A Forrester Consulting
Thought Leadership Paper
Commissioned By AT&T

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Managed Hosting And Private Hosted Cloud

Both Are Viable Alternatives To Public And Virtual Private Cloud Models

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Executive Summary

In January 2014, AT&T commissioned Forrester Consulting to evaluate the hosted private and managed services markets. As the cornerstone for this research, Forrester Consulting conducted online surveys of 165 North American and European IT infrastructure outsourcing decision-makers from firms with 1,000 or more employees.

Forrester defines managed hosting as a general-purpose delivery model involving third-party administration of conventional (not cloud-optimized) server infrastructure on the client's behalf, either remotely or on-site. Managed hosting can entail dedicated or shared (virtualized) server infrastructure.

Typically, managed hosting manages up to the OS level, although it may expand to the application layer in certain domains such as in the case of ERP. This would essentially represent an example of the application service provider (ASP) model.

We defined hosted private cloud as an externally hosted private IaaS cloud that provides semi-dedicated infrastructure through a self-service portal for requesting, managing, and monitoring its virtual resources. Typically, vendors manage up to the hypervisor level although it may expand to the OS layer in certain domains. Compute resources are physically isolated from other customers and dedicated to that customer, but storage resources can either be multitenant or dedicated to that customer.

Both traditional managed hosting and hosted private cloud offer a high degree of flexibility as well as physical isolation of compute resources — still a strong preference for customers, at least for workloads in which they fear security and regulatory exposure.

While interest in moving workloads to the cloud is on the rise among enterprise customers, only 13% of enterprises have implemented public cloud models. Compare that to roughly a third of enterprises that have implemented private clouds as of mid-2013, with approximately 20% of enterprises having embraced hosted private cloud in the same time frame. What became clear in our research is that when considering the cloud, customers do not always know in advance what they are looking for. In this sense, organizations are selecting among competing models that offer varying characteristics and experiences.

While managed hosting and hosted private cloud share similarities, there are very important differences between the two models. One of these differences is industry maturity — whereas pricing and service level expectations are well established for managed hosting, vendors and customers are still feeling their way in terms of expectations for the private hosted alternative. Some differences in the experience of the customers and lingering industry confusion are to be expected and are evident in our survey responses. But even so, customers increasingly view compute models as ephemeral in nature and appear ready to move on, in terms of specific compute model and supplier, upon termination of their contracts.

Forrester found that while motivations to use the two infrastructure models and target workloads are also similar, other differences are apparent. For example, customers perceive that the hosted private cloud model offers more scalability and faster provisioning of additional computing resources, while the managed hosting model entails a traditional ticket-based support and provisioning model as opposed to the self-service approach inherent in the private hosted cloud. Yet, customers of both types of services report similar levels of satisfaction with their choices, although both appear willing to adapt to new and more appropriate models as they emerge and as contractual constraints allow.

KEY FINDINGS

Forrester's study yielded three key findings:

› **Learn the differences before choosing among competing models.** Although both managed hosting and hosted private cloud are clearly viable models, the experience they offer to the buyer can differ markedly. Both models offer dedicated infrastructure managed up to the hypervisor or OS level while target workloads are highly similar. But the experience of customers varies. To some degree, the private hosted model appeals to "do-it-yourself-ers," while some customers of the managed hosting model are by definition more willing to concede more responsibility to their supplier. But these merely scratch the surface. Buyers must choose carefully between them on attributes that may not be immediately apparent.

› **Choice of compute model, target workloads, and choice of supplier are fluid and subject to change.** Customers across models appear to view workload migration as a certainty in their future. Although target workloads for hosted private cloud and managed hosting are similar today, they diverge during the next two years.

While data analysis, business applications, and corporate Internet applications are used in both models today, within two years customers are planning to move web and Internet applications to the public cloud. Meanwhile, use of the models for mobile sites, ERP, and content analysis will increase. Survey respondents also felt little commitment to current models and providers: They were twice as likely to say they would consider new options and providers when their current contract expires as they would seek to renew their contracts. Learning how to transition workloads across competing models and suppliers is emerging as a key capability.

› **Managed hosting and hosted private cloud are not entirely different in the minds of customers.** While some differences in the nature of the services pertaining to provisioning speed, support model, and contractual model were readily apparent in the survey responses, other differences were less clearly drawn. For example, nearly one-quarter of hosted private cloud customers said that their service required a ticket-based request process for adding additional capacity, as opposed to self-service. Moreover, some confusion about provisioning speed was apparent. Clearly, customers are not always certain about differences between the models.

Cost Savings Drive Outsourcing Decisions, But Choice Of Model Is Influenced By Space And Resource Constraints

Potential customers of both the managed hosting and hosted private cloud models are motivated first and foremost to save money, although for customers of managed hosting, this desire is more pronounced.

When deciding which specific computing model to employ, customers of both models are very concerned about security and privacy issues to a virtually identical degree, but hosted private cloud customers were somewhat more concerned about meeting regulatory requirements. For customers of both models, quality of SLAs is an important criterion in selecting their computing model, as are the desire to allocate personnel to more strategic tasks, compensate for a lack of data center space, and achieve more rapid time-to-market. Customers of hosted private cloud also appear more likely to consider both the public cloud and virtual private cloud models as principal alternative compute models. The prospect of better security and regulatory compliance available with the hosted private cloud as a dedicated compute model appears to be compelling. Customers of managed hosting appear to take a more application-specific view, and as a result, are more likely to consider ASP providers and offerings than virtual private clouds.

Workloads Are Clearly On The Move

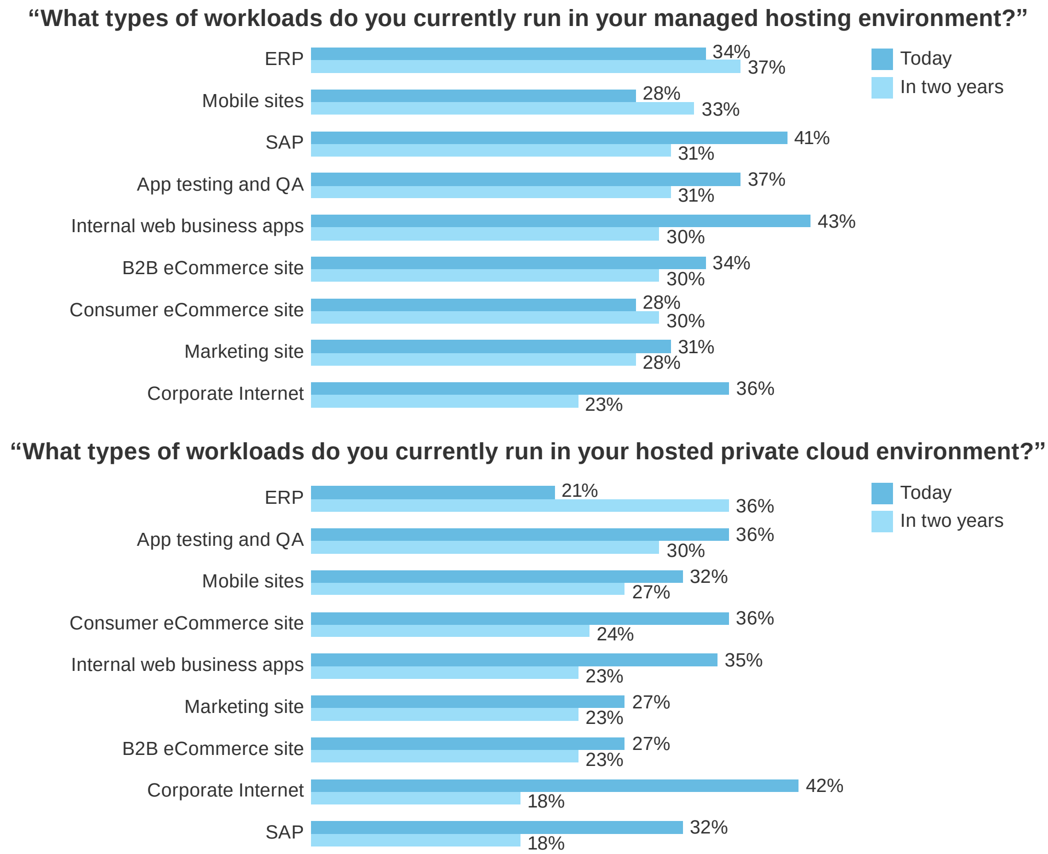
Data analysis is the top reported workload chosen for both outsourcing models. Internal web business applications and HR applications are also well represented. However, legacy applications, used commonly in the context of managed hosting, are well down the list of leading workloads for customers of the hosted private cloud model.

But one thing very striking in our survey data is that many customers say that they will move many of the workloads they are using both managed hosting and hosted private cloud to an alternative model within two years. In some cases, respondents said that they plan to reduce usage of managed hosting for a specific workload, while planning to increase the use the hosted private cloud alternative for that same workload. This suggests that clients plan to move workloads from one model to the other, at least to some degree. This pattern holds true with regard to workloads including HR, legacy applications, and application integration. On the other hand, customers of both models say that they will reduce their reliance on both models for data analysis, SAP, internal web business applications, and corporate Internet to varying degrees, suggesting that some of these workloads will migrate to alternative models such as virtual private cloud and public cloud. Patterns among the stated plans for workloads including mobile sites, application testing and QA, consumer eCommerce site, B2B eCommerce site, and marketing sites were less clear (see Figure 1).

Customers of both hosting models also plan to use both models in support of ERP applications more frequently in the future, although this is much more an area of growth among existing hosted private cloud customers and only marginally so for customers of the managed hosting model (for which ERP is an already well-established workload).

FIGURE 1

Workloads Begin To Shift In Response To Choices In The Market



Base: 165 North American and European IT infrastructure outsourcing decision-makers from firms with 1,000 or more employees

Source: A commissioned study conducted by Forrester Consulting on behalf of AT&T, January 2014

Managed Hosting And Virtual Private Cloud Are Not Entirely Different To Customers

Differences between compute models can be subtle and not all differences between the outsourcing models are clearly understood even by existing customers of the services. For example, more than half of all managed hosting customers and a slightly higher percentage of hosted private cloud customers say that a self-service portal is included for end users and administrators with their service. Logic dictates, however, that the purpose and capabilities of these portals varies in terms of absolute self-service delivered. On a two-to-one basis, managed hosting customers say a ticket-based request process for adding additional capacity is included in their service, compared to hosted private cloud customers. This stands to reason based on the nature of managed hosting services, but why a ticket-based request process for adding additional capacity should be required in a hosted private cloud service is less clear. Not surprisingly, managed hosting customers were more likely to say that their service requires a contract renegotiation to add additional capacity, but nearly 15% of hosted private cloud thought the same thing.

In terms of who manages what, differences are relatively narrow except when it comes to the application layer. One-fifth of managed hosting customers said that management of the application layer was included in their service. A higher percentage, by contrast, indicated that their supplier managed up to the OS layer, although this was true for a higher percentage of customers of private cloud models.

Not surprisingly, customers of managed hosting services were more likely to report that they enjoy physical resource provisioning within three to five days, while customers of hosted private cloud were more likely to say their service included virtual resources delivered in under three days but more than 24 hours. Almost the same percentage of customers for managed hosting cloud as customers of virtual private cloud by percentage reported that virtual resources are delivered in less than 24 hours, but more than 15 minutes, the most frequently acknowledged definition of a true cloud service. Together, these results indicate there is still confusion in the market, likely rampant “cloudwashing” by suppliers.

Subtle Differences Makes Selection A Challenge

Yet, only half of the buyers are fully satisfied with their choice. About one-fifth of managed hosting customers, in retrospect, wished they had gone the virtual private cloud route and nearly the same percentage of hosted private cloud customers wished they went with managed hosting. Roughly one-quarter of hosted private cloud customers said that they wished in retrospect they had chosen virtual private cloud instead. However, only a very small percentage of either model said that they wished they had chosen a public cloud model, colocation, or an ASP.

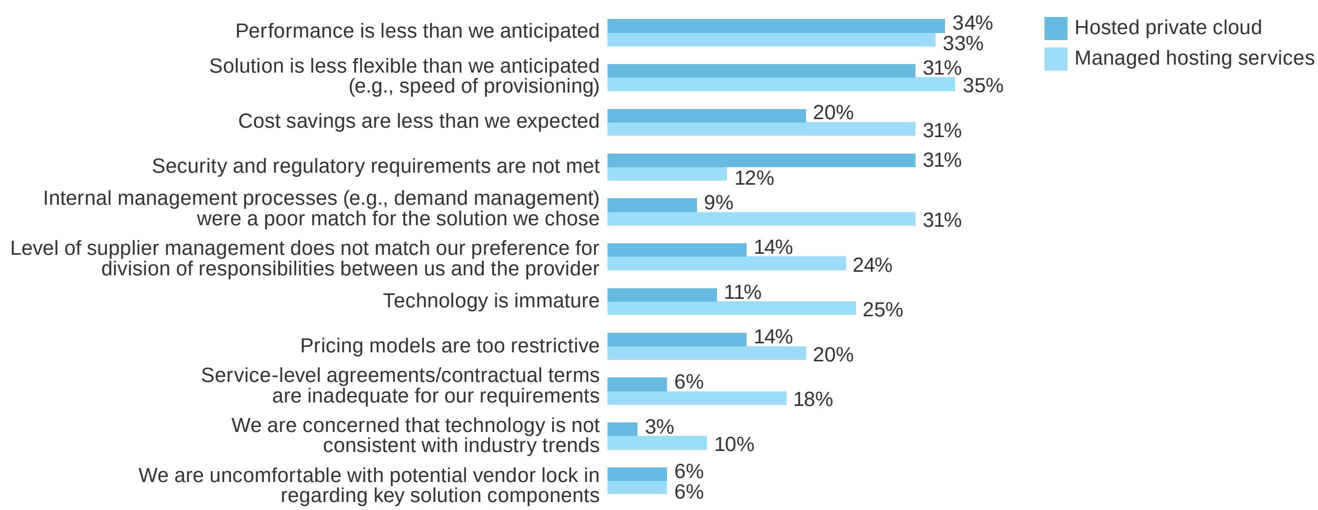
Performance concerns were a factor for some customers in ruing their choice, but there was not any noticeable difference across the models (see Figure 2). Both groups expressed some concern about the flexibility of the solution they chose, with this concern slightly more prevalent among buyers of managed hosting services than customers that chose hosted private cloud. Customers of managed hosting were much more likely to indicate that internal processes such as demand management were a poor match for the nature of the service chosen. That cost savings were less than expected was also expressed by some customers, and reported more frequently by customers of managed hosting. Customers of hosted private cloud were more likely to say that their needs for security and regulatory compliance were not met.

For their part, customers of managed hosting were more likely to express concerns about a mismatch between SLA and contractual terms and company needs, restrictive pricing models, and inconsistency between the managed hosting model and industry trends and were even more likely to suggest their chosen technology was immature, despite its longer time in the marketplace.

FIGURE 2

Performance And Flexibility Issues Are Real Concerns Across Models

“Why do you wish you had chosen an alternative outsourcing service model?”



Base: 86 North American and European IT infrastructure outsourcing decision-makers from firms with 1,000 or more employees

Source: A commissioned study conducted by Forrester Consulting on behalf of AT&T, January 2014

Conclusions

Despite the varying motivations for their use, the preferences expressed, alternatives considered, and experiences to date, both models appear viable and largely successful in terms of business benefits delivered. About half of the survey respondents said that they wound up saving money and avoided having to hire staff. An additional benefit cited was the ability to avoid capital expenditures. However, adoption of these compute models was not without its challenges. About 40% of both buyer groups said that security and privacy concerns were their greatest challenge they faced in their adoption of their chosen outsourcing model. Software licensing issues were a challenge for roughly a quarter of respondents from both groups. Customers continue to express concern about vendor lock-in and their own ability to take advantage of both outsourcing models. However, while the models are different, these differences are not always perceived clearly, making careful selection and migration plans high priorities.

Appendix A: Methodology

In this study, Forrester interviewed 165 North American and European IT infrastructure outsourcing decision-makers from firms with 1,000 or more employees to evaluate the hosted private and managed services markets to provide clarity within these two newer deployment markets. Survey participants included decision-makers in IT, vendor management, and IT procurement. Topics explored with participants included drivers, inhibitors, benefits and challenges of current hosting solution, importance of specific selection criteria, and future plans. The study was conducted in January 2014.