WatServ

9 COMMON BARRIERS TO CLOUD ADOPTION IN 2021

With Suggestions to Overcome Them

WHITEPAPER

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With Suggestions to Overcome Them

Cloud adoption is happening at a rapid pace, especially when it comes to the public cloud. In fact, Gartner predicts that global end-user spending on public cloud services will be $304.9 billion by the end of 2021. This is up from $257.5 billion in 2020, which represents a 18.4% increase.

The pandemic has shown us that in order to succeed in the face of uncertainty, IT needs to be nimble, quick to respond and proactive in keeping up with emerging technology. Despite widespread adoption, many IT professionals still face technical and business-related barriers when trying to get to the cloud.

In this whitepaper, you will find nine common barriers to cloud adoption along with suggestions to overcome those barriers. The barriers are informed by survey responses collected by WatServ during the 2020 Microsoft Ignite, The Tour, Toronto. The suggestions are leveraged from our team's years of experience providing cloud services and solutions.

1. | Concerns about Costs

Some companies hesitate to move to the cloud because they are worried their costs will increase or that they will over-provision.

Suggestions to overcome this challenge:

Despite these worries, many companies that go to the cloud discover that cost governance is easier there. This is because cost management features of the cloud allow you to set budgets, make chargebacks to internal business units, receive alerts when a limit is reached and so on. For instance, you can set up predefined rules that can turn off or restrict the use of a service when a certain threshold is exceeded.

By providing access to data analytics, the cloud also enables companies to better predict their costs over several years. Microsoft and Google offer various discounts for upfront payments, and so on, which can lead to overall cost savings.

2. | Concerns about Security

For as many years as the public cloud has been around, so has been the debate over whether or not it's secure. Despite the trend towards cloud adoption, some IT professionals continue to approach cloud security with trepidation.

Suggestions to overcome this challenge:

In our opinion, the public cloud is not weaker than on-premise implementations. This may have been the case years ago, but today, the public cloud has matured considerably.

The major security risk of the public cloud lies in the fact that customers often believe once their workloads (or data) are in the cloud, they are secure – which is not true. Customers often forget that security controls are not "out of the box" in the public cloud, and instead are the customer's responsibility as per the shared responsibility model. If this is not managed properly, it can result in major gaps and vulnerabilities, ready to be exploited by hackers. To put this into context: According to Gartner, by 2025, 99% of the cloud security failures will be the customer's fault.

However, the strength of technical and non-technical controls offered by public cloud service providers like Azure, Google Cloud Platform and AWS is significantly higher than most on premise implementations. Even if you compare the public cloud to large data center providers, the public cloud has more security features implemented lower in the technology stack by default, which are "invisible" to customers (if you consider the shared responsibility model). As a result, customers are required to manage more controls on data center implementations.

3. | No Strategy, So No Action

With budget constraints and competing projects, the focus of many organizations is solely on maintaining the status quo. New technologies and ways of adopting them are put on the backburner until they are deemed to be truly necessary. Deployments, migrations and implementations are put off because these processes can take weeks, months or even years to complete.

Suggestions to overcome this challenge:

It can be helpful for IT to demonstrate progress by developing an incremental working product. If they wait for the "big strategy" to come along, it may never happen or may not be delivered as planned. Instead, by focusing on low hanging fruit first, IT can build momentum and showcase the added benefits of the cloud at critical moments. Together, this can change hearts and minds and pave the way for the introduction of a larger strategy.

Another approach is to create a roadmap that is divided into several smaller projects and achieved incrementally. Each smaller project can provide its own benefit, which will eventually accumulate into a much larger impact. Projects can be accomplished throughout the year without burdening financial resources.

4. | Analysis Paralysis

Sometimes a major roadblock to cloud adoption stems from simply too many options. Over-thinking or over-analyzing options can make it difficult to choose between Azure, Google Cloud Platform, AWS, on-premise and/or private cloud.

Suggestions to overcome this challenge:

As a starter, it's important to remember that most customers are already in a multi-cloud or hybrid cloud scenario. For enterprise customers, Microsoft's cloud platforms are likely being utilized in some form or fashion as the primary service due to existing relationships and legacy technology integrations with Active Directory and other business applications.

It's also important to remember that all of the top three providers – Microsoft Azure, Google's GCP and Amazon's AWS – have cloud compute capacity and scale on demand.

Here are some key areas to examine when assessing their offerings:

- Depth and breadth of service – All of the major providers offer a vast range of services, from compute and containers to AI and ML, but if you have specific current or future business needs, you should compare offerings to see which provider best meets them.

4. Analysis Paralysis continued

- Geographic needs – All three of the top providers have a global presence, with regions across most continents. However, some organizations have specific geographic restrictions due to factors like data residency or network latency requirements. If you are one of these organizations, doing an assessment of all providers is important.

- Hybrid cloud – All three of the major providers enable hybrid cloud, but evaluating their individual capabilities is important to see which is the best fit. Some organizations that have a substantial legacy footprint will need to integrate with the public cloud for seamless management of identity and security.

- If your organization is having difficulty choosing an ideal scenario, cloud consultants (like our team at WatServ) can help identify your ideal future state and make the leap with confidence.

5. | Keeping up with Training

The cloud is changing every day. The result of this is that many organizations struggle to keep their employees trained on the latest cloud technology. Without adequate competencies, adoption becomes a challenge.

Suggestions to overcome this challenge:

A great place to start is with online learning and training resources provided from organizations like Microsoft and Google. For instance, Microsoft Learn allows employees to enhance their skills and achieve industry certifications on their own schedules. These types of online trainings usually have learning paths, from beginner to advanced, with avatars to track progression.

Another method is to deploy champions across your organization whose role it is to coach employees and drive adoption of new technologies. To complement this, your company can put motivational parameters around the framework to further incentivize skills development and adoption.
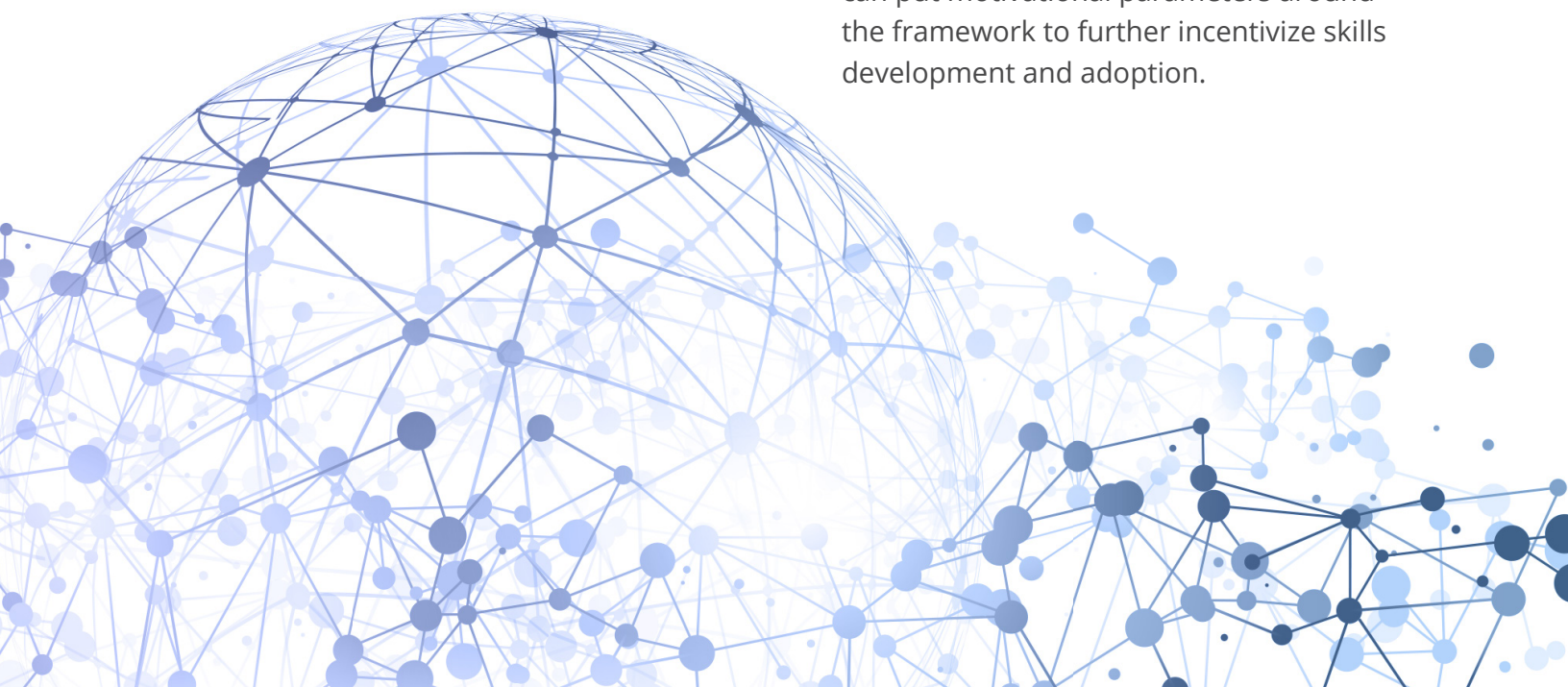
6. Complexity Due to Multiple Locations & Divisions

As companies' operations become increasingly distributed across the nation or around the globe, many IT professionals are faced with the challenge of managing multiple locations, siloed infrastructure and dispersed systems.

Suggestions to overcome this challenge:

Begin by analyzing the state of your company's current technology delivery processes, organizational model and other factors that impact how you manage multiple locations or divisions. This will help you develop recommendations for improvements.

Next, try designing a future state model that incorporates Value Network, Adaptive or Agile best practices. You may also want to factor in training, coaching or support to assist your team in adopting the improved delivery techniques and methods.

In the longer term, you may wish to consider implementing cross-functional teams. These can be helpful for enhancing collaboration and integration, while also avoiding "shadow IT".

7. Complexity Due to Current Workloads

For many companies, a major worry is whether their current workloads will run well in the cloud. This can feel like a large challenge to overcome, making it a common inhibitor to cloud adoption.

Suggestions to overcome this challenge:

To begin, an assessment should be conducted to confirm what should go to the cloud and how best to get it there. Sometimes it's a simple lift and shift, other times it will involve a rebuild. The key is to assess accurately, do a proof of concept and, if needed, consult with external cloud experts to discover workarounds or alternate solutions.

Another way to think of it is: By not moving forward due to unknowns, you may be unwittingly putting your business at risk. With old technology usually comes productivity barriers, security vulnerabilities, less than ideal performance, and eventual end of support from the vendor.

8. Worries About Data Governance

Although this can apply to many industry verticals, data governance is usually of most concern for government agencies and those in the public sector. There are many myths around this topic, spurred primarily by misinformation.

Suggestions to overcome this challenge:

There is a widespread belief that the cloud cannot protect information. This, for the most part, is not true. In fact, for companies that cannot keep up with regulatory changes and internal compliance, the cloud can make it easier. Hyperscale providers, like Microsoft, Google and Amazon review their governance frameworks regularly and can help guide you through the compliance process. They also offer the tools that can help your organization stay in compliance, such as DLP, data classification labels, encryption and so on. Furthermore, their guidance is written in plain language, making it easy to understand for you and your compliance specialist. Finally, public cloud datacenters hold more certifications and security measures than most private cloud or on-premises environments.

As an example, making your organization's data center PCI-compliant in an on-premises scenario is not particularly easy. However, the cloud can simplify the process. Similarly, if you want to implement capabilities like PIM (Privileged Identity Management) in an on-premises datacenter, it is complex. With the public cloud, on the other hand, it becomes easier. There are still actions needed on the user's end, and the cloud can't account for all compliance requirements in all scenarios, but it does offer unique benefits for many customers.

9. Worries About Data Sovereignty

This concern is felt primarily by the public sector, government, military and defense organizations – organizations that are heavily regulated and that face strict compliance rules. Data sovereignty laws often stipulate that data must be stored within the country and accessed by citizens.

Suggestions to overcome this challenge:

While data sovereignty requirements might have been challenging to manage in the cloud several years ago, both Microsoft and Google have since expanded their datacenters within Canada, and they continue to add more every year. For instance, Microsoft recently announced the availability of more zones in Central Canada.

Furthermore, data can be restricted to specific geopolitical areas, making it easy to determine exactly where your data is. This, combined with the fact that hyperscale providers must pass heavy auditing processes, provides increased peace of mind. In fact, the Government of Canada recently chose Microsoft Azure, demonstrating that the days of data sovereignty worries are coming to an end.

Conclusion

The pandemic has validated the public cloud's value proposition and has spurred many companies to fast track their journey to the cloud. As you consider your own journey to the cloud, it is important to identify potential barriers, along with strategies to overcome these. We hope this whitepaper has supported your efforts, wherever you are in your cloud journey.

Need Help?

Are you struggling to achieve cloud adoption? Does your organization need help getting to the cloud? WatServ can help. We offer complete cloud journey consulting, engineering and managed services. Book a call to speak with our cloud specialists today.

WatServ is an IT solutions provider that helps clients digitally transform their business through cloud technologies and services. Founded in 2006, WatServ specializes in providing hybrid and multi-cloud solutions and hosting complex, high-availability environments for enterprise-level applications. WatServ's unique approach to planning, migrating and managing multi-cloud environments, plus premium 24x7x365 support, enables its global customers to focus on their core business. Relying on Microsoft and Google's public clouds, in addition to its own private cloud, the company offers an ideal managed cloud environment engineered for security, reliability and performance. With offices in Canada and the United States, and with 1000's of users connecting from around the world, WatServ is always on.

For more information, visit www.watserv.com