

# TECHNOLOGY PRIORITIES FOR 2012

*As budgets start to recover, IT professionals are taking a closer look at new technologies. See which projects are topping the list for this year.*

- Cautious Growth in U.S. IT Spending
- Windows 7 Migration Wins Out Over Cloud
- The Year of Business Tablet Use
- Data Storage Priorities: Virtualization, Dedupe, Cloud



# NEW TECHNOLOGIES DRIVE IT RESURGENCE

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**WHAT'S ON TAP** for technology in the enterprise? Server virtualization? Cloud computing? Backup deduplication? The data tells the real story.

In TechTarget's annual IT Priorities Survey, 2,642 IT professionals and business analysts gave us their IT forecasts for 2012 for their company's plans. The direction of emerging technologies may surprise you as IT budgets struggle to align themselves with businesses trying to recover from a global recession.

The good news is that technology is going to get more attention in Corporate America in the next 12 months. Although only 20% of IT managers say spending is back to normal, 40% confirm that IT budgets are on the upswing—albeit slowly.

Some of the areas in the survey where CIOs said they will continue to invest include Windows 7 migration and network-based security.

New technologies are also making a big impact. TechTarget survey results report that roughly one-third

of respondents said their companies plan to implement tablets in 2012.

Of the offerings to date, Apple's iPad is still a runaway success. According to the [latest Gartner Inc. research](#), tablets using Apple iOS will account for 61.4% of the shipments this year, while Android tablets should capture 31.9%. Windows-based tablets bring up the rear with a miniscule 4.1% of the shipments. Will tablets beat out laptops among corporate users? See what the experts say.

Always an essential, storage has remained a hefty line item on IT budgets, but technologies and priorities have changed. Find out which key storage deployment initiatives are leading the way and how cloud storage services fit into the mix.

Which project is next in your IT shop? Let me know. Send an email to [mschlack@techtarget.com](mailto:mschlack@techtarget.com). ■

**MARK SCHLACK**

*Senior vice president of editorial,  
TechTarget*

# CAUTIOUS GROWTH IN U.S. IT SPENDING

*Although technology spending is expected to grow, TechTarget's IT forecast for 2012 shows a smaller increase than expected.*

*By Mark Schlack*

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**W**HILE THE U.S. economy remained anemic in November, the eurozone threatened to implode.

There were some hints that economies like China and Brazil might face a little bubble-bursting themselves.

In 2011, we reported an uptick in IT spending, but this year's survey shows a slight pullback. Although many companies (56%) still expect to spend more this year than last year, the percentage that do is down from 64% in 2011. That's still a far cry from the 38% reported in 2010, when the recession had IT fully in its grip.

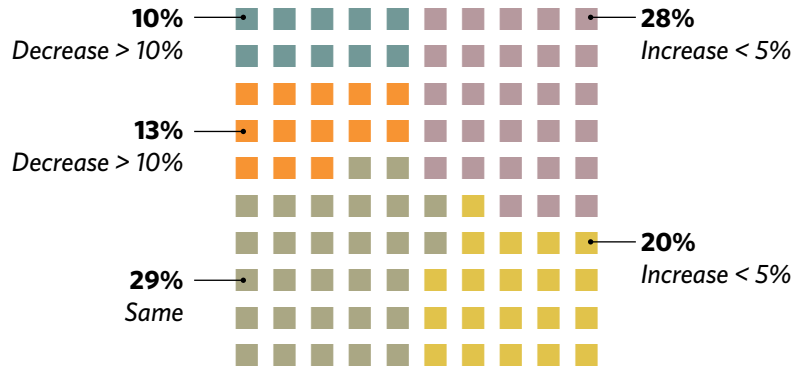
Not surprisingly, IT managers in North America and Europe see lowered growth in 2012. IT spending in North America and Europe, in fact, will rise at only 47% and 44% of

companies, respectively, compared to 69% of companies in Asia.

In North America, 41% of respondents say they are recovering slowly from the recession versus 31% in Asia. Fully 35% of Asian respondents, however, say they never suffered from the recession, compared to 19% of respondents in North America. Europe falls between North America and Asia on both counts.

Recessionary effects appear to be spread fairly uniformly across small, medium and large companies, but respondents from different industries reported somewhat different pictures. Not surprisingly, 40% of government respondents say their IT spending is headed down. Spending is headed up most in the high-tech industries such as computer manufacturing, telecommunications and financial services—57% and

**FIGURE 1: NORTH AMERICAN BUDGET GROWTH**  
*Many IT departments are looking to expand business growth in 2012.*



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54%, respectively. The health care and pharmaceuticals industries also made a strong showing, with spending headed up at 48% of firms.

As economic uncertainty becomes the greatest certainty, aligning IT with business can become a challenge. Is the business growing, treading water or fighting for survival? Overall, many IT departments—37% globally, but 25% in North America—are still focused on expanding to drive business growth (see **FIGURE 1**). But many are in more of a holding pattern, making selective investments (23%) or maintaining service levels with flat spending (15%).

The jobless recovery of the past two years has been the subject of a lot of discussion. In 2009 some IT managers reported they were being told to focus on streamlining

and automating business processes so their companies could increase output without hiring back all the employees who had been laid off in the early part of the recession. Subsequent years also have showed some companies streamlining and automating but only at modest levels. And this year, too, saw only 17% concentrating on helping the business automate more.

This recession has tested the patience and challenged the vision of IT managers just as much as it has any other part of society. It's probably fair to say that their overall sentiment is better expressed by the 40% who say they're recovering slowly, more so than it is by either the 18% who say they are mired in recession or the 20% who say they are back to normal. ■

# WINDOWS 7 MIGRATION WINS OUT OVER CLOUD

*Survey says the top IT priority in 2012 is Windows 7 migration, despite predictions that the cloud would replace companies' IT infrastructures. By Mark Schlack*

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**W**ITH BUDGETS under pressure in 2012 and economic prospects for their companies sketchy, CIOs face the challenge of how best to allocate dollars to meet business needs. TechTarget asked IT professionals and business analysts around the world which of 66 IT projects they would invest in during the coming year.

The results might surprise those who believe IT is getting out of the infrastructure business, but they closely matched IT priorities we have tracked over recent years. Here are the projects that more than 50% of CIOs said they were investing in, with last year's rank in parentheses:

1. Windows 7 migration (2)
2. Server virtualization (1)

3. Network-based security (3)
4. Data protection (4)

Close behind, more than 40% continue their investments in disaster recovery and business continuity, and in business intelligence, business analytics and data warehousing. Server virtualization is bringing with it a number of other changes, with more than a third of respondents focusing on backup for virtual servers and storage virtualization—also being driven by disaster recovery planning.

The emphasis on server virtualization for several years running now is being driven partly by another feature of recent years—data center consolidation. Globally, 38% will take that on in 2012. In North America, the number is down to 30%, probably because consolidation has

been going on there for more than five years. Server virtualization is being adopted by 67% of those consolidating, far ahead of integrated infrastructure (26%), hosted servers (30%), integrated infrastructure (26%) or cloud (25%).

Cloud computing has risen from last year's 22%, but that's actually not outside the survey's 2.5% margin of error. More interesting is where the interest in cloud lies at the moment: mostly in Software as a Service (SaaS). Of those adopting cloud in any form, 55% are implementing SaaS in 2012, far ahead of the next priority, Storage as a Service, at 35%. In fact, SaaS adopters say that 57% of their end-user population will be using one or more cloud

apps next year.

Predictions that cloud computing soon will replace data centers are premature, however. In North America, among the 30% who are putting storage into the cloud in 2012, about 30% of their storage capacity will be there. Among the 31% deploying server infrastructure in the cloud, average capacity for 2012 will be only 20%. While conventional wisdom is that a private cloud is the way companies are going for the moment, only 18% are embarking on that in 2012 (see **FIGURE 2**).

Some other media and industry cloud darlings that didn't fare so well in 2012 adoption plans are online productivity apps (10%) and hosted or cloud email (6%).

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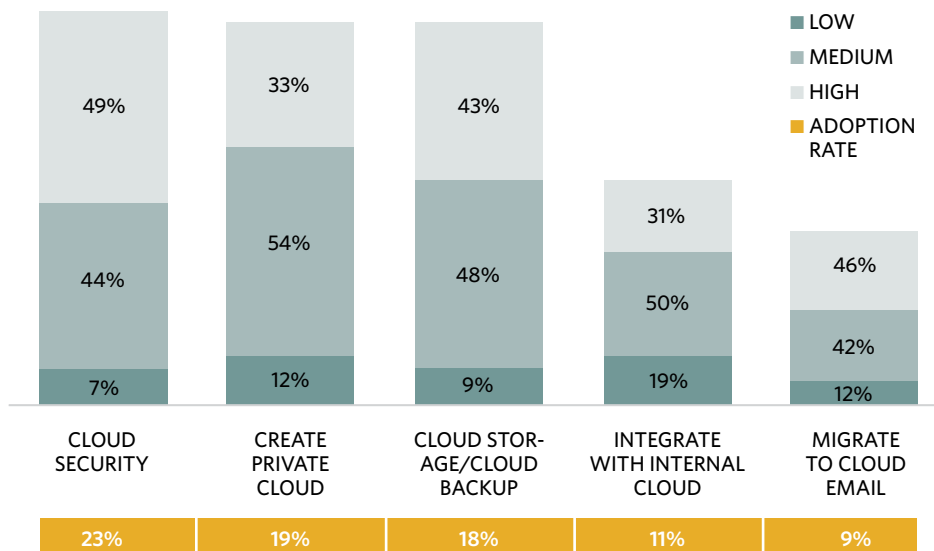
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**FIGURE 2: PLANS FOR THE CLOUD**  
A range of cloud options are on the radar for 2012.



Managed service providers (49%) and SaaS vendors (44%) will be the favored recipients of cloud dollars in 2012, respondents say. Less established vendors still face an uphill battle, and potential customers overwhelmingly cite security, data protection and reliability as their top three concerns. That's not surprising, given the overall emphasis in IT on a cluster of related issues: security, data protection, disaster recovery and compliance.

Looking at the entire application deployment picture, 66% of North American respondents said they would deploy apps with on-premises software and hardware in 2012, followed by 33% SaaS, 29% a private cloud with on-premises software, 22% appliances and 17% mobile. Platform as a Service and a private cloud with a company's own software each rated 14%.

All these models will be used for

packaged applications, but custom development remains an important route to delivering applications, with 34% going that way in 2012, compared to 19% using packaged

**POTENTIAL CUSTOMERS OVERWHELMINGLY CITE SECURITY, DATA PROTECTION AND RELIABILITY AS THEIR TOP THREE CONCERNS.**

apps. The standard kinds of applications that companies will deploy in 2012 are typical, with ERP, finance, customer relationship management and human resources topping the list of functional areas. The top app, however, was business intelligence—43% will deploy it in 2012. ■

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# THE YEAR OF THE BUSINESS TABLET

*Many companies have formally adopted business tablets to offer the benefits of mobility, flexibility and ease of use to their employees.*

*By James Furbush*

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**M**ORE organiza-  
tions are turning  
to iPads to help  
employees work  
more efficiently  
and effectively.

Many companies have formally adopted business tablet use to control the influx of personal devices in the enterprise and to bring the benefits of tablets—mobility, flexibility and ease of use—to more employees. And enterprise iPad use is leading the charge. “A lot of the people are using them at home, and they want to use similar technology at work,” said Brian Katz, director of mobility engineering at Sanofi-Aventis, a pharmaceutical company.

In TechTarget’s 2012 Global IT Priorities Survey, 34% of respondents said their companies plan to implement the use of tablets in 2012—a

significant increase from the previous year’s survey, where only 18% of respondents said their companies would be introducing tablets.

Not surprisingly, Apple’s iPad continues to be a runaway success. Despite competition from Android tablets, the Amazon Kindle Fire and the Barnes & Noble Nook tablet, most consumers and businesses flock to enterprise iPad use. “There are two players in the market,” said Wes Miller, a research analyst for Directions on Microsoft, a consulting firm based in Kirkland, Wash. “Apple owns the market, and Android has had some level of sales, but I wouldn’t call it a success by any means.”

Miller said he expects the iPad’s dominance to continue in 2012 because Apple offers the apps, entertainment and ease of use peo-

ple like, plus a robust set of management and security apps for IT professionals.

Most business tablet implementations begin as users start bringing personal devices to work. “The user gets a new toy, sits there on their couch watching ‘Fear Factor’ or whatever and thinks, ‘Gosh, I wish I could do my work on this,’” said Ben Schorr, CEO of IT consulting firm Roland Schorr and Tower.

The problem is, many users ask for business tablet support without thinking about how difficult that is for IT departments. For example, encrypting data, blacklisting apps, remote wiping and enforcing passcodes is difficult to manage natively on the iPad—most of those functions require a third party—and it’s “non-existent with Android,” Miller said.

Because of these issues, organizations might want to shift this year from bring your own device (BYOD) programs to rolling out controlled tablet projects. Sanofi-Aventis is about to finish its iPad pilot program and move into the implementation phase, and employees are “clamoring for them,” Katz said.

Katz cited tablets’ ease of use, instant-on capabilities and portability as the main factors driving their enterprise surge.

Even organizations that stick with BYOD should be careful to not bite off more than they can chew. Limiting users’ device choices gives IT

more control over management and security—the two primary issues keeping reticent companies from jumping into the tablet fray, Schorr said. “We’ll have to accept that a certain amount of consumerization is going to happen, but IT will have to pick one or two specific devices to dictate what end users can have,” he said.

Tablets will be regular fixtures in the enterprise this year because they offer the same mobility as smartphones but with bigger screens for checking email and browsing the Web, Schorr said. In TechTarget’s survey, 35.2% of respondents said their companies will implement a smartphone program this year—barely up from 34.8% last year.

Employees also use tablets to stay connected to work while on the road and at home, for presentations, on sales calls and for other uses, Katz said. He cautioned that IT professionals should specify a tablet’s use cases before rolling them out to employees, so no one is under the illusion that a tablet is a laptop replacement. Schorr said that tablets won’t replace laptops or desktops anytime soon.

Tablets capabilities are slowly coming up to par with traditional office computers, however. With thousands of business apps and Bluetooth connectivity to printers, external keyboards and other devices, many IT pros view tablets as viable enterprise devices. ■

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# DATA STORAGE PRIORITIES: VIRTUALIZATION, DEDUPE, CLOUD

*Server and storage virtualization share attention among key deployment initiatives. By Rich Castagna*

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**T**RYING TO SQUEEZE as much technology as possible out of generally flat budgets, IT management and staff have set IT data storage priorities that align closely with those of previous years, with a heavy emphasis on data protection. More than one-third of the respondents (38%) to TechTarget's 2012 IT Priorities Survey who have storage responsibilities cited disaster recovery/business continuity (DR/BC) as their top deployment priority for 2012. In a similar survey last year, 38% also ranked disaster recovery as one of their top three priorities for 2011.

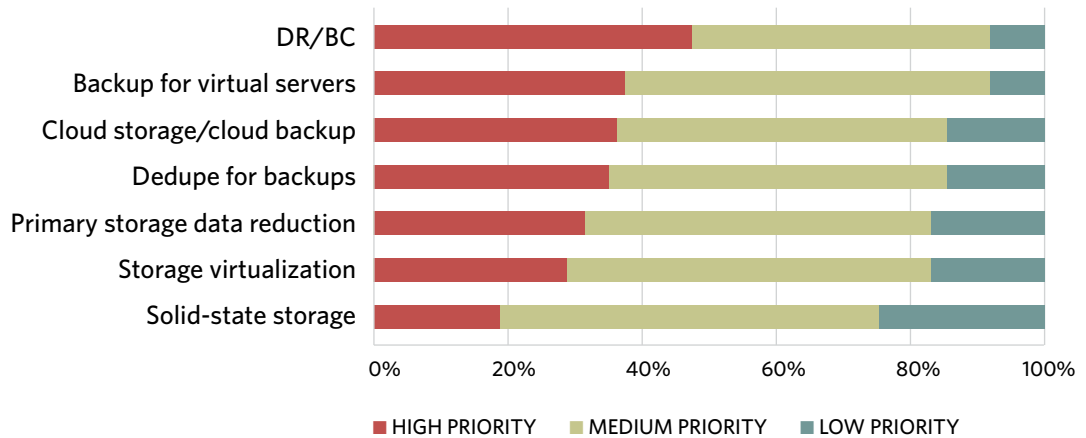
Following DR/BC, backing up virtual servers (35%) and virtualizing storage systems (31%) are the next two key storage deployment initiatives (see **FIGURE 3**, page 11). Virtual machine (VM) backup continues to be a challenge for many companies even as the number of useful tools in that sphere grows. All the major backup application vendors have added VM-specific features, but it's still somewhat of an uphill battle for storage managers who are struggling to implement those new capabilities while the systems side of the shop spins up more VMs and data storage growth continues to spiral.

Interest in storage virtualization is

→ **SURVEY RESPONDENT PROFILE:** *The average annual company revenue for survey respondents was \$2.2 billion, with an average of approximately 16,000 employees. A broad range of industries were represented, with government (13%), financial/banking (12%), healthcare/pharmaceutical (11%) and education (9%) representing the largest contingents.*

**FIGURE 3: STORAGE PROJECT PRIORITIES**

*Virtual machine backup continues to be a challenge for many companies.*



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growing in a more incremental way, which isn't surprising given that a storage virtualization project can be a major undertaking. As the server environment leverages virtualization to become more nimble, data storage shops are looking for complementary technologies, especially to provide adequate flexibility for disaster recovery scenarios. Appliance- or array-based storage virtualization has emerged as the preferred method of storage virtualization.

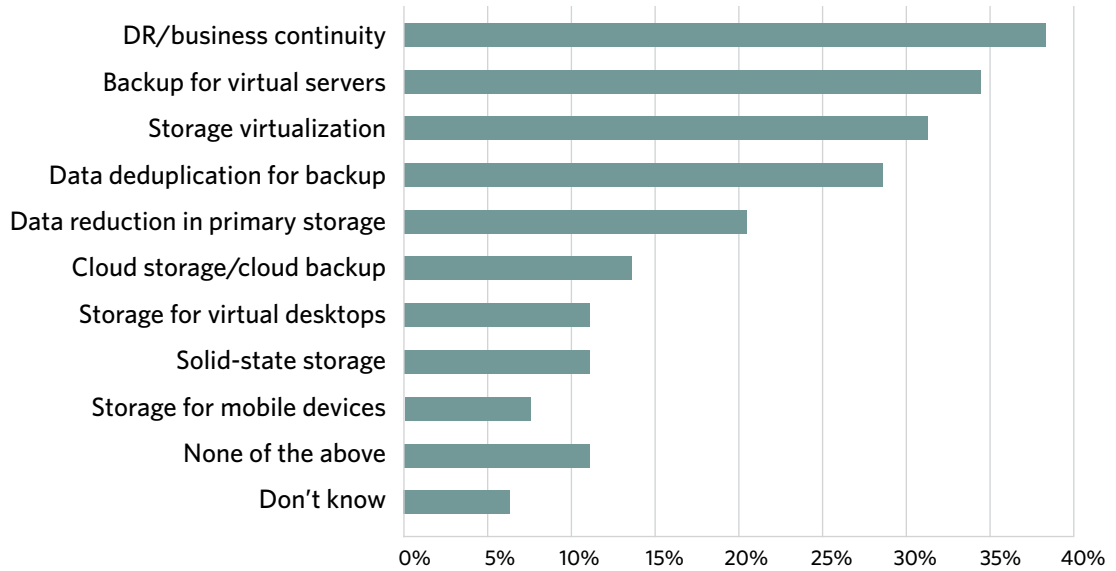
Backup data deduplication products have been available for years, but approximately 30% of companies have deployed the technology. That explains why there's still considerable interest in backup dedupe and why 29% of this survey's respondents say their companies plan to implement deduplication this year. Asked to rate how important

backup dedupe looms as an IT data storage initiative in 2012, 34% call it a high priority, and 51% give it a medium rating.

Data deduplication and other data reduction technologies for primary storage have neither the longevity nor the track record of their backup cousins. So far, the hope for data reduction products and services has outstripped the reality, as only a handful of products are available. Despite the dearth of deployable products, 20% of respondents list primary storage data reduction as one of their planned IT data storage deployments for 2012. Thirty-one percent note that primary dedupe is a high priority, while 52% state it's a medium priority. Storage vendors will have to step up their data reduction product rollouts or demonstrate the efficacy of current products if

**FIGURE 4: TOP STORAGE TECHNIQUES**

*Cloud plays a major role as adoption is set to accelerate.*



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they're to meet those expectations.

No discussion of IT data storage priorities would be complete without considering how organizations plan to integrate cloud storage services into their ongoing data storage operations. Fourteen percent of respondents have cloud storage deployment plans on the drawing board and ready to deploy (see **FIGURE 4**); 36% of those implementers rate cloud storage and/or cloud backup as a high priority for 2012.

Those numbers jibe fairly closely with other data we've gathered related to cloud storage adoption. In those surveys, we found that non-backup cloud storage users had an average of nearly 17 TB stored in the

cloud. The number was the same for cloud backup users. But the current survey suggests that adoption is set to accelerate: Respondents expect that 29% of their storage on average will wind up in the cloud in 2012.

That number may seem surprisingly high given current levels of adoption, especially since so many of the original apprehensions related to cloud services persist today. Asked to name their biggest concerns regarding external cloud service providers, respondents to TechTarget's 2012 IT Priorities Survey listed security, protecting company data and reliability as their top three. So while interest is high, it appears that users are still approaching cautiously. ■



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in business for 29 years, concentrating on computer technology for the last 22 years. He began his high-tech career as network editor at Datamation, where he later became editor. Following that, he was the editor in chief of BYTE, where he was responsible for both print and Web versions of the magazine. Schlack has been the recipient of a number of publishing awards, including a Jesse H. Neal Award.

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