# Why Russian companies are moving to the hybrid cloud







Enterprises around the world are flocking to the cloud, and those in Russia are no exception. The country's cloud technology market is forecast to reach 155 billion rubles (\$3.4 billion) by the end of 2022, according to iKS-Consulting<sup>1</sup> – nearly three times the size it was back in 2017.

The boom in cloud computing has come in parallel with a decline in investment in on-premises data centers, which Gartner estimated would decrease by 2.8% in 2019<sup>2</sup> — the largest drop of any area of technology in its worldwide IT spending forecast for the year. The analyst firm believes that 80% of enterprises will have shut down their traditional data center by 2025<sup>3</sup>, compared to just 10% in 2018, and says that enterprises are increasingly taking a different approach to computing, predicting that 75% of organizations will have deployed a multicloud or hybrid cloud model by the end of 2020<sup>4</sup>.

This hybrid cloud growth is being driven by the expanding needs of digital transformation strategies, which seek to accelerate an organization's ability to innovate, without sacrificing security.

It is therefore unsurprising that the majority (51%) of Russian enterprises consider the cloud a key component of their digital transformation efforts, according to a survey conducted by Computerworld Russia and Hitachi Data Systems<sup>5</sup>.

Their journeys to the cloud have taken some of these companies to both public and private environments, but hybrid cloud has emerged as the dominant enterprise strategy. In the 2019 RightScale State of the Cloud Report, conducted by IT firm Flexera<sup>6</sup>, 58% of enterprises said they had a hybrid strategy — a 7% increase on the previous year.

While the continuing rise of hybrid cloud appears inexorable, there are still significant barriers on the migration journey, particularly in Russia, where any deployment must meet the requirements of a unique data protection law.

#### The state of play in Russia

Mass migration to the cloud is being driven by the need to create scalable and secure digital businesses. CIOs play a crucial part in fulfilling this need, by guiding their enterprises' path to the cloud in their role as trusted advisors to the C-suite.

Another difficulty in Russia is a lack of IT skills. In a recent IDC survey, The State of Digital Skills in CEE7, only 3.5% of companies in Central and Eastern Europe said they had the necessary skills and experience for their digital transformation efforts.

In Russia, CIOs have to navigate this journey while also complying with federal law 152-FZ. This brought Russian data protection regulation into the digital age when it was approved in 2006, by introducing a new level of privacy protection for a data-driven world.

- <sup>1</sup> https://www.statista.com/statistics/1032049/russia-cloud-technology-market-size/
- <sup>2</sup> https://www.computerweekly.com/news/252461814/Gartner-Shift-to-public-cloud-curbs-datacentre-spending
- <sup>3</sup> https://blogs.gartner.com/david\_cappuccio/2018/07/26/the-data-center-is-dead/
- <sup>4</sup> https://www.gartner.com/en/documents/3889497/market-insight-how-tech-ceos-can-position-and-promote-se
- <sup>5</sup> Computerworld-Hitachi study, Present and future of the digital transformation in Russia
- <sup>6</sup> https://www.flexera.com/about-us/press-center/rightscale-2019-state-of-the-cloud-report-from-flexera-identifies-cloud-adoption-trends.html



That extra layer of defence has added to the responsibilities of IT business leaders, as it compels them to use infrastructures with protection tools certified by the Russian Technical and Export Control Agency when processing personal data.

The federal law is not the only barrier to the cloud ambitions of Russian companies. They are also being restricted by the need to support legacy IT systems while redesigning their data centers, as well as a desire for disaster resilient infrastructure.

Another difficulty in Russia is a lack of IT skills. In a recent IDC survey, The State of Digital Skills in CEE<sup>7</sup>, only 3.5% of companies in Central and Eastern Europe said they had the necessary skills and experience for their digital transformation efforts. And those businesses in the region that have adopted cloud technologies reported a 35% higher need for digitally-savvy people versus non-adopters.

These challenges may be significant, but the growing number of business projects that require rapid deployment of IT resources is causing many of these companies to revise their attitude to the cloud.

"In market conditions characterized by economic uncertainty and lack of investment, enterprises are seeking the fastest and most effective ways to implement technological changes," said Dmitry Gavrilov, Cloud Services Lead for IDC Russia/CIS. "Cloud services platforms are one such pillar that can provide enterprises with the ability to quickly adopt new technology stacks for their business needs."

### The pros and cons of hybrid cloud

Hybrid cloud is becoming the preferred choice of computing environment for a variety of reasons. The most obvious of these is that distributing workloads across a mix of public and private infrastructures offers the best of both worlds.

This allows enterprises to combine the scalability and reliability of the public cloud with the security and flexibility of the private cloud. The luxury of choice enables them to move workloads seamlessly between the different platforms, depending on their individual needs.

This approach gives businesses the ability to diversify their spending, widen their skill sets, build resiliency, avoid vendor lock-in, and cherry-pick specific features and capabilities from individual suppliers. It can also significantly cut their costs by paying for only the additional IT resources they need.

These extensive advantages help explain why LogicMonitor, back in 2017, estimated that 83% of enterprise workloads would be in the cloud by 2020<sup>8</sup>, based on a survey of approximately 300 industry influencers. More recent studies from IDG have shown that over 80% of IT leaders now have at least one workload in the cloud, with more advanced organizations now working between an average of five different cloud services, and some with as many as eight. Indeed, the proliferation of such services has often pushed enterprises into a default hybrid cloud position, with workloads scattered between public, private and hybrid clouds.

A 2018 survey by database virtualization firm Datometry<sup>9</sup> showed IT leaders have varied reasons for moving to the cloud. Cost-cutting was cited as the primary motivation by 61% of respondents, followed by a desire for new features and capabilities (57%), existing data warehouses filling up (30%), and an "executive mandate" (23%).

The workloads that organizations typically migrate to the cloud are database workloads, batch workloads, highperformance workloads, analytic workloads and transactional workloads. However, not every workload is ideally suited to running in the cloud. Highly specialized applications that require dedicated hardware for 24/7 operation, legacy applications that need low latency, and workloads that require high-performance network storage may be better suited to being run in on-premises environments.

There are also potential risks of migrating to the hybrid cloud. It can, for example, be very complicated to manage data, applications and workloads in a hybrid cloud environment, which means CIOs must seek partners that can simplify the administration.

Certain vendors also add to the confusion with convoluted pricing plans, which make costs hard to estimate, particularly as visibility over cloud usage can be tricky to maintain.

Another area of complexity can arise through adding an increasing number of different platforms to a single cloud environment. James Williams, IT Advisory Director at KPMG and co-author of a report titled The Hybrid Cloud Survival Kit, told CIO magazine<sup>10</sup> that these were challenges his clients face all the time.

"Many organizations are held back by application architectures and systems development processes that are not yet optimized for a hybrid environment – instead, those processes are scattered across multiple teams and enabled by different tools," he said.

Williams recommends that businesses use orchestration and automation to manage their hybrid cloud operations, while remaining agile enough to incorporate new technologies. He believes that these should focus on those functions that manage the hybrid cloud life cycle.

"It's essential to establish a performance-led, process-oriented target operating model, which standardizes the tools to manage the hybrid cloud environment," he added.

The business must also take responsibility for security in the hybrid cloud. In the LogicMonitor survey, security was cited as the biggest challenge when adopting an enterprise cloud computing strategy by 66% of respondents, and security remains a considerable barrier to cloud adoption today.

<sup>8</sup> https://www.logicmonitor.com/blog/83-percent-of-enterprise-workloads-will-be-in-the-cloud-by-2020/

<sup>&</sup>lt;sup>9</sup> https://datometry.com/blog/moving-to-the-cloud-survey-analysis/

<sup>&</sup>lt;sup>10</sup> https://www.cio.com/article/3271164/essential-keys-to-hybrid-cloud-survival.html

Last year's major Capital One breach<sup>11</sup> highlighted the requirement for better cloud security at the enterprise level. The challenge of implementing this is primarily due to the need to adopt a different security approach for cloud computing. But if this is implemented correctly, it can in fact dramatically improve an enterprise's level of security. Hybrid cloud computing can enhance the security of data by storing it in a protected infrastructure that is customized to the requirements of specific information systems.

For this to work, personal data must be audited to understand the individual needs of systems. The results of this audit can thereby enable a personal data protection system to be designed in line with these specifications, with the appropriate information protection tools implemented and continuously maintained.

After this is complete, regular assessment of the effectiveness of these measures and any certification for legal compliance should continue to ensure that the security requirements are met.

Introducing these security initiatives is now a necessity, as the wide-ranging advantages of moving to the cloud are making the environment an inevitable destination for leading CIOs.

#### The bottom line: Hybrid power

The evidence is clear: hybrid cloud deployments can yield unique benefits to enterprises, but only if CIOs develop the right migration strategy with suppliers that can provide solutions which meet their unique needs.

IT business leaders need to move quickly to achieve this, as the ubiquity of hybrid cloud computing is becoming an inevitability.

"In 2020, the idea that public and private clouds can and will coexist will become a clear reality," Rob Lamb, CTO for the UK and Ireland at Dell EMC, told Computerworld<sup>12</sup>.

"[In 2019, IDC] predicted that by 2021 over 90% of enterprises worldwide will rely on a mix of on-premises/ dedicated private clouds, several public clouds, and legacy platforms to meet their infrastructure needs.

"Multicloud IT strategies supported by hybrid cloud architectures will play a key role in ensuring organizations have better data management and visibility, while also ensuring that their data remains accessible and secure."

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#### The benefits of working with Selectel and VMware

Selectel allows CIOs to reap the benefits of the hybrid cloud while protecting personal data and complying with the requirements of Russian federal law 152-FZ.

<sup>11</sup> https://www.theverge.com/2019/7/31/20748886/capital-one-breach-hack-thompson-security-data

<sup>12</sup> https://www.computerworld.com/article/3511418/cloud-computing-trends-for-2020.html

The Russia-based company has provided IT i cture to over 15,000 international and domestic B2B clients since it was founded 12 years ago, and has developed a vast network that includes six modern data centers in Moscow and St. Petersburg.

Selectel provides customers with VMware Cloud Verified services for customers as part of its mission to provide the best cloud solutions in Russia. The Selectel product portfolio includes a cloud powered by VMware, cloud services built on OpenStack, a custom dedicated server, enhanced security and information security services, consulting and integrator services, and data center services. The company also provides disaster resilient infrastructure built on VMware Stretched vSAN technology.

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The Selectel Cloud Platform, powered by VMware, is built on VMware vSphere, vCloud Director, vSAN, NSX, and vCloud Availability. Selectel also offers a private cloud powered by VMware through dedicated infrastructure in one of the company's data centers. This combined package provides the foundations for Selectel to achieve its central mission: providing the best cloud solutions in Russia.

"The community of VMware Cloud Verified Partners, such as Selectel, is the crown jewel of VMware Cloud Provider's ecosystem," says Artyom Geniev, business solutions architect at VMware Russia and CIS.

"VMware Cloud Verified badge signals that the partner provides easy access to the complete set of interoperable VMware Cloud Infrastructure capabilities delivered as a service."

For more information on making a successful transition to hybrid cloud with VMware and Selectel, visit https://selectel.ru/en/services/cloud/vmware.

