

POV

Cloud Economics - Getting it Right

Author

Viswanathan N.





Cloud adoption has seen exponential growth in the last many years, evident from the growth of cloud hyperscalers. The promise it holds is very powerful for anyone to ignore. This transformation is a journey for every organization, with value realization milestones. It is also evident from many client interactions that the value realization still needs to catch up to the rate of adoption. A recent PwC survey of C-level leaders in the United States mentions that 53% of companies were yet to reap the full benefits of their cloud investments. Typically, the business case starts around IT benefits, but the true north value of the cloud lies in the business growth and outcomes. This scenario raises many questions and key considerations about how to get the value realization right. Getting the cloud economics right becomes very important to derive true north outcomes driving business value from the cloud. Before we dive deeper, let's understand what cloud economics is.



What is cloud economics?

Cloud economics is the understanding of the principles around cloud adoption and its imperatives, weighing the benefits and value vis-à-vis the investments, costs, risks, and complexity of change in the context of each client scenario. The client-specific context would vary and depend on many

factors including their current maturity, readiness for cloud adoption, existing tech landscape, business headwinds, and spend. Hence it becomes essential to understand the major factors which influence the economics of the cloud and how to get it right.



Seven key factors influencing the economics

Most companies interestingly are fast in adopting the cloud but operate in legacy ways of working. This diminishes the value derived from cloud adoption and the associated economics around it. The ways of working are still based on “owning IT” vs. “consuming IT.” The promises suddenly fall short of expectations. Some key factors for consideration to get it right are detailed below.

1. Day-1 promise

A cloud adoption business case is typically backed by a promise. However, organizations are unable to gauge at what point the value will be delivered

in the journey. Very often, the Day 1 milestone is typically an as-is lift and shift, which diminishes the economic value promises of the cloud. It is just a milestone of movement to the cloud. The savings, benefits, and economic value are realized only when the legacy is retired completely, and the cloud ways of working is adopted in the new environment (DevSecOps, CloudOps, FinOps, ServiceOps). This calls for transformation beyond the Day 1 movement.

Takeaway: Chalk out the cloud transformation journey milestones holistically beyond Day-1. Align it to the vision of deriving value from the cloud with timeline, outcomes, and clear dependent factors.

2. Capital budgeting vs. Need-based forecasting.

Traditionally, organizations have focused on peak capacity-based sizing, driven by capital investments, across multiple years with depreciation benefits.

Some key considerations become very relevant here.

- Cost of unutilized capacity – How much is unused, and for how long?
- Tech-Debt Costs – Are we constrained with fixed capabilities provisioned for multiple years?

The new cloud model provides on-demand capacity but elevates the need to forecast business needs and manage need-based cloud capacity. The business needs/volumes must translate into capacity sizing at a granular cloud service level to get the correct forecast. This is dynamic, and the economic value is only realized if the business cycles and cloud capacities & spend are forecasted and mapped.

Takeaway: Mature the ways of working to dynamic business cycle forecasting with mapping of cloud services, service capacities required & associated spends.

3. Forecasting accuracy

Cloud is a new environment, and establishing telemetry data to baseline workloads with capacity utilization is vital to forecast for business cycles accurately. A bad forecast will lead to unutilized capacity charges or unfulfilled business expectations due to inaccurate capacity design.

Takeaway: Forecast right and get economic value by utilizing consumption & telemetry data in conjunction with business scenario cycles.

4. Identifying fixed and variable workloads

The cloud promises scalability and elasticity, but the key consideration is identifying which scenarios and workloads demand elasticity. Variable workloads can scale in the cloud. For example,

- Thanksgiving week has more spike transactions where the cloud is apt to scale.
- Consumer data keeps scaling on the cloud with increasing costs. Is this apt for the cloud? Do we derive value from all the data on the cloud, paying a higher price? Is it getting monetized?
- In contrast, corporate systems have a relatively fixed workload and predictable business cycles.

Takeaway: Maximize the economic value by identifying workloads, the duration of variability, and other monetization values to design systems that will benefit most from variable elastic capacity and associated consumption costs.

5. Architecture, platform, and tools for a hybrid environment

Most organizations mature into a hybrid environment with a mix of cloud hyperscaler workloads, on-prem, or SaaS options. This elevates the need for telemetry, automation, and productivity tools for Hybrid Cloud ways of working not limited to DevSecOps, CloudOps, FinOps, and ServiceOps. These tools are pivotal for delivering productivity, efficiency, and cost savings from an economic standpoint. A reference Architecture & guiding principles sets the guard rails to leverage newer capabilities and maximize economic value.

Takeaway: Adopting purposeful architecture patterns, platforms, and tools to operate in the hybrid environment is essential to derive the productivity, efficiency, and cost savings promise.

6. Change for change

The cloud journey, associated skills, and ways of working are significant changes for any organization. The people change factor becomes vital, complementing the cloud adoption w.r.t ways of working and new tools.

Takeaway: As an integral part of the cloud journey, seed change management early. Involve skilling, enablement, and building confidence in people to evolve into cloud ways of working. This will

help deliver the economic value of productivity, efficiencies, and cost savings.

7. Disrupt the economics with a new business model

Cloud is yet another disruptive technology. Each industry has examples of how the cloud has led to disruption with new business models. The new business model will drive north star outcomes connecting new business eco-systems, completely disrupting cloud economics.

Takeaway: Re-imagine the True North goals and use cases that can deliver business outcomes. Fuel the new business models with cloud capabilities to disrupt the economics exponentially.





Case in point of how clients have got the cloud economics right

A large professional services company embarked on the journey of cloud adoption. It was a two-year journey through which the company tapped into several benefits based on the considerations mentioned above.

- **Modern architecture and tools** – Using a common Lego-block architecture for the cloud (Data mesh architecture, serverless design, observability, SRE models for their modernization) with nuances of data-centric and application-centric workloads, modernizing to a productized architecture
- **Platform-driven reuse** – Adopting new ways of working/DevSecOps/agile and building out standardized platform services for reusability and scale (e.g., API, data consumption, serverless deployment)
- **New business models** – Tapping the ecosystem to monetize products and business growth (e.g., connecting with partners and clients for digital B2B business monetizing multi-tenant SaaS products & data)
- **Forecast usage** – Baseline workloads and aligning usage data to the business cycles for more accurate forecasts and optimized costs

A utility company focused on transforming to “Utilities of the Future” through the below levers.

- **North star-driven cloud** – Defined True North goals with a vision of “Utilities of the Future.” Improving the end-user experience and monetize the eco-system leveraging APIs, data and analytics. It built out a service mesh to engage the eco-system of consumers, distributed energy providers, field operations, maintenance and operations, green energy providers, etc.
- **Hybrid cloud management and governance** – Adopted tools and established FinOps as a practice. Enabled skilling and change management of processes, forecasting, etc across the hybrid environment.
- **Experience-driven outcomes** – Ensured end-consumer satisfaction via intuitive analytics and consumer behavior-led recommendations, manage outages better, and respond using an API-driven connected eco-system

In conclusion, while cloud adoption holds immense potential, organizations must go beyond the initial migration and focus on comprehensive transformation to fully reap the economic benefits. By considering the seven key factors influencing cloud economics and implementing programmatic interventions, organizations can optimize their cloud investments and achieve improved productivity, cost savings, and efficiencies. Embracing cloud-native practices, accurate forecasting, workload identification, hybrid environment management, change management, and innovative business models will position organizations to succeed in their cloud journey and unlock the exponential economic value of the cloud. It is also essential to note that the above factors and their relevance and weightage may vary based on the client's context, maturity & readiness.

About the author



N Viswanathan

Head – Digital & Cloud Advisory

Viswanathan has over two decades of exceptional track record leading transformation initiatives. He has been pivotal in driving strategy and execution for accelerated growth with disruptive thinking and innovation. At LTIMindtree, Viswanathan leads the Digital and Cloud Advisory function and advises CXOs and IT leaders on cloud strategy and transformation programs. He is passionate about innovation and how it translates to non-linear business outcomes.

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