

V2B: Virtualization to Business

The bridge to agile IT services

Capgemini enables organizations to make sense of new computing business models such as cloud computing, and choose the optimum technological path.

We go beyond just optimizing an organization's infrastructure to address the fundamental design, build and running of its full informational structure—the infostructure—and enable clients to access the full potential of cloud computing.

Cloud computing isn't about technology—it's about service

Over the past year, cloud computing has emerged as an efficient, flexible and cost-effective model for computing. As revolutionary as the underlying technology may be, however, it represents a means to an end rather than an end in itself: it is a way to deliver IT services aligned to business demand in a far more efficient and agile way.

For an IT department the challenge is to provide IT-as-a-Service that enables the business to respond more nimbly and quickly to a dynamic market place. The IT infrastructure must provide the business with:

Scalability: Application performance is the same whether there's one user or one thousand users, and

provides consistent service-level characteristics—creating the illusion of infinite capacity.

Abstraction: Applications are not constrained to hardware or locations due to abstraction of the infrastructure.

Elasticity: No forward planning or forecasting is required to rapidly scale up and down with near instant availability.

Accessibility: Access to applications and information is available from the network and on any device.

Pay-as-you-consume pricing: A pay-as-you-go usage model for IT service allows you to only pay for what you use with minimal up-front investment costs.

Taking a holistic approach to the journey

Achieving this type of highly automated, low touch infrastructure requires virtual infrastructure, as virtualization provides the foundation for agility and automation within cloud computing. Customers must achieve a high level of virtualization—more than 70% to fully adopt a service-orientated cloud infrastructure.

Unfortunately, many customers find their virtualization efforts stalled at the 20-30% level. Like any journey, virtualization needs to be carefully planned ahead of time, to avoid becoming lost, delayed, or otherwise sidetracked.

The journey to the cloud requires customers to think holistically about any transformation of infrastructure. It's not just about converting physical machines to virtual machines—there are other transformations that need to occur in parallel to effect meaningful business change.

Customers *need* to have an answer to the following questions:

- What level of automation do I have within my infrastructure?
- Is my infrastructure more agile than my IT organization?
- How should I manage the business of window-shopping for public cloud services?
- How do I secure new cloud environments?
- Who manages this new environment?
- What is the next step from my existing virtualization efforts to get me to cloud computing?
- How does the business perceive the benefits of virtual infrastructure within my organization?

Customers who haven't thought through these issues will be unable to accelerate their virtualization efforts and will remain stalled at a low virtualization percentage until they address the underlying issues. A useful comparison can be made to an automobile with a fuel blockage:

pressing on the gas pedal will accomplish little acceleration until the blockage is removed. Capgemini removes these blockages and filters efforts to sustain your journey to the cloud.

V2B: breaking through the barriers to Virtualization

Capgemini takes a refreshing approach for customers who are at any stage of their virtualization journey—from those who have started and currently find themselves stuck, to those that are looking to undertake the journey as a whole.

With its “V2B: Virtualization to Business” approach, Capgemini provides the insight, roadmap and support enabling clients to transform their IT environments into a flexible, automated cloud infrastructure and derive maximum value from existing virtualization efforts.

The V2B offerings bridge the gap between virtualization and the business, and remove the barriers to obtaining a high level of virtualization. This enables organizations to take the next step towards business agility, and to focus IT on delivering business value.

Capgemini's V2B offerings include:

Business Infostructure enables companies to realize the cost savings available with virtualization and gain an understanding of the business impact of wide-scale transformation.

Virtual Infostructure provides agility to an organization that has agile infrastructure but is unable to deliver agile services to the business.

IT-as-a-Service delivers a feasibility analysis for the implementation of a self-service and consumption-based charging model. This service tackles all key issues around the development and delivery of easily consumed business services.



SAP Virtualization provides a virtualization strategy for complex SAP environments, enabling virtualization of environments that would have otherwise continued to be operated on legacy physical servers.

The new technological framework consists of highly unified infrastructure components—server, storage, and network supporting an automated IT infrastructure with ample security and management components built in.

Realizing the return on your Virtualization investment

The cloud computing framework in Figure 1 provides a foundation for IT-as-a-Service that can deliver tangible business value to today’s enterprises:

Capital Expenditure Reduction

A flexible, agile infrastructure that can grow on demand helps to avoid the opportunity costs that arise when companies make large upfront investments in technology installations before the demand is present. On average, customers save between 50 and 60% in capital expenditures.

Reduced Operational Expenditures

Efficiency through utilization and automation eliminates unnecessary IT investments, achieving lower Total Cost of Ownership (TCO) and minimizing resource requirements for managing and maintaining IT infrastructure. A majority of customers reduce operating costs by at least 25% compared to managing a physical IT environment.

Agility with Control

Agility means having the ability to capitalize on any business change by responding to it rapidly and cost-effectively. Cloud solutions dramatically simplify provisioning and deployment by providing easy, self service access.

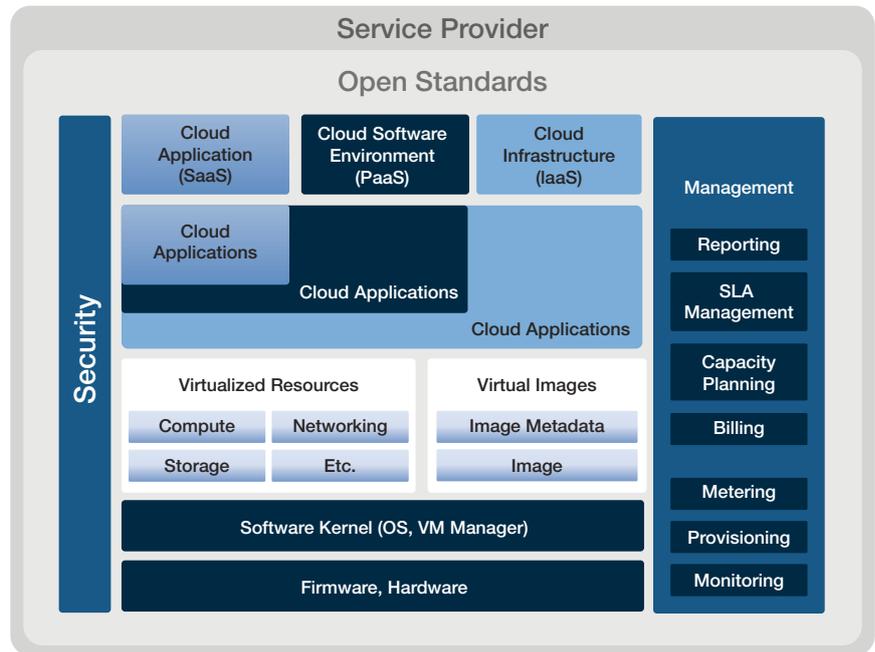


Figure 1: Cloud Computing Delivery Framework

Faster speed to value

Time is of the essence, especially during a chapter of IT history that is witnessing an abundance of innovation and rapidly maturing technologies. Those companies that fail to catch the technological wave will be left behind by their competitors.

With its combination of business and technical expertise, Capgemini can significantly reduce the amount of time it takes to properly deploy a cloud

computing framework and reduce speed to value from months to weeks or days.

Capgemini has successfully helped a range of companies derive real, tangible value from their virtualization efforts. In one case, a large media firm with a well-run and consolidated data center had a utilization level of around 30%. Capgemini helped virtualize 90% of the applications running on their

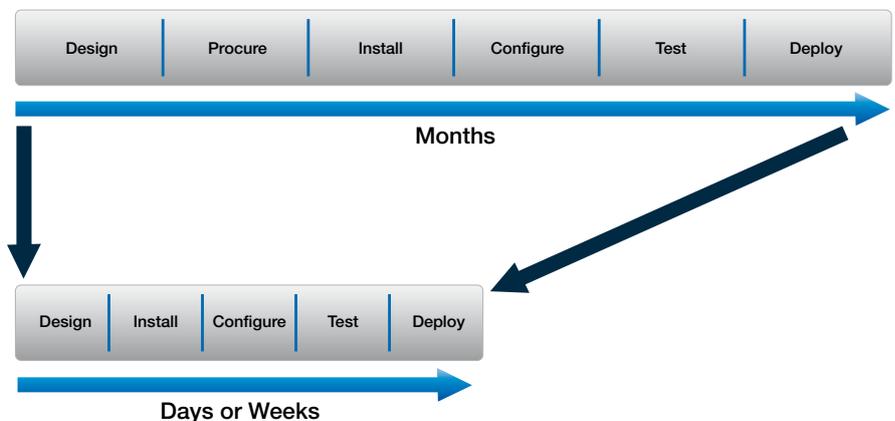


Figure 2: Speed to Value Timeline

servers, allowing for the removal of over two thirds of their machines.

In addition, we recently used our expertise to help an electronics giant benefit from reduced IT costs, simplified IT, and increased flexibility after a successful virtualization optimization assessment. Our rapid IT assessment cut straight to the heart of the problem by proposing a remote access strategy with virtualization to:

- Drive out infrastructure costs
- Centralize administration
- Boost user productivity

As customers move through their journey to adopting IT-as-a-Service, they continuously increase the business value of IT, by reducing capital and operational expenses and improving reliability and responsiveness to the needs of internal customers. Over time, the resulting agility and quality of service improvements allow organizations to provide computing to the business in an on-demand, automated manner.

Whether you are considering a cloud strategy or having challenges with the virtualization of your environment, Capgemini is ideally positioned to guide you on this journey to the cloud and to help you build a bridge to agile IT services.

Business + Technology

Capgemini's V2B services combine the best of two worlds: the business-centric approach of Capgemini, and the proven technology of VMware.

VMware is the global leader in virtualization and cloud infrastructure, delivering customer-proven solutions to more than 190,000 customers, including more than 97% of Fortune

1000 and 94% of Global 500 companies. VMware's leadership has brought together a broad range of technology and service partners—over 25,000 of them. VMware is also the industry-leading vendor of core cloud infrastructure to the broadest set of cloud service providers, with more than 2,600 vCloud service providers.

VMware understands that the goal of every IT purchase is rapid return on investment. That's why VMware services are available in nearly 40 countries and provide customers access to the world's largest virtualization support organizations with the most experience in supporting critical applications in cloud computing and virtualized environments. VMware consulting, education and certification, as well as technical support services accelerate an organization's return on virtualization and cloud infrastructure investments while mitigating risk.

Capgemini has more than 40 years of experience with Enterprise Data Center service, experience, and innovation. Our mission is to empower our clients to respond faster and more intuitively to changing market dynamics, and we enable them to become more agile and competitive through leveraging new technologies. The seamless collaboration of our consultants, IT specialists and outsourcing experts forms the backbone of our unique approach, creating truly integrated services.

What also sets us apart is the way we work together – with each other, with our partners and with our clients. We call our approach the Collaborative Business Experience® - it's at the heart of our every interaction and is how we forge closer, more effective relationships.



About Capgemini

Capgemini, one of the world's foremost providers of consulting, technology and outsourcing services, enables its clients to transform and perform through technologies. Capgemini provides its clients with insights and capabilities that boost their freedom to achieve superior results through a unique way of working, the Collaborative Business Experience™. The Group relies on its global delivery model called Rightshore®, which aims to get the right

balance of the best talent from multiple locations, working as one team to create and deliver the optimum solution for clients.

Present in more than 35 countries, Capgemini reported 2009 global revenues of EUR 8.4 billion and employs over 100,000 people worldwide.

More information is available at www.capgemini.com

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