

White Paper

Guidance for Accelerating the ISV Journey to SaaS

Sponsored by: Pure Storage

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May 2019

IDC OPINION

Software as a service (SaaS) has been around for more than a decade. The evolution from the 1990s application service provider model to today's SaaS started by Salesforce has delivered game-changing benefits for businesses. SaaS transformed the way businesses buy application software. SaaS made it possible for the line-of-business executive, previously an influencer, to become the economic buyer for applications, thus creating new opportunities for the independent software vendor (ISV) and new challenges for IT. The SaaS benefits for customers include significantly reducing infrastructure investment by sharing services such as provisioning, test, and deployment in a true multitenant environment; moving to an operating expense model for applications and services; and getting access to a continuous stream of new features and functionality. SaaS enables buyers to take advantage of innovation accelerators such as artificial intelligence (AI)-enabled automation and the Internet of Things (IoT). These technologies have become mainstream because they are increasingly embedded in the applications users rely on to do their job. Buyers recognize that cloud and SaaS are foundational to access new technology for faster growth and innovation.

SaaS has become the dominant force in cloud, accounting for more than 60% of total cloud software revenue by 2022, and nearly half of total cloud revenue includes IaaS and PaaS. ISVs are meeting IT and line-of-business buyer demand for greater speed, agility, and scalability with cloud-enabled and cloud-native (rearchitected for the cloud) solutions. The explosive growth in SaaS contributes to an avalanche of data. A highly scalable SaaS model is needed to curate and analyze the large stores of data coming from increasingly diverse sources. Buyers turn to their SaaS providers for help managing the data generated and consumed by the application. This includes embedding AI and machine learning in SaaS applications to analyze large data sets and deliver real-time insights.

As these trends have unfolded, the performance gap has widened significantly between SaaS and cloud-enabled enterprises and those that remain locked into outdated operating models that frustrate customers and increase churn. It is against this background that the decision to accelerate the journey from an ISV to a SaaS provider must be weighed.

IN THIS WHITE PAPER

This white paper offers a perspective on the ISV journey from a traditional licensed software supplier to a subscription-based SaaS provider and the strategic importance of infrastructure as the foundation on which to build a successful SaaS business and to de-risk a sensitive business model transformation. Enterprise business applications are core to the SaaS business model. Just as critical are the compute, network, and storage technologies that make up the platform on which that software runs.

For example, uptime is a critical metric for SaaS providers. Data management becomes a key differentiator and a competitive necessity for SaaS providers.

"Uptime is actually the key, keeping the environment up. Customers don't really care about SLAs. They care about actual about uptime. If you end up only meeting SLAs, you're going to lose that customer." (a large SaaS provider for healthcare)

Similarly, developers and IT organizations must ensure that data is stored in a manner that allows it to securely satisfy the latency and throughput requirements of the application. As early as 2008, Amazon noted that an extra 100ms of latency resulted in a decline of 1% in sales, while Google claimed that an extra 0.5 second in page generation time reduced search-related traffic by 20%. SaaS providers should consider investing in infrastructure that offers near parity with the performance characteristics of private cloud.

"If you can't provide the latency and the uptime, you just can't play the game." (a large SaaS provider for healthcare)

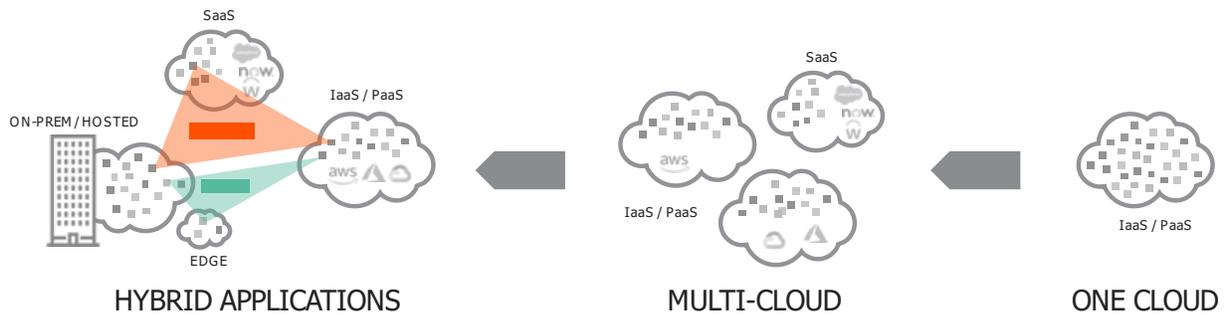
This white paper also examines the SaaS imperative of incorporating innovation accelerators such as AI and machine learning into faster data-centric systems of record (SORs) enables the systems of intelligence that deliver the real-time insights required for digital transformation (DX).

BACKGROUND

Business model change cannot be done successfully without a primary focus on meeting (at a minimum) the changing needs of customers. Customers' IT environments are increasingly hybrid (see Figure 1). Interoperability and APIs are key factors in managing an increasingly disaggregated application portfolio across multiple landing zones. IT buyers prefer technologies that easily integrate with their existing environment and are sufficiently flexible to address future needs. For example, customers prefer to work with SaaS providers that offer the flexibility to choose where their application workloads and data reside as determined by governance, industry and regional compliance, and application performance.

FIGURE 1

The Transition to Hybrid Applications



Source: Pure Storage, 2019

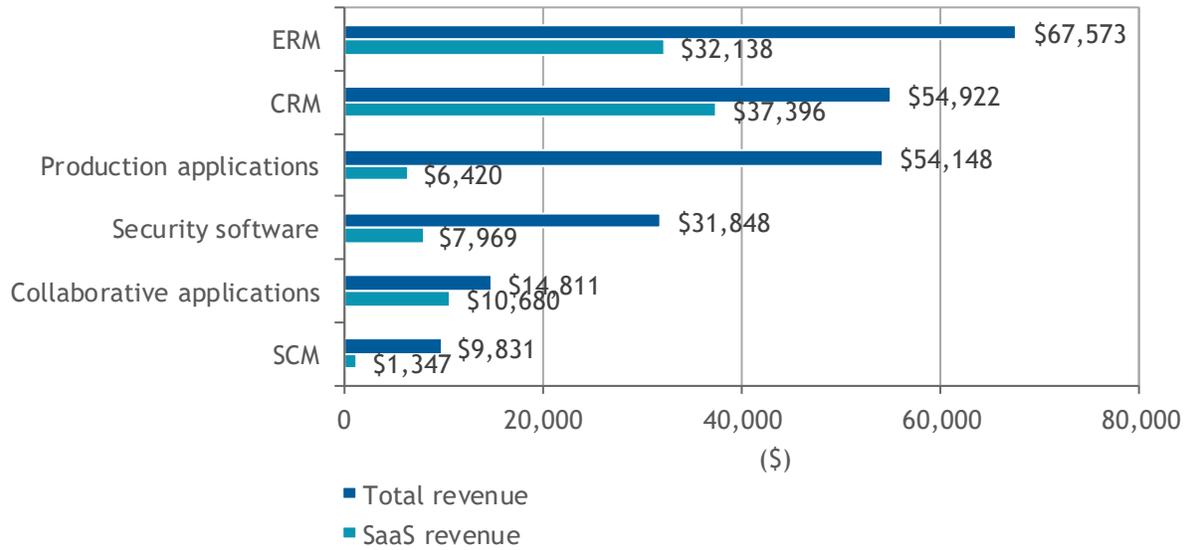
The Enterprise Digital Transformation Imperative

Fundamental to understanding the evolving set of customers' expectations is an appreciation for the DX initiatives that have become enterprisewide priorities (from the C-suite to lines of business) fueled by the need to leverage advances in cloud, mobility, cognitive intelligence/AI, and IoT to collect and analyze massive amounts of data. IT and business leaders have progressively shifted toward leveraging multiple sources of data to inform decision making. Most organizations have become multicloud and hybrid cloud businesses in support of digital transformation initiatives, choosing to deploy two or more cloud services to address different application workload characteristics and avoid service provider lock-in.

The need to modernize IT to support transformation initiatives drives businesses to rethink their technology strategy. This rethinking includes moving beyond legacy systems of record toward cloud-enabled and cloud-native software (see Figure 2). As a result, the SaaS market reached \$121 billion in 2018 (see Figure 3) and is expected to grow to nearly \$200 billion by 2022 at a CAGR of 12.5%. Comparatively, growth in packaged software is hovering in the single digits. The top 20 SaaS providers represent 44.5% of the market, with a long tail of smaller providers accounting for most of the revenue. Rapid market growth and disaggregated suppliers indicate significant headroom for growth. For companies with mixed business models (i.e., subscription and one-time fees or professional services), SaaS subscriptions will represent the majority of total revenue.

FIGURE 2

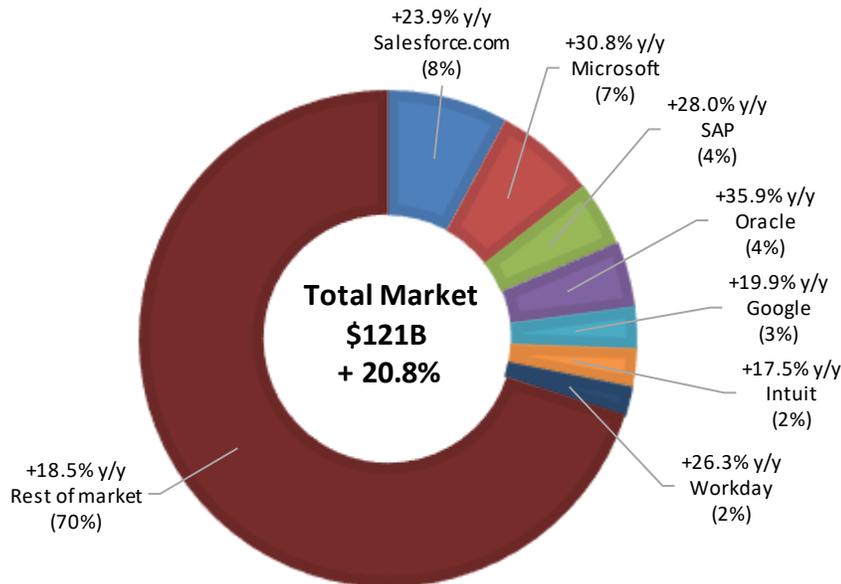
Worldwide SaaS/PaaS Revenue by Selected Category, 2018



Source: IDC, 2019

FIGURE 3

Worldwide Software as a Service Revenue Share by Vendor, 2018



Source: IDC, 2019

Customer Expectations

Today, multicloud and hybrid cloud architectures allow a business to deploy application workloads that support characteristics such as data residency requirements, compliance and regulations, low latency, and low cost. The promise of these workloads is increased agility, improved security, better user experience, and ubiquitous access. A hybrid cloud offers the best of both worlds: a private environment (enterprise private cloud or hosted private cloud) for increased control is integrated with one or more public clouds for virtually limitless scalability, flexibility, and access. A critical consideration for any hybrid environment, however, is the massive undertaking required to move large volumes of data across the IT environment.

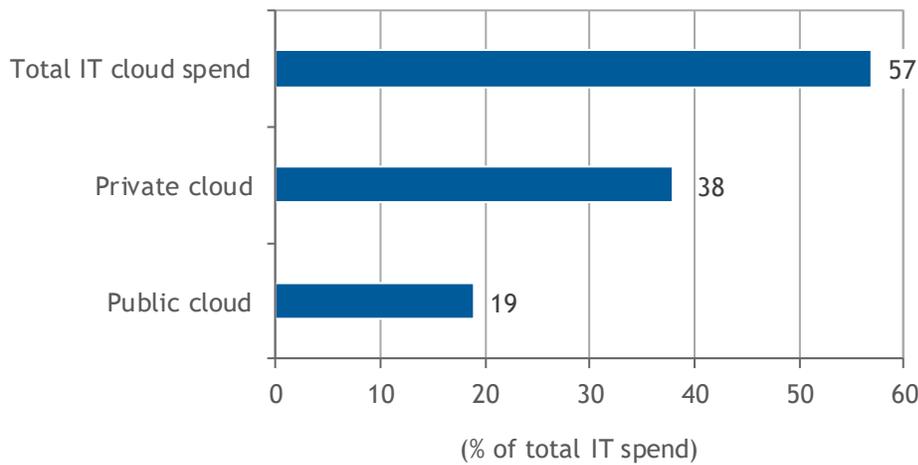
While customers continue to deploy public cloud infrastructure and SaaS solutions at a rapid rate, they are also increasing investments in both enterprise and hosted private cloud solutions where dedicated systems offer greater control and are better able to address unique security, compliance, performance, and cost requirements. Some application workloads that were initially moved to public cloud failed to deliver on the performance improvements and cost reductions promised. This resulted in some of these workloads being moved back to a private cloud environment. In fact, according to IDC's 2018 *Global CloudPath Survey*, 22% of businesses have repatriated some application workloads including database and data management services, and custom and commercial applications, from public cloud to on-premises. Repatriation is more pronounced in Europe, perhaps due to GDPR and other local regulations. Repatriation is attributed to early cloud adopter experimentation where long-term adoption was decided against and does not represent a widespread negative indicator of SaaS and cloud solutions adoption. As the cloud market matures and service providers enhance their offerings for cloud migration, businesses invest more time in planning and coordinating the move to cloud. IT is learning to maximize performance through workload optimization based on specific characteristics like latency, cost, usage patterns, and compliance. The decision between private and public deployment of workloads will be increasingly less important as hybrid cloud solutions and orchestration technologies mature.

As organizations move to deploy application workloads in a multicloud or hybrid cloud environment in order to address different business requirements, SaaS providers must demonstrate how they can assist with aggregating customer data that is distributed across different deployments, including on-premises, public cloud, and private cloud. Once aggregated, extracting value from the data in the form of insights becomes job one. While challenging, the situation creates tremendous opportunities for SaaS providers to solidify their value to customers. Delivering this value will go a long way toward increasing customer retention and helping customers achieve new sources of revenue.

Businesses want real-time interoperability and portability of application workloads across these varied cloud environments. IDC's 2018 *Industry CloudPath Survey* results show that businesses plan to allocate larger portions of their IT budget for both public and private cloud deployments (see Figure 4). The desire for flexibility extends to where buyers prefer to source their SaaS solutions. IDC believes that transactions conducted in cloud marketplaces will rise exponentially over the next four years. An increasing number of ISVs are responding with new solutions, extensions, and a new approach for customers to procure services.

FIGURE 4

Cloud IT Spend



n = 5,740

Source: IDC's *Industry CloudPath Survey*, 2018

The journey from an ISV to a SaaS provider, the importance of a data management strategy, and the infrastructure platform are the three key themes discussed in the sections that follow.

JOURNEY FROM AN ISV TO A SAAS PROVIDER

An ISV's transition to a SaaS provider can be gradual and often at odds with a legacy license business model. However challenging, the journey is necessary for survival because businesses (the ISV's target customers) are increasingly "SaaS first" for applications. The findings from IDC's 2018 *Global SaaSPath Survey* of more than 2,500 midmarket and enterprise businesses show that more than 50% of North American and APEJ businesses are either SaaS first or have a companywide initiative to move applications to SaaS (see Figure 5). Businesses in Europe have been slower to transition to SaaS.

"90%+ of customers that are coming to us every year are moving to the cloud platform. I think the breakup now is almost 50:50, but I see that ratio changing very much in the coming years, as more people adopt SaaS." (a midsize SaaS ERP provider of cross-industry solutions)

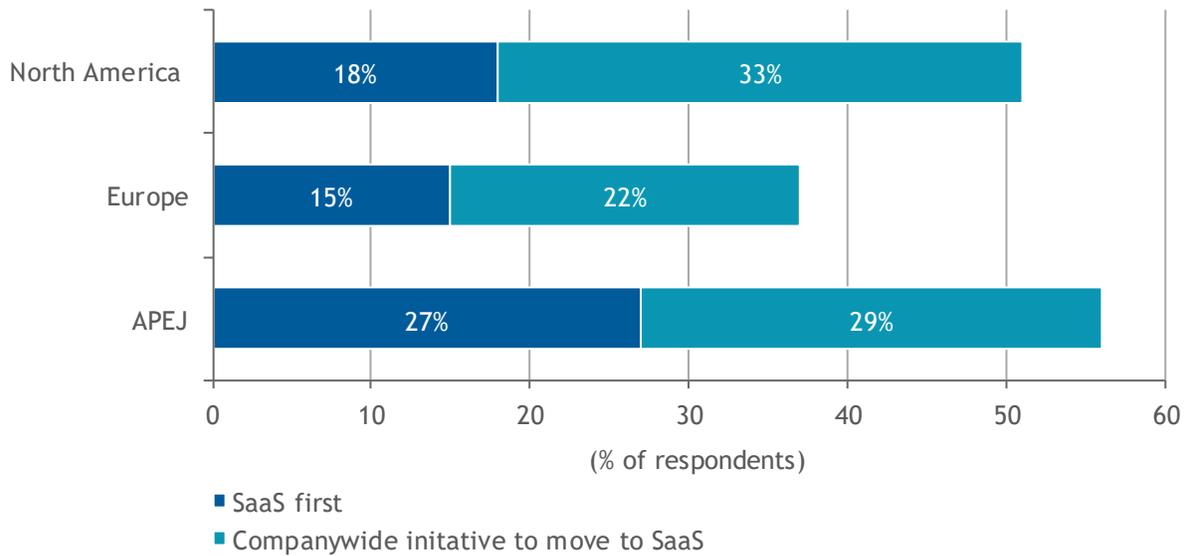
IDC believes that by 2020, ISVs with less than 5% of their revenue from cloud software and services will experience diminished opportunities to tap into future cloud growth. Becoming a SaaS provider positions ISVs for future prosperity.

"The job 10 years ago used to be about the same basics, security, getting the environments deployed ... the agility factor has really turned up, and that's where the real change in all the models is. How fast can you deliver the needed capabilities? SaaS solutions require that. The amount of agility, speed to market, customer focus

those have all changed drastically, especially in the last three to five years." (a midsize SaaS ERP provider for SMB)

FIGURE 5

SaaS Adoption by Region



Source: IDC's *Industry SaaSPath Survey*, 2018

SaaS is the dominant force in cloud and will represent more than 60% of the \$259 billion in cloud software revenue by 2022. Nearly all major ISVs continue to increase their investment in cloud-based offerings. The cloud delivery model goes well beyond prior online delivery approaches – combining efficient use of multitenant (shared) resources, radically simplified "solution" packaging, self-service provisioning, highly elastic and granular scaling, flexible pricing, and broad leverage of internet-standard technologies – to make offerings dramatically easier and generally cheaper to consume.

At the start of the journey, ISVs quickly realize that they are no longer product companies. As a service company, ISVs are responsible for the total operating infrastructure and for the entire customer experience. The transformative impact of moving from traditional software delivery to SaaS disrupts traditional software development, marketing and sales, and distribution models. Transitioning from a conventional licensing model to a usage-based model involves considerable changes to the ISV's operating model. From a business model perspective, the impact of recognizing most of the customer revenue in years subsequent to acquisition can be extremely disruptive. Dealing with the large revenue gap moving from large license payments to smaller subscription fees can be a major challenge for ISVs while the SaaS transition is occurring. For enterprise software sales, it becomes more important to focus on large numbers of quick wins rather than a few big deals. And product development must deliver frequent incremental improvements to enhance value and ensure retention. Such transformation affects traditional pricing and terms (e.g., bring your own license [BYOL], organizational structure, and engagement models).

As ISVs become mature SaaS companies, they recognize that it is not enough to simply take the packaged ISV software but host it and charge a monthly or annual subscription. Customers rely on their software providers to deliver solutions that increase business agility and efficiency and provide quick access to innovation accelerators like AI and IoT. In response, some ISVs have completely redesigned their offerings to capitalize on cloud-delivered services. A rearchitecting of the application becomes necessary to remain in step with the customer's internal efforts to streamline and enhance service delivery to internal stakeholders. According to IDC's *Industry CloudPath Survey*, 53% of businesses on average currently implement a microservices architecture, with 43% of them planning to do so. The message for ISVs is that customers increasingly expect their SaaS providers to offer modern applications that take full advantage of the distributed nature of cloud.

"In many of the same ways that virtualization technology has helped really take the infrastructure platform to new levels of utilization, you have the same issue with the SaaS software equation. How do you get the most beneficial performance, beneficial operations, and beneficial outputs out of any software solution to a customer while being efficient?" (a midsize SaaS ERP provider for SMB)

Aligning SaaS Provider Value with Customer Success

SaaS provider success is directly linked to customer success. Retention is a major driver of SaaS provider valuation and compounds over time. Customer churn dramatically decreases value. SaaS providers that start to invest early to build competency in customer success enjoy greater customer loyalty and increased customer lifetime value. Research from Gainsight, a customer success platform, shows that investments in customer success improve adoption and retention across a variety of solutions. It is important to hire someone who knows the playbook on customer success and who can drive alignment across commercial teams (such as sales, marketing, customer success, and operations). All teams become accountable for revenue throughout the cycle of acquisition, retention, and expansion. It is also important to engage the customer success manager as early in the buying cycle as possible, even before the deal closes. Once the customer is acquired, it is the responsibility of the customer success team to drive feature use and renewals and serve as the customer advocate.

Training and support are critical elements of a customer success program. Even more critical is the need to ensure that your customers get the most value from their SaaS investment by using all the functionality that they are paying for. Pendo, a product cloud company, determined that 80% of features in the average software product are rarely or ever used.

Velocity of Change Drives a New Generation of SaaS

IT is quickly moving from experimentation to innovation at scale, and a new generation of SaaS is already underway. This new generation of SaaS providers is redefining enterprise technology with solutions that are much more agile, easier for developers to work on, and intuitive to use. These companies provide technology that helps the business stay relevant.

The benefits of this new-generation SaaS applications are considerable:

- Greater agility and speed from applications that are delivered as loosely coupled, connected services
- Improved portability and interoperability using microservices and language-agnostic APIs
- Better leverage of Agile, DevOps, and CI/CD software development
- Faster and easier to upgrade individual services (Each service is individually deployable.)

- Failure resistant and fault tolerant

This new generation of embedded AI and machine learning features that are embedded in SaaS applications automate tasks, streamline processes, and offer advanced analytics to understand customer sentiment. Most SaaS providers begin their AI journey with a list of potential projects from service chatbots to solution enhancements that make it easier for users to get their jobs done. SaaS is how most users will experience AI. IDC predicts that by 2022, more than half of the G2000 will be AI enabled, and 50% of application workflows will be automated by AI.

AI is needed to analyze the explosion of data coming from diverse sources such as endpoints, sensors, and the network edge. According to IDC, the global datasphere will grow 10x to over 160ZB by 2025. Moving compute and data closer to the user has become necessary to deliver real-time insights. Vertical SaaS offerings and industry data models will capitalize on all this data to deliver increased value to businesses.

A Data Management Strategy Becomes a Critical Enabler

Data is critical to the design and optimization of new customer-centric business models. As data sets grow to petabytes and exabytes, IT leaders are tasked with managing and securing this data, while the true benefit comes from extracting value from insights. A process-driven organization of structured and unstructured data drives contextual insights for better informed and faster decision making. The autonomous processing of data to discover insights is a transformation imperative. In making data consumable, real-time insights create situational awareness across the organization. Insights can deliver predictive intelligence and allow the organization to take actions before problems occur and to identify opportunities.

The massive data stores enabled by Big Data mean that SaaS providers need to optimize their applications for the volume of relevant data that is stored in a manner that allows it to satisfy the latency and throughput requirements of the application. It's all about the infrastructure as more data is moved to the cloud for analysis or long-term storage or originates in the cloud as part of systems of engagement. In the case of cloud providers with large SaaS portfolios, the data is already there.

Data has become a currency of businesses, and SaaS providers will face increasing pressure from customers to help them extract value from the data that is managed by the provider. We are rapidly approaching a time when data must be considered at the earliest stage of application development. Customers respond to the increased insights from data to make smarter buying decisions in virtually all primary industries. Software components that deliver responsive web applications with high-performing user interface (UI) components such as dashboards, maps, reports, charts, menus, and layout customizations provide the rich experiences sought by users.

"We have lots of data movement, day in, day out, whether it be coming from the customer to us, in between our own environment, and back out to the customer. We're always moving data. And we move millions and millions of transactions a day through our environment. We've got some probably 25,000 connected people logging into our cloud environment day in, day out." (a midsize SaaS ERP provider of cross-industry solutions)

IT leaders continually look for ways to help their businesses deliver a unified view of their data across sources and locations. Many organizations are modernizing their trusted operational SORs with SaaS to make data unification possible. Upgrades to intelligent SaaS systems (i.e., "systems of intelligence")

offer the opportunity for real-time insights, predictive analytics, smarter decisions, and new sources of revenue. Intelligent storage solutions play a critical role in enabling this strategy.

"Some of our products are actually designed and delivered to take different types of transaction data; pull it together, and then through. This is all contracted and approved with customers that choose to conglomerate their data with other data, and then do analytical processing around it to the point where it can produce insights on a given day. People can start to predict in the future what happens with sales on Labor Day. The reality is, Is that Pure has just turned up the processing around that?" (a midsize SaaS ERP provider of cross-industry solutions)

Considerations for ISVs – Data Management Platforms

Infrastructure is the foundation on which an ISV builds a thriving SaaS business. As data grows in volume and velocity, it adds complexity to the transformation effort and places greater demand on infrastructure across deployment locations.

"We have to figure out how we architect that from a system perspective. And in some cases, if it is public cloud, you must figure out how do you secure the data and get the data to and from the cloud. If it's on-prem, is it a technology stack we've used before or is it a new one? And if it is a new one, how do we get the expertise we need in order to be successful there?" (a large SaaS provider for healthcare)

"Mature SaaS and cloud buyers value integrated platforms that provide cross-platform development tools, application security, rich user-experience (UX) components, back end-as-a-service frameworks, data integration platforms, predictive analytics, and high-performance computing, as well as support for machine learning and cognitive computing." (a midsize SaaS ERP provider of cross-industry solutions)

"Agility doesn't only come in the form of speed to delivery. That's almost the table stakes nowadays. It became all about how do we take the transaction closer to the customer? How do we turn that technical agility into the self-service? Things like that are much more key to a good SaaS offering regardless of what infrastructure or application technology you're trying to deploy." (a midsize SaaS ERP provider of cross-industry solutions)

"In many of the same ways that virtualization technology helped take the infrastructure platform to new levels of utilization, you have the same problem with the SaaS software equation. How do you get the most beneficial performance and beneficial outputs out of any software platform to a customer while being efficient?" (a midsize SaaS ERP provider of cross-industry solutions)

Customers are looking for platforms that improve data management integration and user experience while delivering high availability, the ability to scale, and data mobility.

SaaS Provider Profile

Company Overview

IDC spoke with a company that delivers ERP business management software built around financials and business reporting. This company offers a cloud platform that is used to deliver SaaS solutions for SMB and large enterprise customers in retail, manufacturing, wholesale distribution, mining, and services.

"When we deploy our software into a public cloud, it will be in a single-tenanted environment. That is the same in our private cloud as well. We stand up all our customers into individual environments. We take a share nothing-type approach. Particularly because we're dealing with very sensitive data." (a global SaaS ERP provider of cross-industry solutions)

The company runs a highly virtualized environment out of five datacenters, all using VMware. The datacenter footprint has expanded to become significantly larger over recent years. However, the footprint inside the datacenter has become smaller because the technology is better and more efficient, which lowers production cost.

"In some of our datacenters, we contracted from almost 42 RUs down to about 4 RUs because of the move to Pure Storage. There's a huge saving in space by changing technology." (a global SaaS ERP provider of cross-industry solutions)

Priority Initiative

The company experienced brief outages that impacted customers. The outages were caused by the previous infrastructure not performing as promised. So the company decided it was time to make a change.

"Retail has some of the highest-pressure companies out there. If we have five minutes of outage for a retailer when they've got customers wanting to purchase product and their systems not available, that's going to have an impact. That customer puts the goods down, and they walk out." (a global SaaS ERP provider of cross-industry solutions)

Situation

The company used the disruption to identify other areas for improvement including performance, customer experience, security, and efficiency. The company had already deployed flash storage in its product environment. However, it did not have deduplication and encryption at the storage level, and latency was around about 50-60ms.

Solution

The SaaS provider chose a Pure Storage solution that included deduplication, compression, and encryption. As a result, the company experienced significantly better uptime, a 10:1 compression ratio on its environment and a reduction in latency from 60ms to 0.6ms.

"I don't know how they [Pure Storage] do it. I don't really care. The results are absolutely amazing." (a global SaaS ERP provider of cross-industry solutions)

"We know how long a night process takes for a customer. Since we shifted that workload to Pure, it is significantly reduced in time. We're seeing the benefits of application performance. From a customer perspective, they'll say yes, a nice sequence in my nightly backups, and processes are running much more efficiently." (a global SaaS ERP provider of cross-industry solutions)

PURE STORAGE DATA MANAGEMENT PLATFORM

A data management platform unifies on-premises, private cloud, and public cloud environments. Pure Storage's data-centric architecture offers scalable elastic services with policy-based automation. This helps SaaS providers stand up services while eliminating the need for repetitive intervention, which is especially important for ISVs transitioning to SaaS as they build and roll out services. With Pure Storage Cloud Block Store and Purity CloudSnap, SaaS providers can extend their data-centric architecture to the cloud with the ability to back up to the cloud with Pure's technology.

"There were some workloads that generally in certain types of analytical processing areas where there is so much data being churned that block size and things like that matter. The reality is, is that without special configurations, we could get a 5x gain on those subsets." (a midsize SaaS ERP provider of cross-industry solutions)

A critical need for SaaS companies is a data protection environment in which backup is efficient, recoveries are superfast, and data can be repurposed for new business initiatives. ObjectEngine is Pure's flash-to-flash-to-cloud (F2F2C) solution that taps the power of flash and cloud to deliver restore performance on-premises while extending to public cloud for 11-9s of durability and pay-as-you-go economics.

Greater insight into customer usage and behavior drives SaaS providers to build or partner for modern infrastructure that will support the high availability, reliability, scalability, and data management that customers need. Transforming organizations are placing greater emphasis on centralizing the ownership of data and data infrastructure as a critical prerequisite to generate value from their data. Pure's FlashBlade is well suited for this purpose with the performance and scalability essential for advanced massively parallel applications like data analytics, artificial intelligence, and deep learning.

Pure's FlashArray delivers sub-millisecond latency at hundreds of thousands of IOPS even in mixed workload environments. This provides high availability with nondisruptive operations. For ISVs transitioning to SaaS, what this means is they can update their hardware and software and expand capacity without reconfiguring applications, hosts, or I/O networks and without disrupting applications or sacrificing performance. FlashArray offers 6-9s availability for mission-critical workloads to ensure data is accessible at all times. For business continuity, Pure delivers instant recovery with FlashBlade Rapid Restore and recovery time objective (RTO) and recovery point objective (RPO) zero – globally across datacenters with Purity ActiveCluster on FlashArray. Pure's Evergreen Storage program combines this nondisruptive product architecture with a flexible buying program. ISVs transitioning to SaaS can benefit from this subscription-based storage experience, which frees them from the legacy storage approach of complex, risky, and expensive forklift upgrades and data migrations every three to five years. Pure's Evergreen Storage Service is a pay-per-use offering that provides value to service providers that have opex-centric budgets (sometimes even mandated) and/or have a higher need for short-term flexibility that is not possible with capex.

CHALLENGES AND OPPORTUNITIES

Opportunities for ISVs

SaaS is by far the largest and most mature segment of cloud computing projected to reach \$200 billion by 2022. Organizations are increasingly SaaS first for new applications. Most organizations have companywide initiatives to replace legacy applications with SaaS. Growth in SaaS is a bright 16.8%, while the forecast for traditional license software is a gloomy 4%. Do the math. ISVs that deliver their applications "as a service" will reap the benefits of increased demand from customers across regions, industries, and functional application types. SaaS providers that focus on the success of their customers by ensuring a steady flow of new value-enhancing features will benefit from increased loyalty, retention, and expansion. The ability to efficiently and rapidly scale SaaS applications means that growth opportunities are available to all ISVs that deliver services that are highly valued by customers. The delivery of new capabilities is accelerated by services that can be provisioned in near real time in response to new business opportunities. Innovation, meaning the creation of new value, is a priority for digitally transforming businesses and is made possible by new functionality to support increased speed and agility. Fast deployment of applications improves the customer's TCO and creates new opportunities for ISVs that have optimized their entire operating model for SaaS. With all customers on the same version of application, ISVs are no longer burdened with maintaining older versions of legacy applications with all their customizations, patches, and updates. SaaS models provide developers with a faster path to embedding innovation accelerators such as AI and IoT to create new revenue streams.

Challenges for ISVs

Transitioning from tradition licensed software to SaaS is disruptive. The transformation to a SaaS provider requires operational changes that span every business function, from development, product life-cycle management, and support to sales, marketing, and customer success. The transformation of this magnitude requires comprehensive changes in the operating model, not the least of which is aligning sales metrics and compensation with the shift from large up-front license revenue to smaller recurring monthly payments. SaaS businesses invest heavily to acquire customers and recover profits over an extended period. It is critical to study the economics of each customer relationship. Even with flawless execution, an acceleration of growth will often squeeze cash flow and profitability.

Growth in SaaS adoption requires a software-centric data strategy. SaaS providers must be strategic in how they deploy and manage technology and tools to manage customer data as customers increasingly look to their SaaS provider for assistance in data management.

LEARN MORE

Related Research

- *Worldwide Enterprise Storage Systems Market Shares, 3Q18: Market Growth Driven by Sustained Public Cloud Spending and Enterprise Investment in Data-Centric Initiatives* (IDC #US44759919, February 2019)
- *SaaSView 2018: Executive Summary* (IDC #US44398718, October 2018)
- *IDC MarketScape: Worldwide SaaS and Cloud-Enabled B2B Digital Commerce Platforms 2018 Vendor Assessment* (IDC #US43262518, September 2018)
- *CloudView 2018: A Deeper Look at Cloud Maturity* (IDC #US44187818, August 2018)

- *Cloud Repatriation Accelerates in a Multicloud World* (IDC #US44185818, August 2018)
- *Worldwide Storage Software Forecast, 2018-2022: Market Adapts to Cloud, Converged Use Cases, and New Pricing Dynamics* (IDC #US43852618, June 2018)
- *Worldwide Software Construction Components Market Shares, 2016: An Embrace of Data Centricity and Open Source* (IDC #US42882417, July 2017)

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