

CLOUD CLUB

# DATA READY IN 2021

Industry report  
In partnership with  
Cloudera and Red Hat

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# Contributors

The contributors to this report are senior data and cloud executives from organisations across the UK and Europe. Some were happy to be named or quoted. Others preferred to contribute anonymously. We thank all of them for their input.

Alongside the creation of this report, we also held a private roundtable with our partners, Cloudera and Red Hat, to explore the issues raised by the contributors and gain consensus on the outcomes.

# Synopsis


"Any debate around the utility of public cloud has been put aside since the onset of Covid-19"

Gartner Research VP, Sid Nag

The latest predictions by Forrester make for interesting reading for CIOs, CTOs and CDOs. According to their research, "digital leaders will drive double-digit growth in 2021 [while] traditional businesses are trapped in a continuous downward spiral of cost and complexity". Despite this significant opportunity for growth, digital initiatives are frequently hamstrung by legacy technology architectures and a reluctance to adopt public cloud.

However, as cloud adoption accelerates and home working resumes, the weaknesses of this traditional approach have only been further exposed. With just 16% of executives saying their company's digital transformation efforts are succeeding [McKinsey], 2021 is a crucial year to turn the tide and adopt a hybrid cloud strategy to drive deeper insights from more data faster.

Yesterday's IT and network architectures can no longer effectively serve the digital enterprise with the vast majority of budgets being tied up just keeping the lights on, with little opportunity for innovation this puts pressure on CIOs, CTOs and CDOs to respond quickly. But where to start?



“The speed at which the pandemic disrupted organisations has forced Data & Analytics leaders to have tools and processes in place to identify key technology trends and prioritise those with the biggest potential impact on their competitive advantage”

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Rita Sallam, Research VP at Gartner

# #01 Complex Legacy

“COVID-19 has increased demand for Cloud adoption, and growth will remain at or above 2019 levels through to 2025 as companies move to become more agile, and drive innovation”

Deloitte, 2021

Organisations that invested heavily in digital transformation were the most successful during the pandemic, when everyone had to switch to digital overnight. Some companies who'd prepped well were able to make the leap within days - even if they were large global brands.

Most large, 'traditional' organisations have made a vast investment in legacy infrastructure - but according to the latest data, they'll need to reconsider old ways of working. Digital leaders are projected to spearhead double-digit growth over the next 12 months, while legacy dependent businesses are expected to become trapped in a downward spiral of cost and complexity [Forrester, 2020].

There are many problems that come with transitioning from legacy to the Cloud - from resource contention to upgrade issues, lack of scalability, and scrawl. Yet the trade-off is worth it - upgraded companies enjoy increased faster access to more and better data, as well as boosted cost-effectiveness over the long term. 61% of IT leaders quote the companies cost-cutting initiative as a primary reason for porting to the Cloud [Datometry, 2020], but moving over can't happen overnight - so what needs to be done first?

What workloads should be moved over quickly in order to maximise organisational effectiveness? And how will those stay in sync with legacy processes to ensure smooth running?

## Embedding agility

It's not just about what works now - adopting more flexible infrastructure lays better foundations for future survival in changing conditions. The market is shifting fast, and ways of working are becoming more data driven - senior execs need to harness new tech in a way that works for their organisation.

# #01 Complex Legacy

“We’re using the cloud to  
make everything more secure”

Alexandre Moizan - Data Protection Officer- Head of Privacy Continental Europe at HSBC

Data is becoming a primary driver of business value, as organisations increasingly rely on analytics to make better decisions. Even in the financial sector, which has always lagged when it comes to adoption, 74% of banking experts said the cloud would be a major factor in 2021, while 68% felt it was crucial when it comes to “new ways to make payments”, and 60% said cloud services were important to “lower banking costs”. [The Economist, 2020]

Data governance has long been a valuable tool to achieve regulatory compliance, but data is now being used to shape outcomes too. The integrity of that data will be paramount, so company approach needs to be enterprise wide, and well-integrated into the overarching strategy.

Currently, the largest shift of IT spending is in application software – 36% of companies that used other means to host their software, have now moved to the cloud. Along with cost-cutting, the desire to access new features and capabilities is spurring on the transition, with 57% of IT decision makers stating this was a major catalyst. [DATOMETRY, 2020]

## Legacy of problems

Our interviewees all agreed that legacy systems are expensive and complex. They have massive IT security problems and data legacy problems and require many staff members to run. Employees need to change how they use data to support them, while many analysts working on shared data sets causes workload spikes, creating bottlenecks in the pipeline, delays in analysis, and inflating operational expenses.

Upgrade time also drains resources, while the procurement and provisioning of hardware causes further delays, as legacy processes take longer to roll out or update. Legacy dependant organisations often find it a challenge to free up resources in time for seasonal workloads.

Cloud adoption not only helps cut costs - it lets companies maximize their capital expenditure on hardware assets, by freeing up resources. It also increases productivity and solves the problem of resource under-utilisation by optimising the use of data in an agile, cloud-native way.

According to Mordor Intelligence, the hybrid cloud market is expected to reach USD 128.01 billion by 2025 from USD 45.70 billion in 2019, at a CAGR of 18.73%.

Mordor Intelligence, 2020

# #02 Cloud, but Private

“Cloud computing has gained prominence, driving adoption and ensuring seamless performance in remoting work environment. By the end of 2021, businesses will accelerate their move to the cloud twice as fast as before the pandemic”

[IDC, 2020]

Despite the economic turndown, demand for cloud adoption has stayed the same or, in some sectors, risen, due to the need to switch to digital. Having seen that companies who adopted early were better positioned to cope, by the end of 2021, most enterprises will have accelerated their strategy to transition to cloud-centric digital infrastructure and application services.

Spending on cloud services, the hardware and software components underpinning them, and the professional and managed services opportunities around cloud, is projected to surpass \$1 trillion in 2024 [Rick Villars, Group VP, Research at IDC].

58% of Enterprise Workloads are already on hybrid or private Cloud, and the hybrid cloud market is expected to reach USD 128.01 billion by 2025, up from USD 45.70 billion in 2019 [Mordor Intelligence, 2020]. Hybrid cloud gives firms the flexibility of public cloud, with the added ability to run data on-premises, allowing for more agility and data security than public cloud can ever offer.

## Compliance and consent

“You need to follow the guidelines - Focus on customer consent first – to be sure the data can be outside the working group and is manageable.” [Christophe Gaspard - Sourcing Manager at ING Luxembourg]

Data privacy is a frequent concern and shifting personal data to the cloud always carries risk, though, with good governance, this can be navigated. Though public cloud has become more accepted, there is still heavy reluctance in locations like Europe, for political and privacy reasons. The public cloud service market is expected to reach \$623.3 billion by 2023 worldwide but there are security concerns about what data is being accessed, paired with a paranoia around giving data to platform providers [GARTNER,2020].



# #02 Cloud, but Private

## Security is paramount

Firms struggle to be transparent – and this is an issue, as customer consent and compliance is not optional. Hybrid addresses this - now 60% of all businesses in the financial sector now expect their IT environment to be multi-cloud, integrating on-premises and externally hosted cloud infrastructure. Only 18% say they will solely rely on the public cloud.

Companies still expect to process much of their workload internally – via one, or multiple, private cloud solutions. 62% of financial specialists feel implementing multi-cloud architecture will aid application performance, as well as help them meet regulatory needs (43%), and reduce costs (40%). [INFORMATION AGE, 2020]

“When it comes to data, certainty and location is important, as is access – to get a single version of the truth.” [ANONYMOUS INTERVIEWEE INPUT]

One participant told us that from now on, their new projects will be cloud first, as their goal is to make sure all their data is cloud based. Like many enterprises, they currently use private cloud more, as public causes more problems. They desire consolidation between the two though, as they are now looking to adopt a cloud first strategy that will give them agility and increased security. Firms understand the benefits and see the urgency of embedding the cloud into the main elements of their business - currently most organizations are leveraging almost 5 different cloud platforms on average.

For the first phase of transition, companies will need to ensure that all their new projects are cloud related. Moving everything sensitive over to the cloud is risky and this will need to be mitigated with solid strategy. After that, the challenge will be to make sure all remaining data is cloud based, to fully make the switch. In industries like Healthcare and Banking, privacy and security are critical, and any solution used must comply with stringent industry and internal standards. Hybrid solutions let companies manage metadata and policy information in a centralized fashion, while integrated data workbenches like Cloudera’s Data Science Workbench (CDSW), allow for secure, self-service access.

Getting precision enabled access to data will greatly boost R&D departments, as more data will be visible and can be worked with simultaneously, enabling swifter, more accurate insight.

Unlocking this capability will help companies develop faster, as a multitude of insights can be assessed, speeding up the decision-making process.



91% of businesses used public cloud and 72% used a private one. Most enterprises actually utilize both options – with 69% of them opting for a hybrid cloud solution

RightScale, 2019

# #03 Data-Driven Business

“With packaged hybrid offerings, public cloud services can now be distributed to different physical locations, for instance, the edge”

[Gartner, 2020]

A data-led business is a more accurate one, informed by better insights that lead to improved outcomes. These types of firms will find it easier to scale the adoption and integration of AI and Machine Learning and will be able to automate the way they analyse data, so they can adopt a predictive outlook, instead of a backward looking one. They'll have to get the infrastructure in place first though, and to do this they'll need a good data management strategy, so they can dial up speed and security, while keeping costs down.

“Cloud is the cheaper and more efficient option. Silos and data overlaps can be really expensive – cloud will solve this problem”

[Anonymous interviewee input]

Legacy processes often mean siloed data - and paying for both cloud and legacy at the same time, as well as the cost of synchronizing data, only inflates expense. Placing flexible cloud solutions around the internal data system and putting workloads and analytics around these, helps to solve the problem.

Hybrid Cloud can boost the strategic business value by unifying distributed and siloed data sets across different legacy systems, streamlining pipelines. It reduces costs involved with existing processes and makes it easier to meet quality and compliance requirements.

A hybrid solution also offers firms greater flexibility to prioritise areas of concern - from cost, to performance and resilience, or energy efficiency. They can decide where workloads should go based on needs and can accurately monitor outcomes and performance, adjusting where necessary.

# #03 Data-Driven Business

## Data first

“Our strategy is based on data. We want to create a data lake –fed by all the entities across different countries. The banks will do this the same way to manage risks better.” [Christophe Gaspard - Sourcing Manager at ING Luxembourg]

Though many data execs talk about becoming data ready and cloud driven, too few mention it in their strategic plans. Becoming data-driven should be priority for all enterprises in 2021 and the cloud will play a central role in achieving this - but firms need a roadmap to get there. When it comes to laying the right architecture for data management, embedding good data lakes will help manage risks better as they’ll provide more in-depth, broader insight. Acquiring the funding to implement the infrastructure for this can be tricky though, as ingrained attitudes can sometimes be obstacles to overcome. Picking cloud suppliers, who can provide the technology, design, and application of a firm’s data, will be equally pivotal for transitioning businesses.

The drive towards greater automation means a lot of senior execs now see the importance of getting their data in order. As you adapt your cloud strategy, what changes are you making to the way you deal with data? Are you considering a hybrid solution, or have you already adopted this approach at your organisation?

## Data ready

To implement an efficient data strategy, firms will need to streamline data and rationalise, isolating anything unnecessary. One of our interviewees said they’d adopted an information lifecycle which identifies all the data they have and stops them using anything they don’t need.

Putting work into meta data to make sure cloud data is understandable and at people’s fingertips will help make the transition to cloud easier. For ultimate agility, access to needs to be self - service - but to do this you need to get the data accessible. Companies must remain compliant, and GDPR has imposed a strict data cycle management - firms will need to ensure this meshes with their cloud strategy.

Some organisations are already data-driven and many of these are generating better insights from data - now they’re focused on processing it. They’ve made the investment to develop data internally and are not focused on short-term wins, as they understand the long-term competitive advantages.

# Conclusion

Our participants agreed there were benefits to using a hybrid cloud solution, including greater flexibility, easier compliance, and improved access to data. There will be challenges surrounding implementation but security concerns and compliance dog the public cloud, while lack of flexibility and cost associated with private, means the pay off in adopting hybrid will be worth it for many.

Cloud adoption has not slowed, and will be critical going forward, as firms become increasingly data led. This will boost the need for faster acceleration of research and product roll out to the market. Good data is available instantly and is well-curated, with reliable sources and good governance. To maintain leadership in their industry, companies may need to rethink their entire data architecture and strategy.

Embracing hybrid deployment platforms allows for swifter integration of another new tech, such as AI and Machine Learning. Firms that are embedding high performance analytics now, will be able to draw on accurate insights that will enable them improve productivity and create better products, as well as a boosted customer experience. These are crucial factors which will help companies gain a competitive edge.

Implementing hybrid solutions will also help move the needle in time-to-market, due to increased insight access and boosted efficiency. This will allow organisations to bring products and services to customers faster, and will help to seamlessly unify the CX, a critical focus as consumer expectations change.

For companies still tied to legacy who are looking to retain a competitive edge, upgrading to the cloud will not be optional going forward. The only questions now are - how long will it take, and what solution will best prepare them for the future?

[end]

# Data Ready in 2021

## Cloud Club

The Cloud Club is an exclusive network of senior technology & transformation leaders operating within enterprise-scale organisations. Our mission is to accelerate innovation and the pace of change through cloud technologies. By surfacing the right topic at the right time with the right question, we create the right conversation to deliver the right answers. We surround our members with peers in order to bench test and validate your plans. Learn more about the Club, access content and apply to join up-coming events via our website.

<https://cloudclub.global/>

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## Red Hat and Cloudera

A special thank you to Cloudera and Red Hat, for their continued support of the Cloud Club. Red Hat and Cloudera offer a combined solution that helps enterprise companies securely manage the complete data lifecycle, putting data to work faster and reducing time to value. Cloudera Data Platform (CDP) Private Cloud on OpenShift aggregates and visualizes data to derive actionable insights in a secure, hybrid open source environment.

CDP Private Cloud is an enterprise data platform with next generation cloud-native hybrid data architecture, enabling on-premises deployments with the agility, flexibility and cost-efficiency of cloud architectures. Red Hat® OpenShift® is a container platform for Kubernetes that can automate the provisioning, management and scaling of applications. The CDP Private Cloud next-generation hybrid platform combined with the Red Hat® OpenShift enterprise-grade Kubernetes container-based management tools consistently provisions and scales analytic workloads in minutes and allocates just enough resources to meet demand.

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