Realize the potential of the cloud with strategic procurement

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BinaryCore

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A shift to the cloud can be truly transformational. But enterprises often fail to realize this potential, primarily because they view the cloud merely as a means to optimize infrastructure costs. This myopia can be compounded by an inability to look beyond the traditional role of IT procurement, which has been to focus on cost savings and risk management through sourcing, price negotiation, and supplier management.

In essence, taking this traditional approach to cloud procurement can be limiting, and in some cases, detrimental. Our experience of working with clients suggests an entirely different approach is required.

Recognizing the transformative potential of the cloud, a customer-centric procurement team will focus on enabling solutions that will deliver business goals. While they keep cost in check, they do not compromise on performance. They do this by focusing on total cost of ownership, rather than on lowest unit cost.

This article outlines a cloud-centric approach to procurement, which is fundamentally different from traditional IT procurement. Some key differences are highlighted in figure 1.

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Figure 1
A cloud-centric approach to procurement differs from a traditional IT approach in several key areas

	Topic	Traditional IT infra procurement process	Cloud procurement process
1	Requirements definition	— Resource requirements must be estimated for the entire duration of the contract. — There is a high degree of customization and services are markedly prescriptive	— Minimum requirements can be provided. — Highly standardized services are offered to all customers.
2	Procurement of additional resources	Typically requires planning and a tender process.	Flexibility is built into the model.
3	Upgrades and maintenance	Upgrades and maintenance responsibility is with customer.	Upgrades and maintenance responsibility is with the cloud provider.
4	SLAs	Well defined and accepted SLAs exist.	Standard SLAs offered by hyperscalers need to be identified for specific business and performance objectives.
5	Pricing	Price is fixed, especially when infrastructure is purchased as compared to leasing.	Pricing is utility based.
6	Security and compliance	Security and compliance typically rest with the service provider.	Security is a shared responsibility with customers responsible for securing applications and data.
7	Contractual clauses	Standard clauses and terms and conditions exist.	Clauses specific to cloud must be addressed through discussions and negotiations.

Sources: BinaryCore; Kearney analysis

The key steps for cloud-centric procurement

Procurement is a crucial facet of cloud life cycle value management (see figure 2). It will determine the success or failure of any migration to the cloud.

When procuring cloud services, we recommend taking the following key steps:

1. **Preparation**
   This step involves:

   Applications categorization. Estimate the infrastructure requirements for various categories of applications using the many tools available to aid in such an assessment. A rigorous and exhaustive assessment is required to build a realistic business case, achieve the targeted performance, and optimize cost. For example, identifying whether applications require on-demand or reserved instances will enable appropriate decisions to be made to increase performance and lower costs.

   Model. Based on the requirements, decide which model to procure: IaaS, PaaS, or SaaS.

   Cloud provider strategy. Based on your capabilities and the requirements, decide whether to procure directly with hyperscalers or via a system integrator.

   Environments. Gather the requirements for various environments—production, testing, and development.

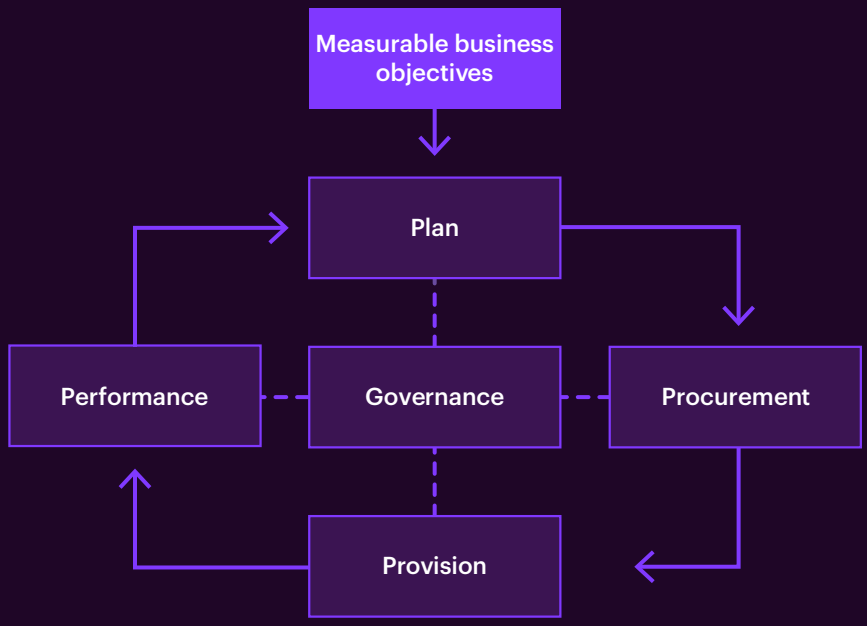
2. **Technical requirements**
   During this step, the requirements from the previous step are translated into detailed technical requirements that are included in the RFP issued to hyperscalers or systems integrators.

   Be aware that hyperscalers tend to offer standardized, rather than customized, services, especially when it comes to infrastructure. If you define highly prescriptive technical requirements, that may lead to most hyperscalers being disqualified or offering limited value. The requirements must delineate the following:

   Environments. The detailed technical requirements for deployment of various environments must be included.

Cloud life cycle value

Figure 2
The cloud life cycle value methodology helps enterprise IT leaders take a more collaborative value-driven approach to the cloud



Sources: BinaryCore; Kearney analysis

Licenses. If there are existing licenses that need to be deployed on the cloud, you should identify those licenses and share the inventory with the providers for assessment.

Certifications. You will need to list the various certifications required from hyperscalers.

You will need to indicate specifications for various requirements, such as:

— Exit management
— Data replication
— Data encryption
— Datacenter clusters
— Datacenter regions
— Data retrieval period
— Backup and recovery
— Disaster recovery
— Monitoring and management tools
— Cost control mechanisms and tools
— Control of data

3. Cloud sourcing process

We recommend selecting cloud service providers through a competitive RFP and the services procured based on a framework agreement.

Given the differences shown in the table above, traditional RFP and templates will not work for cloud procurement. The RFP elements should take into account the unique attributes of the cloud, while the cloud evaluation framework should assess alignment with business ambitions, performance goals, and whether associated services will add value. These objectives should not be compromised for the sake of cost savings. A FinOps framework can help to achieve objectives without compromising on cost. For example, applications with moderate requirements may need general purpose instances, while compute-heavy or memory-heavy applications will require different instances. The selection of appropriate instances for each application can bring about significant savings.

Key elements of cloud RFP

Understanding hyperscalers. Although they typically don't support customization, hyperscalers are constantly innovating and offering new solutions. Therefore, it is essential to understand their road map and how it can align with your business objectives. Get acquainted with the various hyperscalers before the RFP to understand the distinct value offered by each of them. Sometimes it may be appropriate to issue an RFI. If hyperscalers understand your business objectives, they may identify ideal solutions for you.

Service level agreements. Cloud SLAs are different from the traditional infrastructure SLAs. Hyperscalers have a set of standard SLAs that are market-tested and proven. However, they offer a variety of tools that can help in monitoring and optimizing the SLAs for your needs.

Security. In the cloud, responsibility for security is shared between hyperscalers and customers. Customers control how they architect and secure their applications and data, while hyperscalers are responsible for providing services on a highly secure and controlled platform. The service model (IaaS/PaaS/SaaS) dictates the level of security offered by hyperscalers.

Pricing. As pricing for cloud is dynamic, enterprises should look at overall value delivered and the total cost of ownership (TCO), as opposed to a simple comparison of resource unit prices. The traditional approach of ascertaining the lowest unit price does not necessarily lead to the overall lowest price.

Governance and cost management. The business, IT, and procurement teams share responsibility for creating a FinOps framework that provisions for cloud management. Effective management largely depends on setting up a tracking mechanism to monitor and optimize cloud consumption, using alerts as necessary. The FinOps team plays an important role in reducing the TCO.

> Procurement will determine the success or failure of any migration to the cloud.

4. **Evaluation of offers and comparison scenarios**
   Hyperscalers' offers should be evaluated based on TCO, technical fitment, and value added by ancillary services/ tools provided.

   Note, hyperscalers offer a variety of discounts and rebates that can contribute significantly to TCO:

   Rebates for prepayments. Prepayment options generally offer an additional discount on the purchase of most services and usually cumulate on top of existing discounts (for example, RI discounts or savings plans).

   Commitment discount. Discounts provided on cloud consumption volumes committed over the contract duration. The discount is applied to a specific contract. On top of the overall contract commitments, consumption brackets discounts can also be applied for annual volumes.

   Savings plans. Savings plans offer a discount based on a consistent amount of usage (usually amount per hour) of specific services (for example, compute) for a period of one to three years.

   Individual SKU discounts (targeted SKU discounts). SKU discounts are agreed-on volumes of consumed service types provided on the platform (for example, compute, storage, and marketplace services). These discounts are usually limited to specific services and products but are higher than the negotiated baseline discounts on committed volume.

   Reserved instances (RI). Significant discounts are applied to instances reserved for a longer time period (usually one and three years). RIs can be convertible providing flexibility to change OS or tenancies. Reserved services include core services, such as compute, and increasingly analytics and marketplace as well.

   Support, training, migration, and enablement credits. Technical support and training are discounted heavily in enterprise contracts to aid with enablement and increase platform usage. Service credits provided in larger contracts can be used on the platform and with relevant migration and enablement partners.

   For technical evaluation, we recommend identifying various scenarios and comparing solutions for their applicability to the scenarios (see sidebar: Example scenario: reserved instances and volume consumption).

Example scenario: reserved instances and volume consumption

Consider a digital web/mobile app of a retail company that is the main channel for engagement with consumers. The app has a direct impact on customer retention and their lifetime value. Let's assume there are a million users of the app in Europe and the retailer plans to expand in the US over the next three years and acquire another one million users. In this scenario, it pays to reserve instances in advance, while calculating key optimization factors such as:

- **Regional clusters**
- **Latency (typically key to the app performance)**
- **Recovery instances**
- **Compute speed versus performance**
- **Volume, variety, and veracity of the data**

The retailer should articulate its business objectives to hyperscalers so they can understand how to help with business innovation and offer optimal services to customers. They could also offer discounts and rebates for reserved US instances even though the plan is to implement them after a year. The retailer could also qualify for volume discounts, as the volume of consumption will increase exponentially as the operations roll out in the US.

In this scenario, working out the lowest cost for compute and storage by comparing the standard prices offered by hyperscalers may be counterproductive. If it took this approach, the retailer may find that the TCO would shoot up exponentially when instances are procured for the US operations at a later stage.

5. **Contracting and contract management**
   Hyperscalers offer standard contracts to everyone. Therefore, it is important to consider how your requirements will evolve in the future and then draft clauses that are open and flexible. That will enable you to take advantage of the constant innovation offered by hyperscalers and the dynamic nature of the cloud ecosystem. Contracting operates best in a shared responsibility model.

   If the retailer described in the example scenario on page 6 suddenly decides to expand at short notice, an insufficiently dynamic agreement could result in a major increase in TCO. By contrast, an open agreement can pave the way for both parties to optimize the TCO.

   While various aspects of traditional IT contract management and performance management can be part of the contract, it is important to keep in mind the standardization of contracts and services which influence most of the procedures related to governance, escalation process, audit, and so on. There is little scope for customization.

   As the hyperscalers offer a wide array of tools to monitor performance in detail, there is a risk of missing the big picture. Sometimes you need to distill meaning and relevant insights from the rich performance information.

> Realizing a compelling return from the cloud depends on the use of FinOps, the participation of key stakeholders, and collaboration with hyperscalers.

The cloud enables businesses of any size to innovate at a rapid pace. But realizing a compelling return depends on the use of FinOps to monitor and optimize performance, the participation of key stakeholders, and collaboration with hyperscalers.

To find out more about realizing the full potential of a cloud-centric procurement strategy, contact the authors below.

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About BinaryCore

BinaryCore was born from a need to tackle complex technology challenges businesses face in an era when realizing the full value potential of software engineering and cloud usage will clearly distinguish the leaders from the laggards. But addressing these challenges requires radical step change—a willingness to unlearn what went before, an openness to new possibilities and partnerships, and the confidence to make bold decisions and rewrite the rules.

With deep technology expertise, powerful proprietary software, a sharp focus on the numbers, and a clear set of rules, we'll guide you every step of the way to transform your technology and talent set and put in place the infrastructure and teams needed to set you up for long-term success.

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