Outrun Your Competition in Cloud Services

Beyond Commodity Clouds
This is the year for cloud services. Demand for Infrastructure-as-a-Service alone will grow over 38 percent as more organizations leverage cloud services.1 Yet what does it take for cloud service providers to win in this intensely competitive market?

What do customers really need? When it comes to cloud, do cheaper prices automatically win more business, or do customers have additional important concerns?

It’s a common misconception that cloud is a commodity market. Though commodity clouds are today’s leaders, they only address a fraction of the demand. The average enterprise uses six clouds and there is little relationship between low price and high market share.2 Price alone does not guarantee loyalty. What do Hubspot and Dropbox have in common? They’ve both moved major portions of their environments from Amazon Web Services to private, hybrid, and other clouds. Though price was important, it wasn’t their only concern.3 Studies show they’re not alone.

Trend: Enterprise Apps Drive Demand for Premium Cloud Services
Irrespective of how price sensitive they seem, customers who want to leverage cloud services do care about performance, service level agreements, customer service and value added services. The holy grail: high performance, the right services, and SLAs that match dedicated enterprise class equipment, all with pay-as-you-go pricing, agility, and no upfront commitments. Customers have made themselves clear. The best service is the best fit — one that meets their unique and unpredictable needs perfectly at all times. It’s a gap in the market that customers are searching for the right service providers to fill.

Cloud Commodity Scores by Geography
According to 451 research, there is little relationship between price and market share

IDC Survey of AWS Users
57% use other cloud providers IaaS offerings
52% have moved their AWS assets in-house or to another cloud provider

According to Rightscale
6 average number of clouds leveraged by most organizations
Carpe Diem: Now is the Time to Race to the Top

With so much unmet demand, why compete on mass market services when you can differentiate yourself in a race to the top?

The margins are higher and there are fewer competitors. With new technologies such as flash becoming more affordable every day, it’s time to find that special blend of premium services that customers want and that Amazon, Azure, and Google can’t offer.

Winning the New Cloud Game

Constant innovation from competitors and increasingly non-committal customers aren’t signs of an early market phase. They’re the new normal for this market. Providers who wait for clearly defined use cases to emerge before investing in a premium service catalog won’t find a better time. Instead, they’ll find the chasm crossed, the tornado passed, and the lions’ share of profits gone to competitors.

One thing is clear: the next cloud winners will be nimble and agile. They’ll master the art of turning change into opportunity and will leverage modern infrastructure to help them on this journey. So if you’re thinking about upgrading your infrastructure, it’s time to transform. Here are some tips for profiting in this new cloud era, including how to avoid common obstacles and how to find partners who can keep up.

Only Pay for What You Use

Beware of fake ‘pay-as-you-go’ models

Your customers pay as they go, why shouldn’t you? ‘Pay-as-you-go’ is a great model for service providers. By using operating income to cover payments, you get the infrastructure you need without large capex spending up front. And you can align infrastructure spending with revenue increases and maintain your profits over time.

That’s why so many vendors use this term to lure and entrap customers with long-term tiered-leases. By using the term ‘pay-as-you-go,’ the vendor hopes to imply that you’re getting the flexibility and savings of real cloud pricing, even when it’s not true.

In reality, such agreements are like signing up for a three-year cellphone contract. Though you pay for and receive your storage over time, such agreements greatly increase your cost for capacity and make you less flexible. You’re locked into paying for capacity you might not use and future shipments of yesterday’s technology. You can’t give back capacity when you no longer need it.

Tiered-leases make planning, budgeting, and negotiating equipment refreshes and upgrades difficult because different components come on and off lease at different times. Vendors like to take advantage of this confusion and use it to get you to spend more and lock you into longer contracts over time.

Volume Discounts: Too Good to Be True

Like leases, volume discounts increase your capacity and lock you in for the long term. As with tiered leases, any savings from initial discounts are wiped out by paying for capacity before you need it and the technology is stale long before the costs are amortized.

Worse still, the initial discounts often come with higher costs to scale as you grow. Rather than transform clunky foundations to deliver true cloud efficiencies and scale, they lure you with low upfront costs, knowing you’ll pay more once they have your data hostage. By
the time you discover weak management capabilities and limited scaling abilities, it’s too late to switch. They take your money, while you risk buying too much or buying the wrong technology altogether.

**True Pay-as-you-Go is Best**

Look for an infrastructure partner that does not require you to sign up for a long term contract. When you use a genuine pay-for-what-you-use model, you get more for your money. Just like a utility bill, if your usage goes down, your bill should go down too. Best of all, you’ll stop overpaying, profit sooner, and receive exactly what you need: the very best in latest technologies just in time. And instead of a supplier or a vendor, you’ll have a real business partner who shares the costs and risk of building better cloud services.

**Use Machine Learning for White Glove Service that Scales**

If pay-as-you-go is the norm that your customers expect, then you need to earn their loyalty. It’s time to delight more customers with a better “white glove” experience. Yet yesterday’s high-touch, highly manual approach for doing this is expensive and won’t scale as you gain market share. And it isn’t differentiated enough to earn you the price premiums you deserve.

Machine learning and predictive analytics: automation’s latest frontier

It’s no secret. Automation leads to higher profits and faster growth. Unlike yesterday’s provisioning and orchestration scripts that required human maintenance, today’s best machine learning and predictive analytics systems not only maintain themselves and your operations automatically but also improve over time.

Such systems rely on a shared cloud brain that collects and analyzes data collected in real-time from infrastructure components installed in thousands of customer environments. They improve uptime and performance for the entire install base. By leveraging this, service providers get better performance and uptime automatically from day one.

**For Quality Systems, Maturity Matters**

Since the cloud brain uses data from a broad install base to predict and prevent issues for all others, the quality of results continually increases over time. If any customer, anywhere, experiences a problem, the problem’s signature and resolution can be automated to prevent other customers from experiencing the same issue. More learning time yields higher quality analysis. Service providers who want to offer high SLAs with confidence should choose a product that leverages proven full-stack predictive analytics and a mature install base.

**Reimagine Operations with Machine Learning and Predictive Analytics**

Here are some powerful capabilities that machine learning can automate for you when backed by the shared intelligence of a large install base:

1. **Manage and improve your entire operations over time**
   - Automatically manage and deliver quality of service, uptime, performance, and other SLAs for multiple tenants and applications. Prevent noisy neighbors to ensure a good experience for all.
   - Prevent problems encountered by a single system from repeating on others. With predictive analytics, your shared cloud brain learns from experience and acts to prevent the problem throughout your entire install base.
   - Handle routine maintenance tasks automatically.

| Evaluating the Agreement | 1. What are the terms and length of the contract?
| 2. How soon can I negotiate a lower rate or price for the parts I'll receive?
| 3. Who owns the infrastructure? |
| Terms for Cancellation | 1. How soon can I cancel the agreement?
| 2. If I cancel, can I return the equipment for no extra charge and with no questions asked?
| 3. What options are available for upgrading the equipment and on what timelines? |
| About Billing | 1. Will I be billed for what I use, or for the amount installed?
| 2. If I use less storage this month, will my bill also go down? |

**Simple questions you can ask each vendor:**

**Machine learning predicts and prevents problems before they impact customers**

How to identify a high quality machine learning platform

How many customers does the company have?

How large is the install/customer base and how many devices are available to share and pool knowledge from?

How long on average have these systems been running?

And most importantly:

What are the results? How much uptime or downtime does the system experience on average?
2. Deliver great service automatically while reducing demands on your team
   - Proactively prevent issues by alerting staff when more equipment is needed to support existing SLAs as new tenants or workloads are added.
   - Predict and resolve issues before they impact customers.
   - Fix even the most complex issues throughout your infrastructure stack.

3. Enable mass custom services that seed new revenue streams
   - Make it easy to up-sell as customer relationships grow with features such as dynamic SLAs that can be changed with the flip of a switch.
   - Include premium features and add-ons such as clones, integrated backup, data protection, encryption and more at no extra cost – making it easy to create new services that cross-sell and entice customers to consume more resources.

With your infrastructure doing the heavy lifting, your people can move on to more strategic work: developing a full catalog of automated services and SLAs that differentiate you and garner the price premiums you deserve. With affordable offerings, a scalable white glove experience, and easy ways to up-sell and cross-sell, you’ll be ready to differentiate and profit at cloud scale.

Choose Built-in Efficiency for Lower Costs
Last but not least, the very best systems keep costs down by using software to maximize efficiency and manage hardware effectively. Here are a few pieces of key information to request from prospective vendors up front:

1. How much equipment do I need to store this much data?
More hardware not only adds costs up front, but also causes you to spend extra on everything else over time such as power, space, cooling, management, support, maintenance, replacements and scaling. More hardware means more complexity.

Don’t be taken in by vendors whose marketing focuses on individual specs like deduplication rates in hopes that you’ll assume the product is efficient and low cost. This is misleading. Good dedupe rates don’t mean you automatically achieve optimal capacity. What matters is the total effective capacity from all of a vendor’s efficiency features combined: de-dupe, compression, thin-provisioning, and more.

To avoid falling for these traps, estimate your data use today and over the next three years. Then ask your vendor how much equipment others have purchased to store that much data. Serious vendors track usage across their entire install base for quality control purposes and have tools that look at your data and quantify savings. They can eliminate the guess work by providing accurate capacity sizing after all data reduction features are applied. For true quality, these sizing tools should be based on recent, or even real-time data from results achieved by similar customers.

2. What kind of hardware is used to achieve SLAs and how often will I need to replace the parts?
Many vendors rely on premium hardware alone to achieve their SLAs. For example, they may use expensive premium flash drives to achieve faster performance, higher availability, efficiency, or a longer lifespan.

Did you know?

54% of storage performance issues originate elsewhere in the stack. Poorly configured virtual machines can impact storage performance.

Instead of only dedupe, evaluate the total effective capacity that factors all efficiency features combined: dedupe, compression, thin-provisioning, and more.
Yet relying on hardware alone is an unsustainable approach. Without smart data layouts and schemes, even premium flash drives wear out quickly. Like buying a race car from a dealership that skims when you take it in for maintenance, you pay a high price for the expensive product up front, and more to replace the parts as they fail.

Even if upfront costs seem reasonable, replacement and support costs for premium hardware will be high. Once they have your data hostage, it's easy for the vendor to charge more for upgrades, additional software features, and support renewals.

To avoid this situation, look for an infrastructure partner that offers all-inclusive pricing, flat support rates, built-in renewals, and that guarantees the lifespan of your media for more than five years.

3. **What software integration and management features does the vendor provide?**

Many cloud providers use diverse storage media to cost-effectively meet a broad range of customer needs and SLAs. For example, you might use all flash for a database, hybrid storage for virtual machines and email, and tape for backup and disaster recovery. It's a great idea until you find out that none of these products are designed to work together.

Suddenly you have many different systems with different toolsets that don’t understand each other’s data formats. The management and integration challenges of keeping them alive and getting them to talk to each other falls to you. Your staff are forced to master these different toolsets just to keep each system functioning.

Such complex data silos limit your growth rates and make it impossible to achieve the lowest possible cost. As with server virtualization, achieving the lowest total costs for storage is best done by maximizing use of a single shared pool of resources.

**Smart software cuts costs & simplifies complexity**

By managing any hardware properly with thought and care, software can improve reliability, efficiency, and performance. For example, better data layouts can reduce wear and tear on the drives so they last longer. Software can make more efficient use of available capacity to drive savings, or even optimize read/write patterns to improve performance. With the right software foundation, even consumer-grade flash can be a durable, high performance medium for your data center.

To ensure you receive the lowest possible cost, choose a flash storage partner with software that enhances the life of your hardware, unifies diverse storage mediums, and can use the most cost-effective media to deliver SLAs.

Finally, by choosing a vendor that unifies diverse storage media, you’ll have the best of all worlds: the simplicity of a single platform, management tool set, and well-utilized storage pool with the ability to achieve the best performance at the lowest total cost from the underlying media. You’ll get great all-flash performance for primary workloads and more cost-effective performance by mixing flash with other media for backup and disaster recovery.

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**Data Silos vs Shared Pools**

Better utilization, simpler management

**DATA SILOS**  
Match storage media to SLAs

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**Data Silos result in wasted space and management complexity because each vendor uses different software.**

**SHARED POOLS**  
Single platform and management software, with one view into all pooled resources.

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**Shared pools provide unified management across diverse media types to provide better utilization, and simpler management.**
Partner to Win

Get Your Own White Glove Treatment

What have your vendors done for you lately? What game changing innovations have they provided to help you differentiate yourself? With so much opportunity, there’s no need to pursue it alone. If your usual storage vendors are asking you to ‘place bets’ or ‘lock-in’ or if they aren’t doing enough to earn your business, it’s time to challenge them with some competition.

With flash becoming more affordable and new technologies such as machine learning and predictive analytics becoming a necessity to get the most out of the storage, it’s time to give some new vendors a try. With true pay-as-you-go offerings, you can experiment, test, and learn with no up-front commitment. The risk is low. The rewards can be high.

At the very least, you’ll get white glove service from a vendor who wants to earn your loyalty without resorting to lock-in tactics. You might just find a great partner and the foundation for your next phase of cloud growth.

About Nimble Storage Predictive Flash Platform

Since 2008, over 500 service providers and 8,800 customers have grown their business on Nimble. They rely on Nimble to power their businesses, both on-premise and in the cloud. Nimble Predictive Flash gives you the fastest, most reliable access to data. By combining predictive analytics and machine learning with flash storage, we’ve simplified operations and kept their costs down for years. The proof is in our customer satisfaction and results.

Customer Satisfaction

According to a Net Promoter score⁴, a popular customer loyalty survey, Nimble customer satisfaction ranks higher than that of Apple or BMW. Once you’ve experienced our simplicity, you’ll never go back to a traditional infrastructure again.

Learn more at www.nimblestorage.com

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¹Gartner Says Worldwide Public Cloud Services Market Is Forecast to Reach $204 Billion in 2016: http://www.gartner.com/newsroom/id/3188817
³The Epic Story of Dropbox's Exodus From the Amazon Cloud Empire: http://www.wired.com/2016/03/epic-story-dropboxs-exodus-amazon-cloud-empire/
How HubSpot Uses The Open Hybrid Cloud: https://blog.rackspace.com/how-hubspot-uses-the-open-hybrid-cloud
⁴Net Promoter Score: https://www.netpromoter.com/know/