

## View Point



### Lifting the Fog on Cloud

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There's a massive Cloud build-up on the horizon and the forecast promises a rain of benefits for the enterprise.

'Cloud' is no more a buzzword. The enabling power of the Cloud is helping enterprises transform the way they do business. Winning in today's market needs agility, flexibility, efficiency, innovation, and cost-effectiveness. With IT as the game-changer, enterprises need to turn to the Cloud to gain breakout opportunities. Deploying the Cloud, they can align and optimize IT to their business vision, improve processes, boost productivity, lower costs, and yet remain nimble - do more with less at a time when resources are stretched and competition is brutal.

Cloud adoption is the answer to many challenges associated with a traditional IT landscape. Siloed functioning, inefficiencies and high costs coupled with expensive support and maintenance issues hamper growth. By leveraging Cloud's on-demand infrastructure, services and applications to support nearly every aspect of their operations, businesses can focus on their core competencies and leave IT to the experts.

According to a leading IT research and advisory company, the industry is poised for growth through 2014, when Cloud services revenue is projected to reach \$148 billion. (1). In another survey, 46% of CIOs indicated that more than half of their infrastructure and applications will be operating in the cloud by 2015, making cloud transformation the hallmark of many CIOs at their current companies (2).

The burning question today is no longer 'Whether or not to adopt the Cloud'. Instead, the query is: 'What is the right approach to maximize business value from the Cloud?'

# Complex Cloud

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Enterprises are clear that they must move to the Cloud - now what they need is a flight plan. There is increasing awareness that a Cloud cover for IT and business is critical to drive success in a dynamic market. However, given the intricate nature of the Cloud proposition and the multiplicity of available options, there remains confusion over how to embark on a viable Cloud journey and the next steps to take on arriving at the destination. The issues at hand range from the complexity of Cloud adoption to issues of trust and matters regarding privacy, security and compliance.

The Cloud is not a uni-dimensional ecosystem - it can have number of layers such as Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software-as-a-Service (SaaS), and Business Process as a Service (BPaaS). Deployment models also vary, ranging from Public and Private Clouds to Virtual Private Clouds, Community Clouds and Hybrid Clouds.

# The Flight Path

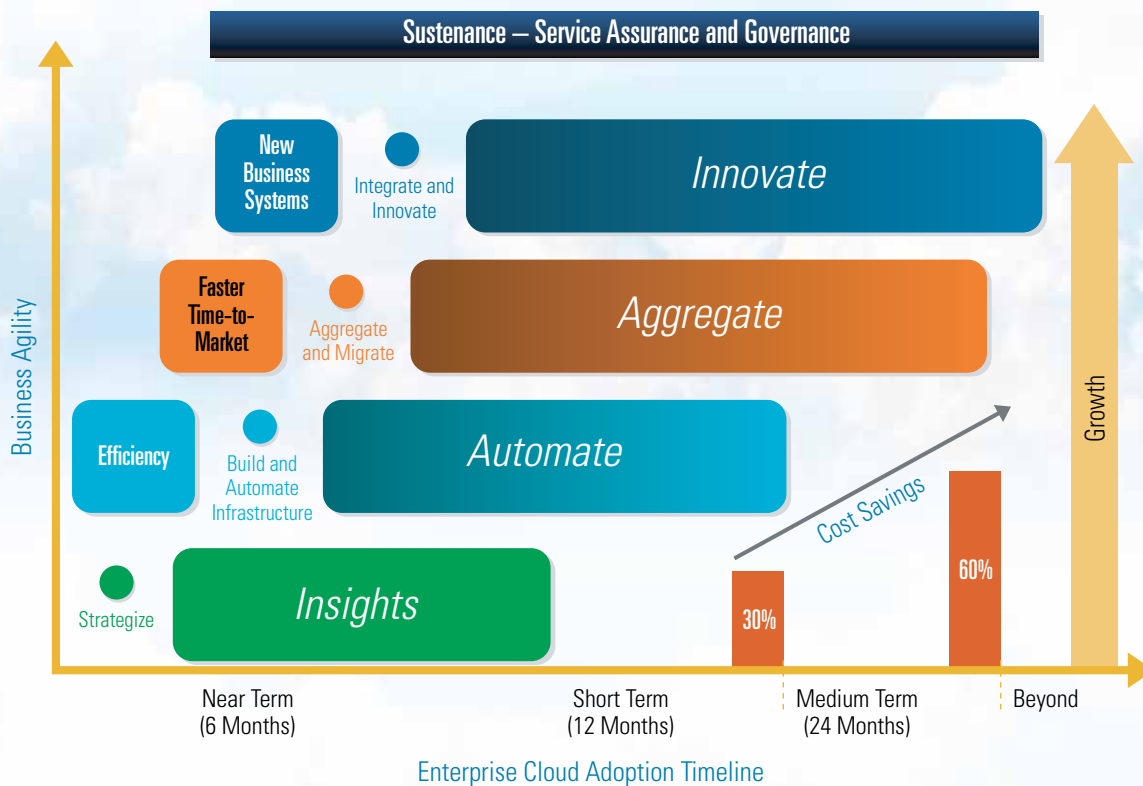



Figure 1: Infosys' approach to Cloud adoption



While there is no doubt that the Cloud offers scope for business agility, flexibility and optimization of costs, the benefits an enterprise can reap from the Cloud are closely tied to the adoption approach taken. Many enterprises are taking a bottoms-up approach, where they start by automation and virtualization of their data centers. While this may provide some quick results, enterprises will not be able to realize the full potential that the Cloud can offer.

In order to derive maximum value from the Cloud, an enterprise may need to rework its business model, adopting a more holistic approach (Figure 1). This approach calls for a phase-wise transition to the Cloud, through Insights, Automation, Aggregation, and Innovation.

First, it is important to get an **Insight** into your business drivers, assess enterprise readiness for Cloud adoption, evaluate the options, and develop your adoption roadmap accordingly.

Organizations can look at **Automation** as the first wave of Cloud adoption. In this phase, enterprises use virtualization, consolidation, provisioning, etc., to create a standard Cloud operating environment and realize infrastructure efficiencies. This creates a good foundation for the succeeding wave.

Enterprises realize superior benefits from the Cloud as they move to the Aggregation phase - remediating and migrating applications to the Cloud. They aggregate multiple Cloud services from Private and Public Clouds and orchestrate them with enterprise assets to address specific business processes and functions. Aggregation enables faster time-to-market for enterprises while maintaining data and process integrity.

As the maturity of Cloud adoption increases, enterprises can **Innovate** by building 'born-in-the-Cloud applications' or native Cloud applications. This helps create new business models and systems to drive future growth. For example, we are seeing quite a bit of interest and possibilities of convergence of Cloud, Collaboration, Analytics, and Mobility. Cloud, by definition, is ubiquitous. The question is how to bring in the power of the ubiquity of Cloud, ubiquity of data, and ease of access, and help enterprises collaborate internally and with other businesses, as well as make sure that right data reaches the right people leveraging mobility.

While an enterprise's journey to the Cloud takes place in phases, we believe it does not necessarily need to happen in the sequence laid out in Figure 1. There is a need for enterprises to assess their Cloud-readiness and identify and prioritize scenarios that are a good fit for moving applications to the Cloud. Organizations need to have a clear understanding of their business drivers and challenges they face with IT, both from an infrastructure and applications standpoint.

Enterprises also need to move beyond the first wave of infrastructure automation. They need to migrate applications and re-architect them for the Cloud. By doing so, they realize the flexibility it provides, from an elastic computing stand-point. New systems and applications can be built in the new architecture so that the time-to-market is much faster.

# The Emergence of the Cloud Ecosystem

As the enterprise moves to the Cloud, a new ecosystem comes into existence - comprised of the enterprise, the Cloud service providers, and technology vendors. The dynamics between various stakeholders - both within the enterprise and of the enterprise with vendors - undergo a change. Given the implications, the enterprise must take steps to ensure alignment in business. Thus, Cloud adoption is not just about a technology change but involves complete business transformation.

As functional roles change, Cloud adoption involves a mindset shift within the organization. Instead of managing an in-house IT setup, the IT team must look at other aspects like managing SLAs, vendors and ensuring availability of services. While this reduces some of the complexities, it requires deeper knowledge across a wider spectrum of technologies.

The enterprise must make a number of critical choices - which applications to source, whether to build or buy, what is the right deployment model, which service providers to work with, etc. However, if the path to adoption is well considered, the benefits accrued are manifold.



# The Industry Need

## An Accountable Cloud Ecosystem Integrator

As an enterprise goes through the Cloud adoption journey, it is faced with the pain of choosing and partnering with multiple Cloud providers (infrastructure, platform, applications, etc.). Most of them will offer differing levels of functionality, transparency, support, and security capabilities. Stitching these together in the organization's business context and going through Cloud adoption is daunting. The issue is further complicated as there is no single point of accountability, SLAs are unclear, and pricing models and contracts are myriad. As such, Cloud adoption initiatives can take longer or run into issues with companies not reaping the right business value.

Therefore, as an enterprise, you start realizing the need for a partner - a Cloud Ecosystem Integrator - to take the complete lifecycle ownership of your Cloud initiative. Such an integrator is a partner who understands your business needs, assesses your Cloud readiness, presents you with a Cloud adoption roadmap with a clear Return on Investment (ROI) estimation, and a broad definition of your customized business service catalog with deployment options. The partner will build your Cloud ecosystem, help you with the Cloud adoption journey, and also manage the end state.

So, how do you decide who is the best partner for your enterprise? This is critical, for the partner you choose can make all the difference between success and failure in the Cloud space.

The partner must provide you the convenience of single-point accountability and a glass box-like engagement where you get complete transparency. As a Cloud ecosystem integrator, the partner must front-end the initiative and manage all the complexity in the background.

## YOUR PARTNER NEEDS TO BE ABLE TO

1

### ADDRESS ALL ASPECTS OF CLOUD ADOPTION

An enterprise moves to the Cloud for top-quality and trouble-free IT - be it services, processes or infrastructure. Inefficiencies in the complex scenario of Cloud adoption can be expensive. Hence, it does not make sense for the enterprise take a piecemeal approach to the Cloud - go to one provider for designing the Cloud, another to build it and a third for maintenance and support. A single proven partner providing integrated, end-to-end capabilities - from evaluating readiness and developing a roadmap to analyzing the application portfolio, developing the Cloud architecture, and offering data migration and remediation - is a more efficient and less expensive option.

2

### BRING AN ECOSYSTEM OF 'PARTNERSHIPS' ACROSS THE STACK

Specialization holds the key in the Cloud space - it is nearly impossible for one vendor to meet all your requirements. Vendors focus their offering on a particular software stack. Thus, they either provide IaaS, SaaS, PaaS, or BPaaS to help meet your specific requirements. What your enterprise needs is a trusted partner who can create partnerships with industry leaders and enable collaborations spanning these stacks, backed by a solid understanding of these partner offerings. This ensures that the enterprise enjoys the best possible choice of vendors, with the advantage of flexibility and interoperability, and without the hassle of putting together these partnerships. It can then quickly respond to changing business requirements by taking advantage of an adaptable infrastructure and adding resources as needed.

3

### STITCH TOGETHER PARTNERSHIPS IN THE CONTEXT OF YOUR INDUSTRY AND YOUR CLOUD ADOPTION ROADMAP AND STRATEGY

Yes, the enterprise requires an integrated Cloud offering. However, it is also crucial that the partner provide industry-specific expertise and robust domain-focused partnerships to ensure maximum return on the Cloud by integrating with existing enterprise investments. The partner must possess the capability to orchestrate a large number of vendors across domains into a network in accordance with your enterprise's Cloud strategy. Only then will the enterprise and its workers gain value from the Cloud.

4

### PRIME THE ENTIRE CLOUD IMPLEMENTATION

Enforcing accountability across the varied players who make up the enterprise ecosystem can be an impossible task if the partner is not the sole repository for accountability. While stitching together a partnership of diverse players across multiple layers, the partner an enterprise chooses must offer a single point of accountability for the engagement and coordinate transactions across players. Only then can the enterprise have the guarantee that processes and procedures are being carried out as per SLAs.

5

### DELIVER MEASURABLE BUSINESS VALUE WHILE MINIMIZING RISKS

One of the main drivers of enterprises moving to the Cloud is adding value to business. Building a high-quality Cloud for the enterprise is a multifaceted challenge that requires a holistic approach. The partner must deliver measurable business value and offer high service levels. At the same time, the partner must mitigate security and data risks.

## CONCLUSION

Moving to the Cloud allows an enterprise to function at a lower cost and faster cycle time while enabling its technology-dependent business processes to operate more efficiently. As the enterprise moves to the Cloud, it requires a richer set of Cloud-based services that can be consumed seamlessly. To fulfill this need, the enterprise must have an integrated stack of partnerships across the Cloud ecosystem. This ecosystem must be stitched together by a partner who offers a single point of accountability to ensure that your enterprise is successfully hitched to your Cloud.

Enterprises need a proven Cloud Ecosystem Integrator as their navigator on the Cloud Journey.

## REFERENCES

1. Gartner, "Forecast: Public Cloud Services, Worldwide and Regions, Industry Sectors, 2009-2014" Ben Pring et al, 2 June 2010
2. Gartner, "Reimagining IT: Insights From the 2011 Gartner CIO Agenda Report" January 2011



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