

# Enterprises Embrace Cloud Computing, but May Underestimate Challenges

Enterprise IT managers have gradually warmed to the benefits that cloud computing offers, including lower TCO and greater IT and business flexibility and scalability. At the same time, many large companies were initially leery of public cloud subscription services, and chose to deploy their own cloud technologies and methodologies internally in so-called private clouds.

A recent survey conducted by IDG Research Services indicates, however, that enterprise wariness about adopting public cloud services is waning, and suggests many companies will embrace both public and private cloud models over time.

The IDG Research Services survey of more than 100 top IT executives does raise some cautionary flags. As has always been the case, many IT managers remain worried about the security of applications and data placed in cloud infrastruc-

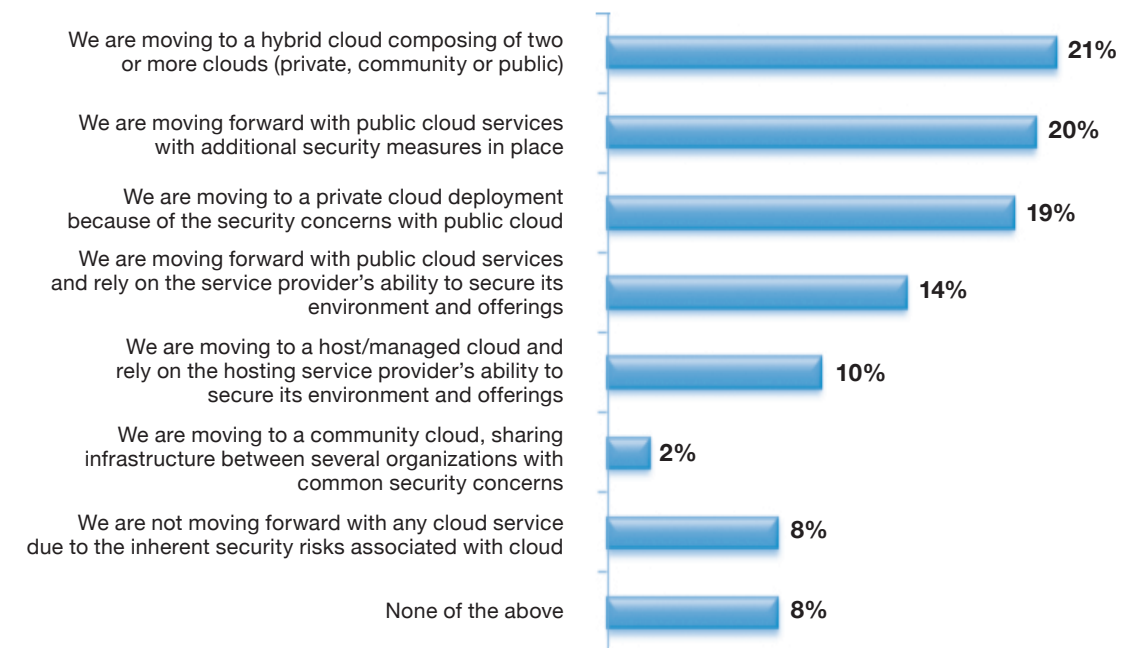
tures. Still, a significant number of respondents are implementing cloud computing strategies despite this concern.

Indeed, nearly three-quarters (74 percent) of survey respondents said their companies are moving to adopt either private cloud computing, public cloud services or some combination of the two. As part of these efforts, many respondents have already tackled, or are planning to tackle, one of the most important aspects of cloud adoption: integrating cloud environments with their legacy IT infrastructure. Thirty-one percent of respondents have already accomplished this integration, and another 31 percent expect to do so in the next 6 to 12 months.

## Cloud-legacy coexistence

These legacy-to-cloud integration initiatives implicitly recognize that clouds will coexist with legacy IT

**FIGURE 1 Cloud Computing Adoption Plans**



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— Terence Ngai, worldwide director for enterprise cloud solutions, Hewlett-Packard

infrastructure for many years. Given that likelihood, IT managers need to ensure that they apply common management and security tools and policies to both the cloud and non-cloud elements of their operations, says Terence Ngai, worldwide director for enterprise cloud solutions at Hewlett-Packard. “Having a unified management and security approach to—and a ‘single-pane’ view into—your infrastructure, applications and information is not just a goal, but an imperative,” he says.

Integrating cloud and legacy environments can be daunting, but survey respondents seem to be of two minds about such integration. While 75 percent of respondents identified this integration as one of the key challenges they face, fully 67 percent said they intend to rely primarily on their own IT departments to accomplish this legacy-cloud blending.

Experts caution that some companies may underestimate the difficulties they face in doing cloud computing well—not just when integrating with legacy IT, but in other areas. “I’ve often talked to people who say they need help solving a tactical

issue relating to cloud computing,” says Bernard Golden, CEO of HyperStratus, a cloud computing consultancy. “It quickly mushrooms into something more when they realize they don’t really know as much as they believe they do.”

Part of the problem is that some IT professionals don’t fully grasp all that’s involved with cloud computing adoption. Some believe, for example, that they’ve implemented cloud environments simply by virtualizing much of their IT infrastructure, notes HP’s Ngai.

Although most clouds do make use of virtualization technology, both Ngai and Golden point out that true cloud computing involves many technical elements and strategic decisions. The latter include deciding which applications are most suitable for cloud deployments. “You need applications that are amenable to an ‘auto-scale’ architecture in which they can add or subtract resources,” Golden notes. Identifying and creating these applications is likely to strain the in-house expertise of many enterprise IT organizations.