



Hybrid Cloud Management Survey Report

Industry Benchmarks, Trends and Best Practices

2020



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Executive Summary

Hystax OptScale provides businesses with a hybrid cloud management platform, which is designed to help them manage their cloud expenses seamlessly. Between idle and over-provisioned resources, businesses are estimated to completely waste approximately \$17.6 billion in cloud spend in 2020¹, representing significant losses which do not need to occur.

To further understand this wastage and the evolving needs of today's businesses, Hystax conducted a survey to uncover insights on market challenges and best practices. Hystax sought to gain more information on the current platforms of choice of companies that are currently using or considering implementing disaster recovery. The results are based on responses from more than 100 professionals from around the world, collected through an online survey conducted in early 2020.

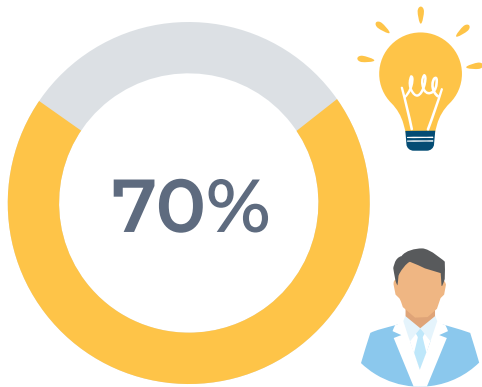
Today's professionals require full insight into their companys' IT budgets to efficiently forecast, produce budget reports and avoid wastage whenever necessary. As such, businesses are seeking tools that provide them with full transparency of their cloud budgets across clouds, business units, projects and users.

The abilities to set flexible alerts, manage multicloud assets and provide seamless cloud migration and cross-cloud disaster recovery within seconds or minutes is critical. While Hystax OptScale aims to provide each of these elements to its current users for instant organization across business units, it desired a deeper understanding of the market.

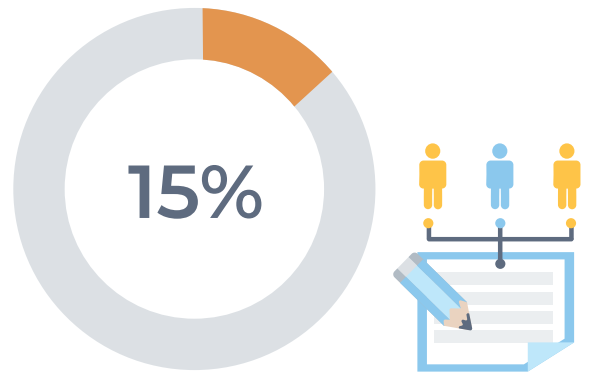
Sources:

¹ Wasted Cloud Spend

Some key takeaways from Hystax's survey



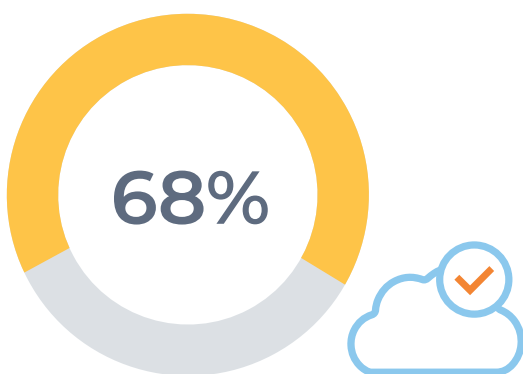
The majority of individuals are seeking more insights and knowledge of trends in this space, and are therefore likely looking to their solution providers as thought leaders and true partners.



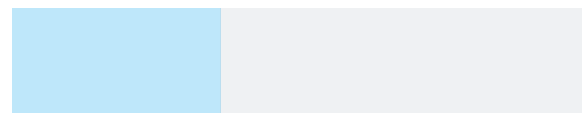
The minority of respondents are proud of their current provisioning process, with all others noting that their systems are time consuming and could be improved.



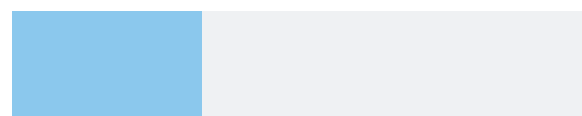
A substantial majority of those surveyed are using AWS as their cloud provider.



The majority of individuals surveyed do not plan to migrate to another cloud in the next year, and therefore would likely need to be presented with key reasons to do so.



30% of respondents said they are unaware of variations in their monthly cloud bills, showcasing a potential lack of transparency to allow for effective budgeting, while **29%** said their cloud bill varies more than 10% each month.





Clouds Preferred

The cloud has quickly become the platform of choice for today's IT leaders and their line-of-business counterparts. Cloud computing has seen substantial growth.²

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“At this point, cloud adoption is mainstream,” said Sid Nag, Research Vice President at Gartner. “The expectations of the outcomes associated with cloud investments therefore are also higher. Adoption of next-generation solutions are almost always ‘cloud-enhanced’ solutions, meaning they build on the strengths of a cloud platform to deliver digital business capabilities.”³

”

The global public cloud services market is forecast to grow 17% in 2020 to a total of \$266.4 billion, an increase from the \$227.8 billion of 2019, according to Gartner, Inc.⁴ These numbers are only expected to continue to increase, with the global cloud computing market size then estimated to reach \$623.3 billion by 2023, at a Compound Annual Growth Rate (CAGR) of 18.0% during the forecast period.⁵

While Software as a Service (SaaS) makes up the largest market segment at \$116 billion, the fastest growing portion of cloud spend will continue to be Infrastructure as a Service (IaaS), increasing 24% YoY to \$50 billion in 2020.

Many established organizations do not utilize a single-provider cloud approach. They may rely on multiple providers to utilize different capabilities when all cannot be provided, such as IBM Cloud for analytical technologies, yet Azure for other services.

Sources:

² How To Choose Your Cloud Provider

³ Gartner Forecasts Worldwide Public Cloud Revenue to Grow 17% in 2020

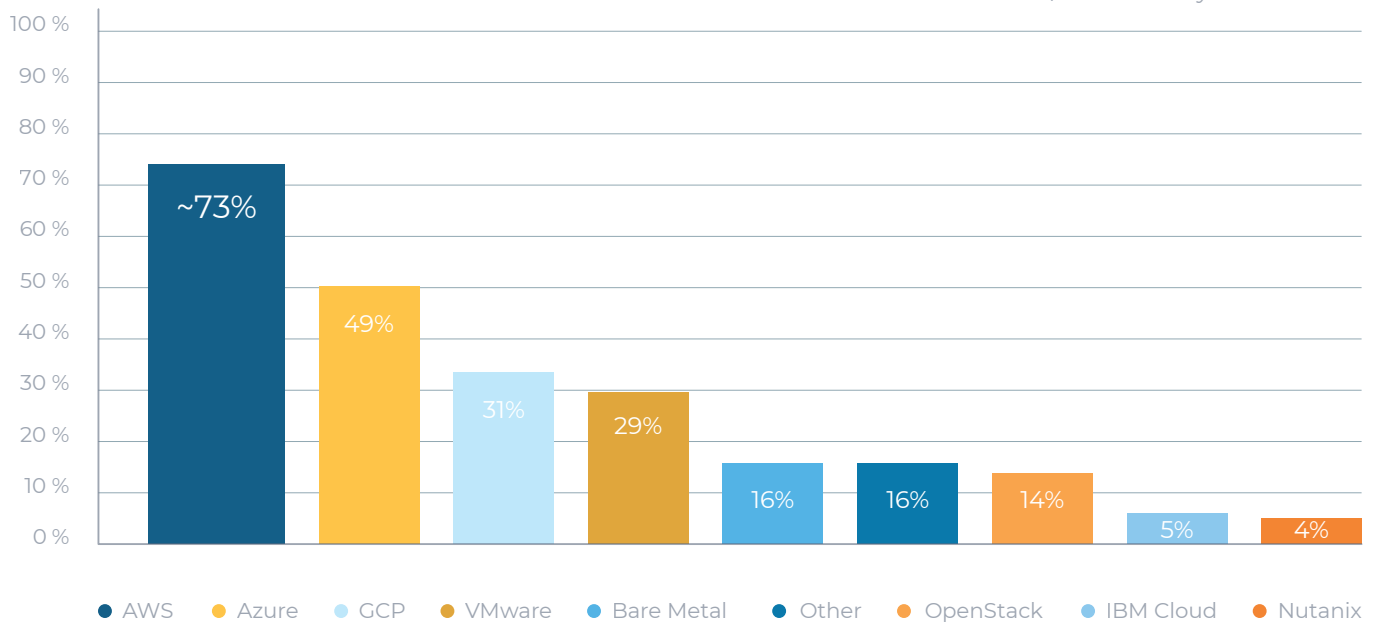
⁴ Gartner Forecasts Worldwide Public Cloud Revenue to Grow 17% in 2020

⁵ Cloud Computing Market by Service Model

Clouds Preferred

When asked what cloud or clouds their team uses, the majority of respondents (73%) noted AWS. After AWS, the second two most popular providers were Azure at 49% and GCP at 31%. IBM Cloud was used by the fewest number of respondents at just 5%.

What cloud / clouds does your team use?



By 2022, approximately 60% of organizations will use an external service provider's cloud managed service offering, a percentage which has doubled since 2018.

“Cloud-native capabilities, application services, multi cloud and hybrid cloud comprise a diverse cloud ecosystem that will be important differentiators for technology product managers,” said Nag. “Demand for strategic cloud service outcomes signals an organizational shift toward digital business outcomes.”⁶

Sources:

⁶ Gartner Forecasts Worldwide Public Cloud Revenue to Grow 17% in 2020

Current Approaches to Cloud Migration & Likelihood to Switch Providers

There are multiple cloud migration strategies that companies may consider when taking advantage of available cloud computing for their business.

The process of migrating to the cloud can often be viewed as somewhat cumbersome or difficult, however with the right strategy in place and identified factors to consider, a business can make this move smoothly.

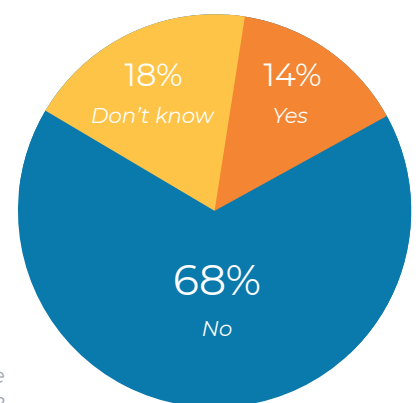
A hybrid cloud migration approach is often needed to provide the best results for migrating data. For those making the transition to the cloud, a gradual approach allows businesses to leave some applications running in local, traditional data centers, while others are moved. This so-called hybrid model allows companies to transition at their own pace.

Commonly used approaches include rehosting (also known as lift and shift), re-platforming, repurchasing, refactoring (also known as rearchitecting) and retiring.

There is no one-size-fits-all answer to which approach is right for your business. You may start by seeing if the application you're using can be moved to a cloud environment in its entirety while keeping operations and running costs maintained.

Additional factors to consider include whether cost-efficiency is top-of-mind as an element which needs improvement, as well as the time and resources you have available for a revamp of your current solutions and processes.

When asked if their organization has plans to migrate to another cloud within the next 12 months, 68% of respondents said no. 14% said yes, their plan is to migrate, while 18% said they are unsure at this time.



Does your organization plan to migrate to another cloud within the next 12 months?



Average Cloud Spends & Wastage

A recently published study⁷ analyzed enterprises' annual public cloud spending last year. 13% of the global enterprise respondents noted that their organizations spent more than \$12 million USD on public clouds each year.

Approximately two-thirds of an enterprise's average public cloud bill is spent on compute, which translates to an estimate of \$33.3 billion to be spent on compute resources in 2020. It's interesting to note that this portion of a cloud bill is highly vulnerable to wasted spend.⁸

As cloud users mature, the study showed they are more aware of the potential for wasted spending than they were a few years ago, yet millions continue to be lost on cloud expenses each year. For example, idle resources are being paid for by the hour, minute or second, yet they often are not being used 24/7. Most non-production resources are only used during a 40-hour work week, which means that for the other 128 hours of the week (76%), the resources sit idle, yet are still paid for.⁹

An additional source of significantly wasted cloud spend is overprovisioned infrastructure. This term refers to paying for resources that are larger in capacity than what is needed. Enterprises doing so are paying for resource capacity they are rarely using, if at all.

Approximately 40% of instances occur when sized at least one size larger than what is needed for a specific workload. Reducing an instance even by one size, can often reduce costs by 50%, while downsizing by two sizes can save enterprises up to 75%.¹⁰

The study further projects that by taking a conservative estimate of 40% of resources being oversized by just one size, this translates to \$6.6 billion wasted on oversized resources in 2020.¹¹

Sources:

⁷ Enterprise Annual Spend on Public Cloud Worldwide in 2019

⁸ Wasted Cloud Spent to Exceed \$17.6 Billion in 2020

⁹ Wasted Cloud Spent to Exceed \$17.6 Billion in 2020

¹⁰ Wasted Cloud Spent to Exceed \$17.6 Billion in 2020

¹¹ Wasted Cloud Spent to Exceed \$17.6 Billion in 2020

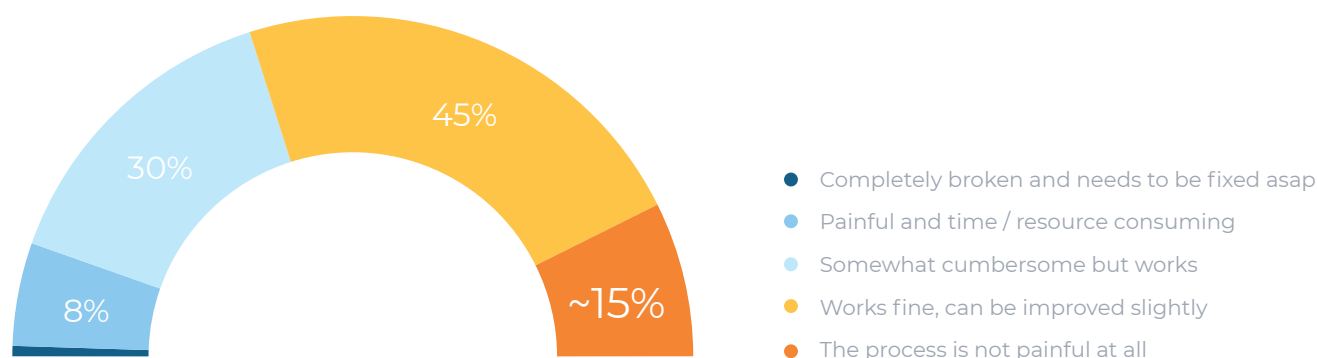
Current Provisioning Processes & Cloud Bill Variation

When asked how painful their current provisioning process is, the average survey response was a 3.67 out of 5.

Only 15% of survey respondents said they are proud of their process, while just 1% noted that their provisioning process is completely broken.

The majority at 45% noted it 'works fine, but can be improved.' 30% of survey respondents said their process is somewhat cumbersome, but working, while 8% said it is painful and consumes both their time and resources.

How painful is your current provisioning process?

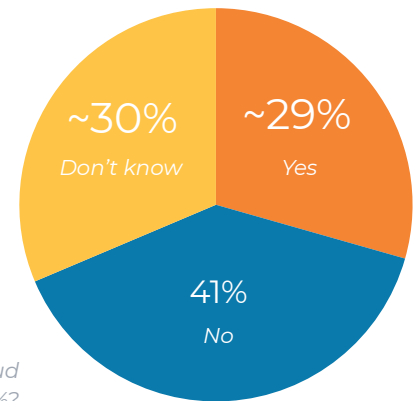


How teams provision resources in a cloud can also vary. 71% said their team provisions resources in a cloud console. 52% use API, 43% use scripts and 25% of respondents said they use a third party cloud management platform.

How these processes and resources are managed and monitored can play a significant role in the ability for enterprises to cut unnecessary costs.

Current Provisioning Processes & Cloud Bill Variation

29% of survey respondents noted that they see a monthly cloud bill variation of more than 10%. 30% of respondents said they didn't know if they have monthly bill variation, or what it is if so. This statistic showcases a lack of critical knowledge or transparency among many enterprise leaders.



Do you have a monthly cloud bill variation of more than 10%?

In delving more into the topic and importance of further transparency, 39% of respondents noted that they would like the opportunity to receive weekly or monthly cloud spending forecasts. 37% noted 'maybe', showcasing that perhaps they are unaware of how this could fully benefit them.

These survey responses demonstrate a gap in awareness of how enterprises can effectively stay on top of their cloud spending and how to do so efficiently. Regular reports are one means to provide these leaders with actionable insights and knowledge to cut costs and significantly improve the bottom line of their businesses as a result.

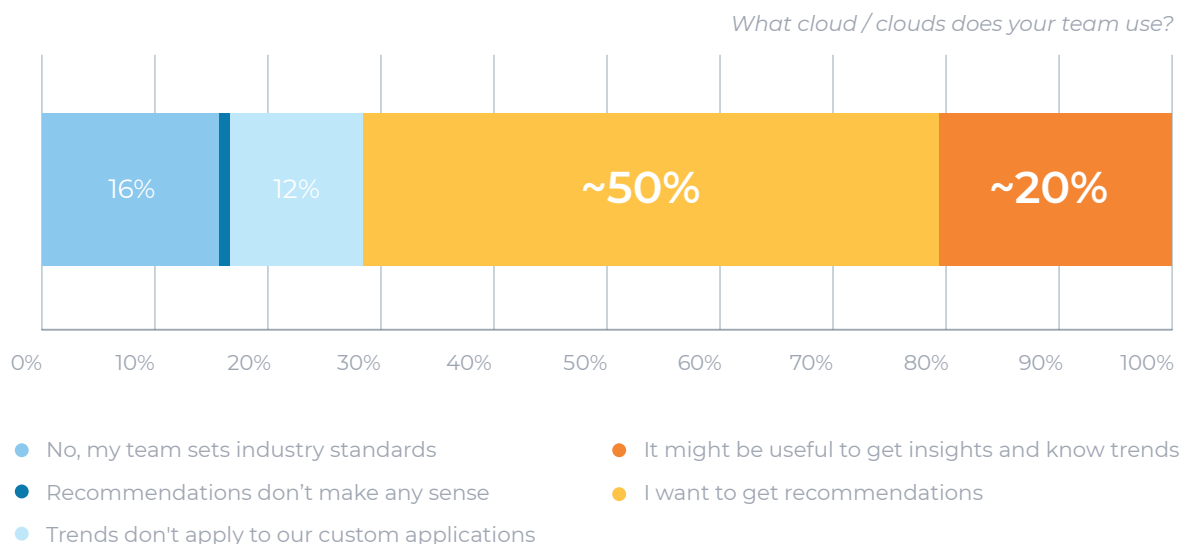
Industry IT Best Practices

Enterprise leaders are looking for expert advice and strategies to decrease their cloud spends, as well as understand where to better invest their resources. Only 16% of respondents believe their teams are setting industry standards.

Cloud providers can fill the gap and help to serve clients in thought leadership and advisory roles. In doing so, they're likely to edge out the competition. Clients should also turn to and expect effective cloud providers to serve as true partners, providing them with key insights to ensure their businesses are running efficiently by reducing wastage.

12% of leaders surveyed said current industry trends don't apply to their custom applications, but the majority is seeking more information on best practices.

When asked if cloud usage recommendations and industry IT practices would be useful, 50% of respondents said it 'might be useful' to get insights and knowledge of trends. 20% of those surveyed actively want to get recommendations.



Cloud Adoption Trends

With cloud computing established as the new norm, there are four top cloud adoption trends that enterprise leaders and Chief Information Officers should be aware of currently to ensure they're investing and spending efficiently, according to Gartner.

“By 2023, the leading cloud service providers will have a distributed ATM-like presence to serve a subset of their services,” the report said. In the new era of cloud, cost optimization will be crucial. Multicloud strategies will warrant provider independence and address concentration risk. The presence of in-house cloud skills will be a key indicator of enterprise agility, including the ability to distribute cloud services where customers want to consume them, on-premises and on the edge.”¹²

Cost optimization is a key factor that will impact cloud adoption and the steps that CIOs can take to ensure their businesses succeed in this new cloud-first world.

According to Gartner, through 2024, almost all legacy applications migrated to public cloud infrastructure as a service (IaaS) will require optimization to become more cost-effective.

Enterprise leaders should look to cloud providers that take steps to strengthen their native optimization abilities to help them select cost-effective architecture that can deliver on the performance required.

Also, the ability to gain higher-quality analytics will likely maximize savings without compromising performance. Leaders need to recognize the need for optimization as an integral piece of the cloud migration process.

Sources:

¹² 4 Trends Impacting Cloud Adoption in 2020

Hybrid Cloud Management

Why should enterprise leaders look to hybrid cloud management? According to Markets & Markets, the hybrid cloud segment will be a larger contributor to the market growth of cloud computing.¹³

By deployment model, the hybrid cloud category will be a larger contributor to the cloud computing market growth. “Increased user and resource mobility, ongoing migration of applications over the cloud, and the emergence of more sophisticated threats are leading organizations toward the adoption of hybrid cloud.”¹⁴

The healthcare, BFSI and government industries, which prioritize compliance, security and customer experience typically opt for the hybrid deployment model. It’s for these reasons that leading cloud providers are focusing on improving their presence in the hybrid cloud space.¹⁵

IBM acquiring Red Hat in 2018 served as one clear example of this investment in hybrid cloud, as the acquisition helped IBM gain access to a larger customer base and extensive cloud portfolio.

An effective hybrid cloud management platform also provides businesses with the opportunity to replace multiple tools with one single, flexible solution, such as Hystax OptScale’s platform.

Sources:

¹³ Cloud Computing Market by Service Model

¹⁴ Cloud Computing Market by Service Model

¹⁵ Cloud Computing Market by Service Model



The Hystax Solution & New OptScale Offering

With these industry points in mind, businesses can benefit from a disruptive and flexible solution that can simplify and orchestrate their processes and cut costs. Hystax will release a Beta version of its new OptScale offering to answer these needs by providing clients with a breakdown of IT budgets, hybrid workload provisioning, mobility and IT resilience, all in a single pane of glass.

OptScale aims to help its users take substantial cost-cutting measures by providing them with 360° IT budget transparency, multi cloud provisioning and resource management, as well as sophisticated budget forecasts and reports to allow them to analyze current spends and monthly differences seamlessly.

The platform also provides users with many customization features to ensure the product works well for their individual needs. These include sophisticated custom alert rules for example, as well as the ability to set custom tags and machine TTL rules.

OptScale also provides transparent budgeting of automated jobs. Users can set a quota and budget for business units, projects and individual users, as well as map them onto cloud resources.

Users are able to witness savings of 35% on their monthly cloud bills.



The Hystax Solution & New OptScale Offering

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“Leveraging Hystax technologies, we’ve been able to eliminate most of the manual tasks to de-risk and accelerate customer migrations to our cloud infrastructure (months to weeks) while achieving higher customer satisfaction, a reduction in migration costs and earlier revenue capture,” said Adrian Ma, COO at Silver Lining Systems.

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Integrations with platforms enterprises are already utilizing is also key to the ease of adoption of OptScale’s services. OptScale currently is operating system and application-agnostic and is certified with the majority of applications such as SAP NetWeaver, SAP HANA, Oracle, VMware, Microsoft IIS, Microsoft SQL Server, MongoDB, Red Hat, IBM WebSphere and more.

Conclusion & Predictions

Nearly every enterprise can not only stand to benefit from crafting a cloud strategy, but looking for ways to revise it with the continued expected growth of cloud computing. Businesses do not need to compromise on their abilities to have transparency into their IT budgets, with an array of solutions available to track and analyze spending month by month. Further transparency will only help businesses identify clear areas where they can reduce costs to avoid wastage.

Businesses that do not have full control of their cloud bills and flexible provisioning scenarios in one place are missing out on a significant opportunity to run their businesses more efficiently. With tools on the market that provide seamless cloud migration and cross-cloud disaster recovery with a RPO/RTO of seconds and minutes, enterprises should not settle when selecting their provider.

Many business leaders simply do not have the knowledge to better keep their cloud bills under control. Hystax's senior leadership has analyzed industry pain points and crafted the OptScale solution to directly address them. As a provider, Hystax can serve as a key partner for business professionals seeking expert advice and recommendations that meet their hybrid cloud needs.

With more analytics, businesses can see more transparency. Hystax can not only help businesses solve current problems or shortcomings in budget awareness, but also advise its users on best practices to actively implement in order to avoid potential problems prior to their occurrence.

About Hystax



Hystax was founded in 2016 by a seasoned team of entrepreneurs and engineers with a mission to address digital transformation challenges and transform clouds into commodities. Customers globally, including PwC, Airbus, Orange, and many others, trust Hystax as their hybrid cloud management platform of choice. Contact Hystax to learn more about the OptScale solution and how your company can benefit.

Our customers include:



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