APAC

Latin America

- "Better standardization." Business Side Executive, LA
- "To keep the platform we currently have active and to keep standardizing our processes." –
 Technology Executive, LA

Automate

United States & Canada

"Business process productivity - finding ways to reduce head count through automation." –
 Technology Executive, US & CA

Europe & Middle East

- "I think an objective is to try and save money through automation as much as possible, so to improve operation processes." – Technology Executive, EMEA
- "Automation and actualization of IT, especially in the conditions of the present crisis." Business Side Executive, EMEA

Asia-Pacific

"We expect to raise the level of automation and systematization of IT." – Technology Executive,
 APAC

Latin America

- "We are working a lot in processes automation." Technology Executive, LA
- "In automation and making the information process speedier." Business Side Executive, LA
- "To focus on the automation to reduce costs." Technology Executive, LA

Virtualization

United States & Canada

 "It's a more web-centric environment. Make sure we get a presence on the web and we can push more apps towards the web..." – Technology Executive, US & CA

Europe & Middle East

- "Virtualization." Business Side Executive, EMEA
- "Consolidation measures, outsourcing, virtualization, et cetera." Business Side Executive, EMEA

Asia-Pacific

 "We should further make use of virtualization technology in order to promote its application in the company." – Technology Executive, APAC

Latin America

"To optimize resources in virtuals." – Business Side Executive, LA

Changing IT's Financial Footprint for the Current Economy

Roughly one-third of Business Side Executives feel the optimal level for IT spend is greater than their current level (with the average ideal spend falling at 6.2%). Some of those in favor of an increase say that it will allow them to get "caught up" from a technology perspective. Among those few who feel a reduction is in order, the concern is the impact the economy is having on revenue. Respondents in North and Latin America are most likely to see their current level as optimal. In Europe & the Middle East the average ideal spend (7.5%) is slightly lower that their current spend of 7.7%, however, some respondents in the region disagree and would like to see

their IT spend be in the range of 10-15%. While some respondents in Asia-Pacific feel they are at the optimal level now, others would like to see their ideal spend go up to 10-15%.

What is your company's current ratio of information spend to revenue? (NOW)/What do you feel should be the optimal level for your company?(IDEAL)		Audi	Audience Region								
		Business Execs n=136		United States & Canada n=51		Europe & Mideast n=32*		Asia-Pacific		Latin America n=26*	
BUSINESS EXECUTIVES ONLY	Y	Now	Ideal	Now	Ideal	Now	Ideal	Now	Ideal	Now	Ideal
	Average Spend %	4.9%	6.2%	2.8%	3.3%	7.7%	7.5%	4.8%	7.7%	7.3%	7.9%
Less than 1%	Less than 1%		10	25	16	3	3	7	7	19	8
1-3%		29	24	41	33	9	9	26	19	31	31
4-6%		13	15	14	24	13	6	22	11	4	15
7-9%		5	6	2	2	9	6	4	4	8	8
10-15%	10-15%		10	0	4	9	16	7	19	15	12
15-20%		1	3	0	0	6	3	0	7	0	4
More than 20%		3	2	2	0	0	0	4	4	8	8
Don't know/Refused		26	30	16	22	50	56	30	30	15	15

•	Audience	Region							
Executive think the optimal level for IT spend is more or less than their company's current ratio of information technology spend BUSINESS EXECUTIVES ONLY	Business Execs n=136	United States & Canada n=51	Europe & Mideast n=32*	Asia-Pacific n=27*	Latin America n=26*				
Optimal spend should be more than current ratio	32	39	19	37	31				
Current ratio is optimal	24	29	16	19	31				
Optimal spend should be less than current ratio	15	12	13	15	27				
Don't know/Refused	28	20	53	30	12				

IT Spend Should Increase Compared to Revenue

"We're simply at the point where we haven't invested enough in IT and we're in a catch-up situation." – Business Side Executive, EMEA

IT Spend is at an Optimal Level Compared to Revenue

• "I think we've found the optimal level for our company." – Technology Executive, EMEA

IT Spend Should Decrease Compared to Revenue

 "Ideal for our company would be a reduction to five percent, especially in view of a coming recession." – Business Side Executive, EMEA

Across all regions, 46% of respondents anticipate either using the economic climate to change the financial footprint of their company's information technology by increasing spending (13%)

or with no change in spending (33%). Only 24% of Business Side Executives anticipate decreasing IT spending vs. the 42% of Technology Executives who anticipate reducing their company's IT financial footprint. Respondents in Asia Pacific, followed by the United States & Canada are the most likely to say they will be increasing spending while those in Europe & the Middle East are most likely to say they anticipate no change.

My CIO is [or I am] using the		Audience		Region											
economic climate to change the financial footprint of our company's information technology by	All n=490		Bus. Tech.		United States & Canada		Europe & Mideast		Asia-Pacific		Latin America				
		n=136	n=354	All n=153	BE n=51*	TE n=102	All n=133	BE n=32*	TE n=101	All n=128	BE n=27*	TE n=101	All n=76	BE n=26*	TE n=50*
We will increase our spending	13	20	10	14	25	9	8	16	5	21	26	20	5	8	4
No change	33	40	30	33	43	28	38	44	36	31	37	30	26	31	24
We will decrease our spending	37	24	42	37	20	45	35	19	40	31	22	34	49	38	54
We haven't decided yet/Unknown	17	17	17	16	12	18	18	22	17	16	15	17	20	23	18
Refused/Don't know	1	0	1	0	0	0	2	0	3	0	0	0	0	0	0

Among those who anticipate reductions, 69% say that those cuts will take place over the next year. Of those individuals, 42% indicate that they will work towards *Moderate savings* (up to 15%) while an additional 27% are expecting to *significantly* (more than 15%) reduce spending. Overall, Business Side Executives are more likely to anticipate a longer timeline for spending decreases and are less likely to anticipate significant cuts than Technology Executives. Respondents in the United States & Canada, Asia-Pacific and Latin America fall predominantly into the rapid but moderate reduction range while those in Europe & the Middle East are more evenly divided between anticipating rapid significant (28%) and moderate (26%) reductions.

		Audience		Region					
IF CHOICE 3: We will decrease our spending	All n=179	Bus. Execs n=32*	Tech. Execs n=147	United States & Canada n=56	Europe & Mideast n=46*	Asia-Pacific n=40*	Latin America n=37*		
Significantly (more than 15% savings) and rapidly (within the next year)	27	19	29	23	28	35	22		
Moderately (up to 15% savings) and rapidly (within the next year)	42	31	45	52	26	45	46		
Significantly (more than 15% savings) but spread over several years	8	6	8	5	13	3	11		
Moderately (up to 15% savings) but spread over several years	19	41	14	20	17	18	22		
Refused/Don't know	4	3	4	0	15	0	0		

The majority of Technology Executives who anticipate reducing IT spending indicate that the first step is becoming more cost effective by cutting discretionary spending and only buying hardware and software they really need. Respondents also indicated that they will be using their current equipment longer and will be doing more maintenance internally to extend the life of their hardware and software. As one Asia-Pacific respondent put it "We're holding off on replacements, but spending wisely where we're investing for the future..."

Some Technology Executives intend to take more aggressive actions to reduce spending. Hiring freezes or staff cuts to reduce manpower costs were foremost among the solutions discussed. Others indicated that they would be delaying planned projects, particularly new ones or those that did not address strategic goals.

Another key area for savings is in vendor contracts. A respondent in Latin America commented that they are working to cut their vendor costs "In some cases by substituting providers in search for new prices, and in other cases trying to use the service less." Across regions Technology Executives say they are reviewing their contracts, renegotiating with their current vendors and considering alternate suppliers to get the best possible prices. Finally, a few respondents indicated that they will be upgrading outdated technology specifically with an eye towards increased efficiency and improved performance.

TECHNOLOGY EXECUTIVES ONLY, IF DECREASING SPENDING: What changes are you implementing to make these savings?

Cutting Discretionary Spending

United States & Canada

- "We are looking at all of our discretionary spending." Technology Executive, US & CA
- "We're not really buying equipment unless it's absolutely necessary and that kind of thing.
 We're not upgrading software unless it's absolutely necessary." Technology Executive, US & CA

Europe & Middle East

- "We will adhere to budgetary limits, i.e. no major new acquisitions or technical innovations that aren't essential." – Technology Executive, EMEA
- "If necessary the requirement for any new investment will be closely examined and probably delayed. Major purchases or system changes will not be realised during this period." — Technology Executive, EMEA

Asia-Pacific

- "Just saving money, really. Just not spending cash on the stuff that we don't technically need." Technology Executive, APAC
- "Avoid unnecessary expending without affecting the company's production or company operation." – Technology Executive, APAC

Latin America

- "Trying to reduce costs in everything that's possible." Technology Executive, LA
- "The reduction of superfluous costs." Technology Executive, LA

Stretching Existing Equipment/Consolidation

United States & Canada

- "Consolidation of services and extending the life of equipment." Technology Executive, US & CA
- "[We] are not buying the latest and greatest...we don't do as many upgrades. Some things where we are still able to function with some of the equipment or servers that we had over the last few years, we continue to use it." – Technology Executive, US & CA
- "Pretty much trying to stretch what we've already implemented to do more things by building around it as opposed to buying new. I'm just capitalizing on investments we've made over the last four years..." – Technology Executive, US & CA

Europe & Middle East

- "We've delayed our hardware replacement." Technology Executive, EMEA
- "We will be cautious and build on what we have." Technology Executive, EMEA
- "Optimization of existing services." Technology Executive, EMEA

Asia-Pacific

- "We will make use of our current facilities or products, including the software we developed, to make them effective. Furthermore, we will lower our spending on maintenance, especially some system maintenance and upgrade costs." – Technology Executive, APAC
- "We're holding off on replacements, but spending wisely where we're investing for the future..."
 Technology Executive, APAC

Latin America

- "Optimize the equipment in the industry. And in our specific area... giving maintenance to equipment ourselves." – Technology Executive, LA
- "Supporting the actual platform and reducing purchases of new equipment." Technology Executive, LA

Cutting Staff

United States & Canada

- "We have a hiring freeze. We're challenged with being more efficient by our COO to get more
 production out of the staff we currently have." Technology Executive, US & CA
- "We are going to restructure the staffing model. We will reduce staffing and go to more automated options for support and less personalized support." – Technology Executive, US & CA

Europe & Middle East

- "We've had staff reductions." Technology Executive, EMEA
- "Major long-term savings of labor in most work processes could be achieved." Technology Executive, EMEA
- "Reduce staff support." Technology Executive, EMEA
- "Above all, it is cut the number of IT employees." Technology Executive, EMEA

Asia-Pacific

- "First, we have to better manage the manpower so as to cut down the operation cost." –
 Technology Executive, APAC
- "We have decreased [the] number of staff of [the] IT department." Technology Executive,
 APAC
- "Some manpower resources can be cut down." Technology Executive, APAC

Latin America

- "The company is reducing the number of employees in the order of twenty percent. So those savings affect almost all IT areas, as the number of my staff has been reduced." – Technology Executive, LA
- "Right now [it] would be to remove people from jobs that are not necessary." Technology Executive, LA

Delaying Projects

United States & Canada

- "We are delaying or stopping any new projects." Technology Executive, US & CA
- "Deferring...projects that don't meet specific goals." Technology Executive, US & CA
- "Less emphasis on new programs and new projects, if you will. We're going to use this time to catch up." – Technology Executive, US & CA

Europe & Middle East

- "We're cutting back on projects specifically." Technology Executive, EMEA
- "Revision of projects." Technology Executive, EMEA

Asia-Pacific

- "We will pause investments in some new IT projects." Technology Executive, APAC
- "We are reprioritizing projects, which may be dropped." Technology Executive, APAC

Latin America

- "We are reviewing the projects, making a review of all projects in the financial and capitalization resources area, in the sales area, and even in the production area." – Technology Executive, LA
- "We are not going to give away new projects." Technology Executive, LA

Renegotiating Contracts/Changing Vendors

United States & Canada

- "We are renegotiating with our vendors." Technology Executive, US & CA
- "We used to have specific vendors, but now we look at different vendors. We really shop for what we're looking for." – Technology Executive, US & CA
- "Renegotiating contracts." Technology Executive, US & CA

Europe & Middle East

- "Across the board, we're looking at every contract. The goal is to reduce costs." Technology Executive, EMEA
- "Discount arrangements with existing providers." Technology Executive, EMEA

Latin America

- "Renegotiating the contract." Technology Executive, LA
- "Contracts renegotiation, renegotiation with suppliers, reduction of costs related to systems." –
 Technology Executive, LA
- "In some cases by substituting providers in search for new prices, and in other cases trying to use the service less." – Technology Executive, LA

Upgrading to Improve IT

United States & Canada

"We're upgrading our existing software... to a newer version."— Technology Executive, US & CA

Europe & Middle East

- "We need to analyse our IT and improve it to get us over the recession and prepare for the subsequent upswing as well as keeping us competitive." – Technology Executive, EMEA
- "We need to renew an aged IT system, basically." Technology Executive, EMEA
- "Technical updating where essential." Technology Executive, EMEA
- "Application of more modernized technologies." Technology Executive, EMEA

Latin America

"Updating services and communications." – Technology Executive, LA

Mainframes in Today's Economic Climate TECHNOLOGY EXECUTIVES ONLY

For 21% of Technology Executives the current economic climate has made them more likely to consider moving away from using mainframes. For many of those who say the economy doesn't impact their decision it was attributed either to the fact that their companies have already made the move away or that they are subject to some industry specific requirements necessitate staying with mainframes.

The economy's largest impact on mainframe use was in Asia-Pacific, where 29% were *more likely to move away from mainframes*, and the United States & Canada, where 22% were *more likely to move away from mainframes*. These regional percentages are higher than the global results. Latin America falls in just below United States & Canada at 20% *more likely to move away from mainframes*. In Europe & the Middle East, only 11% of Technology Executives were motivated to move away from mainframes while 19% indicated that they didn't know whether they would consider it.

In today's economic climate, are you more or	Audience	Region							
less likely to consider moving away from using mainframes? TECHNOLOGY EXECUTIVES ONLY	Tech. Execs n=354	United States & Canada n=102	Europe & Mideast n=101	Asia-Pacific n=101	Latin America n=50				
Much more likely to move away from mainframes	13	14	2	20	18				
Somewhat more likely to move away from mainframes	8	8	9	9	2				
No change	53	56	54	47	56				
Less likely to move away from mainframes	8	12	8	6	4				
Much less likely to move away from mainframes	9	6	8	9	16				
Don't know	10	5	19	10	4				

Technology Executives mentioned many reasons for their companies moving away from mainframes. Across all regions, a main driver is the high cost associated with mainframe maintenance and licensing. Many respondents are moving away from mainframes because using an alternative allows for increased flexibility. Respondents say these alternatives save money, time and space while addressing the needs of their current IT environment.

Why is your company considering moving away from using mainframes?

Too Expensive

United States & Canada

- "Because of the cost of maintenance and cost of the software licensing for the mainframe." –
 Technology Executive, US & CA
- "From a licensing perspective, it is expensive." Technology Executive, US & CA
- "The software becomes more expensive the older it gets." Technology Executive, US & CA

Europe & Middle East

- "To make our costs more predictable using outsourcing and external computer centers or hosting." – Technology Executive, EMEA
- "They bind resources and require financial expenditure both on personnel and material." –
 Technology Executive, EMEA

Asia-Pacific

- "This is because the investment in mainframe is high due to its costs in maintenance, management and staff training." – Technology Executive, APAC
- "The main issue is running cost. [The] mainframe is very cost-consuming." Technology Executive, APAC
- "Mainframes are more expensive than today's servers." Technology Executive, APAC
- "Cost of operation is very high." Technology Executive, APAC

Latin America

- "Cost of maintenance." Technology Executive, LA
- "To eliminate expenses and the communication is a little bit expensive and to find another way
 of communication that is cheaper." Technology Executive, LA

To Allow More Flexibility

United States & Canada

- "To allow more flexibility in current business applications." Technology Executive, US & CA
- "One of the big reasons is the age of applications we have. Both from a flexibility and reparability standpoint, given the skill set we have." – Technology Executive, US & CA
- "We're really not using any mainframes right now anyway. If we were, we'd be more likely to
 move away from that and become more agile and standardized." Technology Executive, US &
 CA

Asia-Pacific

 "The mobility of mainframe is not satisfactory. Every movement would produce extra significant expenses. Therefore, our company must control some unnecessary costs during the global economic downturn." — Technology Executive, APAC

Better Alternatives

United States & Canada

"Servers are less expensive, and it fits our environment. That's the main thing- it's a benefit for our environment to have multiple servers for what we're processing instead of a mainframe." – Technology Executive, US & CA

- "I just think the footprint for the mainframe is larger and more complex whereas breaking it up into individual servers really gives us the economy of scale to put those in place." Technology Executive. US & CA
- "Because I think that hosted services and cloud computing are in my best interest. Those are good enough reasons." – Technology Executive, US & CA

Asia-Pacific

- "We believe using discrete servers is more capable to enhance our business development." –
 Technology Executive, APAC
- "Because this is not the best option in our building. More modern options would be more appropriate." – Technology Executive, APAC

Technology Executives indicate that cost savings, external business issues or the discovery of a better solution would motivate their company to move away from mainframes. Some respondents indicated that their company would make the move if they could demonstrate reduced overhead. Others say that they have no pressing need to switch and suggest they would be more motivated to move away from mainframes if they found were a better alternative or if their current technology fails them.

What would make your company move away from using mainframes?

To Save Costs

United States & Canada

- "The only reason to move away from it today would be to demonstrate significant cost-savings on a different platform. I don't think that would happen." – Technology Executive, US & CA
- "We're moving away from them anyway, regardless of the economic downturn. We're moving away gradually because it's an overhead expense. The savings at the end of the tunnel are not going to be that extraordinary." – Technology Executive, US & CA

Europe & Middle East

- "A solid financing basis and the prospect of costs positively affecting business and amortizing themselves might persuade us not to operate any mainframes ourselves anymore." – Technology Executive, EMEA
- "A prompt cost saving that lasts whilst using another solution." Technology Executive, EMEA

Asia-Pacific

 "We would consider if the energy consumption and other operation costs can be lowered." – Technology Executive, APAC

Forced To Move Away

United States & Canada

- "Support and flexibility. It's expensive to support, especially for what you get out of them. There's little or no flexibility left in those application environments, as well as the infrastructure environment. If you're on one of the older mainframes like we are, you have few cost effective options except to move to a new platform." – Technology Executive, US & CA "If we get sold. Our parent company requires the hardware that we're working with." – Technology Executive, US & CA
- "The technology forced us to. We don't have any issues now." Technology Executive, US & CA Latin America
 - "That would be a decision of the top management and for us it would be only to adapt to those strategies." – Technology Executive, LA
 - "Only if it was imposed to me." Technology Executive, LA

Found Better Alternatives

United States & Canada

- "If we found a better performance, then we would possibly go with another vendor." –
 Technology Executive, US & CA
- "Somebody being able to virtualize that entire environment. And even still, I can't imagine how they could do something like that. We're really not tied to a bunch of mainframes, so to speak."
 Technology Executive, US & CA
- "There are just some things the mainframe does better and if there was a different environment that was better, faster, cheaper then we'd consider it." Technology Executive, US & CA

Europe & Middle East

 "Mainframes could only be abandoned if we had an adequate replacement solution not involving major personnel or engineering change or major cost." – Technology Executive, EMEA

No Change in Attitude on Using Mainframes

United States & Canada

- "We're really not using any mainframes right now anyway." Technology Executive, US & CA
- "We have been moving away from mainframes for years." Technology Executive, US & CA
- "We don't have any mainframes or run any mainframes. We moved away a long time ago." –
 Technology Executive, US & CA
- "No change. We don't have any." Technology Executive, US & CA

Europe & Middle East

- "We're not big mainframe users anyways." Technology Executive, EMEA
- "We don't have a mainframe. I think it's considered a dated technology." Technology Executive, EMEA
- "We replaced our mainframe a year ago." Technology Executive, EMEA

Asia-Pacific

- "We are not using mainframe right now." Technology Executive, APAC
- "We do not have any mainframes; it's not applicable in our case." Technology Executive, APAC

Latin America

- "[We] do not use mainframes or central units." Technology Executive, LA
- "In reality we do not use it; therefore, I have no intention of using it." Technology Executive, LA

According to Technology Executives, the primary barriers to moving away from mainframes are the complexity of transitioning to new technology, high costs of alternatives or issues concerning contracts and legacy. Those respondents concerned with transition complexities mention difficulties in business and staff processes, time investment and dealing with resistance. Respondents worried about cost frequently cite the economy and the inability to finance change at this time. The respondents who discuss issues concerning contracts and legacy are either bound to a certain agreement or have a strong history or relationship with their current technologies.

What are the primary barriers to moving away from using mainframes?

Complexity of Transitioning and Re-Training Staff

United States & Canada

- "Business change management. We've always done it this way. The hardest part is getting the business to accept change." – Technology Executive, US & CA
- "There's already a considerable investment in the infrastructure, the application, the staff that's already in place, and the user community that's already used to that environment. So you've already got... sunk costs, or costs that already exist. So to re-train, re-teach or to re-implement has a significant cost associated with it." Technology Executive, US & CA

Europe & Middle East

- "The costs of new implementation for acquisition and any personnel training needed and the working hours lost." – Technology Executive, EMEA
- "They're still needed for workplaces as completely switching over (virtualization or outsourcing)
 is impossible ad hoc." Technology Executive, EMEA

Asia-Pacific

- "The barriers are mainly... the complicated technologies involved." Technology Executive,
 APAC
- "Converting old system on the mainframe to current server. There are many systems that do not have spec sheets recorded and very few people can deal with an old system. As a result, converting takes lot of time and cost." – Technology Executive, APAC
- "[The] investment needed to train the users." Technology Executive, APAC
- "It is hard to range everything again if you are using mainframes. It is hard to reverse everything." – Technology Executive, APAC

Latin America

- "The company database is on mainframe. It would take a lot of time and work transferring it to a smaller device and the danger of losing it." – Technology Executive, LA
- "Resistance to it and finding qualified people. Those will be the main ones." Technology Executive, LA

Costs

United States & Canada

- "Cost of finding another solution. Our existing infrastructure is well-maintained." Technology Executive, US & CA
- "The cost of updating and maintenance." Technology Executive, US & CA
- "Cost is a significant barrier today because typically a change of this nature, although it may save you money in the long run, today it's going to cost more. It's a new project." – Technology Executive, US & CA

Europe & Middle East

- "[The] major investment necessary." Technology Executive, EMEA
- "All the change needs money, and the money has stopped now." Technology Executive, EMEA

Asia-Pacific

- "The primary barrier is its huge costs." Technology Executive, APAC
- "At this moment, the biggest barrier is the cost." Technology Executive, APAC
- "Cost itself is the main barrier during the recession period." Technology Executive, APAC

Latin America

- "We don't use it anymore due to its high cost." Technology Executive, LA
- "The cost of the investment." Technology Executive, LA

Contracts and Legacy Issues

United States & Canada

- "Our patient billing is on mainframe and we recently renewed a five-year contract." –
 Technology Executive, US & CA
- "Usually you're locked into a software solution." Technology Executive, US
- "Legacy applications that have been around for a while. Re-engineering, re-coding them, all that stuff." – Technology Executive, US & CA
- "The investment in changing the system from the legacy systems over to new systems." –
 Technology Executive, US & CA

Europe & Middle East

 "Priority to us are the obligations we have regarding handling our data, including those for business contacts." – Technology Executive, EMEA

Asia-Pacific

- "Compatibility between mainframe system and new one is the primary barrier." Technology Executive, APAC
- "Legacy application." Technology Executive, APAC

Latin America

"Because we already have a job history with our business system for a very long time." –
 Technology Executive, LA

What Are Technology Executives' Strategic Investment Priorities for This Year? TECHNOLOGY EXECUTIVES ONLY

Technology Executives indicate that there are a number of areas that remain high priorities for investment over the next twelve months despite the current economic climate. Chief among

those are capital expenditures for technology upgrades. Within the United States & Canada one respondent commented, in order "[To] enable our operations to run more efficiently and more effectively. We will continue to make investments in new packages and enhancements to current technology." Virtually all of the priorities respondents mentioned were focused on increasing efficiency and improving tools available for use by other business units.

Of the potential capital expenditures, respondents are prioritizing software and hardware purchases to update current systems, making them more effective. Many are implementing virtualization and automation to increase efficiency and reduce overhead. Others are implementing new ERP systems and other strategic applications to standardize technology, improve business processes, increase revenue, and improve service delivery. For some, a key strategy is expanding the use of communications technologies in order to support a more mobile workforce, allowing employees company-wide to be more efficient and making communication more cost effective. Lower priorities on respondents' lists include improving security and providing stronger tools for compliance and reporting to help keep the company competitive.

Technology Executives Only: What investment areas remain high priorities for you in the next 12 months?

Investing in New Software and Hardware

United States & Canada

- "You're talking about IT investments and I guess the first is in software... software that is going to enable our operations to run more efficiently and more effectively. We will continue to make investments in new packages and enhancements to current technology." – Technology Executive, US & CA
- "Still hardware, believe it or not, but to make hardware more efficient." Technology Executive, US & CA
- "Investment areas that are really high priority are capital expenditure purchases and system upgrades. A couple examples are: updating our communications infrastructure, replacing our corporate email system, and upgrading our Microsoft Office environments." – Technology Executive, US & CA

Europe & Middle East

- "I would say hardware replacement." Business Side Executive, EMEA
- "I expect it to be in the development [of] software and associated hardware fields." –
 Technology Executive, EMEA
- "Maintenance and software and hardware support." Technology Executive, EMEA
- "I would say innovation of the final equipment for accessories, printers, and monitors." –
 Technology Executive, EMEA

Asia-Pacific

- "We will mainly focus on software development." Technology Executive, APAC
- "We will place our priorities in hardware and software issues." Technology Executive, APAC
- "Server hardware and software. That's pretty much it." Technology Executive, APAC
- "Hardware upgrades." Technology Executive, APAC

"Buying new hardware, installing storage devices or servers and enhancing [the] server side." –
 Technology Executive, APAC

Latin America

"Within the software area and some part of the infrastructure." — Technology Executive, LA

Virtualization and/or Automation

United States & Canada

- "Utility consolidation virtualization. That's one area that's very hot for us right now." –
 Technology Executive, US & CA
- "Virtualization, security, and analytics. Virtualization includes server and desktop, and cloud, and that kind of stuff." – Technology Executive, US & CA
- "Virtualization we're doing more Virtualization. We've always done quite a bit and we're doing more." – Technology Executive, US & CA
- "Virtualization is just starting, but we want to deploy it company-wide." Technology Executive, US & CA

Europe & Middle East

- "We are going to possibly go to virtualization." Technology Executive, EMEA
- "Virtualization needs considering." Business Side Executive, EMEA
- "We will concentrate more in virtualization solutions. We've realized this already In part of the company as a pilot project, and it's now to be done gradually throughout the company." – Technology Executive, EMEA

Asia-Pacific

- "I say virtualization is the most important area. I have recently asked vendors for proposals [for] downsizing from our mainframe to mid-range computers." Technology Executive, APAC
- "Mainly for virtualization to realize integration of servers." Technology Executive, APAC
- "Consolidation, virtualization and improving infrastructure." Technology Executive, APAC

Latin America

- "The investments in the implementation of the team that incorporates the most automated equipment." – Technology Executive, LA
- "And at the internal processes engineering, which is what we call here in Brazil as Shared Services Center. Because effectively with the decrease in the number of employees of the company, some areas require that certain procedures and projects are even more intertwined. So we will win in scale, on those processes for not depending on so many people." – Technology Executive, LA
- "Our operative area. The automation part of it." Technology Executive, LA

Enterprise Resource Planning

United States & Canada

- "Enterprise Resource Planning implementation and storage." Technology Executive, US & CA
- "We'll continue to invest in our core ERP strategies." Technology Executive, US & CA

Europe & Middle East

- "New ERP." Technology Executive, EMEA
- "Their main ERP system and get their platform updated." Technology Executive, EMEA
- "Setting up Enterprise Resource Planning." Technology Executive, EMEA

Asia-Pacific

- "We would like to connect our electronic business platform with our branches and the ERP system to have real-time processes." – Technology Executive, APAC
- "To get the existing ERP implemented." Technology Executive, APAC

Latin America

- "Within IT, the priority investment is a new ERP." Technology Executive, LA
- "We are implementing a new ERP system, and we expect to finalize that investment." –
 Technology Executive, LA

Strategic Applications

United States & Canada

- "Strategic applications that promise a better return on investment." Technology Executive, US
 & CA
- "Probably application development. That's probably a key piece. The software we've developed in-house for ourselves we've actually decided to take commercial and so the growth of that part of the business is one of the key cornerstones of our business right now." – Technology Executive, US & CA

Europe & Middle East

- "We will decide on new... application processes and acquire [them]." Technology Executive,
 EMEA
- "Computerized management of investment activities that reduce costs." Technology Executive,
 EMEA

Asia-Pacific

- "Designing new business processes and the development of applications remain at high priorities." – Technology Executive, APAC
- "Putting in applications that can span across multiple business units." Technology Executive,
 APAC
- "Standardizing the use of applications." Technology Executive, APAC
- "We are planning to implement new applications to reach other segments of users." –
 Technology Executive, APAC

Latin America

- "Optimize some processes in applications." Technology Executive, LA
- "Basically it would be business intelligence projects and development of some internal business management tools." – Technology Executive, LA

Communications Technology to Support a Mobile Workforce

United States & Canada

- "Really the applications [that] ensure collaboration and communication across the company. For
 example video conferencing and the communication tools like SharePoint and Office 2007." –
 Technology Executive, US & CA
- "A mobile workforce. Gearing up technology-wise for a more mobile workforce." Technology Executive, US & CA

Europe & Middle East

- "Obviously taking into context that we're globalizing our business, integration is obviously very high up on our agenda. The building of a common infrastructure framework in order to give our business common infrastructure: tools, networks, video conferencing, collaboration, internet, file sharing, e-mail, etcetera." – Business Side Executive, EMEA
- "Communications improvement." Business Side Executive, EMEA

Asia-Pacific

- "Well, investment areas of high priorities will still be on communication because at our site, our
 office relies on connectivity with the regional office and the head office. So I do not foresee any
 reduction in the investment in those aspects." Technology Executive, APAC
- "Mobile computing." Technology Executive, APAC

Latin America

"Developing communications." – Technology Executive, LA

Improving Security

United States & Canada

- "Security. Security deals with the whole host of the security environment in today's world, with what's going on as appropriate to a global company." – Technology Executive, US & CA
- "Security. To be very secure and then for our users to not feel any kind of latency." Technology Executive, US & CA

Europe & Middle East

- "Secure those information flows because there have been a few problems [with] security breaches." – Technology Executive, EMEA
- "Security policy." Technology Executive, EMEA

Asia-Pacific

- "Network security such as anti-virus software." Technology Executive, APAC
- "Security... is the highest priority." Technology Executive, APAC
- "Enhancing security in selected areas." Technology Executive, APAC

Latin America

"Information security." – Technology Executive, LA

Compliance/Reporting

United States & Canada

- "The high priority will be to integrate a lot of our non-compliance locations into part of the global network." — Technology Executive, US & CA
- "Compliance continues to be important." Technology Executive, US & CA

Asia-Pacific

 "Only those things which are needed for corporate governance and to remain in compliance with standards." – Technology Executive, APAC

Latin America

■ "The legislative part, we pretend to adopt the "fiscal" receipt." — Technology Executive, LA

TECHNOLOGY EXECUTIVES ONLY

Most Technology Executives are planning a combination of projects that will consolidate IT operations, reduce redundancy, improve service delivery and flexibility while making IT more cost efficient. Globally, 56% of Technology Executives indicate that they are either planning or considering *Server or storage consolidation*. *Virtualization* finished second overall at 49%, driven largely by respondents in the United States & Canada (where it was the most common response) and Asia-Pacific (where it was the second choice). Respondents in Europe & the Middle East were more likely to be considering *Application modernization or consolidation* as their second choice, though it finished third overall. In Latin America *Automation* was actually the most common response at 44%.

Which strategic information technology	Audience				
investments are you making or considering in the next 12 months? TECHNOLOGY EXECUTIVES ONLY MULTIPLE RESPONSES PERMITTED	Tech. Execs n=354	United States & Canada n=102	Europe & Mideast	Mideast Asia-Pacific n=101	
Server or storage consolidation	56	65	49	62	42
Virtualization	49	69	33	58	24
Application modernization or consolidation	45	57	37	49	30
Automation	41	47	32	42	44
Data and information management	41	42	28	57	30
Staff Training	38	46	22	47	36
Networking	32	39	15	43	28
Technologies to reduce power & cooling costs	26	25	18	34	26
Service management	25	14	22	46	14
Data Center Transformation	24	21	15	40	16
Service Oriented Architecture	23	26	12	31	20
Cloud computing	10	15	8	9	8
Other SPECIFY	9	4	13	6	16
Don't know	1	0	2	2	0

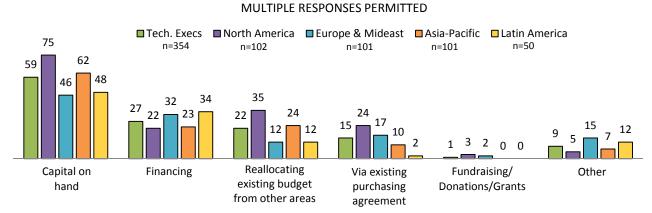
When moving ahead with these strategic IT investments, Technology Executives expect them to deliver some key business outcomes. The majority of respondents indicate that they are looking for three key outcomes: cost reduction, increased efficiency and a strong contribution to the company's strategic goals. As one respondent in Europe expressed it, "Clearly it's increased revenue, increased productivity, lower costs to the business, and faster turnaround which helps us deliver business products to market for our clients more efficiently and more effectively. "Faster, better, cheaper," is what we're always aiming for."

Among the other goals that respondents would like their investments to meet is lowering overhead through reduced staffing and management costs, consolidated infrastructure that requires less space and lower expenses such as heating, cooling or power. Some respondents also indicated they expect these investments to translate directly into revenue by expediting service, increasing production or opening up new sales avenues. Finally, a few Technology Executives also indicated that they expected to see improvements in reliability and data accuracy as a consequence of the investment they have planned for the next year.

Many Technology Executives would use a mix of funding strategies to pay for strategic IT investments. The most popular funding method across regions, at 59%, is using *Capital on hand*. Between a quarter and a third of Technology Executives in each region would use *Financing* to pay for investments. *Reallocating existing budget from other areas* is slightly less common and is considered to be an appropriate funding alternative by 22% of respondents. Respondents are least likely to use *existing purchasing agreements* or *fundraising/donations and grants* to pay for IT investments over the next 12 months.

Three out of every four Technology Executives in the United States & Canada plan to pay for investments using capital on hand. Respondents in this region were more likely to reallocate existing budget from other areas, use existing purchasing agreements or fundraising, donations and grants than respondents in any other region. Over a third of Technology Executives in Latin America are likely to use financing to pay for investments, more than respondents in any other region.

How do you plan to pay for those IT investments?



Of the Technology Executives planning to pay for IT investments by reallocating budget from other areas, most reported that they would acquire these funds by consolidating or reducing waste within the IT department. By consolidating to eliminate redundancy and streamlining to reduce waste and increase the efficiency of current resources, Technology Executives expect to save money to put towards key IT investments over the next 12 months. As one respondent from the United States & Canada put it, "The major area we're looking at right now is some pretty extensive performance tuning, which would reduce the consumption of computing resources, which because they're outsourced save money, which would then be reallocated."

Reallocating funds from the company as a whole by general budget reallocation or from cost cuts across the company was also mentioned by some respondents as a possibility.

In the United States & Canada and the Asia-Pacific region, Technology Executives were more likely to consider reallocating funds from within the IT department. While this attitude was less common, some respondents in each region, with the exception of Latin America, would consider using funds from other business departments to invest in IT. One respondent in Europe & the Middle East has plans to allocate funds "from other departments and offices that can be dissolved or cut."

IF REALLOCATING EXISTING BUDGET: Where would those funds be allocated from?

Consolidating and Reducing Waste

United States & Canada

- "The major area we're looking at right now is some pretty extensive performance tuning, which would reduce the consumption of computing resources, which because they're outsourced save money, which would then be reallocated." Technology Executive, US & CA
- "From our current infrastructure. We have multiple servers at other sites and servers [that]
 would be consolidated and brought into a virtualized environment." Technology Executive, US
 & CA
- "I mentioned earlier a list of cost-cutting measures. That's where we'll take the money from. For example, if you can renegotiate your wide-area network contract to get lower costs. That frees up some money to buy virtualization, which allows you to consolidate servers, which allows you to reduce your power and cooling costs." Technology Executive, US & CA

Europe & Middle East

 "We will re-allocate funds from our fleet management and other non-essential areas if necessary." – Technology Executive, EMEA

Asia-Pacific

- "In case we do not have enough funds for the project, we will reallocate and get the funding from other less important projects, so as to ensure those important projects can be completed successfully." – Technology Executive, APAC
- "Selling our unnecessary equipment, which we really don't need." Technology Executive, APAC
- "Looking to consolidate funds." Technology Executive, APAC

Across the Business as a Whole

United States & Canada

- "Just across the company, reallocating the budget that we have through all the departments." –
 Technology Executive, US & CA
- "All lines of business areas." Technology Executive, US & CA

Europe & Middle East

■ "General cuts." – Technology Executive, EMEA

Asia-Pacific

 "We would use our internal reserve and reallocate the budgets from our partnership companies." – Technology Executive, APAC "From the head office." – Technology Executive, APAC

Latin America

- "Practically all the operational areas in the company." Technology Executive, LA
- "From the restructuration of all the expenses of the company." Technology Executive, LA

Within the Information Technology Department

United States & Canada

- "It would come from within my department. There may be a limited amount from outside. But, predominately from the IS division." Technology Executive, US & CA
- "From IT or the business units. It just depends on where that functionality resides today." –
 Technology Executive, US & CA

Asia-Pacific

- "We would consider adjusting the funds for IT system development, and invest part of them into the enhancement of servers and storage." – Technology Executive, APAC
- "Other areas of IT." Technology Executive, APAC

From Other Departments

United States & Canada

- "From other departments and inside IT where we would not go and do a capital investment that we might have had planned." Technology Executive, US & CA
- "From other business units." Technology Executive, US & CA

Europe & Middle East

- "From other departments and offices that can be dissolved or cut." Technology Executive, EMEA
- "From other business units." Technology Executive, EMEA

Asia-Pacific

 "I believe this could be reallocated from [other] departments, but in the end it really depends on our Vice President." – Technology Executive, APAC

What business outcomes do you expect to realize from those investments?

Cost Reductions

United States & Canada

- "I expect to be able to provide a comparable level of services at a reduced cost. That's the nuts and bolts of it. This should allow us to do things more efficiently. By doing things more efficiently, I'll maybe be able to do more things, provide a comparable level of service, and yet reduce costs at the same time." – Technology Executive, US & CA
- "That we will better control our costs and our resources. Cost-reduction is definitely a factor now." – Technology Executive, US & CA
- "I know they're doing virtualization to simply cut down on support costs." Technology Executive, US & CA
- "The bottom line is to reduce costs overall." Technology Executive, US & CA

Europe & Middle East

- "Management of cost, I think, would be the prime concern." Technology Executive, EMEA
- "Reduction of IT operating costs." Technology Executive, EMEA
- "Reduction in management and support costs." Technology Executive, EMEA
- "Reduction of costs related to information management." Technology Executive, EMEA

Asia-Pacific

- "We hope the... virtualization technology can save the costs in maintenance, management and software and hardware investment." – Technology Executive, APAC
- "Reducing input costs." Technology Executive, APAC

Latin America

- "Costs reduction and unnecessary expenses reduction." Technology Executive, LA
- "Reducing expenses." Technology Executive, LA

Increase Efficiency

United States & Canada

- "To build more efficient communication among the business units so we can all work together as a system rather than individual silos." – Technology Executive, US & CA
- "Efficiencies in processing speed initiative." Technology Executive, US & CA

Europe & Middle East

- "You only see an optimization in the work routines and work processes, among other things for [the] monitoring of IT." – Technology Executive, EMEA
- "Improve efficiency and availability of systems." Technology Executive, EMEA
- "Increasing effectiveness of investments management." Technology Executive, EMEA
- "Efficiency throughout the company." Technology Executive, EMEA

Asia-Pacific

- "We expect the efficiency and performance of the staff can be raised." Technology Executive,
 APAC
- "Aiming [to increase] the efficiency of the operation of IT." Technology Executive, APAC
- "Greater efficiency. The point is to enable the company to grow [by] utilizing current infrastructure." – Technology Executive, APAC
- "What I would expect is more efficiency, time-wise. Mainly from the time-management side." Technology Executive, APAC
- "To have efficient applications and smooth running of our system." Technology Executive,
 APAC

Latin America

- "Greater efficiency than our competitors." Technology Executive, LA
- "Making processes more efficient." Technology Executive, LA

Contribution to Business Strategy

United States & Canada

"The ultimate goals [is to] empower people so they can take care of things themselves and make us more efficient as a facility, as a whole, and really just decrease cost in certain areas by doing that." – Technology Executive, US & CA "The ability to deliver technology solutions and innovations that will help the business." –
 Technology Executive, US & CA

Europe & Middle East

- "To react quicker to competition." Technology Executive, EMEA
- "Stay competitive and perform business processes thanks to product advantage." Technology Executive, EMEA
- "Effectiveness and boosting the company's image." Technology Executive, EMEA
- "Increasing the company's market share." Technology Executive, EMEA
- "The fulfillment of strategic goals of the company." Business Side Executive, EMEA

Asia-Pacific

- "Some business enhancements due to our strong IT infrastructure." Technology Executive,
 APAC
- "We hope the continuity of the business can be strengthened." Technology Executive, APAC
- "It will place the company in a more competitive position based on improved systems." –
 Technology Executive, APAC
- "Projects will be in line with the business goals and targets for the year." Technology Executive, APAC

Latin America

- "Improvement in the business management decisions." Technology Executive, LA
- "More than anything our intention is to focus in a client oriented approach, to offer additional services in our operation, I mean through information technology, deliver better data to our users to give a better service to our clients." – Technology Executive, LA

Less Overhead

United States & Canada

- "Reduce operating costs such as staff and infrastructure." Technology Executive, US & CA
- "Less office space requirements from a corporate office standpoint which provides you savings from heating and cooling, rent, et cetera." – Technology Executive, US & CA

Europe & Middle East

- "We expect cuts in management and perhaps personnel cost due to the labor time saved." –
 Technology Executive, EMEA
- "Cutting... specialist staff investment costs with better cost control." Technology Executive,
 FMFA

Asia-Pacific

- "We expect to increase the work efficiency of staff in different aspects. We aim to reduce unnecessary manpower." – Technology Executive, APAC
- "We're looking at reducing overhead costs associated with the technology." Technology Executive, APAC
- "Power and cooling reductions. We foresee some changes there." Technology Executive, APAC

Latin America

"Talking about automation is reduction of staff." – Technology Executive, LA

Increase in Revenue

United States & Canada

"Increased revenue." – Technology Executive, US & CA

Europe & Middle East

- "Clearly it's increased revenue, increased productivity, lower costs to the business, and faster turnaround which helps us deliver business products to market for our clients more efficiently and more effectively. "Faster, better, cheaper," is what we're always aiming for." — Technology Executive, EMEA
- "Falling costs and higher profits as a result." Technology Executive, EMEA
- "Profit in about three to four years." Technology Executive, EMEA

Asia-Pacific

- "This year, we have more investment on back-up and data storage. We expect to have more profit as the outcome." — Technology Executive, APAC
- "Improve the way we service our customers and to improve the sales of the company." –
 Technology Executive, APAC
- "It will mean more revenue and less running costs." Technology Executive, APAC

Latin America

- "More production and more profits." Technology Executive, LA
- "To be able to increase our revenue but offering additional services to our clients." Technology Executive, LA

Increase Reliability and Accuracy

United States & Canada

- "Increase availability and reliability of the systems." Technology Executive, US & CA
- "Improving system stability." Technology Executive, US & CA
- "Probably a higher reliability of our operating environment and our operating technologies." –
 Technology Executive, US & CA

Europe & Middle East

- "Problem-free daily business processing is what we expect." Technology Executive, EMEA
- "There are only little adjustments and maintenance, so it is exclusively to make the system work." – Technology Executive, EMEA

Asia-Pacific

- "We [are] always eager to establish stable systems as an outcome." Technology Executive,
 APAC
- "So that our department has more accuracy." Technology Executive, APAC

Latin America

- "Establishment of a reliable environment regarding the [IT] network." Technology Executive,
- "We expect to obtain more accurate, available data." Technology Executive, LA

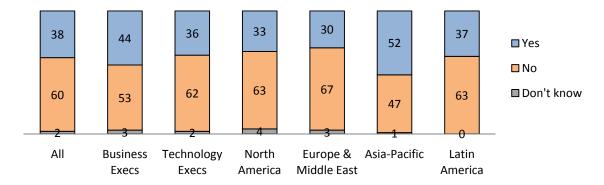
Outsourcing of Information Technology in the Current Economic Climate

Globally, 38% of respondents are interested in the possibility of outsourcing. Business Side Executives are more attracted to outsourcing than Technology Executives, 44% vs. 36%. There are also some regional variations in how attractive respondents feel outsourcing is in today's economic climate. The majority of respondents in Asia-Pacific (52%) find outsourcing more attractive in the current situation. As one Technology Executive in Asia-Pacific put it, "Owing to our insufficiency in technical strength, we need the help of outsourcing companies' and their resources to complete some upgrading or optimizing tasks. To us, outsourcing can save our costs, and their technical strengths are higher as they have specific professionals in specific fields, hence, their end products or results are usually better than doing [it] ourselves." Over a third of North & Latin American respondents find outsourcing more attractive. Interest in outsourcing is lowest in Europe & the Middle East with only 30% viewing it more favorably.

However, the majority (60%) of respondents indicate that the current economic climate does not make outsourcing more attractive. This may be either because they are already favorable towards it or because they are satisfied with their current in-house IT and have no plans to outsource. The most common rationales both for and against outsourcing are related to costs, quality, manageability, efficiency, or a need for specialized skills to address specific project requirements.

Do you find outsourcing part, or all, of your information technology environment to be a more attractive option in today's economic climate?

Do you find outsourcing part, or all, of your information technology environment to be a more attractive option in today's economic climate?



What makes outsourcing more attractive now?

For those who find outsourcing more attractive, it is an intriguing means to be more cost effective, utilize skilled labor, remain flexible, and refrain from long-term commitments. These aspects of IT outsourcing are viewed as advantages in the current economic climate.

Respondents see an opportunity to reduce costs associated with labor, infrastructure, and fixed and project costs through outsourcing. The unique skills and talents of outsourced labor offer specialized knowledge to supplement in-house capabilities. Flexibility and scalability of outsourced projects is desirable in the current economic climate. As one Technology Executive in the United States & Canada stated, "[At] the end of the day... outsourcing gives you more flexibility, and in uncertain economic times, that's pretty important." Additionally, the fact that outsourcing can be used on a project-specific and application-driven basis, translating to fewer long-term commitments, is attractive to respondents.

In the Asia-Pacific region and Latin America, most respondents mentioned lower costs as an advantage of outsourcing. Many respondents in Europe & the Middle East saw the specialized skills and talents of outsourced labor as attractive. Respondents in the United States & Canada are particularly attracted by the potential for IT to be more flexible through outsourcing some or all of its operations.

Lower Costs

United States & Canada

- "Labor rates. I can hire a person in Bangalore for what I pay for health care costs for a person here. It's really a financial decision. I think it's just cheaper." – Technology Executive, US & CA
- "Being able to have a fixed cost so we know what we're dealing with and when that's in-house, it tends to get bloated." – Technology Executive, US & CA

Europe & Middle East

- "Certainly very competitive pricing. The actual price has come down, so people are not charging such inflated prices." – Technology Executive, EMEA
- "Outsourcing can save costs and yield clearly predictable cost structures. The company thus avoids costly and laborious infrastructure and process build-up." – Business Side Executive, EMEA
- "Reduction of expenses to some extent." Business Side Executive, EMEA
- "Nowadays there are many vendors and it is cheaper." Business Side Executive, EMEA

Asia-Pacific

- "First, outsourcing is more economical than doing it ourselves as the cost is lower." –
 Technology Executive, APAC
- "It's cheaper in the long run to outsource it than to run it in-house." Business Side Executive, APAC
- "Can have lot of savings in terms of manpower and budget." Technology Executive, APAC
- "It would cost me less compared to hiring people internally, and I would also benefit from the updates I would receive from time to time." – Business Side Executive, APAC

Latin America

- "It can reduce costs." Technology Executive, LA
- "It is cheaper, especially right now in these recession times." Business Side Executive, LA

Unique Skills/On-Demand Talent

United States & Canada

- "Without getting into specifics, simply from a standpoint of cost savings, with some of the highly specialized skill sets and what they cost on the market, we're finding it's more attractive in certain situations to outsource as opposed to adding bodies to the staff with specialized knowledge." – Technology Executive, US & CA
- "It is on-demand talent and improved effectiveness in that technology." Technology Executive,
 US & CA
- "First of all, the knowledge. Within our company, we don't have human resources that know about that advanced technology in IT now, and we are finding people who are experts or who know about the cutting-edge advancing computer technology." – Technology Executive, US & CA
- "[As] our budgets go down, we can no longer afford to have one of each expert in our environment. So we look to outsourcing to bridge that gap between expertise you have and the expertise you need." – Technology Executive, US & CA

Europe & Middle East

- "Higher concentration on core expertise." Technology Executive, EMEA
- "That we can outsource areas requiring specialized knowledge to others and concentrate on our core expertise." – Technology Executive, EMEA
- "Possibility of quick attraction of professional human resources." Technology Executive, EMEA
- "There is not enough human capacity to guarantee services with our own sources." –
 Technology Executive, EMEA

Asia-Pacific

- "Owing to our insufficiency in technical strength, we need the help of outsourcing companies' and their resources to complete some upgrading or optimizing tasks. To us, outsourcing can save our costs and their technical strengths are higher as they have specific professionals in specific fields, hence, their end products or results are usually better than doing [it] ourselves." Technology Executive, APAC
- "We cannot hire many excellent IT people within our company [so] we rely on outsourcing." Business Side Executive, APAC
- "The expertise of the people at the outsourcing companies." Technology Executive, APAC
- "To bring new set of skills from the outside of our company." Technology Executive, APAC

Latin America

- "Because it reduces staff costs. I don't have to maintain an employee here to make an installation." – Technology Executive, LA
- "Someone specialized in these issues...to get better results." Technology Executive, LA

Flexibility and Scalability

United States & Canada

- "Outsourcing is definitely a consideration and probably would be quite attractive. It's easier to scale." – Technology Executive, US & CA
- "Flexibility. I don't fundamentally believe that the cost is going to be dramatically different, and you take different kinds of risks when you outsource versus when you attempt do it yourself. They both have benefits and they both have risks, but they're in different directions. At the end of the day, though, outsourcing gives you more flexibility, and in uncertain economic times, that's pretty important." Technology Executive, US & CA
- Primarily the ease to add or subtract staffing." Technology Executive, US & CA

Europe & Middle East

- "Above all rationalize business processes, reduce process complexity, release management capacity, make the company more flexible and focus it on its core business." – Business Side Executive, EMEA
- "Optimal scalability plus avoidance of locally required investment." Technology Executive, EMEA
- "[You can] set your goals and needs." Business Side Executive, EMEA

Asia-Pacific

 "Outsourcing part of our business can provide us a clear picture of the expenditure; on the other hand, employing an engineer is actually a kind of long term investment cost." – Technology Executive, APAC

Latin America

"What makes outsourcing more attractive is the information's agility." – Technology Executive,

Project-Specific/Application-Driven

United States & Canada

- "I think you've got the cost for whatever project you're typically working on, and that is the cost. When you have people on staff, those costs don't go away, and when revenue drops, it's easier to drop outsourcing. When you need it, it's there, and when you don't, you can do away with it."
 Technology Executive, US & CA
- "Finding somebody that can focus on our specific needs as opposed to us trying to manage it
 internally and a lean, internal staff to manage multiple facets of that independently without an
 outside contractor." Technology Executive, US & CA
- "If you have a project that you need done in ninety days you can have a company that can do it in thirty days because they have multiple people." – Technology Executive, US & CA

Europe & Middle East

 "If companies grow very rapidly and don't want to invest in laborious infrastructure and process build-up then this is a worthwhile consideration when expanding a major company." – Business Side Executive, EMEA

Asia-Pacific

- "Outsourcing can control and shorten the project." Technology Executive, APAC
- "Probably the fact it's not a fixed cost. If you use it, you pay for it." Business Side Executive,
 APAC
- "They facilitate special projects." Technology Executive, APAC

Latin America

- "The possibility of transferring to a third party an eventual fixed cost which you can interrupt at any time." – Technology Executive, LA
- "Not to make commitments for the future." Business Side Executive, LA

Why isn't outsourcing more attractive now?

Respondents in every region mentioned contentment with their current in-house IT as a primary reason not to outsource. However, many raised more specific issues that include expense of outsourcing, no current needs that would necessitate outsourcing, poor quality, loss of control and less flexibility. The most common concern was that outsourcing can be

expensive. A respondent in the Europe & the Middle East said his company wouldn't find outsourcing more appealing, "Because the costs linked with outsourcing are still higher than what we spend on IT employees' salaries."

In Asia-Pacific, respondents are particularly concerned that outsourced work is of a lower quality than in-house work. As one Technology Executive in Asia-Pacific put it, "My perception is that the quality of services provided by major outsourced partners is rather poor and you wonder if it's viable for them to provide quality services. We are aligning the business needs to be in-house and not outsourced." Many respondents in the United States & Canada worry about a loss of control as a result of outsourcing, though they remain interested in the potential to cut IT costs. Cost, quality and security were main concerns surrounding outsourcing in Europe and the Middle East and respondents in this region were more likely to specify that they are satisfied with current in-house IT operations and do not see a need to outsource than their peers in other regions did.

Not Seen as Necessary

United States & Canada

- "We have a great group that is very, very adept. They have put together a great system that is incredibly cost-effective." – Business Side Executive, US & CA
- "It's just the nature of our business." Technology Executive, US & CA
- "Well, we're a pretty small shop. There are three guys here and we've done a pretty good job of handling everything thus far." - Technology Executive, US & CA

Europe & Middle East

- "Because we don't believe in outsourcing as a model that's good for us." Technology Executive, EMEA
- "We see no benefit in outsourcing. It's therefore not an option for us." Technology Executive,
- "We don't have the work load for outsourcing." Business Side Executive, EMEA
- "The company has an efficient setup, hence [outsourcing is] not required." Technology Executive, EMEA

Asia-Pacific

- "Outsourced companies are not familiar with our management concepts, traditions and operations. Therefore, we do not see the need of outsourcing. Moreover, we have our own research center with very high quality technical staff which enables us to do well in the IT department. Not only can it save on costs, but it also enables us to develop suitable software for the company, that is tailor-made to our business needs." Technology Executive, APAC
- "We have enough IT people to deal with all of our tasks." Technology Executive, APAC

Latin America

- "In our structure [outsourcing] would not make any difference. The context of our company is already optimized and cost effective." – Technology Executive, LA
- "Because of the resources that the company has, we are sufficient to continue with the plan and specific objectives in these areas." – Business Side Executive, LA

Expensive

United States & Canada

- "It all comes down to how much it costs. Every time I've approached people with an outsourcing scenario, it costs more than having a person on staff. The service would probably not be worth it either." Technology Executive, US & CA
- "Based on what we've looked at, we think we can get it done cheaper and more efficiently inside." – Business Side Executive, US & CA
- "Because there is typically a large start-up cost when you outsource. We're trying to cut costs now. Most of the favored outsourcing locations have rapidly escalating costs China, India. It's not clear that we can get that big [of] a savings from them. When you do an outsourcing arrangement like that, you typically have to sign a long-term contract. With the economy in freefall, it's not clear we can make those kinds of long-term commitments. I don't want to get stuck with a contract in nine months that is a waste of money." Technology Executive, US & CA

Europe & Middle East

- "I find it more expensive." Technology Executive, EMEA
- "This may result in further costs not initially apparent or considered." Business Side Executive,
 FMFA
- "It is not attractive for them and they have saved money by in-sourcing instead of outsourcing and do things themselves." – Technology Executive, EMEA
- "Becomes more expensive. It is cheaper and more effective to use our own personnel." Business Side Executive, EMEA
- "Because the costs linked with outsourcing are still higher than what we spend on IT employees' salaries." – Technology Executive, EMEA

Asia-Pacific

- "Because from our past experience, it is not cost effective. If cost is [the] same, we prefer internal operation." – Technology Executive, APAC
- "Basically because of the cost factor of outsourcing. From past experiences outsourcing means there is a high cost associated with it." – Technology Executive, APAC
- "Currently we have a lean organization... Outsourcing people is more expensive than the training people." – Business Side Executive, APAC
- "Pricing is very high. It's not the right time for us to go for outsourcing." Technology Executive,
 APAC

Latin America

- "Not attractive at the moment due to cost issues." Business Side Executive, LA
- "Because maybe the cost is a little bit more excessive than having it in-house." Business Side Executive, LA

Lower Quality of Work than In-House

United States & Canada

"What would make it more attractive is the reliability of the products, so the outsourcing partner
that you are outsourcing to has to really demonstrate that they have a rock solid product." –
Technology Executive, US & CA

Europe & Middle East

- "We don't trust this technology." Business Side Executive, EMEA
- "[The] best experiences are having them in-house." Technology Executive, EMEA

Asia-Pacific

- "We do not have much confidence in their after-sales service and maintenance ability, and we are afraid that outsourcing may affect our business." – Technology Executive, APAC
- "From my past experience, there is no such vendor that is less expensive with high quality of service." – Technology Executive, APAC
- "Well outsourcing requires some level of quality... of the actual service provided. I would have to find companies with both quality of service and lower costs." – Technology Executive, APAC
- "My perception is that the quality of services provided by major outsourced partners is rather poor and you wonder if it's viable for them to provide quality services. We are aligning the business needs to be in-house and not outsourced." – Business Side Executive, APAC

Latin America

"We have had this experience. With the outsourcing we end up losing service's quality. Sometimes you can outsource, like a third level support, but network assistance, infrastructure and direct assistance I think that should be done by the company itself." – Technology Executive, LA

Lack of Control

United States & Canada

- "Well, there are pros and cons to everything, but when you outsource a lot of things, in some
 ways it takes your hands off of a lot of it. You're putting it in the control of somebody else to
 take care of." Technology Executive, US & CA
- "The in-house ability to control and maintain our systems and services. We have only ever considered it for very minor things but ninety-nine percent of everything is in-house." – Technology Executive, US & CA
- "Control is part of it and we just don't have a need to, and I'm patriotic."— Business Side Executive, US & CA

Europe & Middle East

- "We need control and management of data and the ability to interfere to remedy matters at all times. This is impossible when outsourcing." – Business Side Executive, EMEA
- "As specialist service providers we're always skeptical of the expertise of others. We would hence not like to see our company data, processes etc. in the hands of others." – Technology Executive, EMEA
- "Because [of] the direct integration of our own system and coordination for our company specific conditions is far more important, it has to be done by employees who are employed here." – Business Side Executive, EMEA

Asia-Pacific

- "We believe it is better not to outsource in terms of... control." Technology Executive, APAC
- "Potentially it will create more errors and on top of that we would need to train the outsource team. They might tend to be a source of more problems and errors in the long run." – Technology Executive, APAC

Latin America

"If we do everything ourselves it will be easier and better to manage." – Technology Executive,
 LA

 "The fact that I manage my own staff and department, gives me much more confidence and control over everything." – Technology Executive, LA

Less Timely/Efficient

United States & Canada

- "Because it takes a lot more time to train the outsourced staff in order for them to have our knowledge, and to be compliant with the policies." – Technology Executive, US & CA
- "Because you have to adjust a lot of the business things before the outsourcing can happen. It's the way we do business. Some of these require attention and with this current climate you don't have too much time to wait. You have to make decisions fast. You have to make sure things can happen at your discretion." – Business Side Executive, US & CA
- "Based on what we've looked at, we think we can get it done more efficiently inside." Business
 Side Executive, US & CA

Europe & Middle East

- "It is more effective to use our own personnel." Technology Executive, EMEA
- "It is not efficient because of time reasons... a local support is more efficient for us." –
 Technology Executive, EMEA

Latin America

"Outsourcing does not answer quickly." – Business Side Executive, LA

Less Flexible

United States & Canada

"It reduces your flexibility of the timeliness or the ability to respond to changes in the marketplace. So we feel by having it closer, in house, we're more flexible and adaptable to the changes that occur around us." – Technology Executive, US & CA

Europe & Middle East

- "It has never been attractive for them to outsource. He has never believed in outsourcing. His best experiences are having them in-house. In case of outsourcing it is mostly about package solutions, where you can't optimize and configure it as you want it to be. You can only get what they offer and it is never as flexible." Technology Executive, EMEA
- "Partly according to flexibility... the people should be sitting here." Technology Executive, EMEA
- "I think that a company of our size couldn't have IT outsourcing because the operational problems, which occur every day, are needed to [be] solved in real time. I can't imagine how it would work." – Business Side Executive, EMEA

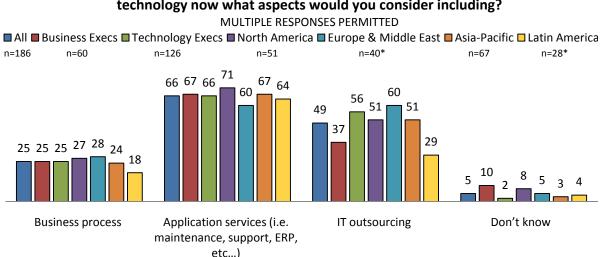
Asia-Pacific

 "Our requirements for outsourcing services are high and the current technology of outsourcing companies has not reached our multi-faceted and multi-changing requirements." – Technology Executive, APAC

When asked what they would consider outsourcing, 66% of all respondents say they would consider application services, 49% IT outsourcing, and 25% business processes. Specific aspects of IT outsourcing that respondents would consider included IT services and support, server administration and hosting, virtualization and automation. Globally, Business Side Executives

were marginally more likely than Technology Executives to select Application services and somewhat less likely than Technology Executives to select IT outsourcing (37% to 56%) as specific areas to consider for outsourcing.

Regionally, respondents in the United States & Canada were most likely to consider Application service outsourcing. Those in Europe & the Middle East were most likely to consider Business process and IT outsourcing while those in Latin America were least likely to consider either Business process or IT outsourcing, but particularly the IT outsourcing.



IF YES: If your company was to outsource a portion of your information technology now what aspects would you consider including?

Of those respondents who would consider IT outsourcing, specific aspects included IT services and support, server administration and hosting, virtualization and automation. Virtually none of the Technology Executives interviewed expressed an interest in outsourcing IT components that are focused on meeting the company's strategic goals, preferring to maintain control internally in those areas. As one Technology Executive in the United States & Canada who would outsource IT support stated, "We wouldn't consider outsourcing things that require deep business knowledge because the learning curve is too steep."

Respondents in every region include a variety of IT services and support in what they would consider outsourcing, such as application and troubleshooting services and infrastructure and development support. Server administration and hosting were mentioned in every region with the exception of Latin America. Virtualization and automation were often cited by respondents in the United States & Canada but were not as important in other regions. Typically, these services and support were seen as less strategically relevant and hence not as important for inhouse IT departments to control.

IF IT OUTSOURCING IS SELECTED: What specific IT components would your company consider outsourcing?

Services and Support

United States & Canada

- "Desktop servicing and things of that nature. Desktop support." Technology Executive, US &
- "Infrastructure support, help desk, some application development. We wouldn't consider outsourcing things that require deep business knowledge because the learning curve is too steep." – Technology Executive, US & CA

Europe & Middle East

- "Application services." Technology Executive, EMEA
- "Application service providing." Business Side Executive, EMEA
- "Outsourcing of managed services, knowledge process outsourcing and perhaps business process outsourcing is under consideration." – Business Side Executive, EMEA
- "Consulting and introduction of new products." Technology Executive, EMEA

Asia-Pacific

- "We would consider outsourcing... network and desktop services." Technology Executive, APAC
- "Maintenance of system including trouble-shooting. Currently our IT staff is [trouble-shooting]
 but it is quite cost consuming." Business Side Executive, APAC
- "Programming and support services." Technology Executive, APAC
- "Infrastructure, application support and development." Technology Executive, APAC
- "Total software and hardware support." Technology Executive, APAC

Latin America

- "Development service and infrastructure." Technology Executive, LA
- "The support part is more clear, as well as in software and system areas." Business Side Executive, LA

Server Administration and Hosting

United States & Canada

- "Hosting- We are currently doing that now." Technology Executive, US & CA
- "Database administration and server administration." Technology Executive, US & CA

Europe & Middle East

- "Server outsourcing." Technology Executive, EMEA
- "Server environments." Technology Executive, EMEA
- "Servers and distant net management." Technology Executive, EMEA

Asia-Pacific

- "All of our projects including development and maintenance are outsourced... due to the consideration of cost and effectiveness for professional services." – Technology Executive, APAC
- "Server management." Technology Executive, APAC

Virtualization and Automation

United States & Canada

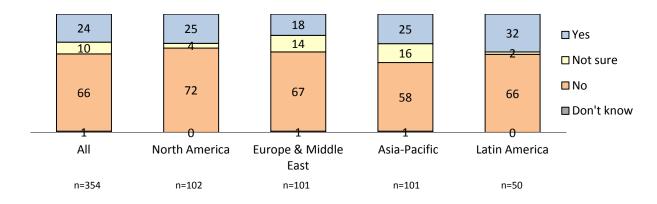
- "Virtualization, storage consolidation, [and] technologies to reduce cooling and power costs." –
 Technology Executive, US & CA
- "Virtualization, automation, server storage consolidation, application modernization and consolidation, data and information management." – Technology Executive, US & CA

Vendor Selection in the Current Economic Climate TECHNOLOGY EXECUTIVES ONLY

Twenty four percent of all Technology Executives agree that the current economic situation changes the information technology vendors they would most like to work with. Respondents in Latin America were the most likely to be interested in changing vendors, while those in Europe & the Middle East were the least likely.

Does the current economic climate change the information technology vendors that you want to work with?

TECHNOLOGY EXECUTIVES ONLY



Among those interested in changing vendors, respondents want a technology vendor that is cost effective and provides quality service. Many respondents cite the economic crisis or their forecasted business plan during the recession as contributing factors to their competitive cost and quality needs.

Across regions, *cost effective* was the top scoring attribute or vendors respondents were most likely to work with. *Quality service* was close behind as the second attribute respondents wanted overall, with the exception of Asia-Pacific, Europe & the Middle East, where *capabilities* came in second. Specifically in Europe & the Middle East region, *efficient* was valued more than *reliable*. Other frequently mentioned attributes associated with vendors respondents are most likely to work with include *reliable*, *efficient*, *experience*, and *manageable*.

What are the top two or three attributes you would associate with the technology vendors you are **more likely** to work with?

What are the top two or three	Audience		Re	gion	
attributes you would associate with the technology vendors you are most likely to work with? TECHNOLOGY EXECUTIVES ONLY MULTIPLE RESPONSES PERMITTED (UP TO 3)	Tech. Execs n=84	United States & Canada n=25	Europe & Mideast n=18	Asia-Pacific n=25	Latin America n=16
Cost effective	45	44	50	40	50
Quality service	30	28	28	28	38
Capabilities	21	8	33	36	6
Reliable	19	8	22	28	19
Efficient	17	12	33	4	25
Experience	15	8	11	20	25
Manageable	12	24	11	8	0
Longevity	11	16	6	12	6
Reputation	11	8	17	4	19
Support	10	16	0	12	6
Innovative	7	16	6	0	6
Stable	7	16	0	8	0
Global reach	6	4	6	8	6
Competitive	5	0	6	8	6
Accessibility	4	0	6	8	0
Company size	4	8	0	4	0
Secure	2	0	0	8	0
Accountable	1	4	0	0	0
Don't know	74	80	67	64	88

In general, *low quality service* was the attributes respondents associated with technology vendors they are least likely to work with. However, a notable difference is in Latin-America, where respondents are most concerned with *cost*. There, *unmanageable*, *no longevity* and *inexperienced* are also attributes of greater concern than *low quality service*. Latin-American respondents cited *not cost effective* as the attribute they most associated with undesirable vendors. Other attributes most associated with vendors respondents are least likely to work with include *inexperienced*, *inefficient*, *unmanageable*, and *unreliable*.

What are the top two or three attributes you would associate with the technology vendors you are *less likely* to work with?

What are the top two or three	Audience		Re	gion	
attributes you would associate with the technology vendors you are <u>least likely</u> to work with? TECHNOLOGY EXECUTIVES ONLY PERCENTAGES BASED ON TOTAL RESPONSES MULTIPLE RESPONSES PERMITTED (UP TO 3)	Tech. Execs n=84	United States & Canada n=25	Europe & Mideast n=18	Asia-Pacific n=25	Latin America n=16
Low quality service	37	12	33	56	50
Not cost effective	36	40	22	28	56
Inexperienced	18	20	17	16	19
Inefficient	17	8	22	16	25
Unmanageable	13	24	11	8	6
Unreliable	12	12	17	8	13
Lack of capabilities	11	16	11	8	6
Poor or No reputation	10	16	11	8	0
No longevity	8	20	6	4	0
Company size	5	12	6	0	0
Lack of support	5	4	6	8	0
Unstable	5	12	6	0	0
Inaccessible	4	4	6	0	6
Lack of innovation	4	8	0	4	0
No global reach	4	0	0	4	13
Lacking security	1	0	6	0	0
Not competitive	1	4	0	0	0
Don't know	112	88	122	132	106

What Should IT Look Like Post Economic Downturn

As a result of decisions they make, respondents expect that IT departments should look different after the economic downturn. Overall, Business Side Executives and Technology Executives agree that *cost effective* is the adjective they would most like to be able to apply to their information technology as a result of decision-making in the current situation. The second scoring attribute overall is *optimized* at 29%, followed closely by *efficient* at 28%. Slightly more Business Side Executives mentioned *efficient* than Technology Executives (30% and 28%, respectively), while more Technology Executives mentioned *optimized* than did Business Side Executives (30% and 26%, respectively). Other adjectives mentioned by more than 10% of all respondents include *agile*, *competitive*, *lean*, and *standardized*. Overall, the lowest scoring adjectives among respondents were *automated* and *strong*.

There are some regional differences in the adjectives respondents would most like to be able to apply to their information technology as a result of decision-making in the current economy. *Cost effective* was the highest scoring adjective among respondents in the United States &

Canada and Europe & the Middle East, whereas *efficient* was the top adjective in the Asia-Pacific region and *optimized* scored highest among Latin American respondents. A higher percentage of respondents in the United States & Canada chose *agile*, *lean* and *strong* than in any other region. *Cost effective* and *automated* did best in Europe & the Mideast, while efficient scored highest in the Asia-Pacific region. *Competitive* and *standardized* fared better in Latin America than they did elsewhere.

Which one or two of the		Audi	ence		Reg	ion	
following adjectives would you most like to be able to apply to your information technology as a result of the decisions your company is making? RANKED BY ALL, MULTIPLE RESPONSES PERMITTED (UP TO 2)	All	Business Execs	Tech. Execs	United States & Canada	Europe & Mideast	Asia- Pacific	Latin America
Cost effective	37	35	37	39	42	40	18
Optimized	29	26	30	25	32	27	32
Efficient	28	30	28	28	17	41	28
Agile	19	18	19	24	17	13	20
Competitive	17	15	18	14	15	16	28
Lean	15	17	14	22	11	13	11
Standardized	14	12	16	8	14	17	22
Automated	9	10	9	8	17	2	9
Strong	8	9	7	11	8	3	8
Don't know	1	1	1	0	2	1	0

Appendix

Research Objectives

The research:

- Clarified what areas respondents are focusing on during the economic downturn
- Identified how the downturn has the changed respondents plans and priorities for Information Technology / IT
- Identified perceived business benefits and challenges as they relate to the current economic climate
- Determined the extent to which Business Side Executives and Technology Executives view the current economy as an opportunity to change their information technology financial footprint
- Compared perceptions of optimal relationship between information technology spend as a percentage of revenue
- Expanded understanding of how respondents anticipate the current economic climate impacting their technology infrastructure and business processes long term
- Identified the **role of the economy** in infrastructure and outsourcing decisions

Methodology

Hewlett-Packard (HP) commissioned this study of 490 in-depth interviews (IDIs) conducted with Business and Technology Executives. Business Side Executives included CEOs, Chairmen, Presidents or CFOs, and VPs and Directors of Finance (and other related job titles). Technology Executives included CIOs, Presidents of IT (and related job titles), and other senior level technology decision makers. Interviews were conducted December 8 through January 16 via telephone. Approximately 75% of the respondents were from Enterprise level companies and 25% were from Mid-Market companies. Regions included: the United States & Canada (United States and Canada), Europe and the Middle East (UK, Germany, France, Denmark, Russia, Czech Republic, UAE), Asia-Pacific (China, Japan, Australia, Philippines), and Latin America (Brazil, Mexico). Fielding was conducted by PSB Research.

All numbers shown in this report represent percentages unless otherwise noted. Columns that do not add up to 100 may be due to removal of "don't know" responses, rounding errors or inclusion of multiple responses.

Questions answered by the full sample of business and technology decision makers are subject to a sampling error of plus or minus approximately 4 points at the 95 percent level of confidence. This means that in 95 out of 100 samples like the one used here, the results obtained should be no more than 4 percentage points above or below the figure that would be

obtained by interviewing all business and technology decision makers in the markets covered by this research.

In addition to sampling error, one should bear in mind that question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of opinion polls.

		Audi	ence		Reg	ion	
	All	Business Execs	Tech. Execs	United States & Canada	Europe & Mideast	Asia- Pacific	Latin America
Sample Sizes	490	136	354	153	133	128	76

Additional Data

Current Perceptions Regarding Information Technology

Across regions, both Business Side Executives and Technology Executives feel that their company's information technology is currently *Efficient*, *Standardized*, and *Competitive*. Respondents in the United States & Canada also feel (31%) that their IT can be described as *Lean*, while those in Europe & the Middle East, Asia-Pacific and Latin America are more likely to describe it as *Optimized* or *Automated*. In general, respondents have a positive perception of their company's current IT. Globally the only negative adjective that scored higher than 10% was *Outdated*, at 11%.

Which one or two of the		Audi	ence		Reg	ion	
following adjectives most applies to your company's information technology today? RANKED BY ALL, MULTIPLE RESPONSES	All	Business Execs	Tech. Execs	United States & Canada	Europe & Mideast	Asia- Pacific	Latin America
Efficient	33	33	32	35	37	25	34
Standardized	24	18	26	21	29	25	18
Competitive	19	18	20	14	22	18	26
Lean	17	15	18	31	10	15	5
Optimized	15	15	14	4	20	17	22
Agile	13	12	14	14	15	9	13
Automated	12	13	12	7	17	10	17
Outdated	11	13	11	16	6	13	9
Strong	10	7	11	11	11	5	13
Inefficient	5	4	5	5	2	11	1
Bloated	4	4	5	1	5	4	11
Overpriced	2	4	2	3	1	2	4
Unwieldy	2	3	2	3	2	2	3
Incompatible	2	1	3	3	2	3	1
Don't know	1	2	1	1	2	1	0

Demographics

		Audi	ence		Reg	ion	
Gender	All	Business Execs	Tech. Execs	United States & Canada	Europe & Mideast	Asia- Pacific	Latin America
Male	92	88	93	93	86	94	97
Female	8	12	7	7	14	6	3

		Audi	ience	Region				
What is your title?	All	Business Execs	Tech. Execs	United States & Canada	Europe & Mideast	Asia- Pacific	Latin America	
CEO	13	49	0	20	12	9	11	
President, Vice President, Divisional Director or Board Director	11	40	0	8	9	10	24	
CFO	13	8	15	5	17	16	17	
Managing Director	30	2	41	0	47	46	34	
Chairman	4	1	5	1	3	3	14	
CIO	11	0	16	31	0	6	0	
President or Vice President of Information Technology/Information Systems	2	0	3	6	1	1	0	
Director of IT	13	0	18	26	8	9	0	
Director of MIS	2	0	3	4	3	0	0	
Other	0	0	0	0	0	0	0	
Don't know	0	0	0	0	0	0	0	

		Audi	ience		Reg	gion	
To whom within your company do you report?	All	Business Execs	Tech. Execs	United States & Canada	Europe & Mideast	Asia- Pacific	Latin America
Board of Directors	19	43	9	19	19	18	20
CEO	32	27	34	27	41	32	26
CFO	14	4	18	18	10	12	16
coo	6	3	7	7	5	5	9
CIO	12	1	16	14	11	16	5
President / VP / Director / Manager	13	14	12	10	14	9	24
No one - everyone reports to me	1	4	0	4	0	0	0
Others	3	3	3	2	2	8	0
Don't Know / No Response	0	0	0	0	0	0	0

What is the approximate number		Audi	ence		Reg	ion	
of employees in your company at all locations worldwide?	All	Business Execs	Tech. Execs	United States & Canada	Europe & Mideast	Asia- Pacific	Latin America
250 - 499 employees	13	8	15	1	24	13	18
500 - 999 employees	24	25	24	27	26	16	29
1000+ employees	62	67	61	72	50	70	53

What is your arganization!s		Audience		Region				
What is your organization's primary type of business at your location? MULTIPLE RESPONSES	All	Business Execs	Tech. Execs	United States & Canada	Europe & Mideast	Asia- Pacific	Latin America	
Aerospace	1	2	1	0	4	0	0	
Agriculture / Forest / Fishing	2	3	2	1	2	1	5	
Computer related products or services	4	7	2	4	5	3	1	
Education	2	1	3	0	7	0	0	
Engineering / Architecture	3	0	4	2	5	5	1	
Entertainment	2	3	1	3	2	2	0	
Government	1	0	1	1	2	1	0	
Finance / Banking	5	6	4	5	5	7	3	
Healthcare	1	1	1	0	1	1	1	
Hospitality	2	1	3	2	2	4	1	
Insurance	4	3	4	6	5	3	0	
Legal	1	1	1	4	0	0	0	
Manufacturing	32	29	33	27	22	41	45	
Mining	1	1	1	0	1	1	1	
Non Profit	3	4	2	7	3	0	0	
Printing / Publishing	2	1	2	0	2	1	4	
Professional Services	2	3	2	2	5	1	1	
Real Estate	3	3	3	2	4	2	5	
Retail	6	5	6	10	6	5	1	
Telecommunication	1	1	1	1	2	0	1	
Trade Services	3	3	3	2	2	2	5	
Transportation	6	9	5	7	8	7	0	
Utilities	2	1	2	2	2	3	0	
Wholesale	3	3	2	4	0	3	4	
Others	8	10	8	7	7	5	18	
Refused / Don't Know / No Response	0	0	1	0	0	2	0	
Construction	1	1	1	3	0	1	0	