



In 2020, looking back on this decade, what will be the single most impactful technical advancement driving business growth?

We are in the midst of a dramatic, multifaceted technological revolution that is significantly and permanently transforming our traditional perspectives of information technology. Be it the explosion in mobile devices and ubiquitous access, the exponential and seemingly endless expansion of bandwidth and computing capacity, or the adoption of social networking concepts...we are rapidly embracing change to drive our business success. But looking back in 2020 across the IT landscape, this will be the decade that **Cloud Computing** delivered the single most impactful technology advancement to drive business growth. Why? Simply put, cloud computing will free business from the legacy foundation that burdened them with the intense capital, operational, and human capital expenses tied to building, operating and managing traditional data centers. Over the coming years, we expect enterprises to accelerate their adoption of consumption based services as "cloud" rapidly becomes the standard operating paradigm for the entire IT stack of services spanning across colocation, networking, compute and applications. Ultimately, companies of all shapes and sizes will no longer have to own their own IT infrastructure or applications but will rely on third party cloud service providers to supply their IT-as-a-Service on demand when they "flip the switch."

So why cloud computing and why now? First, cloud based solutions offer significant cost and operational benefits versus legacy deployment methodologies which provide the basis for a persuasive business case. These benefits are extremely compelling and most often enable companies to reduce their IT related capital expenditures and/or operational expenses by 50% or more. And even when a company has already fully embraced virtualization technologies, the "as-a-service" model leverages advanced provisioning features, greater scale, and a true consumption based methodology that individual companies cannot achieve on their own. Second, cloud based services build upon the evolution and maturation of several parallel technologies bringing us to the precipice of rapid adoption. I've already referenced virtualization which has clearly been a catalyst not only from an infrastructure perspective but also psychological endorsement of a multi-tenant architecture. In addition, we have seen significant evolution in the design and capacity of next-generation datacenter server platforms purpose built for the deployment of large cloud computing utility nodes. And finally cloud computing leverages the ubiquitous availability of high-speed, secure transport enabling companies to connect effectively, efficiently and securely to remote data center facilities operated by cloud providers.

The adoption of cloud based services is well underway and, in my opinion, already moved well beyond the early adopters who were the first to embrace the new capabilities. We are now witnessing a massive shift as the majority of companies are either considering, trialing, or wholly embracing cloud computing for their specific needs. For some companies this may simply be to relieve the burden of deploying and supporting separate IT environments for their development, test and quality assurance procedures. Others are pushing their non-mission critical applications to cloud service providers so they can focus on their core business or leveraging the cloud for new business continuity and disaster recovery services. While others are getting out of the data center business completely and rapidly adopting the compute-as-a-service model for their entire infrastructure needs. A recent report by IDC predicted that more than 25% of all IT expenditures will be cloud related by 2014. I would be surprised if this was not a very, very conservative projection from my perspective "at the top."

With various forces combining to transform the IT landscape, how do you see the role of the IT department evolving?

As companies embrace cloud computing they are rapidly transitioning the operation of their core data center services to cloud providers. These services could range from Infrastructure-as-a-Service (IaaS) and Software-as-a-Service (SaaS) solutions to emerging Desktop-as-a-Service (DaaS) and Recovery-as-a-Service (RaaS) offerings. The swift adoption of these cloud based services will not only deliver significant cost and operational benefits but will also enable companies to redirect their IT resources toward their core business applications and services. IT is now in a position where priorities are based on the business strategy and goals thus directly tied to the competitive differentiation of the firm and the overall success of the business. The IT department is now moving out of the traditional infrastructure and support role and refocusing on business enablement and application enhancement. This is a dramatic change from the legacy view of IT as a cost center often perceived as an extension of the facilities department. In fact the IT department has arguably never before been in a more pivotal role.

For IT professionals it's an exciting period as they are more closely tied to business drivers that enable organizational success. The IT department is moving away from managing infrastructure and, instead, moving significantly up the technology stack to focus on core business applications and services. For cloud service providers it's equally exciting as we are building new computing delivery models enabling companies to acquire core IT capabilities "as a service" and removing them from the burden of managing complex and expensive data centers. The adoption of new cloud based services is accelerating quickly, and we are witnessing the dramatic shift first hand for companies of all sizes.

ConnectEDU (www.connectedu.com) is a great case study that captures the potential of cloud based services but also the evolving role of IT. ConnectEDU is the nation's web-based leader in using data to connect students with colleges and employers through the nation's largest college and career planning network .

ConnectEDU was looking to accommodate seasonal demand for their applications and web-based tools and also establish a new elastic infrastructure to more efficiently support their accelerating growth. Rick Blaisdell, ConnectEDU CTO, was an early adopter of virtualization technologies and convinced the executive team that a cloud based approach would not only be more efficient but also provide a competitive differentiation in the market. ConnectEDU displaced all their legacy infrastructure with NaviSite cloud based services and now leverage NaviCloud for their core application, SuperApp, as well as a rapid state-by-state rollout of a new student portal. Rick and his team simplified the business process for student applications, provided a more elastic and scalable infrastructure for applications, and standardized and automated a service based deployment across the country. In this new world, the ConnectEDU IT department no longer spends time worrying about infrastructure availability and performance. Instead they focus all their efforts on the enhancement of core business applications to differentiate their company and position ConnectEDU for long term success...something all businesses are striving to achieve.

This interview was published in [SIIA's Vision from the Top](#) , a Software Division publication released at [All About the Cloud](#) 2012.