INTELLECTION
strategies

"Perspectives"

The Counterparty Risk to Virtualization, Green IT and Distributed Computing

Organization technologies are evolving to leverage the software side of their architectures. This increases business operation resiliency, establishes rapid on/off ramping (scale) of systems, reduces environmental impact (i.e. carbon, power consumption) and lowers overall IT costs. The result is a tectonic shift in how businesses operate at the digital level and the introduction of application liabilities, "counterparty" risk in IT. In most cases, business service functions and consumers are completely unaware of the change. As prior shifts in technology have shown, companies must insist on operational integrity, adhere to performance service level agreements and address compliance mandates. Achieving these business concerns is more necessary in a chaotic business cycle, when competitive responsiveness and swiftly satisfying customer concerns is vital.

Virtualization, Grid Computing and Cloud (VGC) platforms have shifted to the production environments of every enterprise. These technologies leverage hardware investments more fully and provide the ability to scale processing power rapidly. They also reduce the impact on the environment and lower IT costs. VGC platforms enable companies to dynamically scale Web services quickly to, for example, meet a Christmas rush, launch a new global press campaign, temporarily rent Craig-like processing power, or simply launch regional "data centers" to improve customer experience.

Virtualization enables organizations to cluster numerous computers on a single server, while distributed computing, loosely including Grid and Cloud environments, allows companies to farm out computing work to anywhere in the world with near zero planning. While the total impact of VGC technology adoption is a small percentage today and mainly involves non-critical and sensitive systems, it is changing rapidly. Popular players in the VGC space include VMware, IBM and even Amazon.

The positive effects of this technology shift are greater than previous shifts like the commercialization of the World Wide Web. The difference today is that this leap in technology computing requires mature business processes and strong governance over operations. This is truer than ever given the absolute disassociation of business operations to physical assets. As an example, consider attempting to run your

business without the network or computers. In nearly all businesses, technology no longer supports but has fully supplanted the non-computing processes.

Operationally, businesses are able to adopt a VGC platform without any material change to the customer experience. One of the upsides to adopting a VGC platform is there is no marketing, training or customer adoption cycle to endure. Nonetheless, the affect of VGC platform on the company are tremendous and involve new skill sets, risks, opportunities, technologies and business processes.

Commodity, transportation and energy costs are impacting technology data centers in ways not previously experienced or even contemplated. The era of blindly building data centers and purchasing endless racks of computers are gone as each additional CPU is counted and megawatt measured. These costs have material impacts on organizations and allow for increased project budgets and lower total costs.

Shifts in "how" a business operates highlight where radical enhancements in product offerings are possible. This might happen when the competitive landscape is upended, causing an established company with global data centers to be suddenly on equal footing with a nimble, VGC platform-enabled competitor, with their sole risks being equally exposed to fraud or disaster The VGC competitor also keeps CAPEX at lower rates while responding to market environments.

Establishing control principles in a VGC platform-enabled environment isn’t automatic. Business leaders must apply core control principles across this emerging technology platform. These controls transcend all business units and require a new hierarchy. This is truer now than ever before and it increases the stakes equally. Operational integrity must be redefined, as the adopted assumptions of application processing and device trust are rewritten. The new reality has introduced a new 'logical' data center that lives fluidly across, in some cases, hundreds of computing systems across the planet with the concept of segmentation, authentication, monitoring, performance and control being completely altered. The checklist and simple attestation is no longer sufficient to ensure the security or delivery requirements of business processes in these new environments. Leaders must seek out and demand true reporting and encourage the development of appropriate service metrics.

What is old is new again, and what is new is simply the old again. Despite technology leaps, organizations must plot a course to reconcile with the same attention to culture, risk and necessity as with any business venture. Only with careful effort will companies gain large capital savings, agile business processes and a better competitive position that is required in chaotic business cycle we’re experiencing today. This is not the time to invent new controls, but it is time to repurpose, retool and reapply as appropriate.