



Exclusive Research from Computerworld

IT's Balancing Act

As companies solidify their investments in emerging technologies such as mobility, cloud and collaboration, IT anticipates wide-ranging benefits to both the top and the bottom line. But integration challenges—and the specter of shadow IT—make it critical to balance technology operations and business needs

Mobility and collaboration technologies continue to be key contributors to creating a competitive advantage for long-term corporate sustainability, according to the November 2013 Computerworld "State of the Enterprise" survey of 313 business and IT professionals with influence over technology purchasing decisions.

As companies solidify their investments in these and other emerging technologies, such as cloud, big data and consumer IT, they expect to reap a wide range of financial, operational and strategic benefits. Yet many IT departments, especially in larger companies, struggle to balance business expectations with the challenges of integrating new technologies with still-needed legacy systems.

Solidifying Important Investments

Compared to the results of a similar survey in 2012, companies are solidifying their investments in emerging technologies. A higher percentage of respondents reported this year that they are in the process of adopting, have completed deployment of or have optimized their ROI from mobility (74 percent), cloud (58 percent) and consumer IT (45 percent) initiatives. Implementation of collaboration technologies is stable: as in 2012, 73 percent of respondents said their companies have deployed them or are involved in doing so.

Although all four of these technologies are becoming more important as contributors to corporate competitive advantage, a majority of respondents again cited mobility (59 percent) and collaboration tools (58 percent) as very important or critical to their companies' future.

Evaluation and adoption of big data technologies is proceeding more cautiously, particularly among smaller companies. About half of all respondents (49 percent) said big data and analytics are highly important to them, the same percentage as in 2012. Business analytics also tops the list of technologies that respondents believe provide them with a competitive edge. Yet, overall, a slightly smaller percentage of respondents report they're implementing the technology than did a year ago. Big data investments appear to be concentrated among companies with 1,000 or more employees. They're almost 40 percent more likely to report they are deploying the technology than companies with fewer employees. Although large companies are also more likely than small companies to be implementing mobility, cloud, consumer IT and collaboration tools, big data presents the biggest gap.

The difference may be explained at least in part by the significantly greater focus large companies appear to have on the business objectives for their analytics investments.

Respondents overall cite a range of goals about equally: improving profitability (35 percent), increasing revenue (35 percent), retaining customers (34 percent) and improving productivity (33 percent). In contrast, 45 percent) of respondents at companies with 1,000 or more employees anticipate revenue growth, 41 percent see improved profitability and 41 percent expect to retain customers as a result of their analytics initiatives.

Nevertheless, spending on analytics and data management remains steady: 82 percent of all respondents said their budgets for these technologies would stay the same or increase. Not surprisingly, companies with 1,000 or more employees are significantly more likely to boost spending on analytics next year.

Investment in 11 other infrastructure and end-user technologies is stable or likely to increase during the next 12 months. As with analytics, companies with 1,000 or more employees are more likely to increase spending. Cloud and wireless/mobile technologies the most probable beneficiaries of additional investments. Forty-two percent of all respondents expect to increase spending on cloud, while 38 percent plan adding to their investments in wireless/mobile technologies.

Honing a Competitive Edge

Where big data targets the top line, other technologies aim at corporate costs, efficiency and effectiveness. Survey respondents see these investments as contributing to competitive advantage.

They anticipate productivity improvements from their investments in mobility (52 percent) and collaboration tools (53 percent). In addition, 47 percent expect their mobility initiatives to improve both customer service and business agility. These two objectives also rank second (38 percent) and third (37 percent) for collaboration investments. Respondents at companies with 1,000 or more employees are significantly more likely to anticipate productivity (61 percent) and customer service (45 percent) improvements from collaboration technology.

Productivity improvement is also the top goal for consumerization of IT, especially at companies with 1,000 or more employees. Thirty-five percent of respondents, and 43 percent from large companies, cited it as an objective. Overall, respondents also think consumerization will improve customer service (32 percent) and reduce operating costs (31 percent).

Meanwhile, reducing operating costs is the primary goal for cloud—the choice of 48 percent of respondents. They also anticipate using cloud to increase agility (44 percent) and improve productivity (38 percent).

Given these overlapping objectives, it's not too surprising that respondents value several technologies as both important to keeping the business running and to delivering a competitive edge. Asked to choose, from a list of 16, five technologies that are most essential to business success and five crucial to delivering a competitive advantage,

respondents chose three for both lists: business analytics, wireless/mobile and software (including everything from operating systems to enterprise applications). [Q4/Q5] Disaster recovery/continuing planning, virtualization, and security also made the "essential" list (respondents ended up selecting six due to ties). The "competitive advantage" list also includes application development, upgrades or replacement, along with cloud.

Which five technologies demonstrate the most core value to your business?

Technology	Percent
Wireless & mobile	37%
Disaster recovery/continuity planning	36%
Virtualization	36%
Security technologies	36%
Business analytics	35%
Software	35%

Which five technologies demonstrate a clear competitive advantage to your business?

Technology	Percent
Business analytics	42%
Application development, upgrades or	40%
replacement	
Wireless & mobile	40%
Software	36%
Cloud computing	35%

However they position their technology investments, respondents report that during the next 1-3 years, they expect to shift their budgets away from "core" technologies such as infrastructure, compute, storage and legacy software to spend more on "edge," or customer- and user-facing devices and applications. On average, respondents expect the balance to change from the current 72 percent core-28 percent edge to a 64-36 split. Companies with 1,000 or more employees, which already dedicate a greater share of their spending to edge technologies, will continue to do so.

Innovation Requires Integration

When evaluating new enterprise technologies for adoption, two-thirds to three-fourths of IT heads who participated in the survey reported that they take into account business outcomes such as enhancing competitiveness (63 percent) and improving customer satisfaction (73 percent), along with budget and technical considerations. But 80 percent named integration of the new technology with existing systems and infrastructure, making it the top factor, followed by cost containment (75 percent) and the ability to accelerate business processes and improve collaboration (74 percent).

Financial and productivity benefits are the most compelling reasons respondents have to switch vendors, more so at companies that spend more. Sixty percent of respondents said they would be very likely or somewhat likely to choose a new technology provider if they could reduce operating costs, followed by productivity improvements (58 percent) and improved profitability (57 percent).

Easier integration (52 percent) ranked 6^{th} as a reason to switch; nevertheless, a majority consider it. Consistent with the priority IT heads place on it, the ability to easily integrate new technology with existing infrastructure also emerged as respondents' top need from current vendors, chosen by 57 percent of respondents.

Integration challenges may be feeding continued tension between IT and other business groups. IT departments continue to struggle somewhat to maintain productive relationships with other business units and functions. Respondents cited managing expectations around the speed of new technology implementation (49 percent), business viewing IT as a cost center (40 percent) and lack of collaboration between IT and other groups (40 percent) as the greatest sources of disconnection. These problems are more acute in companies with 1,000 or more employees, and may have a greater impact outside the C-suite. For example, only 27 percent of IT heads consider lack of collaboration to be an issue, yet 50 percent of respondents in other IT and business roles say it is.

The Road to Improved Business-IT Relationships

Meanwhile, IT and other business departments may still be somewhat at odds over shadow IT. At least some technology spending initiated by business units and functions is out in the open: 37 percent of those surveyed report that departments outside of IT help to underwrite the IT budget. But there may be more business-driven IT spending than IT heads think. Sixty percent of IT heads report that other business departments do not contribute to IT spending, compared to 47 percent overall.

IT leaders may also be underestimating the extent to which other business units and functions outsource technology services directly. Fifty-nine percent said it isn't happening, compared to 48 percent of respondents as a whole. There is progress, however. Nearly half (46 percent) of IT heads say IT is always consulted when departments outside of IT do their own outsourcing, compared to 35 percent in 2012.

Meanwhile, IT departments are taking steps to make their own spending more transparent to business users. Compared to the results from a similar question in 2012, more companies—40 percent, versus 32 percent last year--have, or are considering, formal chargeback policies. The bigger the company, the more likely it is to have a chargeback policy already. Forty-five percent of respondents at companies spending with 1,000 or more employees do, compared to 18 percent of companies with budgets fewer employees.

Respondents indicated that improved communication generally, more than any formal initiative, can facilitate better relationships. Half said they are taking steps to ensure more

frequent and open communication among IT and other groups. Only about a third (32 percent) chose the next most popular measure—forming an IT steering group. Embedding IT representatives within lines of business, chosen by 29 percent, ranked third. Nevertheless, companies with 1,000 or more employees are significantly more likely to see steering groups or other management initiatives as a solution. For instance, 40 percent of respondents from large companies said they are forming IT steering groups, versus 25 percent from companies with fewer than 1,000 employees. One reason could be because larger organizations need more structured ways to exchange information.

Methodology

Computerworld conducted its 2013 State of the Enterprise survey online between October 17, 2013 and November 18, 2013 to gain a better understanding of how the enterprise is evolving to be more competitive and how various technologies are aiding in that transition. Members of the Computerworld audience were invited to take the survey via pop-up and email invitations. Respondents were offered a chance to win \$250 cash as an incentive for completing the survey.

A broad range of industries are represented including high tech, telecom & utilities (20 percent), manufacturing (14 percent), government (12 percent), education (11 percent), financial services (8 percent), professional services (8 percent), healthcare (6 percent), advertising, marketing and media (5 percent) and retail, wholesale and distribution (4 percent). Respondents are employed in organizations with an average of \$5.7 billion in annual revenues. Forty-seven percent of respondents work in companies with 1,000 or more employees, while 51 percent work in companies with fewer than 1,000 employees (3 percent weren't sure). Just under half (43 percent) of respondents indicated they are the top IT executive at their company or business unit/organization. Forty-eight percent of respondents hold executive IT management titles, 17 percent hold mid-level IT management titles, 20 percent hold IT professional titles, 11 percent hold business management titles and 4 percent hold other titles.

The margin of error for a sample size of 313 is +/- 5.5 percentage points. For questions requiring respondents to select a single answer, percentages may not sum to 100 percent due to rounding.