Why Everything-as-a-Service?
Why HPE?

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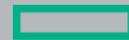
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Enterprise

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INTRODUCTION

In 2009, Simon Sinek delivered a Ted Talk at TEDx Puget Sound entitled "Start with Why." This talk, which brought Sinek from a successful leadership author to global acclaim, has now been viewed over 46,000,000 times.

Sinek's talk was a simple yet eloquent articulation of one of the biggest challenges that affects companies today -- the dissonance that exists between what companies do, how companies do it, and WHY companies do what they do.

Most famously, Sinek is quoted, "People don't buy what you do or how you do it, they buy WHY you do it."

This talk, unbeknown to Sinek, has become the foundation of so many corporate presentations, keynotes and mission statements. As we transition from the service economy to the experience economy, companies are searching for their proverbial "why," and seek desperately to make that connection with their customers.

> **"People don't buy what you do or how you do it, they buy WHY you do it."**
> — *Simon Sinek*
>
> **FUTURUM.**

When customers can truly see the "why," it creates a confidence, an affinity and a loyalty that breathes life and longevity into brands.

In an era where technology serves as the gateway between customers and brands, it takes technology companies that know their "why" to build the solutions and deliver the experience that enable businesses to transform.

DIGITAL TRANSFORMATION SHIFTS THE IT LANDSCAPE

Digital Transformation is driving the next era of business and technology investment. Organizations are acutely aware of the disruptive forces that can cause industries to pivot almost instantaneously, especially the threat of the unknown entrant providing the incumbents almost no time to react.

Beyond disruption, companies are aggressively seeking to transform their business models to be more agile, more adept to change and more able to deal with shifting consumer demands. This requires stronger culture, greater investment and a precise application of the right technology to act as an enabler between an organization's people, processes and its ambition.

To digitally transform, organizations must transform their IT. This starts with Infrastructure, as infrastructure enables companies to build and deploy the applications that employees, customers and value chain partners leverage to engage. The proliferation of data, AI, compute,

edge computing and mobile are just a few of the technology forces that a company's infrastructure must support. It's a tall order, but it is achievable with a well-defined plan and even better execution; especially between line of business and IT, which are too often opposing forces which ironically are aiming at the same target.

RISING EXPECTATIONS FOR IT: ENABLING THE BUSINESS IN A CONSUMER WORLD

As the IT Landscape continues to shift, leadership teams and line of business executives expect more from the IT function, but in parallel want better, more consumer like experiences, and often their ambition is to pay less for IT. In instances when the IT function can't step up, "shadow IT" emerges. That's where the line of business adopts its own, often SaaS based applications – and it's becoming commonplace. This is driven by a stubbornness and/or lack of resources that often exists in IT and pervasively forces employees to work with less than ideal IT tools with the expectations of high productivity.

Consumerization is another key market force that is having a tremendous impact on how companies utilize IT. Consumers are becoming used to Uber, Netflix and Spotify and wondering why business applications have to be so difficult and convoluted when what people want and expect are rich user interfaces and easy-to-use services -- often with low cost and value associations due to shifting monetization strategies by consumer apps.

The cloud has fundamentally changed enterprise expectations around IT. Businesses now seek an experience that allows the ability to act with speed and agility, and dynamically compose resources based on business demands. In simple terms...

> **The model for provisioning of compute and storage has moved from "buy the album" with a capital outlay to "stream the song" with a monthly payment.**
>
> FUTURUM.

Perhaps the most significant challenge for IT is that vendors and providers are increasingly being tasked with enabling customers to bring the cloud experience to their data center while minimizing or eliminating an up-front capital outlay. The prevailing IT vendor corporate

mission is to build a single platform that can span across multiple clouds as well as on-premises and puts companies in a better position to take advantage of new business opportunities without the management complexity and cost. This is a wildly complicated feat, but the expectation will remain and the company that is able to execute this first and/or best, is going to be well positioned to win a competitive race for market share in a world where on-prem is sought to run like IaaS and IaaS would more happily be consumed like SaaS.

Enterprises want that SaaS-like experience, but it must come in an era where no one cloud or application can meet all the needs of the business. Everything must look, feel and be delivered like SaaS. This is the proposition that Hewlett Packard Enterprise (HPE) has committed to achieving by 2022 under the leadership of Antonio Neri. For HPE, delivering today's SaaS experience in the complex Hybrid IT world of tomorrow is the company's "why." Knowing that "why" has led the company to a new direction that is clearer and more on par with market demands -- and this relentless dedication to achieving this approach is precisely why the company is well positioned to execute on its vision and achieve market growth in the process.

In this paper, we will discuss the market forces of today, the consumption models of tomorrow and take a deeper look at the HPE strategy of moving everything to a service model in the next three years.

EXECUTIVE SUMMARY

As boardroom expectations have changed and the demands on the IT function have exponentially increased, on-premises IT infrastructure has, until recently, lagged behind what has been available from hyperscale public cloud providers. Through recent developments and partnerships between key vendors this has changed.

The leading IT vendors are offering fully managed hybrid clouds as a service with flexible consumption-based charging models. These innovative new services allow clients to focus less on IT ops and more on their core business. Put another way, these services enable clients to focus on applications rather than the process and tools of IT.

Given the increasingly competitive business climate — with disruption by new entrants into existing markets being the norm and not the exception — the pressures on IT functions have increased exponentially in the last few years. Clients have responded by embracing digital transformation projects, further placing burdens on internal IT departments. This has resulted in a need to reduce the deployment timelines for IT projects and improve time to value for any investment.

Within the IT department the need to respond to the new line of business-driven requirements and the overall business landscape has reached a crescendo. IT departments need to consume infrastructure rather than procure; manage rather than administer; and finally control rather than support the IT provisioning for their business.

> *IT departments need to consume infrastructure rather than procure; manage rather than administer; and finally control rather than support the IT provisioning for their business.*
>
> ◆ **FUTURUM.**

Futurum Research believes HPE is well positioned to deliver modern IT architecture that enables digital transformation. This starts with the company's brand promise and its delivery of flexible and agile IT offerings, including its granular and transparent consumption models. This approach allows businesses to use *the right* data ... to transform as *their own company* and customers dictate ... to be moved by market forces in the way that *make the most sense for the business* in terms of meaningful forward movement.

◆ **FUTURUM.** TECHNOLOGY INSIGHTS FOR BUSINESS LEADERS

THE CASE FOR CONSUMPTION-BASED MODELS

60% of Enterprises will use flexible, lower-cost IT consumption models by 2023, according to an IDC report commissioned in 2019. Futurum is seeing the trend where clients are increasingly looking to transition away from Capital Expenditure (CapEx) models, where IT equipment is bought and then depreciated over a 3- to 5-year period, to a model where clients use Operating Expenditure (OpEx) to pay for infrastructure.

What is driving this trend is a desire to have IT infrastructure spending better align with IT consumption. In the previous CapEx model clients had to predict and capacity plan in order to right-size infrastructure investments. This model led to scenarios for many clients where infrastructure is underutilized as business projections or priorities have changed. With digital transformation projects being driven by DevOps and Agile processes the ability to predict and plan for infrastructure investments is further challenged. These new project delivery processes encourage early stage prototyping and getting to a position

where project failures can be declared earlier in the delivery cycle. This minimal viable product and "fail fast" methodology means that in the traditional CapEx model any project investment would be wasted if the project were to fail early in the delivery process. The flipside is that with project pivots being easier to make in agile delivery processes, project scope and the infrastructure required can be radically different than was originally envisioned.

All of these factors are driving clients to evaluate consumption-based models and the public cloud has benefitted as a result. We envision this consumption-based trend coming to on-premises infrastructure deployment models in the next 3-5 years as client expectation transforms.

MARKET FORCES

While rapidly shifting customer expectations are the overarching market force that is driving massive investments in technology, there are several market forces that are playing a significant role in changing the way companies are deploying technology to enable innovation and agility while leveraging the power of data to deliver next-generation customer experiences.

For traditional IT vendors this means more services, and not just services of yesteryear, but the services of tomorrow which require greater flexibility to match new spending models, on-demand accessibility, lower technological thresholds and greater levels or usability.

Fundamentally, we believe there are 4 key market forces for traditional IT vendors that are serving as the roadmap to building and delivering next generation architectures.

These key market forces serve as tectonic shifts in how IT is provisioned and consumed. In this section, we will discuss these key market forces and how they are driving the need to move to an Everything as a Service model. These forces include:

Digital Transformation. The business landscape is changing. From retail to travel to finance, new innovative disruptors are challenging the incumbents around the globe. In most cases, these new entrants are not encumbered by technical debt and are therefore able to build new streamlined IT infrastructures from scratch and leverage new technologies instantly. This puts further pressure on incumbents who cannot operate with a blank page and must transform what they have within legacy systems and processes.

Futurum sees that increasingly C-suite leaders want their IT departments to be more agile and entrepreneurial so they can support business-wide digital transformation projects.

The IT level response has been to embrace digital transformation and to drive cloud and new software delivery mechanisms, which often is comprised of a hybrid cloud model that encompasses the use of SaaS, public cloud and legacy on-prem workloads. This model to date still lacks the greater flexibility required for companies to be as agile and dynamic as desired. It also serves as an opportunity as companies desire to see a transformation that simplifies how technology is consumed.

Modernized Experiences. The modern consumer is more and more conditioned to leverage mobile and web as their primary interface to a business. For example, online retail has now surpassed 10% of total retail spend by most consensus estimates. This trend is now commonplace in everything from airline booking to online banking, and the shifting behavior has forced companies to react. Without an attractive, easy-to-use interface, clients will vote with their wallets and revenues will decline as a result. This has led to an extreme focus on the User Interface (UI) for everything in our daily lives.

As consumers become conditioned to user experiences from their mobile devices and highly optimized websites, expectation levels have also increased for business IT services to follow suit. Essentially, why is enterprise IT so hard, yet consumerized applications so delightful?

This revolution is being driven by user experience and has placed strain on how IT functions provide service to users and build applications for customers. Business users demand simplified and quick methods to commission and consume IT services from their internal teams and if these teams cannot deliver line of business executives look to shadow IT providers typically in the form of off-the-shelf SaaS and platforms from easy-to-access public cloud providers.

Exponential Data Growth. As marketing moves from demographics where client segments are targeted, to a demographic of one, where everything is known about a client, data volumes have exploded. With inputs from social media providers and company data sources building a 360-degree view of the customer and their preferences, all this data needs to be stored somewhere. The proliferation of devices, users and Internet of Things (IOT) has driven data collection to new levels and as a result data growth has exploded exponentially over recent years.

This explosion in data volumes has coincided with more than just using the data to deliver best of breed customer experiences; it has created an entirely new focus on digital trust, which is comprised of privacy, security and data protection.

Today's enterprises need not only to protect their data but many times must demonstrate to regulators a strong governance over data retention and deletion. The explosion of data volumes and increased governance over data has put huge stress on the IT function, which has long been underinvested in areas like cyber security. In many cases the only way to address these challenges has been to simplify operations by moving to cloud delivery models where mundane tasks are automated and performed in a simpler-to-manage environment. However, this path is littered

with challenges because, despite the desire for common data lakes, data sovereignty and latency demands are only a few of the reasons why companies cannot just lift and shift to cloud; essentially acting as the impetus for a hybrid approach. Data gravity, especially in larger organizations that collect massive amounts of data and need low latency, is one of the main roadblocks to moving to the cloud.

Rapid Application Development. As Digital Transformation projects have been put in place to respond to dynamic market forces this has led to pressure on project delivery timescales. The requirement for IT to do more and to do it faster has become the norm. This has led to delivery of software applications being transformed over the last few years, with a move away from monolithic applications to more composable ones. The method for application development has also changed from the previous waterfall method to new agile DevOps models that leverage open source methodologies and Continuous Integration/Continuous Delivery (CI/CD) where code is dropped often on a daily basis with almost no impact to uptime. These new agile methodologies enable project managers to bring functionality and features to users and clients often daily rather than in big drops every 6 to 12 months which was previously the case.

NEXT GENERATION IT THROUGH CONSUMPTION

Futurum Research is seeing a pivotal change in how IT is delivered and consumed by the line of business. With mega trends such as IoT, 5G, Big Data, AI and Cloud all impacting business simultaneously, the level of disruption is unprecedented. These mega trends are impacting how IT is being delivered as a result. The blurring of the lines between the IT function and line of business and how they operate in harmony is fundamental to success as companies look to deal with the market forces.

Indeed, organizations turn to technology to make these connections for customers. As the need for on-demand consumption models becomes critical in nature, those same organizations need to realize their transformation paths. This section discusses the evolutionary nature of this type of transformation and the resources to enable this type of change:

Consumption Driven. Consumption driven models enable enterprise IT to shift resources to meet changing business demands. Customers pay for what they use and plan capacity ahead of use to avoid overprovisioning and save on TCO (total cost of ownership).

Metered Capacity. With metering and capacity management, the resources required for each workload are ready to deploy in minutes, not months, shortening time to deploy global IT projects. Meanwhile, it grants IT visibility into how much of which resources are being used, by whom and at what cost.

Cloud Brokerage. Customers can use cloud brokerage tooling to identify which workloads and applications are ideal to move to public clouds, or keep in private clouds, and how to migrate those workloads to achieve the optimal mix of hybrid cloud.

Cloud Native Orchestration. Innovative cloud management software delivers data-driven guidance that allows customers to remain in control of IT operations, policies, and procedures, achieve increased performance and manage costs for each workload.

An Overall Better Experience. Consumption models are designed with the customer experience at the front and center. The ability to pay for what you use; gain clear insights into capacity requirements; quickly expand or cut back without jeopardizing the infrastructure; flexibly deploy workloads across a wide-spectrum of clouds while concurrently paying in an on-demand billing mechanism drives high complexity hybrid IT to operate and feel like SaaS.

The demand for a better experience will propel new consumption models and the expectation of delivering everything as a service. It is critical, though, to be certain the underlying capabilities aren't incomplete or financial engineering -- but rather true SaaS experience in the delivery of hybrid IT.

FUTURUM. TECHNOLOGY INSIGHTS FOR BUSINESS LEADERS
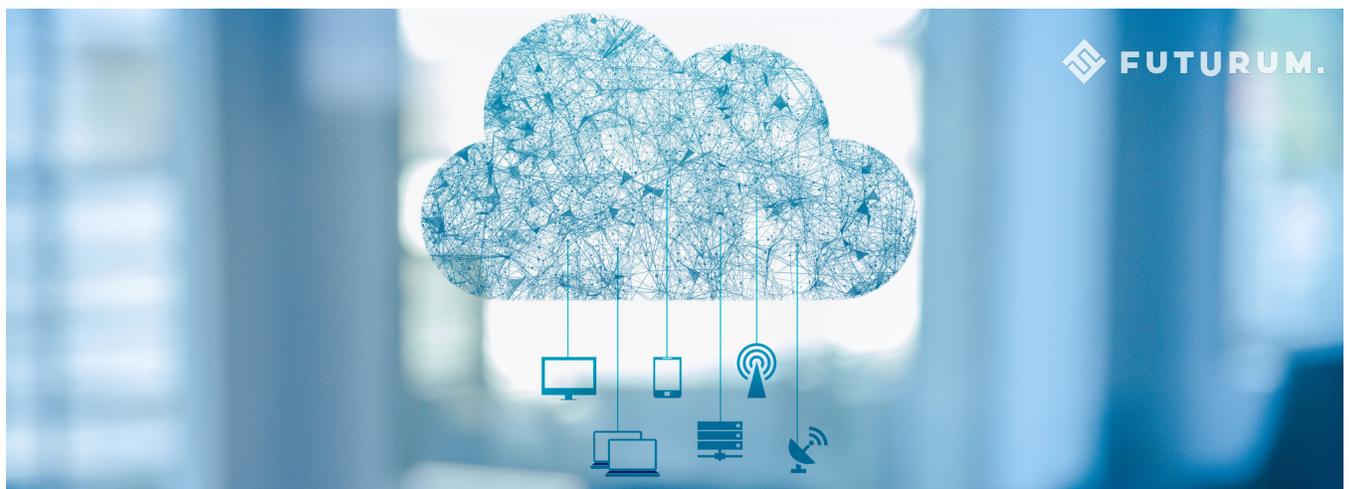
WHY HPE?   THE RIGHT TIME FOR MASSIVE CHANGE

The time to evaluate IT providers has arrived for clients as they look to deliver Digital Transformation projects under business pressure. Clients are faced with a choice: Stick with existing models and the providers who deliver IT infrastructure using traditional CapEx focused models or make a shift to new consumption models often brought to market by different IT vendors.

Futurum Research believes HPE has a significant value proposition to bring to clients looking to transition to consumption-based models. The following four areas are especially notable:

1. **The Brand Promise.** HPE has been the most vocal and demonstrative by its executive commitments and subsequent product announcements in the delivery of an "Everything-as-a-Service" model. With a clear commitment of time frame coupled with an open ecosystem approach that minimizes lock-in and enables companies to take an agile approach to migration from technical debt, HPE has a complete offering that sits beneath this brand promise.

2. **Delivering on the Promise.** HPE is in position to deliver on the corporate mission it has stated to transition all its products to an as-a-Service model by 2022. This has been demonstrated well before the 2022-time frame with expanding product offerings that span infrastructure like storage and compute to full platform offerings like SAP HANA, backup, big data, private cloud – and fully-managed public and private clouds. The

company is also demonstrating its desire to serve the complex hybrid IT environment with its strategic acquisition strategy, which has included more than 12 companies in the past 36 months.

3. **Positioned for Success.** HPE is well positioned for the next wave of changes based on our analysis. Futurum Research sees clients transitioning to an increased utilization of consumption-based models for on-premise IT. With on-prem and hybrid being long-term operating models, the Everything-as-a-Service for IT provisioning is going to be well received by the enterprise. HPE is not only well positioned but is currently leading the industry in this category.

4. **Proven Success.** The market shift to Everything-as-a-Service is only just beginning for on-premises infrastructure. However, Futurum Research predicts HPE's continued success is probable based upon the company's early ambition in delivering everything as a service, but also because of the company's deep technical capabilities and open ecosystem approach to deploying modernized IT infrastructure in hybrid environments.

HPE's Value Proposition for Transitioning to Consumption-Based Models

1. The Brand Promise

HPE is committed to the delivery of an "Everything-as-a-Service" model.

2. Delivering on the Promise

HPE's corporate mission is to transition all products to the as-a-Service model by 2022.

3. Positioned for Success

HPE is well positioned and leading the industry in the Everything-as-a-Service transition.

4. Proven Success

HPE's technical capabilities and open ecosystem approach assures their continued success.

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WHY HPE?   THE RIGHT VENDOR FOR THE FUTURE OF IT OPERATING MODELS

HPE is well positioned as a leader in the Hybrid Cloud space and is boldly forging ahead with plans to deliver its entire product portfolio as a service by no later than 2022.

Today, HPE offers **real consumption models**, not financial engineering structures based on leasing or subscription and this is a critical point of differentiation. HPE Greenlake offerings are based on metered IT with 100% visibility and granularity into usage and costs. This built in metering capability is specifically designed to address the requirement for ensuring cost matches consumption for IT infrastructure.

In addition to the raw compute and storage HPE offers a **full portfolio of solutions** offered as a Service, as well as on-demand resources via HPE Pointnext Services to consult and enable companies to deal with the human capital intense nature of IT transformation. This completeness in vision and execution is crucial for enterprises, as the consumption models eliminate most unexpected costs and the breadth of services can help companies bridge capabilities gaps that mitigate transformational efforts.

Based on Futurum's analysis of HPE, we are certain that the company has the **experience and a track record** of delivering proven reference architectures. This documented success is vital for enterprises planning to build out new digital transformation driven IT projects for the first time under strict time constraints, while also further enabling companies in progress to be more efficient in their transformation efforts.

We also believe that HPE delivers infrastructure solutions that are **wrapped with comprehensive services** to manage the hybrid cloud, which represents the future IT operating model for businesses. The company's comprehensive services approach ensures that enterprises can think holistically about project delivery rather than having to work with multiple suppliers and manage the inherent risks of this approach. However, it is worth noting that the company has also shown a greater than average propensity toward being flexible to deliver portions of multi-vendor projects.

A final component is the **focus on ecosystem** HPE has brought to their Everything-aaS approach. HPE has also developed a deep set of partnerships with VMware, Red Hat and Nutanix that enable clients to have flexibility in which software they use to drive hybrid cloud orchestration. Futurum Research believes that this strong partnership approach enables HPE to demonstrate choice to clients as well as benefit from shifts in technology trends at the provisioning layer as this area matures.

The overall approach of HPE shows a strong understanding of the evolving nature of IT orchestration in a hybrid environment. The company clearly understands that cloud isn't a technology or a trend, but rather an operating model.

FUTURUM. TECHNOLOGY INSIGHTS FOR BUSINESS LEADERS

CONCLUSIONS

Futurum Research believes that in order to respond to the dynamic business climate and the need to delivery successful Digital Transformation projects at speed clients need to have IT delivered as a service to survive. Against this backdrop and based on our extensive research we believe that clients will transform who they procure IT infrastructure from to support their projects.

With the explosion in data volumes and the need to use the data to deliver best of breed customer experiences, companies are faced with an entirely new focus of digital trust that needs to be supported by the right IT infrastructure.

The infrastructure also needs to be scalable to grow and evolve with an organization. The path to success if often littered with challenges if the right partners are not in place because, despite the desire for common data lakes, data sovereignty and latency demands are only a few of the reasons why companies cannot just lift and shift to cloud; essentially acting as the impetus for a hybrid approach.

This is the scalability and agility that digital transformations need to thrive business-wide. The current model of SaaS, public cloud and legacy on-premises workloads lacks the greater flexibility required for companies to be as dynamic and as fast as desired. This is also one of the main driving forces to simplify the technology to deliver fast adoption and even faster results.

Going a step further, companies need the right leadership, employees, and supporting partnerships to be able to use the technology and IT infrastructure successfully.

Futurum Research considers HPE to be well positioned to deliver on this promise. The company has a strong Everything as a Service approach to its business development, partnering with other tech leaders that allow everything not just to be serviced, but to be simple, metered, flexible, and agile. Their consumption models aren't just consumption-driven; they offer peace of mind via 100 percent visibility and granularity. And HPE is focused on building solutions and services that aren't just easy to access, but are also easy to use. This allows businesses to use *just the right amount* of data... to transform as *their own company* and customers dictate... to be moved by market forces in the way that *make the most sense for them* in terms of meaningful forward movement.

Digital Transformation isn't about technology, it is about delivering the customer experiences of the future, today. It is about every business understanding its "Why" and utilizing modern IT architecture to deliver the brand promise while creating an organization that can not only survive, but thrive, in ever changing market climates. Today's businesses, at the core, need IT that is flexible and agile because they themselves need to be flexible and agile.

Futurum Research believes that HPE's "Why" is about enabling the "Why" of the enterprises it serves, which positions the company to perform admirably into the foreseeable future.

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HPE GreenLake is HPE's market-leading IT as-a-Service offering that brings the cloud experience to apps and data everywhere—data centers, multi-clouds, and edges—with one unified operating model. HPE GreenLake delivers public cloud services and infrastructure for workloads on premises, fully managed in a pay per use model. Powered by HPE

GreenLake Central, a new intuitive self-service portal and operations console, enterprises can now rapidly deploy services, gain cost and compliance insights, and simplify management across their entire hybrid estate. For more info visit:
https://www.hpe.com/greenlake

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