Invented for life

Make cloud the operating model for your business needs

Orchestrate a measured, business-fit approach to the cloud
Most industries view going cloud-first as more of a mandate than an option for transforming their business. So, enterprises must ensure they are not falling into the trap of moving to the cloud 'just because', but rather have a clear plan for their cloud adoption initiatives to include economical cloud-native design systems, disaster recovery, business continuity plans, and many more strategies.

Assessing various business needs and the relevant use cases will help, but more importantly, enterprises can no longer depend on age-old strategies and need to adopt a different mindset – focus on the cloud as the means, as opposed to the destination. Preparing for an ecosystem where cloud and on-prem can work in harmony puts forward a more practical scenario for CIOs and IT leaders in evaluating and structuring their cloud measurement strategies.

This paper talks about how enterprises need to re-evaluate or set their priorities by utilizing the cloud more as a vehicle to maximize outcomes, assess cloud maturity, and further understand cloud economics to put the right metrics in place to measure its success.
The many drivers of cloud adoption

‘Shifting to the cloud’ and ‘optimizing how you use the cloud’ are two very different actions. Enterprises that have understood this have successfully reaped the many benefits of the cloud; they have stabilized their existing environment to adapt to newer bandwidth availability, expanded their infrastructure footprint, and optimized it to create a gateway for innovation cycles to resume.

Nevertheless, the cloud comes with its own set of challenges along with the adoption or migration journey if not implemented the right way. It especially sets up a major fallback for enterprises who have approached it as piecemeal, and not in a holistic manner.

Faster upkeep and maintenance of hardware

The cloud offers enterprises a myriad of benefits by connecting systems and enabling them to communicate, drastically reducing the hardware costs and investments in IT infrastructure. It also helps businesses not have to make additional expenses in their own data centers. Adding to this, with cost-maintenance applications, there’s minimal need for time-intensive updates. Updates on the server and hardware are done automatically in the cloud, ensuring faster upkeep with minimal manual intervention.

Improved disaster recovery and business resilience

IT environments are often disparate and can be susceptible to data loss and significant downtime. A failure to plan in such environments can result in huge financial losses, especially since the average hourly cost of downtime has surpassed $300,000 globally. Organizations need the cloud to scale their disaster recovery and business continuity plans to keep all systems secure, increase operational agility, and stay online during unforeseen circumstances.

Cost optimization

One of the primary reasons enterprises move to the cloud is the cost of renewing on-premises support contracts, especially for hardware that is outdated. Comparatively, a new business using a pay-as-you-go model is faced with entropy, continuous changes, and a lack of cost awareness. Key transformation strategies like economical cloud-native design systems, operational refinement, and on-demand capacity can make for a cost-effective adoption.

Additionally, here are a few other business benefits driving enterprises of all sizes to reimagine cloud adoption:
Hurdles along the journey to the cloud

Enterprises looking at the multi-cloud need to change their view on how workloads are being deployed across different cloud platforms. Though security controls might be the same for each of the platforms, the take on various other elements like deployment, tools, architectures, and processes are different.

And, since the nature of the cloud is dynamic, it becomes difficult to obtain visibility into the many platforms and their state of security without an end-to-end approach.

As organizations move their data and applications to cloud platforms, they face a few other challenges:

**Asset Management**
When moving assets to the cloud, it is quite difficult to make an inventory of various devices with dynamic IP addresses. Adding to this, the mass adoption of microservices and containers only makes dynamic systems harder to track. Furthermore, subscribing to an increasing number of IT services from multiple providers, the lack of a standard for managing one’s supplier ecosystem, and a lack of uniformity in overview systems like dashboards, admin portals, etc., prove the managing of assets to be cumbersome and expensive.

**Speed of Adoption**
One of the strategic decisions a business should consider is the speed of cloud adoption and the motivations behind modernization since they play a huge influence on the timeline. Some factors such as end-of-life hardware costing too much to operate, the constant business need to drive IT costs down, competitive disadvantages, and time taken for corporate initiative deter the speed of adoption. There is also a huge gap in ensuring that the resultant deployments are dynamic and that operational costs are realized.

**Managing Cost**
Managing multiple cloud service providers for different cloud services is as complex as it sounds. The scope of each provider varies, and being able to pick and choose might mean agility, but at fluctuating costs. Most businesses do not understand their requirements before committing to a cloud vendor, leading to increased vendor lock-ins. Moreover, the lack of visibility on the spending baseline makes it difficult for enterprises to set practical budgets based on the actual usage of resources.

Organizations need to start looking at holistic cloud solution providers with a single umbrella of solutions, right from sensors and software to consulting services. A proven implementation guideline from the solution provider that specifically focuses on enterprise IT security architecture needs and continuous compliance also helps prevent common roadblocks otherwise faced along the adoption journey.

An end-to-end approach for unlocking full benefits of the cloud
The right mix of pillars and partner requirements

A consistent set of myths surrounding the assured returns from cloud investments has derailed many enterprises from achieving their goals. There’s a need to debunk these myths – such as moving from Capex to Opex is always profitable, a lift-and-shift method results in better ROI than existing on-prem solutions, and all workloads can simply be shifted to the cloud. A successful cloud migration needs a carefully designed strategy resting on the right mix of profitable pillars and partner expertise.

Let’s discuss a few of these pillars that make for an economical cloud adoption strategy:

- **Need Analysis**
  Identify the applications that can be moved to the cloud by understanding the complexity of the existing IT environment. For starters, there is a multitude of standards, controls, and frameworks that need to be thoroughly assessed before being adopted. Companies need to look at a predetermined set of cloud risks and vulnerabilities that are tailored to meet their specificities in risk mitigation. Ultimately, the decision to either accept or reject the proposed cloud service is based on weighing the above information.

- **Platform selection**
  Choose the right cloud environment – public, private, or hybrid - for specific business demands by weighing the pros and cons of each. A few pre-implementation factors to gauge your service provider on - application fit, hypervisors, operating systems that the internal or external IT team can support, performance testing, availability of tools and support, and cloud provider characteristics. The ideal cloud platform not only reduces overall IT environment complexity but also gives the organization the ability to choose best-of-breed applications to standardize specific business requirements.

- **Return on investment**
  Compare pre-migration performance with post-migration efficiency, along with proper evaluation metrics, to realize the value derived from the move to the cloud. A few pre-migration KPIs to consider would be the duration of each phase of the migration, predicting any trepidations that can affect the migration process, and looking beyond data transfer rates for any associated costs as well. To know if the migration has been successful, measure KPIs such as error rates (failed vs. total requests), latency, number of time-outs, and throughput.

Embarking on a cloud adoption journey can be a whole lot easier with a partner who can tailor their services to the above pillars and function as a one-stop-shop for all cloud-related requirements, without being limited to an SI service provider alone.
What’s next with the cloud

Embarking on a cloud adoption journey demands a long-term commitment. Businesses need to re-evaluate continually as it is not only about application modernization but also about people, culture, and processes that change with time. A partner who can offer clearly differentiated paths for devices, gateways, and the cloud along the adoption journey can help bring fluidity back into complex environments.

Our **Vision** of Sensor-Software-Service

Redefining sensor, software, and services to enable cloud transformation
Let’s look at a few successful industry-specific applications of the cloud, followed by turn-key initiatives:

**Healthcare**

The COVID-19 pandemic brought out the best of cloud capabilities in healthcare firms, from providing data storage to computing resources that are managed by external service providers. A significant impact was made in terms of the safety, quality, and efficiency of healthcare in these areas. A few key initiatives such as HIPAA-eligible cloud services, healthcare APIs, and applied artificial intelligence cloud can help healthcare firms fully unlock the benefits of the cloud.

**Retail**

The rapid adoption of smartphones, the need for compliance and collaboration, and the shift to omnichannel experiences are the major drivers of cloud in retail. Many SMEs have also been adopting cloud services to a considerable extent, as these services offer high efficiency, ease of use, and flexibility in handling anything from payments and location specifics to inventory needs.

**Industrial & Manufacturing**

Cloud enables manufacturers to seize benefits around cost reduction, flexibility, and new digital capabilities. From 3D printing and high-performance computing to IoT and industrial robots, cloud computing also democratizes access to these technologies for smaller manufacturing units. Key initiatives in factory process optimization, business expansion, and manufacturing cloud platform from the right partner can get the ball rolling.

**Banking**

Data security, data infrastructure, hybrid IT deployment, and data sovereignty are the major trends driving the adoption of the cloud in banking. Though major banking players have been skeptical about outsourcing cloud-based platforms due to privacy concerns, key initiatives in personalizing dashboards, biometric payments, digital wallets, API solutions, and more can be the turning points for banks making the move to the cloud.

**Travel & Hospitality**

Post the pandemic, the cloud in the travel and hospitality industry has improved the effectiveness of assets and uptime, as well as employee productivity. This shift has reduced costs and added agility to processes. With the right implementation partner for self-service kiosks, conversion rate platforms, and end-to-end hospitality management solutions, agents can continue providing seamless services to their customers.

Businesses need a trusted partner who can provide end-to-end support for all cloud requirements, and pinpoint milestones where people and resources need to be focused. An ideal partner will not only help make the shift from a cloud-first to a cloud-only approach but also orchestrate futuristic solutions for the digital economy across any industry.
Contact our Cloud experts for further information and vital tips.

Schedule a call with our expert
Rahul.Shetty@in.bosch.com

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For more information, send your enquiries to connect.bgsw@in.bosch.com