

# Understanding The Cloud Services Provider Landscape

## Landscape: The Cloud Computing Playbook

by Bill Martorelli and Liz Herbert

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### Why Read This Report

With cloud computing services now central to modern technology strategy, the challenge for infrastructure and operations (I&O) professionals is to focus on selecting the right partners and planning for long-term value. Most tech firms are jumping into the cloud business, but they may not be delivering on true cloud computing promises. This report gives an overview of the landscape of cloud service providers (CSPs) to help I&O leaders and other IT decision makers best select their strategic partners and negotiate with providers for the greatest benefits.

This document is an update of a previous report to reflect the current market.

### Key Takeaways

#### **Cloud Solutions Are Empowering Improved Customer Engagement**

As business models evolve to better engage customers, technology suppliers must change their strategies to enable improved customer interaction. Public cloud solutions provide the necessary business agility. When they're combined with legacy, on-premises systems in a hybrid scenario, they give technology leaders the tools to support the new customer approach.

#### **Educate Yourself On Leading CSP Types To Maximize Business Benefit**

Skyrocketing demand for cloud services has brought many different types of technology suppliers into the game, each with its own strategic approach. Make sure your provider's business model aligns with its cloud strategy road map, and have a tactical plan to fill in any holes down the road.

#### **Optimize Your Selection Of Cloud Services To Avoid The Pitfalls**

Cloud services allow unprecedented business agility, but they're not a panacea. Firms still encounter supplier issues such as data sovereignty and limited global reach of services. Carve out the right strategy that addresses the limitations of required cloud services so your firm is not only cloud first but also business ready.

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### Related Research Documents

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# Digital Transformation Reshapes The Cloud Service Provider Market

The pressures for digital transformation are ubiquitous, and the pressure to reinvent business models in the age of the customer is making technology buyers and I&O professionals reprioritize what they need from their suppliers. These buyers demand flexible, agile solutions that give them a place to experiment and that accelerate delivery of customer value. They seek technology solutions that let them engage with their customers and partners in real time in a many-to-many way.<sup>1</sup> These digital mavericks are turning to cloud solutions to achieve revenue growth and business-model innovation. Increasingly, cloud is the means by which they pursue digital transformation. To these ends, many are adopting a cloud-first approach.

## Technology Buyers Turn To The Cloud For Speed And Customer Obsession

Technology buyers are choosing cloud solutions to achieve business goals, because of:

- › **Business agility, driven by solutions that are ready to go and easy to modify.** Cloud-based solutions, particularly public-cloud-based and software-as-a-service (SaaS) solutions, are ready to go and quick to scale, significantly shortening deployment times upfront and throughout the solution life cycle. These solutions are easily modifiable through simple point-and-click interfaces that let customers change the solution quickly in line with evolving business needs. For example, global software decision makers at enterprises that use or plan to use SaaS stated that the leading factor in their decision to do so was to improve business agility.<sup>2</sup>
- › **Customer-centric business processes fueled by evergreen cloud solutions.** Public cloud customers are used to frequent updates to their public cloud solutions, while both they and SaaS suppliers automatically make new features available to all customers simultaneously. This means you can no longer embark on a two-year application deployment only to find that your two-year-old processes are no longer a fit. Cloud solutions — with everyone on the same version — mean that all customers run modern functionality and get automatic access to the latest and greatest capabilities through regular, seamless upgrades.
- › **More inherent innovation, with advanced development tools and add-on marketplaces.** Additionally, the one-version model means that partners and customers can develop add-on solutions that work with your deployment; some public cloud vendors support marketplace models that make it easy to search for and consume these add-ons, both for fee and for free. And most cloud platforms strive for an easy-to-customize, clicks-not-code approach to development, which democratizes development and innovation.
- › **The ability to engage easily with partners and customers in real time.** Public cloud solutions and SaaS solutions are accessible from anywhere, making it easy to extend them to partners and customers through identity and access management, without the need for additional portals or

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integration technology. Customers, partners, and employees can connect in real time — which lets you work together in new ways and make better, data-driven decisions based on up-to-the-minute information.

### Clients Think Public Cloud First But Manage A Hybrid Cloud In Reality

Even the purest of pure public cloud vendors have started to lean closer to pragmatic hybrid models.<sup>3</sup> For example, Amazon Web Services (AWS) launched its new Outposts solution in 2018, which brings AWS services on-premises.<sup>4</sup> New hybrid realities became possible in 2017 with the delivery of cross-cloud simplicity between VMware and AWS in the form of VMware for AWS and the release of Microsoft Azure Stack.<sup>5</sup> For nearly all brownfield enterprises, hybrid is the reality because:

- › **Pure public cloud is an impractical goal for most enterprises.** Outside of startups or carve-outs that have the luxury of operating in a totally greenfield environment, hybrid models are the reality, as established companies augment their legacy technologies with newer cloud solutions. Cloud migration is shaping up as a multiyear effort, while some customers don't ever plan to move core applications to the cloud. While 77% of global infrastructure decision makers at enterprises that are planning, implementing, or upgrading cloud say they are already in a hybrid cloud environment, they don't agree on what "hybrid cloud" means.<sup>6</sup> (Forrester defines hybrid cloud as simply the use of one or more cloud types within the enterprise.)
- › **Specialized hybrid cloud solutions are emerging.** Vendor-specific hybrid stacks are promising great things. The release of Microsoft's Azure Stack and VMware on AWS are two such solutions that promise to significantly simplify the migration of work between public cloud and on-premises systems. Such visions were previously possible only through extensive customer effort and expense and then only for a small number of applications. However, progress is mixed across the various models.
- › **Customers opt for multicloud solutions, consciously or otherwise.** Multicloud is not the same thing as hybrid cloud, although the two terms are often taken to mean the same thing. Multicloud usually refers to the use of multiple public clouds. Most large enterprises find themselves using multiple public clouds, but this doesn't mean they chose to do so consciously or intend to use multiple clouds in a clearly defined or equivalent manner (hybrid by design). One exception is with some financial services companies that are being pressured to avoid dependency on one cloud model — mainly for regulatory compliance reasons. Most cloud customers have accumulated multiple cloud relationships due to individual stakeholder preference (hybrid by accident). Cloud vendors prefer customers engage with only them, justifying the choice on the ability to leverage their development features more completely and gain additional leverage in pricing through volume discounting.

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### Leading Cloud Service Providers Are Shaping The CSP Landscape

The cloud market is changing quickly, and clients face a fragmented and diverse technology landscape. A short time ago we appeared headed for a world that was not just public cloud first, but public cloud only. However, substantial interest remains in private cloud alternatives. While SaaS and public cloud alternatives still dominate, customers envision supporting hybrid (and multicloud) environments for many years to come. However, customers still face significant challenges in managing their cloud environments:

- › **Managing the hybrid/multicloud environment remains a major challenge.** Making the disparate elements of a hybrid cloud strategy, including public cloud, SaaS, private cloud models, and legacy infrastructure, work together remains a significant challenge for many customers. Success requires not only the use of software products such as hybrid cloud management solutions but also appropriate involvement in open source activities and possibly tumultuous process refinements. The new hybrid cloud stacks now coming to market promise to greatly improve this situation, but will require time for their impact to be felt and will likely not be as seamless as everyone desires.
- › **Clients look to CSPs to provide more services help for critical skills.** Cloud services pose an uneven handshake, in the sense that many responsibilities for demand management, provisioning, orchestration and many others fall to the customer, requiring effective cloud management skills.<sup>7</sup> Staffing these skills in-house presents challenges in finding, training, and retaining people, as well as dealing with a fragmented mix of minor resource needs, such as 0.25 full-time employees (FTEs) to manage a major SaaS app. Skills shortages remain a major barrier to achieving cloud success. But because cloud solutions physically reside offsite and are highly standardized as service offerings, clients can neither touch nor easily alter them. Accordingly, clients rely on managed services providers to help them manage their cloud services relationships.
- › **In response, cloud giants help shape a cloud-centric services industry.** While cloud once loomed as a threat to their businesses, traditional services firms have now become part of the CSP landscape. For skills that don't come from the CSP directly, clients are turning to third-party services partners to fill the gaps.<sup>8</sup> Recognizing that vast numbers of enterprises with legacy needs require substantial assistance with establishing their hybrid cloud environments, public cloud leaders like Amazon, Google, and Microsoft are all expanding significant attention on building partner networks, with an eye toward strengthening key competencies like cloud migration. For their part, suppliers like Fujitsu and IBM are building extensive services capabilities around their own cloud service offerings.

### The CSP Market Continues Its Fast-Growth Trajectory

To meet the growing buyer demand and prevent revenue erosion, vendors from every corner of the technology world are investing in the cloud. By now, most customers have experience with at least one type of CSP. We define a CSP as:

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*Any third-party technology vendor that offers its services in compliance with the National Institute of Standards and Technology (NIST) definition of cloud computing.*<sup>9</sup>

The CSP landscape includes telecoms; hosters, resellers, distributors, and aggregators; SaaS, platform-as-a-service (PaaS), and infrastructure-as-a-service (IaaS); systems integrators; managed technology services and outsourcing; and business services and BPaaS. IBM's recent announcement of its intent to acquire Red Hat reminds us that the cloud market is not yet fully formed and that significant market shifts are still possible in the months and years to come.

### Trusted Tech Vendors Are Taking New Forms, With All Playing A Role In Cloud

The cloud boom continues across all categories of technology. Leading choices are rising to the top as some established technology vendors struggle to make the shift. Specific trends making an impact on the CSP market are:

- › **The public cloud market is well into its hypergrowth phase.** Even in its purest form (i.e., public cloud), cloud is more than 10 years old and has reached an inflection point. In 2017, 40% of global infrastructure decision makers at enterprises saw the use of public cloud platforms as a high or critical priority for the next 12 months.<sup>10</sup> Forrester data shows, moreover, that following years of sporadic cloud usage, most clients now prioritize cloud as a necessary and strategic part of their technology portfolios.
- › **Scale matters; the hyperscale competitors have separated themselves from the pack.** Many suppliers thought they could compete with Amazon and the other hyperscale public cloud players, but their inability to keep pace has forced them to abandon the market. This phenomenon is not limited to the public cloud leaders. In all categories of cloud service providers, first-mover advantages and growing scale are driving sustained competitive advantage. Providers such as Accenture, Alibaba, Amazon, Google, Microsoft, and Salesforce are enjoying great opportunities to capitalize on their early success. By continually leveraging their economies of scale and using their growing data and process knowledge to form new, additional, differentiated services, they continually strengthen their positions, making it harder for new entrants to scale the market's heights.
- › **Virtually all suppliers are now CSPs in one form or another.** The days are numbered for vendors that have not yet substantially developed a viable cloud strategy. By now, most major suppliers have already pivoted to the cloud in a notable manner across software, hardware, and services. But some still focus on protecting revenue and maintaining the status quo while embracing the cloud only halfheartedly. These cloud laggards will struggle; former giants are at risk of extinction through failure or, more likely, acquisition.<sup>11</sup>

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### Definitions Of Cloud Categories Shape The CSP Landscape

The definition of the cloud offered by NIST helped add coherence to an emerging industry, but no definition could possibly withstand the pace of change that the cloud market has experienced. The definition focused on three elements of cloud that vary widely in their market dynamics to the point where they might as well be considered distinct categories of their own. SaaS, for example, emerged initially from the world of software suppliers, while IaaS's origins lies in infrastructure, differences that continue to reverberate in vendor management strategies. Considering them the same masks some very real differences in behavior and contracting best practice. The primary cloud categories are:

- › **Infrastructure-as-a-service — IaaS.** One of the three cloud platforms envisioned initially by NIST, IaaS is interpreted as a public cloud available in a variety of forms, including virtual private cloud and hosted private cloud. IaaS is most visible in the market as a public cloud and is a common destination for enterprise applications of various kinds. Market share leader AWS is the best-known IaaS player, but alternatives include Google, IBM, and Microsoft. Some specialty IaaS firms provide IaaS of a more private nature, as can other suppliers such as large managed services players, hosting providers, and telecoms. Whereas hosted private clouds have specific term commitments, public cloud IaaS does not, although use of multiyear reserved instances serve as a de facto term. Generally speaking, the identity of IaaS has held up reasonably well since the NIST definition emerged in 2011.
- › **Platform-as-a-service — PaaS.** PaaS, the second category in the NIST definition, has become less of a standalone category unto itself and more of a collection of use cases. It has tended to blend into its adjacent IaaS or SaaS categories. For example, Microsoft's Azure is one of the industry's dominant PaaS platforms, while Salesforce's App Cloud has become a primary PaaS offering in its own right.<sup>12</sup> The very concept of a PaaS as a distinct category is under pressure from developers' preference for native tools and the rise of serverless computing (e.g., Amazon Lambda), among other factors. However, the category has been resuscitated by Pivotal's Cloud Foundry and Red Hat's Open Shift, two of today's most prominent general-purpose PaaS platforms. Whether a distinct category of tools or a set of use cases, planning for PaaS remains an important element of cloud strategy.<sup>13</sup>
- › **Software-as-a-service — SaaS.** The third category in the NIST definition, SaaS has progressed to being the default choice for many enterprises (if they can find a suitable candidate in the marketplace). Principal suppliers of SaaS include NetSuite, Salesforce, and Workday, among many others in a myriad of distinct categories. SaaS solutions are becoming more embedded into various services, including direct B2C scenarios as well as underlying business process services.<sup>14</sup> Although related to IaaS and PaaS in many ways, SaaS represents a distinct value proposition with very different market dynamics. The term SaaS itself masks significant variability in the market, with several subtypes representing different categories of SaaS offerings. While cloud is supposed to be free of commitment, SaaS providers offer some of the tightest multiyear commitments in the business.



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- › **Business services and business-process-as-a-service — BPaaS.** Business services and BPaaS is an emerging category in which cloud services will have an increasing impact on delivery of business process outsourcing (BPO). BPaaS is the next step beyond platform-based BPO, and was conceived with SaaS-based application enablement in mind. Unlike IaaS, PaaS, and SaaS, NIST has no established definition of BPaaS around which the industry can rally. Consequently, its meaning remains vague.

## Understanding The CSP Landscapes

As the traditional approach to delivery recedes and cloud-based delivery takes greater hold — a process progressing by increments every day — no supplier of any kind can feel comfortable without a comprehensive cloud strategy. As a result, cloud services of various kinds are available from a growing range of suppliers.

### Cloud Service Providers Include Disparate Types

Virtually every technology supplier is involved in some aspect of cloud services delivery. In many cases, the same or similar services are available from different types of providers, including traditional suppliers and cloud-native suppliers (see Figure 1). Principal categories include the following types of providers:

- › **Public cloud suppliers.** Often referred to as the hyperscale providers, the public cloud giants sit at the summit of the cloud market, offering core IaaS and PaaS services so successfully they have left a large number of one-time competitors in the dust. Leading public cloud providers, including Alibaba, Amazon, Google, and Microsoft, are well aware they are in a highly competitive market that will only intensify in years to come.
- › **Telecom firms.** Telecoms have always seized the opportunity to participate in infrastructure-related markets, and the cloud has opened new potential for them. Telecoms not only offer bandwidth but also provide public cloud IaaS, managed hosting, and colocation services. Representative providers include British Telecom, CenturyLink, Orange Business Services, and Vodafone. Telecom companies have emphasized adjacent services, including hosted private cloud and other forms of hosting, but have generally struggled in the public cloud market, and some providers, like AT&T and Verizon, have effectively bowed out.
- › **Hosting and hosted private cloud (HPC) suppliers.** Cloud is a natural evolution of the managed hosting business model. Hosting providers are more and more focused on offering complementary managed services aimed at helping customers manage their public cloud efforts and providers. Hosting providers are distinguishable from the telecoms for their lack of network bandwidth, but in practice, their offerings are highly varied and may include not only network but also colocation and other services. Representative suppliers include Rackspace and TierPoint. Whereas suppliers like Rackspace initially sought to compete directly with Amazon for cloud services, they have since



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embraced a complementary strategy aimed at providing managed cloud services built around the hyperscale public clouds. This segment has been highly volatile from the standpoint of ownership, with private equity firms acquiring many suppliers and additional consolidation expected. As an example, Rackspace acquired fellow Amazon MSP Datapoint in September 2017.

- › **Resellers, distributors, and aggregators.** Just as third-party suppliers once served physical infrastructure and software, a reseller channel has emerged for the cloud. Today's market has discrete cloud resellers, aggregators, and brokers, while many former VARs and other specialty companies are reselling cloud services.<sup>15</sup> However, reselling and “brokering” is not limited to the VARs only. For example, IBM — following its 2015 purchase of Gravitant — is one technology supplier offering cloud-brokering solutions in a managed services capacity, following Accenture's earlier introduction of the Accenture Cloud Platform (ACP), a primarily homegrown solution. Services for cloud orchestration and hybrid cloud management are similarly diverse in nature. A variety of VARs, including Ingram Micro and Insight Enterprises, are becoming more active in the cloud market.
- › **Systems integrators.** Systems integrators (SIs) offer, first and foremost, professional services aimed at helping customers achieve success in a variety of cloud-related tasks. These include implementing cloud solutions (including SaaS); identifying elements of customers' applications portfolios suitable for migration to the cloud; providing assistance in actually migrating these applications to the cloud; and addressing other elements of the “plan, build, and run” spectrum. Digital agencies and traditional consultants also fit in this category with advisory, strategy, migration, and applications services, but most lack much in the ongoing operational services. In fact, it's tempting to think of SIs as pure professional services firms, but this is changing in the cloud era. For example, SIs are also delivering their own proprietary hybrid cloud management solutions, as they morph from a focus on labor to intellectual property (IP)-led engagement models and “run” services.
- › **Managed IT services and outsourcing.** Managed IT services and outsourcing firms overlap significantly with systems integrators and hosting companies in terms of their cloud service offerings, but can be distinguished by their preference for multiyear, managed services contracts. A large percentage of companies today calling themselves cloud service providers called themselves managed services providers a decade ago. These consist of many companies operating on global, national, and regional levels. Major global examples of this category include Accenture, Atos, CGI, DXC, NTT DATA, and others, including the major India-centric suppliers. Some — like HCL and Wipro — are as well known for their infrastructure services as for their application services. Suppliers of managed IT services and outsourcing are grappling with the long-term substitution of cloud services for more traditional service delivery.
- › **Cloud-first integrators.** New services companies tend to appear with major technology disruptions. This was true in client/server, again with the internet's initial rush, and has been proven true again in the era of the cloud. A variety of new firms, including 2nd Watch, Cloudreach,

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and Cloud Technology Partners (subsequently acquired by HPE), are prominent examples of this segment. Capabilities of these firms span functions including new development, applications migration, and ongoing management, but don't typically dig deeply into legacy environments.

- › **Technology suppliers.** The idea that a supplier of underlying hardware or a device manufacturer is a CSP may seem absurd, but suppliers of technology like HPE and NetApp are increasingly selling their wares on a pay-as-you-go basis, sometimes along with SI partners like TCS who sell all-encompassing private cloud models. Device-as-a-service is also catching on in the end user device world.<sup>16</sup>
- › **BPaaS suppliers.** Suppliers of BPaaS services are diverse, some offering business process services on top of SaaS just as they once built upon on-premises ERP platforms. For example, KPMG — fueled by the Towers Watson Workday practice it acquired in 2015 — now offers HR-as-a-service based on a leading HR SaaS platform (Workday).

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**FIGURE 1** Cloud Service Provider Types: Core Competencies

Business process	Apps	Platform	Infrastructure	Network	Example vendors
SaaS					Apttus; ClickSoftware; Coupa; Salesforce; Workday
PaaS					Microsoft; IBM Redhat; Pivotal; SAP
IaaS					Alibaba; AWS; Google
Business services and BPaaS					Accenture; ADP; EXL Service; Genpact; Hewitt
Managed IT services outsourcing					DXC; Fujitsu; IBM; NTT Data; TCS; Unisys
SIs					Accenture; Atos; Capgemini; Cognizant; Wipro
Cloud native SIs					2nd Watch; Cloudreach; HPE Pointnext (Cloud Technology Partners)
ISVs					Alphabet; IBM; Microsoft; Oracle; SAP
Technology suppliers					Dell; EMC; Fujitsu; HPE; NetApp
Resellers, distributors, and aggregators					Arrow; Dimension Data; Insight; OnApp; Trend Micro
Hosting and hosted private cloud suppliers					INAP; NaviSite; Rackspace; TierPoint
Telcos					CenturyLink; Orange Business Services; Vodafone

**Key:**

Core competency     
 Strong capability     
 No capability in this area  
 Very strong capability     
 Capability exists but is limited and is not a core competency

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## CSP Drivers And Behavior Are Converging

Different types of cloud service providers originated in different types of businesses, which can reveal core differences in the way they think and operate (see Figure 2).<sup>17</sup> While most CSPs mainly exhibit the behaviors of their core type, the motivations are converging as CSPs become more diverse in their businesses. For example, even the public cloud giants now offer professional services. Among the developments now reshaping the CSP marketplace:

- › **Data center providers seek high yields on data center assets.** Those with data centers want to fill them with revenue-producing customers. In this way, public cloud providers share important motivations with their antecedent supplier types. Facilities-based hosting providers, for example, have long sought to maximize revenue yield per square foot of data center floor space. Why? Their traditional model made money through the long-term rental of their infrastructure (expressed as annual revenue per unit, or ARPU), or alternatively, monthly recurring revenue. While not necessarily calibrated monthly, the principle behind cloud infrastructure is the same.
- › **Challenges remain for traditional hosting companies.** Customer preference for opex pricing and their desire for cloud's flexibility challenge the historic approach of hosting firms. Their focus now is providing explicit support for workloads in public cloud data centers while simultaneously managing other elements of customers' hybrid cloud environments. Even though their cloud offerings are growing much faster than traditional services, for many hosting providers, revenues still come from managed services. Increasingly, these so-called managed cloud services like hosted private cloud are becoming a bigger part of the mix.
- › **SaaS providers emphasize subscription growth.** SaaS providers have pursued subscriber and revenue growth. Growth has been explosive, although profitability has remained elusive for many. Suppliers born in the cloud, like Salesforce and Workday, have adapted easily to cloud services as described in the NIST model, but older suppliers have had to balance their preference for upfront revenue recognition using perpetual license payments with the realities and dictates of true cloud models. The result has been a mishmash of pricing models that are continually evolving, available from the large software giants like Microsoft, Oracle, and SAP.
- › **SIs and outsourcers stress efficient use of personnel and automation.** The traditional systems integration model emphasizes the effective use of personnel in optimized pyramid-like structures. Indeed, this model still pertains in important categories of cloud services, including planning workshops, software package implementation, and applications migration services. However, integrators are embracing an IP-centric model that seeks to break the linear relationship between staffing growth and revenue growth, a model that is turning them into quasi-software suppliers. This is certainly true in the case of hybrid cloud management solutions, in which SIs are, in many cases, competing directly with software vendors.<sup>18</sup> The likes of Accenture and IBM are also playing the role of cloud consumption enablers or brokers, building up software IP with a focus on key service brokering functions like service provisioning, unified billing, and chargeback.

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- › **To some extent, the motivations are converging.** For example, SIs are themselves seeking long-term relationships with predictable revenue streams as the focus of managed services delivery shifts to the cloud. Hosting suppliers, like Rackspace, are moving aggressively to offer professional services like those of the SIs. Expect more CSPs of various forms to overlap in their offerings and value propositions.

**FIGURE 2** Understanding CSP Business Models

Integrator model	Hoster model	Cloud-first model
<p>Key revenue metrics:</p> <ul style="list-style-type: none"> <li>• Revenue (in dollars) generated per employee (\$rev per employee): consultant; integrator</li> <li>• Profit (in dollars) generated per engagement (\$prof per engagement): engagement repeatability; efficiency</li> <li>• Contract length and renewal rate: loyalty and customer satisfaction</li> <li>• Business driven by number of experts; number of areas of expertise; number of offerings</li> <li>• Profit driven by efficiency and productivity of staff</li> </ul>	<p>Key revenue metrics:</p> <ul style="list-style-type: none"> <li>• Revenue (in dollars) generated per rack unit (\$rev per rack unit): brick-layer model (ARPU)</li> <li>• Profit (in dollars) per square foot (\$prof per sq ft): DC/infra ops efficiency</li> <li>• Profit (in dollars) per service engagement (\$prof per service): service efficiency; repeatability</li> <li>• Contract length and renewal rate: revenue predictability and customer satisfaction</li> <li>• Business driven by ARPU</li> <li>• Profit driven by facilities/I&amp;O efficiency and managed services upsell</li> </ul>	<p>Key revenue metrics:</p> <ul style="list-style-type: none"> <li>• Subscription growth: increasing customer loyalty</li> <li>• Revenue (in dollars) generated through upsell per user subscription (\$rev upsell per seat): services added to base subscription</li> <li>• Profit (in dollars) per sq. foot of data center floor space (\$prof per DC): holistic efficiency metric by data center</li> <li>• Churn: ongoing customer relationship</li> <li>• Business driven by subscriber/subscription growth</li> <li>• Profit driven by customer density</li> </ul>

**A Transition To The Cloud Challenges Existing Customer Engagement Models**

The transition to cloud-centric models is not without challenges for suppliers and their customers:

- › **Suppliers recognize that cloud is the future but must still balance it with the past.** Traditional services are sometimes misrepresented, but increasingly sophisticated customers are more aware of the meaning of cloud than in the days when the NIST definition was still young and cloudwashing was rampant. Transitioning to cloud-centric, pay-as-you-go models is only one of the challenges. Customers still need a mixture of cloud and noncloud services, while suppliers still

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rely heavily on conventional services for much of their revenue. Customers will ultimately benefit from suppliers like Atos, IBM, TCS, and others that offer the ability to manage disparate cloud and noncloud models under a single supplier relationship.

- › **The lines between service categories are blurring.** The behavior of suppliers is evolving and manifests itself in different ways. For example, some CSP types are addressing the large enterprise preference for higher-touch services than most pure-play CSPs can provide. One example is managed cloud services from suppliers like 2nd Watch. Also, professional services aren't the sole province of the integrators. Hosting providers increasingly boast a range of consulting offerings, and public cloud providers like Amazon and Rackspace are developing a professional services capability to help facilitate cloud migration. Don't expect CSPs to go retro by embracing unlimited customization in services, terms, and conditions. The principle of standards is well established in the CSP market but is blurring at the edges.
- › **Suppliers think locally and act globally.** The midsize enterprise segment was the first to fully embrace the cloud. As a result, most cloud suppliers didn't start out with a global perspective in mind. Instead, they had to adapt to the global perspective due to regulations that govern the behavior of their increasingly global enterprise customers. All cloud services have physical origin points that determine their suitability for a given business or use case. These points determine their true global reach and affect their ability to support multinational enterprises or a global customer footprint. Origin point is also key to data sovereignty and residency. The major hyperscale providers expanded their geographic reach significantly by establishing new data centers in areas where they have growing customer bases. For example, Amazon recently expanded its data center footprint significantly in Europe and India. This is driven by legislation like the European Union's General Data Protection Regulation (GDPR), imposing significant noncompliance fines for enterprise customers.

## Recommendations

### Turn Knowledge Of The CSP Market To Your Advantage

With a better understanding of the CSP landscape, you can now start to map your key vendors and evaluate their strategic value to the business. You can also conduct a more informed scrutiny of their road maps and capabilities. This helps determine which vendors to keep close and which to wean. Your decisions will depend on your strategy and the pace at which your own company is moving to the cloud. This means that you should:

- › **Determine which vendors are relevant based on your go-forward cloud strategy.** As your company transitions and adapts to the cloud, you'll shed vendors that aligned well to your past business but aren't transitioning to where you're going. Cloud will accelerate this trend. Don't simply trust that today's key vendors will be the same tomorrow. Amazon finds, for example, that customers will typically continue to engage their top five suppliers after transitioning to the cloud environment but will discover that many of their top 50 are no longer required.

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- › **Consider the tradeoffs of a one-cloud versus multicloud strategy.** Understand your own differences between using a single primary cloud provider and multiple cloud providers. Steer usage to what makes the most sense corporatwide but realize the very nature of cloud militates against heavy-handedness. Suppliers are anxious to maximize account penetration, so familiarize yourself with the merits of the respective suppliers, and do the math. Given the relatively limited extent of the discounts offered by cloud providers, consolidation for the sake of maximizing discount programs may not be sufficient motivation.<sup>19</sup>
- › **If you're a global company, look to global CSPs.** There's obvious benefit in doing core business functions in a consistent fashion, and applying this thinking to the cloud providers can pay big efficiency dividends as you leverage them across geographic regions. However, don't force consistency where it doesn't fit. Compliance with local laws, cultures, and business practices may demand unique implementations or processes, and a single CSP choice may not grant you the necessary flexibility. Even the largest providers struggle with consistency of service across geographic boundaries, but they are steadily progressing.
- › **Be aware of the implications of functional choices in SaaS.** SaaS suites have matured to the point where they are development platforms inclusive of PaaS capabilities in their own right. They are also extremely rich functionally, to the point where the same functionality can be implemented in multiple SaaS platforms. The choice of which platform to implement can have important implications down the line, so take the time to consider the tradeoffs.
- › **Don't get too hung up over vendor lock-in.** Are you using advanced features of your cloud environment? Are you taking advantage of multiyear reserved discounts? Are you subject to data ingress and egress fees? Ultimately, some form of vendor lock-in is unavoidable. Be aware of lock-in in its various forms and choose carefully. Lock-in may not be a bad thing if the provider is delivering significant value and a great customer experience.
- › **Negotiate a win-win contract . . .** While you can certainly buy cloud services on a credit card and off CSPs' published price lists, you want a deeper relationship if the provider is strategic to your business. This is where going after an enterprise contract makes sense. Be informed: The more you know about a vendor's strategic direction, the better you can map it to your own and identify areas where you both want to share risk. But remember that the term "enterprise contract" means different things in IaaS versus SaaS. In IaaS, it governs the overall terms of usage like a conventional master services agreement, while in SaaS it normally entails opening usage to all potential users — with possibly excessive license costs.
- › **. . . but use the cloud services as is.** One key mistake enterprises commonly make is trying to bend the cloud service to their needs rather than adapting to the service that others are getting. This is true both functionally and contractually. This is a common mistake because it aligns well with traditional sourcing and vendor management practices. The service has a 99.5% availability uptime, but you may want to negotiate a 99.99% guarantee. This is the wrong move — unless you can accomplish your goal within the parameters of the cloud service itself by architecting across



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multiple availability zones. Your company gains greater value and efficiency from a cloud service when you consume it as everyone else does — and the CSP gains the same way. But don't be bashful in requesting new services from your cloud providers. The best cloud suppliers take their cues for new services from their customers.

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## Endnotes

<sup>1</sup> Cloud is evolving from an internal-facing point solution to an enabler of connected cloud economies. In this next phase of cloud, leading CIOs will orchestrate cloud ecosystems — which connect employees, customers, partners, and devices — to serve rising customer expectations. These cloud ecosystems have the potential to disrupt business models and revolutionize the customer experience. For more information on the transformation that's taking place, see the Forrester report "[Cloud Powers The New Platform Economy.](#)"

<sup>2</sup> Some 26% of global software decision makers at enterprises (1,000+ employees) that use or plan to use SaaS said that improving business agility was among the most important benefits of doing so; this was the leading response — ahead of the speed of implementation and deployment (25%) and the regular, automated delivery of upgrades from the vendor (23%). Source: Forrester Analytics Global Business Technographics® Software Survey, 2018.

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<sup>3</sup> For more information on a pragmatic approach to cloud, see the Forrester report [“Build A Pragmatic Cloud Strategy That Delivers Real Value To Your Organization.”](#)

<sup>4</sup> For additional information about AWS Outposts, visit the following website. Source: “AWS Outposts,” AWS (<https://aws.amazon.com/outposts/>).

<sup>5</sup> For more information on how the new hybrid cloud battleground is heating up, triggered by the availability of Microsoft’s Azure Stack on-premises cloud software, and the responses by AWS and Google, see the Forrester report [“Azure Stack Sparks The Hybrid Cloud Explosion.”](#)

<sup>6</sup> For example, 27% of respondents say that it means “using multiple public and private clouds for different application workloads,” while 25% agree that it means “integrating public cloud with our non-cloud on-premises infrastructure and data.” Source: Forrester Analytics Global Business Technographics Infrastructure Survey, 2018.

For a discussion of hybrid and multicloud industry dynamics, see the Forrester report [“Top 10 Facts Every Tech Leader Should Know About Hybrid Cloud.”](#)

<sup>7</sup> The many responsibilities taken on by cloud buyers has spawned a robust industry for managed cloud services. See the Forrester report [“Use Managed Cloud Services To Speed Transformation — But Choose Carefully.”](#)

<sup>8</sup> For more detail on managed services for cloud, see the Forrester report [“Vendor Landscape: Hybrid Cloud Management Solutions Of Major Service Providers, Q2 2016.”](#)

<sup>9</sup> NIST defines cloud computing as “a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.” Source: “Final Version of NIST Cloud Computing Definition Published,” National Institute of Standards and Technology, January 8, 2018 (<https://www.nist.gov/news-events/news/2011/10/final-version-nist-cloud-computing-definition-published>).

<sup>10</sup> Source: Forrester Analytics Global Business Technographics Infrastructure Survey, 2018.

<sup>11</sup> For an explanation about the challenges ahead for traditional technology giants and how they are adapting to succeed in the cloud age, see the Forrester report [“Evolve Or Crumble: Prepare For The Fate Of The Hardware Incumbents.”](#)

<sup>12</sup> For a detailed breakdown of global cloud platform providers, see the Forrester report [“The Forrester Wave™: Global Public Cloud Platforms For Enterprise Developers, Q3 2016.”](#)

<sup>13</sup> For good guidance on the many PaaS options, see the Forrester report [“An I&O Pro’s Guide To Platform-As-A-Service.”](#)

<sup>14</sup> To learn more about the various SaaS market categories, see the Forrester report [“TechRadar™: Software-As-A-Service, Q3 2016.”](#)

<sup>15</sup> Years of confusion about the cloud brokering function have resulted in the term itself falling into disuse. However, the idea of an external party serving as a reseller of cloud services enterprises remains viable, most notably in the managed services of Accenture and IBM.

<sup>16</sup> Device-as-a-service (DaaS — often called desktop-as-a-service) is a popular element of workplace evolution. For more information, see the Forrester report [“Make Employee Experience The Focus Of Your Managed Workplace Services Strategy.”](#)

<sup>17</sup> For more information, see the Forrester report [“Be Wary Of Licensed Software Geeks Bearing SaaS.”](#)

<sup>18</sup> Hybrid cloud management software suites are disaggregating into discrete functions, complicating the cloud buyer’s journey. For more information, see the Forrester report [“The Forrester Wave™: Hybrid Cloud Management, Q2 2018.”](#)

<sup>19</sup> For a discussion of cloud contracting models, see the Forrester report [“Smart Cloud Contract Negotiation Strategies.”](#)

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