The Value and ROI Potential of Cloud Migration

In recent years cloud computing has become one of the most popular technology trends for organizations globally. In fact, it's become a vital technology, used all over the world to make organizations more efficient and productive, while at the same time giving users more innovative solutions and features in products.

Since the start of the COVID-19 pandemic, however, cloud computing has exploded and has led to more companies adopting it and spending more on infrastructure and development. It's now estimated that 94% of all enterprises use cloud services and 48% of businesses store their most classified and important data in the cloud.

What's even more staggering is the fact that the cloud computing market had a value of over $370 billion in 2020, with North America holding 61% of the market share. And it's expected that this growth will continue, especially considering the advent and increasing popularity of 5G networks and edge computing. In fact, analysts predict that the cloud computing market will be worth over $830 billion by 2025.

With that in mind, it's easy to see why so many companies are migrating to the cloud. But where do you find the value in cloud migration? What is its return on investment potential (ROI)? Let’s look at these questions in more detail.

The Basics of Cloud Migration

Before looking at where the value in cloud migration lies and what its return on investment potential is, let's recap with a short primer on cloud migration. So, what exactly is cloud migration? It's simply the process when an organization moves all or some of its digital assets like data, IT resources, applications, or workloads to cloud infrastructure.

- ### Different Types of Cloud Computing

Now, the definition for cloud migration sounds relatively simple. But we need to unpack it and look at the different types of cloud computing. This is simply because the different types of cloud computing influence the capital expenditure that organizations will need to implement it. Ultimately, this then influences the potential return on investment.

Here, the different types of cloud computing are:

- **Public cloud**. With a public cloud like Amazon Cloud Services or Microsoft Azure, all the resources like infrastructure are owned why a third party, typically called a cloud service provider. Organizations then use these resources and services over the public Internet. Generally, these services are either free or organizations pay

for using them on a pay-per-use basis. This is also one of its main benefits because it can result in significant savings, which is probably also the reason why it's the most common form of cloud deployment.

- **Private cloud**. In contrast to a public cloud, with a private cloud, the resources and infrastructure are used and owned by one organization. This, in turn, gives them the most customization options and maximum control over the deployment. Typically, a private cloud implementation can be situated in a mini data center on-site or can be hosted at a remote location. Also, implementing private clouds requires more specialized skills and knowledge and can, as a result, cost more than public cloud.
- **Hybrid cloud**. As the name implies, when organizations use a hybrid cloud, they implement elements of both public clouds and private clouds. This model is well suited to organizations that need some features of private clouds like increased security but also want the benefits of public clouds. Like a private cloud, implementing a hybrid cloud can require specialist skills and on-site hardware, which reduces the cost savings of migrating to the cloud.
- **Multicloud**. When organizations implement a multicloud environment, they typically use multiple cloud services in one environment or infrastructure. So, they might use a mix of public and private clouds or different public cloud providers. This, in turn, enables them to realize the benefits from different providers or reduce the reliance on one single provider, which gives them a certain amount of redundancy.

[IMAGE: https://unsplash.com/photos/klWUhr-wPJ8]

Different Cloud Service Models

In addition to the different types of cloud computing described above, there are also different types of cloud service models that organizations should consider which can, ultimately, impact their costs and by implication, their return on investment.

Here, the different cloud service models are:

- **Infrastructure-as-a-Service or IaaS**. With IaaS, organizations are able to run custom software applications on infrastructure in the cloud. There is also no need to install any operating systems or hardware for organizations to do this. In simple terms, this service model allows organizations to move their on-site server to the cloud.
- **Platform-as-a-Service or PaaS**. In contrast to IaaS, PaaS platforms are cloud platforms that provide organizations with additional resources and infrastructure. These can include everything from storage, network capacity, monitoring, and service orchestration. This enables organizations to create, deploy, and scale applications without needing to be concerned about things like infrastructure or storage.
- **Software-as-a-Service or SaaS**. The final cloud service model is SaaS, where organizations pay a subscription fee to use complete applications. As a result, they don't need to be concerned about infrastructure storage or the installation of software on local computers. For this reason, it's the most commonly used cloud service model and includes extensive business platforms like Salesforce and even simple applications like Google Sheets.

Where Is the Value in Migrating to the Cloud?

Now that we've recapped what cloud migration is and the different types of cloud computing and service models, it's time to look at where the value in cloud computing lies. In other words, what benefits can organizations gain when they migrate to the cloud.

Agility and Scalability

In a competitive market, organizations should be able to adapt to changing market conditions quickly and efficiently. If they aren't, it negatively affects their ability to deliver IT projects which, in turn, influences their revenue growth or cost reductions.

Migrating to the cloud allows them to do this because they're then able to provision and de-provision IT infrastructure as their needs, requirements, and market conditions change. Ultimately, this makes them more efficient, gives them the ability to scale, and saves costs in the process.

Performance and Reliability

All the major cloud service providers have worldwide networks of world-class infrastructure and cutting-edge technology. As a result, they're able to provide organizations with increased network speed, robust network stability, lower network latency, and more storage.

This increased performance means that organizations can be more productive and their systems are more reliable.

Productivity

Apart from being more productive from a performance and reliability perspective, migrating to the cloud can also make organizations more productive because it facilitates

efficient collaboration. This is simply because it allows anyone across an entire organization to access the infrastructure from any browser.

As a result, it enables organizations to collaborate better and scale their operations up or down to support their business goals. In turn, this allows them to launch their products or services to the market faster, attract more customers, and retain new customers better.

Security and Compliance

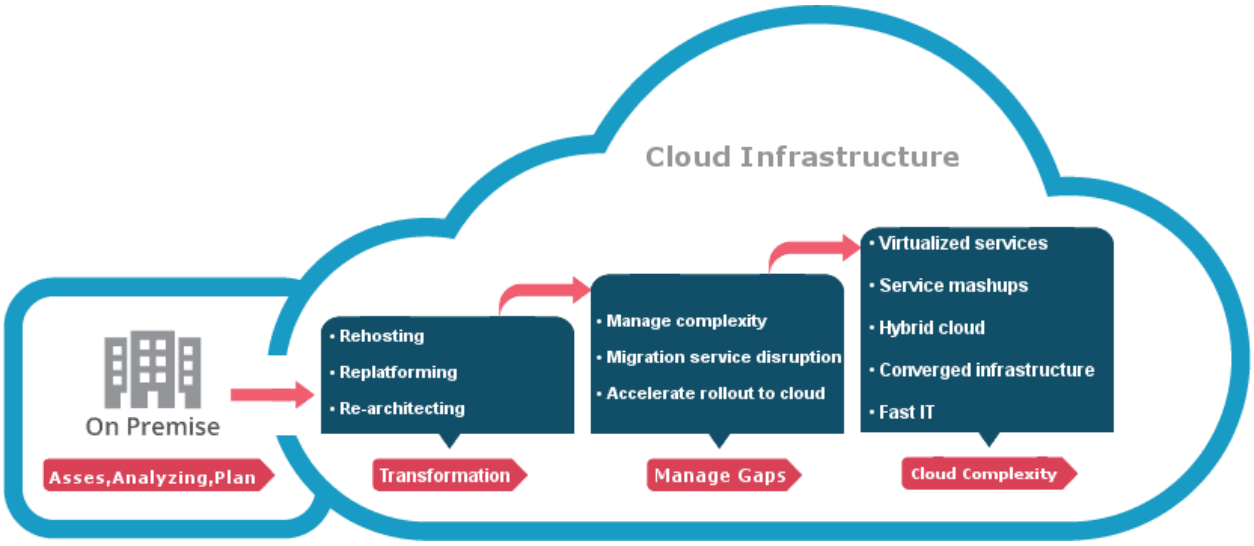
Most cloud providers provide technologies and security controls that far exceed the security practices and controls an organization can implement with on-site infrastructure. In addition, they implement the necessary security measures to ensure compliance, no matter what industry an organization is in.

For organizations that migrate to the cloud, this means that their security is always updated and their sensitive data remains safe.

Maintenance

Another benefit of migrating to the cloud is that it simplifies IT management and maintenance significantly because cloud service providers ensure that their infrastructure is in place and well-maintained. It's simple, when organizations migrate to the cloud they don't need to concern themselves with maintenance of equipment and hardware and updates to software.

This allows organizations to focus on achieving their business goals because they don't need to waste unnecessary time and effort on these aspects.



What Are the ROI or Cost Savings That You Can Expect When Migrating?

Another significant benefit of migrating to the cloud that needs special mention is the cost savings it brings about. Because it gives organizations the ability to only pay for the resources they use, it gives them access to resources that would simply be too expensive to implement.

Conversely, achieving this with traditional IT infrastructure is challenging. For example, if an organization needs significant resources for its application, it would require a massive infrastructure investment. Now, if its infrastructure demands decline, the organization would have infrastructure it doesn't use. In simple terms, it would overpay which, in turn, reduces revenue.

This is one of the places where migrating to the cloud provides its biggest benefits. Because it allows organizations to effortlessly scale down their resources depending on the demands and their specific requirements, they, more than likely, won't pay for infrastructure they don't need.

Migrating to the cloud, therefore, allows organizations to shift their IT systems and infrastructure from a capital expenditure to an operating expenditure. As a result, they don't invest in something that depreciates in value and that they would have to replace in a few years.

Because cloud providers can provide organizations with up-to-date resources at a lower cost than on-site implementations, their capital expenditure versus operating expenditure utilization can be more effectively managed.

Return on Investment – The 6 R's Factor

And this is where the return on investment lies. In other words, the return on investment is when we place a monetary value on the value that organizations can gain from migrating to the cloud. It's important to keep in mind here that the value not only relates to the cost savings, but all the other benefits mentioned above.

So, what is the return on investment for organizations that migrate to the cloud? Simply put, the return on investment depends on various factors that need to be taken into account.

The first is what type of cloud migration strategy an organization uses. Here, there are six common approaches, typically referred to as the "six Rs of migration". These are:

- **Rehosting**. Also commonly referred to as "lift and shift," this approach involves organizations moving their technology stack from on-premises hosting to the cloud. As a result, they can implement an exact copy of the on-site infrastructure in the cloud without needing to make extensive changes.
- **Replatforming**. This approach also involves moving an entire environment to the cloud but includes a few cloud optimizations that provide further benefits.
- **Repurchasing**. When organizations use this approach, they move their applications to a cloud-native product like a SaaS platform. Although this is a highly

cost-effective approach, it does have one drawback in that it introduces a new platform that employees should be trained on.

- **Refactoring**. This approach requires that organizations rebuild their applications from scratch to use cloud capabilities. This is typically the most expensive approach but brings with it a certain amount of future-proofing.
- **Retiring**. Here, organizations retire applications that are no longer useful which brings about savings.
- **Retaining**. In this, the final approach, cloud migration does not yet make sense for organizations. As a result, they keep the infrastructure and applications they currently have, but plan to revisit migrating to the cloud at a later stage.

These six approaches all have pros, cons, and potential cost implications. For example, retaining requires no capital expenditure or increased operating expenditure, but also offers none of the benefits, or value of migrating to the cloud. Conversely, refactoring comes with the highest cost, but also offers most of the benefits.

The second thing organizations should consider is the costs of migrating to the cloud. This often involves looking at their current IT infrastructure, which gives organizations a baseline to compare with one of the approaches mentioned above.

Here, organizations should look at the direct costs which include the acquisition of hardware, software, employee costs, and maintenance. They should also consider indirect costs such as a loss of productivity, electricity costs, and infrastructure improvements.

To effectively compare these costs when moving from on-site deployments that require servers and hardware, to cloud services that typically require a subscription fee, organizations should consider both the initial costs of the migration and the ongoing costs thereafter.

So, organizations should calculate their estimated cloud infrastructure costs. Fortunately, most cloud providers provide calculators that can provide organizations with a rough idea of the estimated monthly cost that they'll need to budget for when migrating to the cloud.

In addition, they should also estimate their cloud migration costs which include costs for data migration, integration and testing, and consulting fees. The final step would be to calculate the estimated post-migration costs. These include costs for continued integration and testing, training, security and compliance monitoring, and administration.

The final thing that needs to be considered is the value that the migration adds to the business. So, here organizations not only need to take into account the cost savings of migrating to the cloud but also the new revenue that they're able to generate, increased productivity, and more efficiency. In other words, this should assist what value means for them and derive a figure from that.

Once organizations have all these figures, they can calculate the return on investment that migrating to the cloud will offer. To do this, they'll typically deduct the initial value of the investment from the final value of the investment, divide the result by the cost of the investment and then multiply with 100.

This calculation will ultimately give organizations a value-focused return on investment which will enable them to assess the value gained from the capital expenditure involved in migrating to the cloud. A positive result will then show organizations that their projected gains from migrating to the cloud compare favorably to their expenditure during the process.

Important Things To Consider

After doing the calculation above and when organizations decide to migrate to the cloud, there are some things they need to consider before they do. These include:

- **Security**. It's vital to keep sensitive data safe, especially for financial services organizations. As a result, organizations should choose the right cloud service provider that meets all these security needs and requirements.
- **Scalability**. Although the cloud is inherently more scalable than on-site infrastructure, it's still important that organizations consider what constraints the cloud will put on their scalability and how compatible their systems are with cloud infrastructure.
- **Reliability**. It's obvious that organizations want their applications and infrastructure to be highly resilient and running with little to no downtime. It's, therefore, vital that they look at their cloud provider's accessibility and availability as well as its margin of error, security issues, and frequency of power outages.
- **Data Location**. It's crucial that organizations choose a data location that allows them to move their data quickly and easily to prevent data loss. In addition, typically, when data is located close to where organizations use it, it brings about further cost savings as data transfer happens faster.
- **Disaster recovery**. Organizations should always ensure that they have the necessary strategies and redundancies in place to ensure data availability in the case of an outage.

The Bottom Line

With the benefits that migrating to the cloud offers organizations, it's easy to see why so many are making the shift from on-site infrastructure to cloud services. With its inherent ability to scale better, make organizations more efficient and productive, and bring about significant cost savings, it's also expected that this trend will continue.

For organizations that wish to migrate, it's a good idea to calculate the return on investment they could achieve by doing so, not only in monetary terms but also in terms of the value that a cloud migration could contribute to its business.

To find out how we can help you with all of your IT requirements reach out to sales@gtglobal.ca