Achieve Cloud Economics For Operations And Services
by John R. Rymer, May 2, 2012

KEY TAKEAWAYS

Cloud Solutions Are Now Practical For Most Enterprises
Market responsiveness is now a top priority for enterprises; cloud solutions can meet this objective better than internal services for new web, mobile, collaboration, and analysis applications. Cloud is also effective for batch workloads, development and testing, online training, and, via SaaS offerings, CRM, recruiting, and many other functions.

To Gain The Benefits Of Cloud, Your Organization Must Change
Your organization must embrace cloud services as part of its portfolio and learn how to manage them as first-class services. This means understanding what makes cloud services different and what workloads they serve best. Cloud presents an opportunity to win back the trust of the business and position IT anew as a partner for innovation.

Cloud Empowers And Extends, So Prepare For A Hybrid Future
Prepare your organization for a portfolio that blends old and new infrastructures and services into a nimble hybrid architecture that drives cost efficiencies and business agility. Risk profiles will demand the delivery of private implementations of cloud services and the integration of conventional applications with cloud services.
Cloud computing has reached an inflection point for enterprises — a comprehensive strategy for its use is now required. Until now, most companies had adopted cloud services in an ad hoc fashion, driven mostly by business leaders and developers looking to deliver new systems of engagement they felt could not be delivered by corporate IT — or in the time frame required. These ad hoc experiences prove that cloud solutions are now ready to be strategic resources in your business technology portfolio. Only CIOs can help the business strike the right balance between the agility, efficiency, security, compliance, and integration that’s required for a successful cloud strategy. This report describes how to execute an enterprise cloud strategy from vision to implementation to ongoing optimization.

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This research is based on ongoing client inquiries, briefings, and interviews with consumers of cloud computing services, as well as vendors of cloud services.

Related Research Documents

Understanding Cloud’s Multitenancy
March 15, 2012

TechRadar™ For SVM Professionals:
Software-As-A-Service, Q4 2011
January 03, 2012

Five Trends That Will Change SaaS Sourcing
November 30, 2011
CLOUD GIVES RISE TO A NEW ERA OF IT SERVICE FOR BUSINESS

A new era of business-responsive IT service is upon us, and cloud computing will be key to your organization’s transformation. Business responsiveness demands fast software delivery, updates, and changes; flexible funding for projects; and automatic cost efficiency, application reliability, data and process integrity, and security (so that everyone can focus on innovation and market response rather than IT arcana).

Cloud computing in its various forms is helping many CIOs drive greater business responsiveness. Enough so that most enterprises have adopted cloud computing in some form — usually a collection of software-as-a-service offerings. But cloud solutions now offer cost optimization, security, and quality of service for the full range of enterprise requirements, not just tactical needs. Thus, it is time to make cloud strategic, rather than a disconnected set of initiatives. How? You’ll need a playbook to create, implement, and optimize an end-to-end cloud strategy (see Figure 1). Your cloud strategy must achieve three goals:

- **Establish the measurable business value of the new technology.** Obviously, we believe cloud’s primary role should be to ramp up your organization’s business responsiveness via “systems of engagement,” which are separate from your systems of record (see Figure 2). The business value of systems of engagement is found in revenue growth, customer retention, lifetime customer value, and similar measures — not in IT metrics.

- **Make space in your portfolio for cloud capabilities.** Start by recognizing cloud computing as an additional set of IT solutions and platforms, not necessarily a replacement for your existing portfolio. Think back to the advent of web technology during the mid-90s. Enterprises had to open up their IT strategies to make space for new types of applications, talents, technologies, and vendors. Cloud is a similar change.

- **Start the organizational change management.** Your adoption of cloud as a strategic technology will require changes in the way your domain operates — in every dimension. Your organization will emphasize consultative service delivery rather than rigid controls to ensure integrity and efficiency. Your notions of openness and freedom of choice will evolve. Your organization’s relationships with business leaders will be more collaborative than they’ve ever been. Your strategy should identify the most critical changes as top priorities and sequence broader changes over time to avoid chaos.

Change is difficult and risky, but the dividends from your adoption of cloud computing will be to transform your organization’s business responsiveness.
**Figure 1** The Cloud Computing Playbook

<table>
<thead>
<tr>
<th>DISCOVER</th>
<th>PLAN</th>
<th>ACT</th>
<th>OPTIMIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Look</td>
<td>Business Plan</td>
<td>Skills And Staffing</td>
<td>Performance Management</td>
</tr>
<tr>
<td>Business Impact</td>
<td>Strategic Plan</td>
<td>Policy And Procedures</td>
<td>Budgeting And Planning</td>
</tr>
<tr>
<td>Assessment Framework</td>
<td>Road Map</td>
<td>Build/Buy Capabilities</td>
<td>Change Management</td>
</tr>
</tbody>
</table>

**Figure 2** How Cloud Enables Business Responsiveness

- Enables business innovation requiring software
- Pay-as-you-go
- Self-service
- Allows business innovation on market time
- Empower innovators to move fast
- Provides IT cost flexibility to implement innovations
- Deploy in hours, keep improving
- Link expenses to actual usage in time

Source: Forrester Research, Inc.
Cloud Is About Flexible Business Service, Not Technology

Cloud computing is not new and has already proven its business value to many enterprises. At the same time, cloud computing has too often been appreciated as a set of technologies first and a set of business enablers second. And like the tale of the blind men describing the elephant, various role players in your enterprise too often skew decision-making to fit their narrow points of view of the topic. Use your cloud strategy to raise the level of understanding in your enterprise of the real benefits available from cloud, the illusions associated with cloud, and the required investments and adjustments to achieve cloud's benefits.

Start zeroing in on the potential value of cloud solutions by understanding two key target audiences and three delivery architectures. The two target audiences are (see Figure 3):

- **Business leaders and pros.** Your organization relies today on packaged applications to automate business processes; cloud computing's equivalent is applications services your organization subscribes to. There is a long list of available products, starting with some strong customer relationship management (CRM) options and proceeding to talent management, quarterly employee reviews, and many others. Often called software-as-a-service (SaaS), cloud business applications are widely adopted by enterprises today and growing fast.

Cloud-based business applications improve business responsiveness in two ways. First, these services streamline acquisition and setup by letting customers simply subscribe to them. Adding new subscribers can take minutes. Second, these services streamline the dreaded upgrade cycle by making new releases immediately available to subscribers.

- **Application development and delivery pros.** For custom-built applications, your organization today relies on development and delivery platforms, including application servers, libraries, frameworks, and life-cycle management tools. Cloud offers platforms for custom development as well. Some of these platforms seek to be comprehensive equivalents to your on-premises application platforms, providing tools, application servers, automatic deployment services, and a framework all in one neat package. Often called platform-as-a-service (PaaS), cloud application platforms and services are sparsely adopted in enterprises — primarily because they’ve been too limited to address enterprise needs.

Your developers probably use a different kind of cloud-based platform already — one commonly called infrastructure-as-a-service (IaaS). The core of IaaS is raw, virtualized server, storage, and network capacity (hence the name “infrastructure”), but IaaS services provide many other cloud services as well, such as frameworks and automated deployment tools. Both types of cloud-based application platforms are improving fast and can speed delivery of custom applications and updates by your development and delivery pros in two ways. First, these cloud platforms slash time spent on server, storage, and software procurement to support projects. Developers can self-provision. Second, cloud platforms eliminate time spent on middleware and database configuration.
The three delivery models for cloud solutions are:

- **Public clouds.** Most of the discussion on cloud computing focuses on so-called public clouds, including those from Amazon.com, Google, IBM, Microsoft, Rackspace, and many others. Use of public cloud services is an outsourcing strategy to save time and cost, similar to hosting your web applications in a third-party data center. The differences: Public cloud providers are far more cost-efficient than data centers, and your team’s pros will have to work harder initially to determine how any given public cloud will meet your security and compliance requirements.

- **Private clouds.** Private clouds are most enterprises’ answer to fear, uncertainty, and doubt about the security of public clouds. Cloud solutions implemented on-premises promise to capture the cost-efficiency of cloud computing without the risks of public clouds. The problem: Most enterprises find it easy to virtualize their servers, storage, and networks but far more difficult to create the multitenant architectures, automated workload management, reliability strategies, self-service tools, and metering and accounting features that give cloud its power (see Figure 4).

Why? There are technical and financial hurdles to building a private cloud, but the primary barrier is your IT staff’s readiness to design and operate a cloud service. Even prepackaged “cloud in a box” offerings don’t solve this problem, as many IT groups turn off the self-service, auto scaling, and other cloud features of these products.

- **Hybrid clouds.** No substantial business application these days is an island, even if it starts out that way. There’s always a need to either get internally managed data or submit data to applications running inside the firewall. Hybrid clouds combine public cloud services with other deployments where a pure cloud solution is not a suitable fit for a given business service.
Most enterprises integrate with external services of some sort today, but hybrid clouds will incorporate much more sophisticated integration patterns than are common today. Hybrids build upon your existing service-oriented architecture (SOA) and web architectures where a business service spans deployments and services for efficiency, client reach, scale where scale is needed, and separate tiers for security and availability reasons.

Figure 4 Security Concerns Will Keep Many Applications On-Premises

“What are your firm’s concerns, if any, with pay-per-use hosting of virtual servers?”

<table>
<thead>
<tr>
<th>Concern</th>
<th>2011 (N = 397)</th>
<th>2010 (N = 603)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security concerns about security/privacy issues in virtualization or cloud environments</td>
<td>62%</td>
<td>59%</td>
</tr>
<tr>
<td>We believe our total costs are cheaper</td>
<td>39%</td>
<td>36%</td>
</tr>
<tr>
<td>Too immature</td>
<td>38%</td>
<td>32%</td>
</tr>
<tr>
<td>Vendor lock in that makes it difficult to leave the service provider</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>Our application vendor or custom apps aren’t compatible or won’t support it</td>
<td>26%</td>
<td>22%</td>
</tr>
<tr>
<td>Specific compliance requirements that the service providers can’t meet</td>
<td>26%</td>
<td>27%</td>
</tr>
<tr>
<td>Service levels are insufficient or non-existent</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>The performance isn’t good enough</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>Software licensing issues</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>The offering capabilities don’t match our needs</td>
<td>16%</td>
<td>21%</td>
</tr>
<tr>
<td>Too difficult to understand</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>None — we don’t have any concerns</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td>Other reason</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>2%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Base: IT executives and technology decision-makers who work with servers, storage, or the data center

*Base: IT executives and technology decision-makers who work with servers, storage, or the data center

Source: Forrester Research, Inc.
Cloud Is Now Practical For Most Enterprises

When cloud assets — particularly those running in public clouds — meet enterprise requirements, your organization faces new and often difficult constraints and compromises. Your organization's auditors may prevent you from moving some applications into public clouds, for example. The number of barriers to cloud adoption is shrinking, however, as enterprises adopt cloud computing options and push providers to better support enterprise requirements due to the following:

- **Security and privacy are vastly improved.** Public cloud environments may be more secure than your own data centers. In general, cloud vendors implement per-tenant, per-application, and/or per-resource security controls, while most enterprises rely on perimeter security. Vendor compliance with recognized industry security standards such as SSAE-16 audits, ISO 20001 and 27001 operational certifications, and emerging requirements such as the US government's new Federal Information Security Management Act (FISMA) controls are markers for the services providing the most sophisticated security protections.

- **Reliability and availability are improving through hard lessons.** Service outages at the largest cloud computing vendors are heartening, not discouraging. Every outage is a learning experience for both vendors and customers, and the good news is that we've had a lot of lessons. Vendors that publish information about outages and the uptime records of their data centers typically have the most experience and the least to hide.

- **Freedom of choice is growing.** In the early days of cloud computing, vendors locked customers in, often at several levels of the architecture. This is changing fast, due to a number of developments. First, standard/open-source products like OpenStack and OpenShift insulate customers from infrastructure lock-in. Several cloud application platforms now run on the infrastructures of several cloud providers, as well as support multiple development languages and frameworks. Lastly, the Representational State Transfer (REST) pattern for integration interfaces is opening up many cloud-based business applications and services.

- **Private cloud offerings are coming into focus.** Finally, the promise of private clouds is now attainable, as vendors ranging from IBM to Morphlabs bring packaged private clouds to market.

These are general characterizations, not prescriptions for your enterprise. There are variations in the security, reliability, openness, and functional richness of various cloud products. Your strategy should clearly state your organization's requirements on these product dimensions so that your teams can make effective choices.

Cloud Drives A ‘Broker First, Provide Second’ BT Strategy

Cloud computing will also help your domain become both a broker and a provider of solutions. Providing solutions is what the typical enterprise IT pro believes his job is — to build custom
applications or customize packaged applications. Brokering solutions cuts out as much of the customization as possible to speed time-to-solution. Cloud solutions reinforce two prerequisites of brokering:

- **Standardized workloads.** The cloud-solutions vendors that succeed standardize the workloads they run to leverage cloud economics. Standardized workloads are crucial to fast solution delivery — customization steals time and prevents fast upgrades to new versions.

- **Rapid new-technology adoption.** The cloud-solution vendors also tend to adopt advanced technology (e.g., mobile applications) and new ideas (e.g., social collaboration) faster than most enterprises can on their own.

Your teams will still deliver solutions, but add brokering as a mode of service they provide to business leaders as well. Think of this shift as bringing your “shadow IT” out into the light of day — not to kill it, but rather to shape and channel it in more productive directions.

**PREPARING FOR YOUR CLOUD STRATEGY**

Your task: Transform your strategy to embrace cloud computing as a set of strategic options. To do so, you'll need a holistic approach that draws on your organization's experience with cloud services and technologies today to support broader adoption. Your cloud strategy must be comprehensive in its scope and embrace a multiyear adoption life cycle.

The first step of that life cycle is preparation of your domain and the enterprise's business leadership, and eventually all of your enterprise's employees, business partners, and customers as well. Preparation for your cloud strategy requires:

- **Having a vision for the change.** Your strategy will add new technologies, opportunities, and challenges to today's portfolio. What business advances will these changes ideally create? Our advice is to hook cloud to business responsiveness initially, as many enterprises do. Using the two key audiences and three delivery architectures, define the targets of cloud's benefits and determine the architectural options you'll use to attain those benefits. Your most difficult task will be translating your vision into credible and compelling terms for your most influential business and technical stakeholders — starting at the top.

- **Connecting your cloud strategy to today's business realities.** This chapter of your playbook breaks down your vision of the future into pragmatic steps that begin immediately. The most important question to answer is how the cloud adoption you propose will improve the business as it operates today. You've done this kind of adoption planning before: Find the quick wins that create the confidence to take further steps. For your technical community, answer similar questions: Why will cloud make IT more responsive? Why will cloud make IT better? State the risks and vulnerabilities you can see as openly as your culture allows.
Understanding the current state of solutions, platforms, and infrastructure. Your organization's legacy of systems, skills, culture, and relationships is ground zero for the changes your cloud strategy envisions. Assess your situation to determine not only which parts of the portfolio can benefit most from cloud adoption but also which portions of the portfolio should not move to cloud. Most enterprises place their systems of record into the “can’t move to the cloud” category. At least for now.

SETTING YOUR CLOUD STRATEGY

Your strategy defines the key milestones and practices of your cloud strategy in a plan that is holistic but not rigid. The plan must identify the strategy leaders and the transition teams and their responsibilities, transparent reporting, and frequent deliverables. The plan will unfold over many years, and so it should also include mechanisms to periodically review and revise. Planning for your cloud computing strategy requires you to:

- Define a business substrategy. The business strategy addresses the business goals, opportunities, and constraints your cloud computing plan must address. Leave technology out of this chapter of your playbook. The best way to create this strategy is to focus on critical stakeholder needs. Approach each stakeholder as an investor (of either time, money, or both): What will the return on investment be for each stakeholder? Obviously, senior business leadership’s priorities will be at the top of your list.

- Define a business technology substrategy. This part of your strategy addresses which cloud products and technologies you’ll adopt and which role players in your enterprise will be empowered by them. To guide technology adoption, reference architectures will be essential for your IT staff, while capability maps are often effective as a common language for IT and business leaders. If your strategy addresses both business and technology role players, you’ll succeed. This is why we call it a business technology strategy: The goal must be to empower business people at every turn.

- Chart your road map to the future. Picking up on the business-impact analysis you’ve included in your preparations and your definition of what cloud means to your organization, map out the sequence of technology investments and changes, organizational moves, and business strategy changes required to meet your envisioned goal. Make this element of your strategy a real road map with milestones to help your enterprise recognize when it has materially moved toward your overall goals.

EXECUTING YOUR CLOUD STRATEGY

Once the plans are in place, translate those ideas into people, partners, and technologies doing work. For some organizations, an execution plan introduces cloud to a single marquee program, like
cloud-based CRM. Other firms take on wholesale changes. One large pharmaceutical manufacturer, for example, introduced a public cloud service to all of its researchers for molecular modeling and analysis. Previously, they'd lined up for time on a high-performance compute cluster. Either approach can work. To implement your cloud strategy:

- **Update your talent and staffing.** Cloud is an IT transition that demands new talents and skills. Everyone in your domain — architects, developers, QA pros, infrastructure and operations professionals, security experts, business analysts, and financial/procurement specialists — will have to learn new tricks. Particularly your security and compliance experts. Expect only some of your people (including contractors) to make the transition. Lastly, cloud solutions will demand new talents of your sourcing and vendor management professionals. While your group’s consultations with these business buyers will solve immediate issues, also seek to build up their cloud smarts to streamline future decisions.

- **Refine and redesign your governance.** If you’ve already adopted cloud solutions, you’ve seen how inadequate traditional IT policies and procedures are at governing them. Primarily because all activities move much faster in cloud, you’ll have to reorient to accommodate that speed. Procurement and budgeting for elastic resources will also demand new models if you expect to take full advantage of cloud’s pay-as-you-use cost advantages. The organizational boundaries between your technical teams and business teams must fall. Designing the roles, responsibilities, and accountabilities for combined marketing and IT teams, for example, will be your most challenging organizational change.

- **Build, buy, or rent to provision cloud solutions.** Cloud solutions add a new rent-and-customize option to your traditional build-versus-buy-and-customize choice to provide business capabilities. Rent applies principally to the public and hybrid architectural models. You’ve got a broad range of services to consider within your strategy. The range of functions addressed via SaaS products is now very broad and includes not only early specialties like CRM and salesforce.com automation, but also full enterprise resource planning suites and new categories like recruiting management. And now industry-specialized SaaS products have begun to appear.9 Cloud-based email and conferencing are well established. And you may be surprised at how many of your employees already use cloud-based tools to share files and collaborate (Box, Dropbox), create documents (Google, Zoho), manage travel (Concur Technologies’ TripIt), and manage notes and other information (Evernote, OneNote) despite all those Microsoft Office licenses your enterprise owns.

**OPTIMIZING YOUR CLOUD STRATEGY**

Your enterprise’s transition to cloud computing will unfold over many years, and you should expect your share of false starts and failures along the way. Put into your strategy the means to channel both your enterprise’s failures and its successes into continued business progress. A program of ongoing optimization requires that you:
- **Measure your strategy’s impact on business performance.** Start at the outset to define how you’ll assess the business impact of the cloud solutions, organizational structures, and talents your strategy introduces. These measures hold the key to a multiyear series of investments in the change you advocate. The business leaders who will fund your strategy must see continual *business* returns to keep moving toward your envisioned future. One of cloud’s unique properties is the amount of data solutions it provides to help you with this task. But remember, focus on measures of *business* success, not only IT progress.

- **Stoke your reporting engines and include benchmarking.** Your metrics of business performance impact are the most important reporting you’ll do to support your cloud strategy, but there’s a bigger reporting and analysis picture to define as well. First, define the full range of reports to key stakeholders you’ll need, and define the environment you’ll use to deliver them. Assume you’ll be drawing information from many external sources and that those sources will constantly shift. Also, benchmark your cloud strategy and its results against your business objectives.

- **Staff a function to manage ongoing change.** Your cloud strategy won’t be realized in a single project, but rather in a series of initiatives. Your strategy won’t just introduce new technology and products but will also transform your organization, your talent, and your relationships with business stakeholders. Everything will change! Put in place people and programs to help manage that change, including impact assessments and training. Communities are a key mechanism to socialize ideas, support their introduction, and encourage redesign and improvement.

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**WHAT IT MEANS**

**CLOUD SOLUTIONS DRIVE A RESPONSIVENESS TRANSFORMATION HARDER**

Your challenge: Transform your organization and your IT portfolio to raise business responsiveness. Cloud computing is a key tool to help you drive this change. Of course, you’ll need other tools in your bag, but cloud solutions will be a particularly powerful change agent. Cloud solutions:

- Empower your people to deliver more solutions faster — and keep innovating.

- Standardize workloads to simplify decision-making about new investments and their implementation.

- Revise your base of technology and skills to emphasize fast, flexible business action.

- Move you to dynamic cost management to match expenditures to business priorities and results.
SUPPLEMENTAL MATERIAL

Methodology
Forrester's Forrsights Hardware Survey, Q3 2011 was fielded to 2,343 IT executives and technology decision-makers located in Canada, France, Germany, the UK, and the United States from companies with two or more employees. This survey is part of Forrester's Forrsights for Business Technology and was fielded during July and August 2011. The LinkedIn Research Network fielded this survey online on behalf of Forrester. Survey respondent incentives include a choice of gift certificates or charitable donations. We have provided exact sample sizes in this report on a question-by-question basis.

Forrester's Forrsights for Business Technology fields 10 business-to-business technology studies in 12 countries each calendar year. For quality control, we carefully screen respondents according to job title and function. Forrester's Forrsights for Business Technology ensures that the final survey population contains only those with significant involvement in the planning, funding, and purchasing of IT products and services. Additionally, we set quotas for company size (number of employees) and industry as a means of controlling the data distribution and establishing alignment with IT spend calculated by Forrester analysts.

Forrester's Forrsights Hardware Survey, Q3 2010 was fielded to 2,321 IT executives and technology decision-makers located in Canada, France, Germany, the UK, and the US from SMB and enterprise companies with two or more employees. This survey is part of Forrester's Forrsights for Business Technology and was fielded from June 2010 to August 2010. The LinkedIn Research Network fielded this survey online on behalf of Forrester. Survey respondent incentives include a choice of cash, gift certificates, or a summary of the research results. We have provided exact sample sizes in this report on a question-by-question basis.

We have illustrated only a portion of survey results in this document. To inquire about receiving full data results for an additional fee, please contact Forrsights@forrester.com or your Forrester account manager.

ENDNOTES
1 Please refer back to the online document to see the associated reports in the playbook. See the May 2, 2012, "Achieve Cloud Economics For Operations And Services" report.

2 “Systems of engagement” is a term we accredit to Geoffrey Moore. Source: Geoffrey Moore (http://www.geoffreyamoore.com/).

3 In this tale, of which there are many versions, a group of blind men touch an elephant to determine what an elephant is. Each one feels a different part of the elephant's body, and thus they are in complete disagreement as to what an elephant is when they compare notes.
Software-as-a-service (SaaS) has finally come of age and is now a staple of the technology landscape at most organizations. As organizations build on the basics of their SaaS sourcing and vendor management (SVM) strategy (policy, due diligence, contract terms, and governance), SVM executives must also look ahead to the emerging trends affecting the SaaS space. See the November 30, 2011, "Five Trends That Will Change SaaS Sourcing" report and see the January 03, 2012, "TechRadar™ For SVM Professionals: Software-As-A-Service, Q4 2011” report.

The term platform-as-a-service describes many different approaches to developing applications that run in Internet data centers, and each of these approaches is suited to a limited number of application scenarios. These scenarios are evident in the developer services each platform provides as well as in each provider’s customers. For your experimentation with PaaS, select products that not only are well aligned with your shop’s applications needs and skills but that also provide the facilities you’ll need to create useful applications. See the November 30, 2011, “Five Trends That Will Change SaaS Sourcing” report and see the May 19, 2011, "The Forrester Wave™: Platform-As-A-Service For App Dev And Delivery Professionals, Q2 2011” report and see the May 19, 2011, "The Forrester Wave™: Platform-As-A-Service For Vendor Strategy Professionals, Q2 2011” report.

It is through multitenant architectures that cloud services achieve high cost efficiencies and can deliver low costs. Multitenant architectures must balance these cost benefits with the need for individual tenants to secure their data and applications. See the March 15, 2012, “Understanding Cloud’s Multitenancy” report.

Cloud solutions aren’t a thing; they’re a how, and most enterprise I&O shops lack the experience and maturity to manage such an environment. To be ready, they must first scale operational standardization, automation, and virtualization mountains. You can fast-track cloud learning with turnkey solutions for greenfield environments, but delivering an internal cloud will take years for most enterprise shops. See the July 26, 2010, “You’re Not Ready For Internal Cloud” report.

How application development and delivery professionals serve the business is changing, calling for new delivery methods, organizational models, roles, and processes. Three case studies illustrate the paths that organizations will follow as they make the transition from IT order-takers to business technology (BT) leaders. See the August 16, 2011, “How To Become A BT Leader — And Leave IT Order-Taking Behind” report.

Five major forces will reshape SaaS: 1) industry specialization; 2) analytics; 3) cloud orchestration; 4) social; and 5) mobile. These five forces will not only affect SaaS sourcing as individual game changers but will also create new opportunities for new business value creation. See the November 30, 2011, “Five Trends That Will Change SaaS Sourcing” report.
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