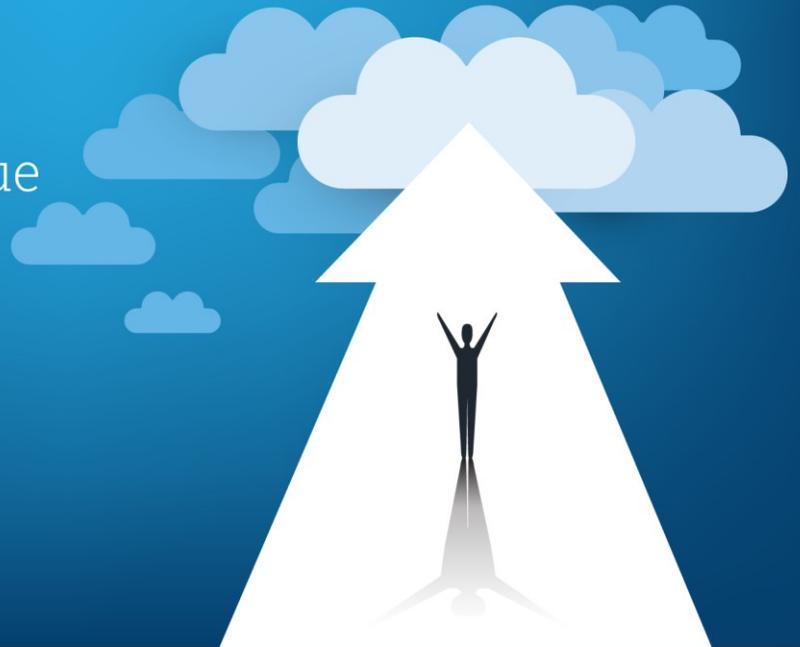


Moving to the Cloud

Part 1:

Understanding the Cloud
& Realizing Business Value



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Introduction

Time has proven that market and technology disruptors historically sweep aside those who can't change, refuse to change, or don't change quick enough to keep up with the disruption. We are in the midst of an exciting and fast-moving period of technology disruption. Much of this change is driven by the introduction of widely available and mature cloud services.

Cloud computing has enabled revolutionary consumer and business solutions. It has also introduced new sets of risks and questions for business leaders. Beyond the headlines and hype, this series will explain the fundamentals of cloud computing, and how you can apply cloud solutions to your enterprise to realize value.

For Starters...

What is Cloud Technology?

From the onset, interpretations of what 'the cloud' is have often seemed unclear and sometimes threatening from a loss-of-control perspective. Over the last 10+ years, understanding of what the cloud is and realization of the cloud's business and IT value has grown to the point that many organizations, from commercial companies to public entities, are recognizing significant efficiencies and gaining competitive advantage through cloud services and solutions.

Simply put, "the cloud" is a global network of servers hosted on the Internet. For a more thorough definition, let's look to the market-share leader, [Amazon Web Services](#): "The on-demand delivery of compute power, database, storage, applications, and other IT resources via the internet with pay-as-you-go pricing." Cloud computing can also be viewed as a distribution of clustered and connected data centers that are available to users and companies over the Internet or through direct connections.

Cloud services providers such as [Microsoft](#), [IBM](#), [Oracle](#), [Google](#) and [AWS](#) own and maintain the network-connected hardware required for these application services, while IT provisions and uses what is needed via a web application. Clouds may be private and accessible only to a given entity, or they may be public and available to many organizations.

The cloud is a global network of servers hosted on the Internet.



The Business Value of Cloud Computing

Cloud computing's value ultimately comes as a result of economies of scale that further enable business and IT value realization through cost savings, elasticity, agility and speed to innovate.

Elasticity refers to the ability to use and pay for what you need. Agility refers to the ability to change and innovate faster through exponentially shorter resource provisioning time. In addition to these benefits, the cloud ultimately enables organizations to focus on their core competencies and offload the maintenance, provisioning and administration of physical hardware, network infrastructure and facilities to the aforementioned public cloud providers.

Elasticity

Before cloud computing, IT had to [overprovision infrastructure](#) to ensure enough capacity to handle business operations at the peak level of activity. Now, it is possible to provision only the amount of resources that are needed, scaling up or down automatically with the needs of the business. This reduces costs and improves the ability to meet user demands.

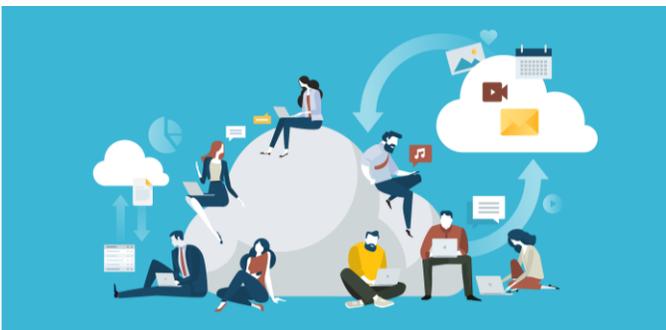
Agility & Innovation

Today, organizations need to move quickly to satisfy their customers, and their customers' customers. Whether they are consumers of services, products or government services, customers expect constantly evolving capabilities, improved levels of customer experience and better quality.

The cloud allows companies to innovate more quickly and focus their valuable IT resources on developing applications that differentiate their business and transform customer experiences rather than managing infrastructure and data centers. With cloud, organizations can quickly spin up resources as they need them in minutes instead of days, weeks or months.

The cloud also makes it easy and fast to access a broad range of technologies, such as compute, storage, databases, analytics, machine learning, and many other services on an as-needed basis. Cloud providers make these services immediately available and integrated within their cloud infrastructure. As a result, you can very quickly develop and roll out new solutions for your business using "cloud-native" services from your cloud provider, rather than having to procure – or custom-build – external services and applications. The abundance of cloud-native services also enables your teams to experiment and innovate more quickly and frequently.

The cloud allows companies to innovate faster and refocus their valuable IT resources.



With the cloud, organizations can easily deploy an application in multiple physical locations around the world with just a few clicks. This means lower latency and better experience for customers and at minimal cost.

Understanding Cloud Computing Economics and Cost Savings

A financial advantage for organizations who move to cloud computing is the change from large upfront IT [capital investments \(CapEx\)](#) to paying as you go for what you use, or operating expenses (OpEx). This is a game changer for businesses. Business initiatives focused on adding or enhancing business capabilities through technology do not require huge upfront capital investments, precise service-cost estimates or complex infrastructure and platform sizing. The technology can be expensed as identified and implemented in an iterative fashion. This approach allows companies to innovate and test, versus commit massive investments to evolving business initiatives.

This OpEx model does require a reset to how your organization traditionally finances IT. Here's an example.

Consider how a capital investment in technology worked before cloud at a traditional infrastructure operation at a Fortune 500 retail firm with a large online/ecommerce presence. Executives invested millions in server hardware, storage, networking, and software to meet the demand between October and February – peak months for a B2C retailer. Much of that infrastructure sat idle the rest of the year. The firm made huge capital investments to make sure that gear was up to date for the peak season every year.

In the year 2010, this was a standard investment in the business. In today's business world, there would need to be other business drivers to justify this practice – or else it would be an investment in obsolescence.

Today, businesses should consider investing in peak demand with cloud resources. A capital investment is not necessary. Cloud technology can be configured to scale up for the demand, scale down when the peak is over, and the business will only pay for what was used.

In summary, financial paradigm shifts include:

- how IT resources are planned, budgeted and funded;
- how IT resources are procured;
- how operating models are structured and funded;
- and how IT resource costs are accounted for within financial statements.

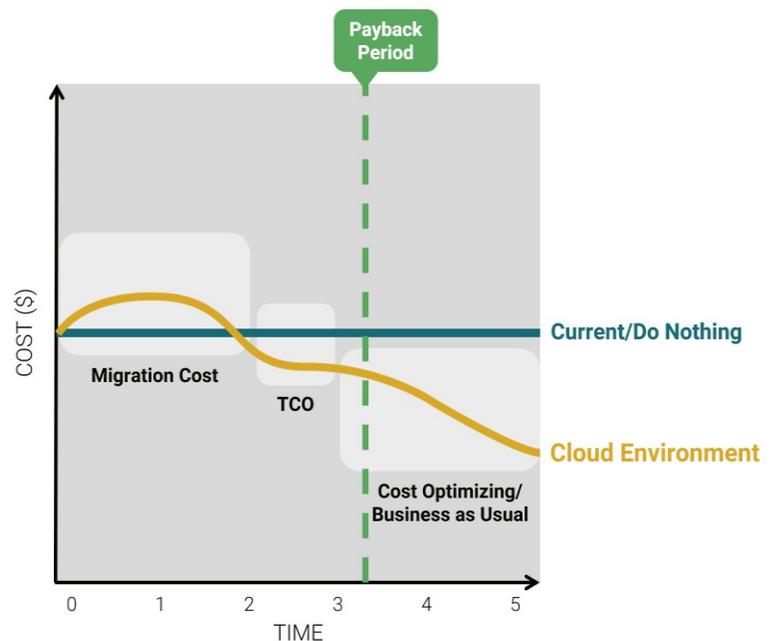
Cloud computing cost savings can be recognized in at least four distinct ways:

- by lowering the opportunity cost of running technology;
- by allowing for a shift from capital expenditure to operating expenditure;
- by lowering the total cost of ownership (TCO) of technology;
- and by giving organizations the ability to add business value by renewed focus on core activities.

At Impact Makers, we see firms who migrate to cloud experience a one-year or greater payback period to realize these savings. First, firms incur a one-time cost for migration, and second, firms take some time understanding and optimizing their cloud ecosystem.

There's transformational business value in considering cloud capabilities. There's also significant migration planning and risk management that must occur. Read the next installment in our series to learn more.

Cloud Economics - Reference View



Partner with us to see where cloud can take your business.

Impact Makers works with customers to deliver and enable strategic business advantage with cloud services. Our cloud consultants leverage comprehensive and mature practices to enable customers to evaluate all facets of their ecosystem to determine where cloud adds value, and how to control risks. Every project has unique elements that must be incorporated into a [comprehensive strategy](#) in addition to identification and execution of technical work.

As an [AWS Advanced Consulting Partner](#), Impact Makers' comprehensive cloud framework includes the [AWS Well Architected Framework](#) and industry best practices in addition to elements like compliance, asset and metadata management, business strategy alignment, service portfolio management, support model definition, [service design and deploy](#), and [CloudOps](#).