Extreme Competition

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Call Your Broker: The Rise of Cloud Service Brokerages

Managing end-to-end business processes across the entire value delivery system will never be the same. While there used to be an 800-pound gorilla orchestrating the many players in a value chain (think Walmart), all that is changing. The new 800-pound gorilla in the room is the inescapable fact that the economics of scale alone dictate that services derived from the Cloud will typically be less expensive than any that an internal IT shop can provide, not to mention grappling with Big Data and predictive analytics.

Does your company generate its own electricity? Likewise with basic IT services. Now compound the issue with how much an internal IT shop can allocate for security, compliance, disaster recovery, 7x24x365 operations, unified communications, and it is quickly apparent that the economics dictate, with very few and rare exceptions that internal IT will evolve the way of internal electricity, internal shipping, internal telecommunications, and pretty much any other aspect of the business that doesn't directly create value for customers or competitive differentiation for the company. All of these resources will be sourced from a more proficient provider. Many of the objections to that concept are effectively, in the long term, red herrings.

As they did when complexity grew in the enterprise use of IT way back in the late 1950s, companies will reach outside their internal IT departments and call in outside IT services companies that have assembled top-tier technology talent in cloud computing. Over the next few years, we will see some key trends developing that will change the IT services industry as a result of the emergence of cloud computing.

What is the IT services industry?

In the beginning, way back when this newfangled thing called a computer entered the enterprise, life was kind of simple and "data processing" basically involved computer programming. But as the uses of computers grew in both breadth and depth within the enterprise, things quickly became complicated. 1959 marks the year when companies looked outside to tame the growing complexity of enterprise computing. That was the year that what is now today a major "systems integrator," Computer Sciences Corporation (CSC), was founded. CSC was founded in El Segundo, California in April 1959 by Roy Nutt, Fletcher Jones and Bob Patrick. A systems integrator is a company that specializes in bringing together component subsystems into a whole and ensuring that those subsystems function together. Today, CSC employs about 93,000 people in 90 countries and ranks among the largest outsourcing companies in the world and has been a Fortune 500 company since 1995.

But CSC isn't the only IT services player in the game. IBM Global Services (426,751 employees in 2010), Electronic Data Systems (EDS), Logica, Accenture, BearingPoint, Capgemini, Deloitte Consulting, HP Enterprise Services, HCL Technologies, Infosys Technologies, Siemens IT Solutions and Services, Tata Consultancy Services, Perot Systems, and Wipro. You might consider these firms as a source of "timesharing" of technological and engineering talents that individual companies could ill afford.

Looking beyond the pure technology perspective, IT has been undergoing a continuous evolution to greater and greater levels of abstraction. Today virtualization's goal is to totally abstract the hardware and system software. The logical end state would be the abstraction of IT itself. We are starting to see this happen: The Corporate Executive Board's recent report on the future of IT essentially predicts that most of IT will be either merged into departments, be integrated into a central, shared services function, or be effectively outsourced—not to a technology provider, but to a provider of *business services* that will bring along its own technology for the operational aspects of the information.

This would suggest that the long-term opportunity for IT services is to supply services to the emerging Business Services Industry—not just Business Process Outsourcing (BPO) but also Business Services as a Service (BSaaS).
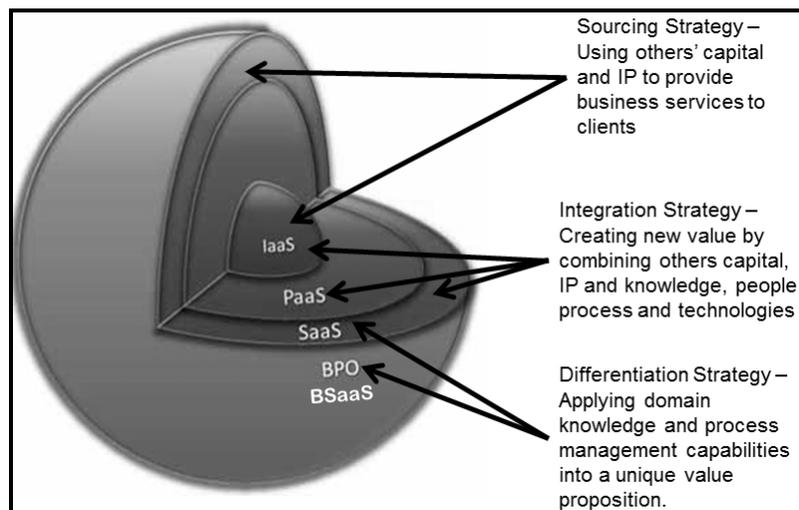
Clearly, mobility will be the catalyst for the dominant technologies that emerge in the Cloud: what can enable anywhere, anytime, any-device computing (and maintain context across every device); and what can manage and support anywhere, anytime, any-device computing.

Under this assumption, information security, governance and compliance, and risk management technology will dictate the boundaries and stage gates within which, at least at the enterprise level, the desired capabilities will operate. One could almost imagine a new Microsoft providing the DRM, policy management, and self-protecting data environment, though one would hope that "open standards" will get there first. There will likely be much risk management discussion of capabilities, as consumers and startups eschew the conservatism of traditional larger enterprises and provide capabilities outside of the existing parameters of information protection.

Within these constraints, technology that enables the *choreography* and management of *end-to-end business processes* will be a vitally important technology provided by both Cloud service providers (CSPs) and under the covers of the business service providers (BSPs).

Social analytics will also emerge as a dominant technology service sought by customers. This one is easy, as it is a natural for one of the aforementioned business services. Look at the pattern of usage for Google Analytics. This could be considered a special case of the Big Data (and the resulting need for embedded, predictive analytics), but the specific domain knowledge and specialized skills needed to utilize Google Analytics has driven most of this work to niche business services providers (in the same way software-as-a-service will be narrow-focused and embody "deep-knowledge"), creating a long-tail market and business model. Again, the IT services opportunity will be to serve those business service providers.

The Rise of the Cloud Broker

From all of this will come one form of innovation that will enable many more – the rise of the Cloud Brokers. And not just brokers of IT services, but entire business service offerings available in the Cloud.

According to Gartner, through 2015, Cloud Services Brokerage (CSB) will represent the single largest revenue growth opportunity in cloud computing. But like so many areas of cloud computing, there is confusion about both the terms and the very nature of this concept.

First, there is not just one type of Cloud Services Broker. As ubiquitous or utility computing evolves, there will be multiple types of brokerage services appearing, in the same way there are multiple types of clouds. For example, Amazon, Google, and Rackspace all use different underlying (and basically incompatible) technologies and approaches. There are also multiple "as a service" types of offerings—such as Infrastructure as a Service, Platform as a Service, and Software as a Service—and all of those providers are diverse and incompatible. And that's just the tip of the iceberg. Cloud computing as a technology platform is varied, evolving, and diverging as services become more nuanced and specialized.

The brokerage market will be just as diverse as the Cloud is. There will be brokers that do nothing but perform a management and integration service across multiple clouds, and Cloud vendors for infrastructure and platform needs. The cloud computing landscape is evolving rapidly, with more and more players introducing Cloud products and services of all kinds.

Most recently we've seen the announcements by VMware partners, including Terremark, BlueLock, and others, as well as the introduction of Rackspace's Cloud Servers. EMC is planning to offer a compute cloud, in addition to its existing Atmos storage cloud. And Dell is taking a broad approach through partnerships with Microsoft (Windows Azure Platform appliance), VMware, and by helping to develop Open Stack.

As the proliferation of offerings continues to accelerate, IT managers have questions about how to proceed. How can you evaluate the range of potential Cloud offerings to find the right match? How do you route an application or workload to a target cloud and make sure that it works? How do you integrate it with IT applications running back in the datacenter?

Even within a single cloud, deploying an application requires learning the provider's operating environment, management tools, and business terms and conditions. Doing this for every cloud provider you may wish to utilize is likely to prove daunting and not cost-effective. In a cloud computing environment characterized by multiple providers, each with its own service terms, operating platforms, management systems, security levels, and disaster recovery approaches, the specialized expertise and value-add of a Cloud Services Broker will help IT managers find the right Cloud offering, deploy applications and business processes in the Cloud, and manage them properly.

Cloud Brokers will also form around domain areas (pharmaceuticals, IT, soft goods retail, process manufacturing, and so on) or applications areas (supply chain management, enterprise resource planning, human resources, payroll, and so on)—perhaps even combinations of these—so that they become shopping centers from which companies can assemble the necessary services and functionalities for their businesses.

In a similar vein, we can expect the rise of cloud services brokers that specialize in Big Data—a consequence of the evolving connectivity of the Internet of Things and the concurrent Big Data deluge. These brokers will specialize in the collection and storage of domain, industry, or applications area data and the associated analytics. An example of this could be a clearinghouse for point of sale (POS) data collected across retailers and made available to manufacturers.

It is likely that the real evolution of Cloud Services Brokers will be the logical extension of current business process outsourcing services (BPO) to include more end-to-end and higher-level knowledge skills incorporated with applications (or application components rendered as Cloud services) and data. One can easily imagine everything that's not core to a business, or not directly creating value for a business's customers, eventually being outsourced. For example, the simple process of hiring someone could be done completely virtually by using multiple applications, databases, and external services via the Cloud.

There will also likely be a transitional market opportunity for companies to sell excess capacity on their internal systems via cloud brokers, especially as they move their hygienic and housekeeping systems to the Cloud. You already see this with Toronto-based Enomaly, which lets companies buy and sell unused cloud computing capacity in a clearinghouse called the SpotCloud. The service also gives companies the ability to switch services on demand to get the best price while still receiving a single bill.

And lastly, there is the traditional broker—companies like Sterling Commerce—that can route purchases or service requests to the "best" provider. It's likely to arise to deal with the variety of offerings. Think of it as "least-cost routing" for cloud computing. The benefits of Cloud Services Brokers using specialized tools to identify the most appropriate resources, and then map the requirements of an enterprise application or process to those resources, will soon become apparent. Cloud services brokers will be able to automatically route data, applications, and infrastructure needs based on key criteria such as price, location (including many legislative and regulatory jurisdictional data storage location requirements), latency needs, SLA level, supported operating systems, scalability, backup/disaster recovery capabilities, and regulatory requirements. IT and business process managers will be able to run applications or route workflows where they truly belong, while the broker takes care of the underlying details. For example, if you are hiring an employee in India, some of the BPO activities might be routed to a different service provider than if you were hiring someone in Russia or China or the United States.

But wait. Given that the notion of a Cloud Services Broker is about as well defined as a marshmallow, what can we say about them?

Gartner is most likely right to forecast that the market, however it evolves, will be huge. The Cloud has taken so much friction out of the economics of IT that a long tail will be in full effect, with countless different service offerings to be evaluated, chosen from, integrated with, managed, and so on—and companies will gladly pass that pain off to a broker.
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