

The 11 Predictions for 2011 from Quest's Top Experts

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Quest Software World Headquarters
LEGAL Dept
5 Polaris Way
Aliso Viejo, CA 92656
www.quest.com
E-mail: legal@quest.com

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Abstract

This paper shares 11 predictions from Quest experts about key technology trends and practices for 2011, based on analysis of surveys conducted at The Experts Conference (TEC) 2010.

Introduction

Technology evolves quickly, and that evolution is driven by the market: no matter how technically elegant a new product or platform is, it will be a success only if it is recognized and adopted by the information technology (IT) community. For example, we hear a lot today about cloud services and virtualization, but do they really represent the future? The answers to this and other critical technology questions are found only within the actual practices of the IT community.

Accordingly, Quest works to understand the issues and needs of the identity and access management (IAM), Exchange, and SharePoint communities, through interaction with our customers, review of the latest information from technology forums, and thoughtful analysis by our team of technology experts. The understanding we achieve helps us build better products and provide organizations with knowledge and best practices to improve their productivity and efficiency.

This paper shares our insights on key technology trends and practices in the form of 11 predictions for 2011. Our top experts use data gleaned from surveys conducted at The Experts Conference (TEC) to provide a window into what “real life” practitioners are doing now and where they are likely to go next. Our predictions tackle critical, high-profile topics such as cloud services adoption, cloud and virtualization technology platforms, identity federation, and even the economy. We hope you find them to be insightful, thought-provoking, and valuable when planning your technology strategies.

About TEC

Sponsored by Quest, TEC is the premier annual conference for sophisticated users of Microsoft identity and access (IDA), Exchange, and SharePoint technologies. TEC 2010, the ninth annual event in the series, included three concurrent conferences on Microsoft's latest technology platform releases:

TEC for Directory & Identity, which covered Active Directory, Forefront Identity Manager (FIM), and Active Directory Federation Services (ADFS)

TEC for Exchange, which focused on Windows Exchange Server 2010

TEC for SharePoint, which concentrated on SharePoint 2010

TEC 2010 attracted 324 delegates from 205 companies in 23 countries. TEC delegates represent a broad spectrum of organizations across many government and industry sectors. TEC delegates are "hands-on" practitioners with deep knowledge of their organizations' current and planned strategies and practices, making them ideal survey candidates.

About the TEC Survey

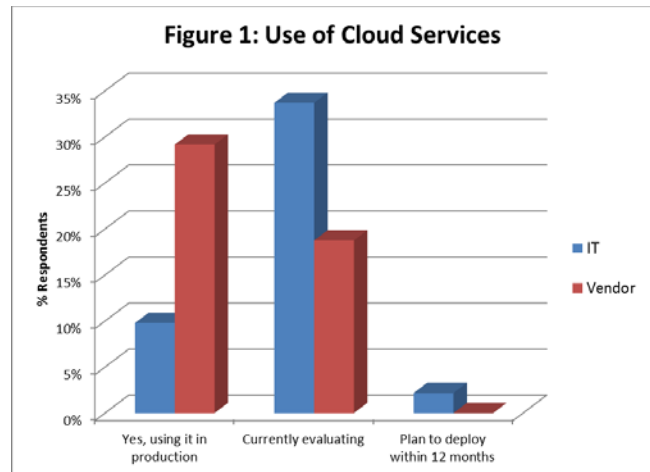
Accordingly, Quest conducts annual surveys at TEC that focus on technology trends, best practices, current issues and priorities. Separate surveys are conducted for IDA, Exchange, and SharePoint conference delegates. Each survey contains questions specific to the individual technology area, along with a core set of questions asked of all TEC delegates. This approach enables respondents to answer in-depth questions in their areas of expertise, as well as to provide data on topics that affect all delegates, such as cloud services, virtualization, job satisfaction and the economy. In 2010, a strong sample of 146 delegates responded the survey; their participation provided a wealth of fascinating information for analysis by Quest experts. This paper shares our 11 key predictions for 2011 based on the TEC 2010 survey.

The Predictions

1. Cloud computing will make notable inroads into corporate IT

Despite considerable attention from technology providers and the media, business adoption of cloud-based services has been slow to date. Like other forms of outsourcing, cloud computing is a major cultural switch for organizations used to developing and supporting their own business applications, and most organizations are proceeding with caution. As shown in Figure 1, only 10 percent of the IT respondents in the TEC survey report that their companies are currently using cloud services in production.

However, signs of accelerating growth are emerging, and we expect cloud computing to see steady growth in production use in 2011. Among IT respondents, 34 percent are presently evaluating cloud services, and 2 percent are planning to deploy a service into production within 12 months. Equally important, cloud service adoption among TEC software and service provider respondents is significantly higher (29 percent) than IT adoption. Since these organizations tend to adopt new technologies early to gain expertise for serving their IT customers, they are good indicators of accelerating growth. However, the smaller percentage of vendor evaluators suggests that the first wave of adoption by the vendor segment has already occurred.



2. But almost half of the companies will avoid cloud computing for at least five years

Interest in cloud computing may be growing, but almost 40 percent of TEC respondents (both IT and vendor) have no plans to use cloud services. This market segment will continue to resist or ignore the ongoing hype around cloud services for the foreseeable future. As a result, the cloud adoption curve will differ from the bell curve usually seen in evolutionary technology changes, such as the migration from Windows XP to Windows 7, which tend to be inevitable. Instead, cloud computing adoption will likely follow an adoption curve similar to offshore outsourcing from the late 1990s to today: after an initial surge of adoption, growth will slow as remaining companies sit on the sidelines and resist until they see proof of success from the early adopters. Once a critical mass of cloud services users establishes success, competitive pressures will force these companies to adopt cloud services themselves, and like offshore outsourcing, cloud services will become a ubiquitous business practice.

3. The battle for cloud platform supremacy will intensify

The big players are competing for market dominance, but there is no clear leader yet. Highlighting the early stage of cloud service adoption, only 3 percent of IT respondents had already chosen their primary platform, with their selection evenly split between Microsoft Azure Services Platform, Google App Engine, and Amazon Web Services. Given the projected size of the market as computing shifts to the cloud, the

stakes are high for the company that is able to achieve platform supremacy. One indicator of the potential in the coming year is that 20 percent of IT survey respondents are currently in the process of evaluating and selecting their primary cloud platform.

4. A dedicated cloud administration model is emerging and will play a key role in increasing cloud service market penetration

The first signs of organizations making structural changes to support a shift to cloud services are emerging. Rather than relying on the same functional administrators responsible for on-premise applications, 9 percent of TEC survey respondents are setting up new administrative teams dedicated to supporting cloud services. Although this number is small, like the emergence of dedicated web development teams during the dawn of the Internet era, it is an indicator that leading-edge companies recognize that the provisioning and support of cloud services will be fundamentally different than current application delivery models.

We believe the adoption of a dedicated cloud administration model will be a growing trend. As a primary source of cloud delivered services, managed service providers will play an ever-increasing role in this development. Further, these new administrators will provide a base of cloud-savvy expertise that will serve an important role in introducing and encouraging the use of cloud services within their organizations.

5. E-mail will be the first cloud service to win widespread IT acceptance

E-mail is the cloud service that garnered the most interest among TEC survey respondents. As shown in Figure 2, 30 percent of TEC respondents report that their enterprise has considered e-mail as a cloud service. When we correlate this data with the cloud service adoption rate shown in Figure 1, we find that about 50 percent of the companies using, currently evaluating, or planning to deploy cloud services have or are considering e-mail.

This high level of interest indicates that e-mail as a service is a culturally viable option for a significant number of companies. It also shows that these companies are not fully satisfied with their current e-mail system implementations, bolstering the opportunity for a cloud-delivered alternative.

Currently, much of this interest remains in the “tire kicking” stage. Just as customers wait to transition to a new operating system until after the release of the first service pack, enterprises are waiting for e-mail offerings to mature and add desired features. We believe that as more feature-rich updates of Microsoft’s Business Productivity Online Standard Suite and similar competitive offerings reach the market, these enterprises will begin to make the switch to cloud e-mail. However, truly widespread adoption is still likely to be years rather than months away.

Figure 2: Has your enterprise considered cloud services for any of the following business processes?*	% Respondents
Email	30%
Web conferencing	18%
Systems management	14%
Office applications	14%
Email archiving	13%
Customer relationship management	10%
Desktop management	8%
Ediscovery	6%
Email migration	4%
Elastic compute technologies	3%
Customer support	3%

* Respondents could choose multiple options

6. Cloud service decisions made outside of IT will lead to less vendor standardization and more “best-of-breed” purchases

Not all cloud service purchase decisions are made within IT. For example, the relatively low interest in customer relationship management (CRM) shown in Figure 2 is inconsistent with the popularity of Salesforce.com and other cloud-delivered CRM services, indicating that IT organizations are not involved in and may not even be aware of all cloud services used within their enterprises. The ease of use and scalability of many cloud solutions enables business area managers to select their own platforms and applications rather than rely on centralized decisions by IT organizations. We believe this trend will lead to the purchase of more “best-of-breed” solutions by departments and teams, and less vendor standardization across an enterprise.

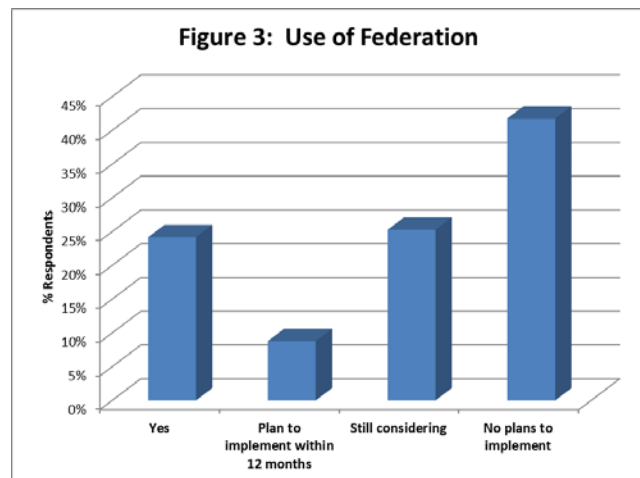
7. Inadequate cloud service contingency plans will cause high-profile trouble

The newness of cloud service delivery models coupled with a strong focus on cost reduction will cause some IT organizations to underestimate the need for proper contingency planning to handle service outages. Cost reduction is cited by 34 percent of TEC survey respondents as the primary driver for considering cloud services. Organizations strongly focused on achieving cost savings are less likely to develop a proper contingency plan and invest in the people, hardware and software needed to execute it, leaving themselves exposed if their cloud provider suffers a significant outage. Other organizations will rely too heavily on their cloud service providers to supply adequate backup. We believe this situation will lead to at least a couple of high-profile finger-pointing cases between corporate IT organizations and their cloud service providers, where each blames the other for the business disruption caused by an outage.

8. Federation will become a standard part of IT delivery

By sharing identity information across domains, federation enables business users to access multiple systems and services without redundant user administration. Use of federation has been growing steadily over the past several years. As shown in Figure 3, federation is already deployed by 24 percent of TEC survey respondents, and another 9 percent of respondents plan to deploy it within the next 12 months. The 25 percent of respondents considering federation shows the potential for additional near-term growth.

As business computing continues to evolve away from monolithic applications behind corporate walls to multiple services that cross internal and external organizational boundaries, we predict that federation will become a standard part of IT delivery. By providing a means to achieve single sign-on across services, the use of federation will both enable and be driven by increasing adoption of cloud services.



9. E-discovery, compliance and security will be the primary drivers for increases in Exchange support spending

Exchange administrators may be able to optimize the efficiency of their routine operational and user support tasks, but they have little control over a growing workload of externally-driven activities. More than 40 percent of IT respondents at TEC for Exchange reported that their resource requirements for e-discovery support and maintaining security increased or increased significantly over the past year, due perhaps to greater regulatory oversight, increasing levels of litigation, or more pressure to protect corporate information. Additionally, 31 percent of IT respondents saw growth in the resources required for compliance reporting and supporting audit requirements, and 70 percent were less than satisfied with their e-mail compliance processes. We predict these pressures will continue in 2011, with e-discovery, compliance and security as the primary drivers of increases in Exchange support spending.

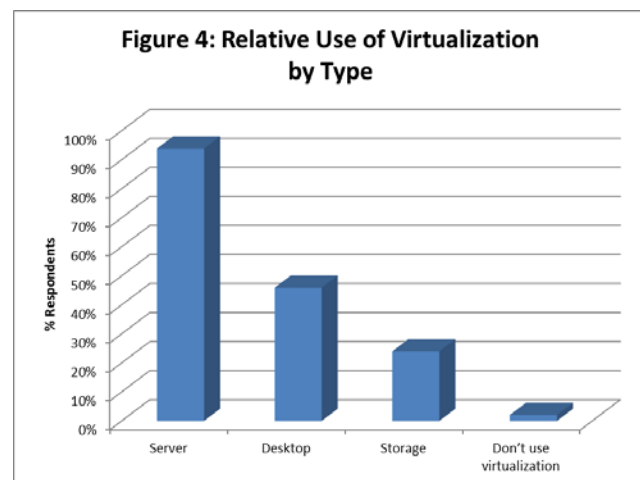
10. Desktops and storage will be the key battlegrounds in the virtualization market

Virtually everyone is using virtualization: 91 percent of TEC respondents are already using it in production, and most of the remainder are either in the process of evaluation or are planning to deploy within the next 12 months.

VMware is solidly the virtualization platform market leader and has locked up the server virtualization market; it is used by 93 percent of IT respondents and 82 percent of vendor respondents. While Microsoft Hyper-V has made significant inroads in the vendor community, it is currently used by only 27 percent of IT respondents, and Citrix XenServer is used by 22 percent of responding organizations.

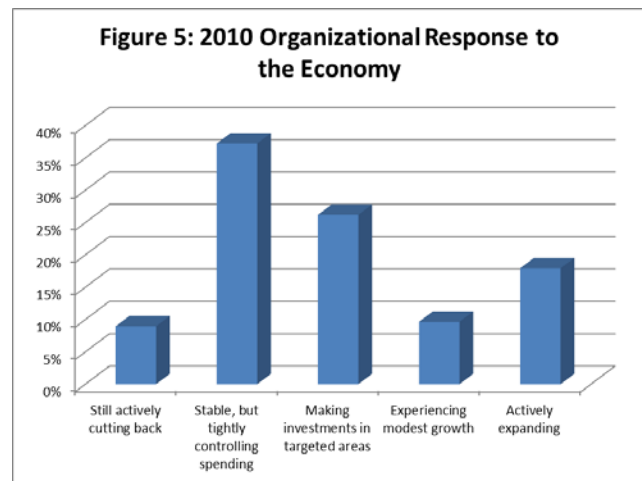
As shown in Figure 4, the server virtualization market has reached saturation, with this type of virtualization in use or under evaluation by 94 percent of responding organizations. While beginning to reach maturity, desktop virtualization still has room for growth in adoption, with current use at 46 percent in responding organizations. Storage virtualization is in an earlier stage of adoption, used by only 24 percent of responding organizations. However, this percentage may be somewhat skewed because many organizations may be using technologies such as RAID, DFS, SAN and others, without considering them to be storage virtualization.

It appears that although VMware is in a position of power, the desktop and storage virtualization markets have yet to be won.



11. Technology acquisition strategies will shift from cost-cutting focused purchases to opportunity-based investments

While many companies and government organizations are still tightly controlling spending, responses on the TEC survey show promising signs of economic improvement. Only 9 percent of responding companies are still cutting back, while 54 percent are making investments, at least in targeted areas. As the economy continues to improve, albeit slowly, we expect to see an increasing shift from the cost-cutting focused purchases of recent years to more opportunity-based technology investments as companies seek to accelerate revenue growth. This shift in spending will help address a backlog of deferred projects, and will also fund greater evaluation and faster adoption of newer and potentially revolutionary technology areas within cloud services and virtualization.



About the Forecasters

Gil Kirkpatrick

Gil is a 30-year veteran of the commercial software business, having designed or developed dozens of successful commercial software products. He is well known as the founder of the popular Directory Experts Conference, now The Experts Conference, the only international conference focused on Microsoft Identity and Access technologies. He is the author of the highly-regarded book Active Directory Programming, and is a frequent contributor to Windows IT Pro and TechNet magazines. In his current role as a chief architect at Quest Software, Gil consults on various security, identity, and marketing projects, and speaks at technology seminars and conferences around the world. He has received the Microsoft Most Valuable Professional award for his work in the technology community each year since 2005.

David Sengupta

David has been a Microsoft Exchange Server MVP since 1998, and has worked with Exchange since its inception. He is a chief architect at Quest Software. A leading expert in messaging and unified communications, David has written for many print and online publications, contributes regularly to books on messaging and Exchange, and speaks at major Microsoft events and conferences, including TechEd and IT Forum.

Dmitry Sotnikov

Dmitry has more than 10 years of experience working in the Windows management area, and is the author of multiple whitepapers. He is a regular blogger - at [Dmitry's PowerBlog](#) and [CloudEnterprise.info](#) - and a presenter at numerous trade shows, including: Microsoft Management Summit, WinHEC, Longhorn RDP Airlift, IT Forum, Platforma and TechEd. He is currently leading the new product research and development team for Quest's Windows Management business unit. While in this role he has helped make Quest an industry leader in migration, SharePoint and PowerShell space, and is now leading the company into the cloud computing era.

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Contacting Quest Software

PHONE 800.306.9329 (United States and Canada)

If you are located outside North America, you can find your local office information on our Web site.

E-MAIL sales@quest.com

MAIL Quest Software, Inc.
World Headquarters
5 Polaris Way
Aliso Viejo, CA 92656
USA

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5 Polaris Way, Aliso Viejo, CA 92656 | PHONE 800.306.9329 | WEB www.quest.com | E-MAIL sales@quest.com

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