

# CLOUD: SHOW ME THE MONEY!

Analyzing the Economic Case  
for Enterprise Cloud Services



**EVEREST GROUP**

*From insight to action.*

## Challenges in analyzing cloud infrastructure economics

- Radically altered mixes of resources and operating expenses
- Pricing for public cloud services is menu-driven, requiring operating configurations that may not match the optimal private cloud architecture
- Economic drivers vary for different application workloads – transaction processing, web hosting, communications and other uses drive very different business cases
- Most examples of cloud economics are not relevant for enterprise-class workloads

## Everest Group Cloud Value Assessment Model™ – key capabilities

- Models at specific levels and types of application workloads
- Multiple infrastructure scenarios
- Cost elements and architecture configurations
- 300 market prices for hardware, software, network, and public cloud services
- 200 algorithms for aligning architectural dependencies

## Example application workloads

- Microsoft Exchange
- ERP hosting
- Web hosting
- Application testing and development

The promise of cloud-based infrastructure solutions paints a picture of simplicity and automation. This may be true in many respects for operational responsibilities, but the financial analysis and quantification of the true impact on the enterprise are far more complicated than for other infrastructure solutions. While traditional cost structures are understood, those of private, public and hybrid clouds are radically different and ironically difficult to get a handle on, especially when you factor in the “take it or leave it” Chinese menu of public cloud options.

As a result, potential users of cloud infrastructure services must understand in detail how they would design and operate a virtualized environment or a private cloud, normalize to compare to public cloud solution alternatives, and gain insight into the variations by different application workloads. Bottom line: enterprises must rigorously define and analyze the details regarding changes in required hardware and software, the relative consumption of processing, storage, and network resources, and the alternative architectures for applications running on the infrastructure, or the irclouds may end up delivering a highly unwelcome, and very costly, shower.

## Bring clarity to the complexity

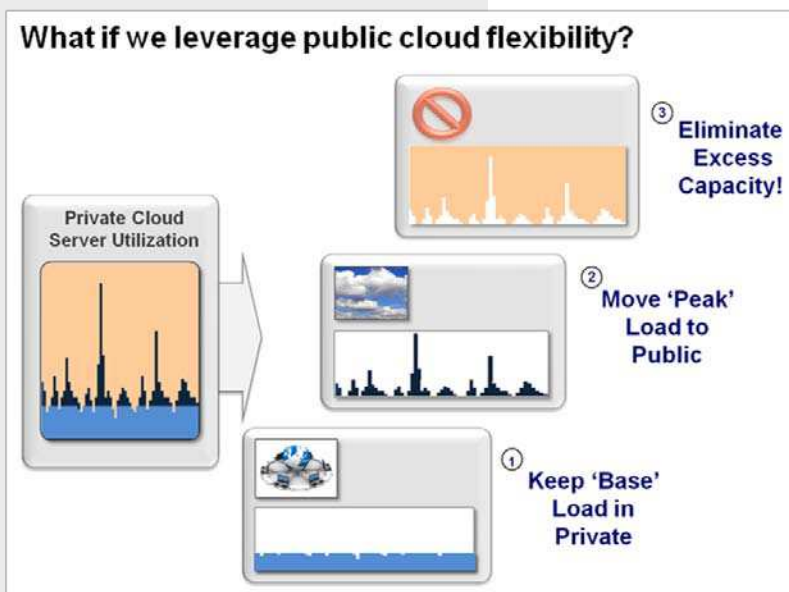
To help bring clarity to the analysis of your cloud infrastructure business case, Everest Group developed the Everest Group Cloud Value Assessment Model™ (EG CVAM™) that is based on four fundamental principles:

- 1. Application workloads are not created equally.** When seeking to optimize the use of technology resources and potentially push the needle on network connectivity, the unique characteristics of applications become even more pronounced. EG CVAM enables you to assess multiple types of application workloads, including customized configurations.
- 2. Multiple scenarios bring increased insight.** EG CVAM allows you to compare across multiple infrastructure scenarios including legacy on-site, virtualized on-site, private cloud on-premise, Amazon dedicated and Amazon EC2. By analyzing the cost and financial profile of each scenario, you can more easily identify optimization drivers.
- 3. Migration and re-platforming costs may swing business cases.** While making an application ready for the cloud can be an expensive proposition, innovative ideas for how to minimize these efforts are rapidly evolving. Understanding how much these costs must be reduced to justify a business case helps you determine which workloads to proactively migrate toward cloud-readiness.

4. **Detailed configuration to ensure accurate results.** To cover every variable you need to factor into your decision, each scenario and application workload are pre-configured in EG CVAM with the latest pricing for hardware, software, public cloud services, and other financial factors (e.g., power and network costs). Additionally, to address architectural and technical dependencies, EG CVAM can be configured to address alternative operating systems and virtualization software, ensure processing power is optimized, assess if data loads are sufficiently accommodated by resources, etc. In total, EG CVAM's analysis produces an integral impact of changes in scale.

### Insights from enterprise cloud infrastructure analysis

Although many factors determine the actual business case for selecting a particular infrastructure service model, our research and analysis reveals several general insights that help guide most enterprise infrastructure delivery strategies.



**Hybrid models likely to prove attractive — “own the base, rent the peak.”** Most large enterprises have sufficient base volumes to justify a private cloud solution, which in turn helps address data and security concerns. However, as private clouds are still far from optimized, smartly leveraging public clouds as a portion of your overall solution helps you generate another 40-50 percent in total savings – but in exchange for carefully understanding and addressing the variances in demand and data/security requirements across application workloads.

**Relative shape of peak demand to base demand for each workload is a critical starting point.** Traditionally, enterprises

addressed variances in demand by simply over-allocating capacity – after all, they could not precisely manage capacity anyway. With the ability to more tightly size capacity to match demand, much greater effort is required to size the shape of individual demand and the aggregate impact of demand across application workloads. This portfolio-level view helps you size the potential workload utilization across applications, as well as to individual workload.

**Choice of service provider can lead to different outcomes, and not only through per unit pricing.** As technology evolves at a rapid pace so will the entire ecosystem of service providers and their portfolio of offerings. Our model takes into account the se

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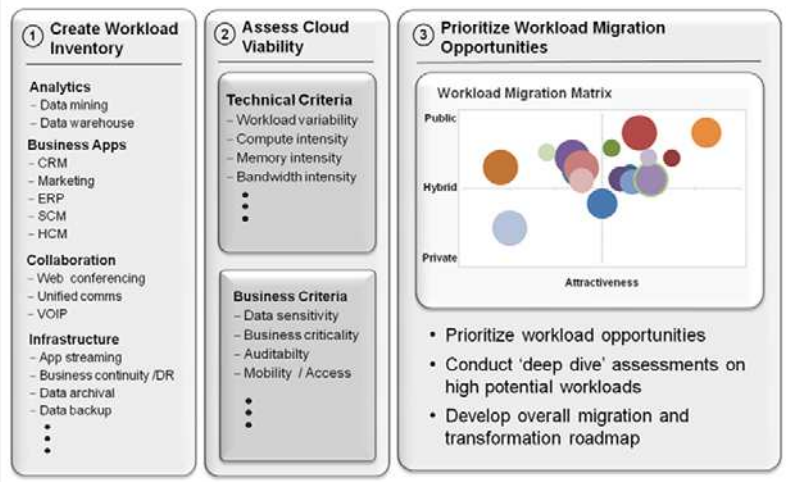
variations, and is able to generate alternative business case scenarios within a dynamic market context. In particular, we believe service providers' revenue models will mature over time, and competition will increase in the future (surprisingly or not, some are currently achieving 50-60 percent gross margins.) Consequently, your business case around cloud solution options will be driven by the initial nature of investment and the economics of transformation, rather than per transaction price differentials.

### Multiple ways to gain value from a cloud infrastructure economic analysis

Regardless of how your organization decides to determine its cloud infrastructure plans, we strongly encourage using a robust economic analysis to create significantly greater clarity, primarily through four main uses:

- 1. Educate stakeholders and executives.** Reviewing alternative business cases and their underlying drivers with key constituencies can significantly sharpen your organization's ability to sort through the myriad paths for progression of your cloud infrastructure strategy.
- 2. Create new business cases.** As your organization begins to consider cloud infrastructure options for moving beyond test pilots, you'll require rigorous business cases to evaluate the various options and the associated implications for investments, operating models, and other factors unique to your enterprise.

### An approach for accessing the potential impact of enterprise cloud



### 3. Prioritize which application workloads to move to next generation models.

Invariably, any enterprise infrastructure strategy will involve a series of steps to progressively adopt new infrastructure options. Understanding the relative economic benefits and complexity of migrating different application workloads can help you prioritize the plan and create early savings to fund future efforts.

### 4. Benchmark pricing for cloud services.

By comparing alternative infrastructure delivery models, you can determine the appropriate pricing structures and levels for comparison to external options. This will help you normalize across both private and public cloud alternatives.

### How Everest Group can help

To be added to our distribution list for future updates on cloud economics research and insights, please email us at [cloud@everestgrp.com](mailto:cloud@everestgrp.com). And if you would like to learn more about cloud economics to educate your stakeholders or develop business cases, please contact us for information on diagnostics, workshops and strategy support.

Information technology infrastructure has traditionally been slower to evolve due to modest changes in how it can be optimized and operated. Virtualization and cloud capabilities are creating step-change opportunities to rethink infrastructure service delivery models. The economic prize for most enterprises will not be a single pot of gold in the near-term, but rather a series of smart, greatest opportunity mining initiatives in the coming quarters and years.

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## About Everest Group

Everest Group is an advisor to business leaders on next generation global services with a worldwide reputation for helping Global 1000 firms dramatically improve their performance by optimizing their back- and middle-office business services. With a fact-based approach driving outcomes, Everest Group counsels organizations with complex challenges related to the use and delivery of global services in their pursuits to balance short-term needs with long-term goals. Through its practical consulting, original research, and industry resource services, Everest Group helps clients maximize value from delivery strategies, talent and sourcing models, technologies, and management approaches. Established in 1991, Everest Group serves users of global services, providers of services, country organizations, and private equity firms, in six continents across all industry categories. For more information, please visit [www.everestgrp.com](http://www.everestgrp.com) and [www.everestresearchinstitute.com](http://www.everestresearchinstitute.com).