

Does Cloud Computing Make Enterprise Architecture Irrelevant?



Cloud computing brings a lot of unexpected benefits. Is this one of them?

The world of business technology is shifting to “almost enterprise” applications – a network of smaller, more agile applications that are often hosted remotely, as in cloud computing. With less reliance on massive, monolithic enterprise solutions, it’s tempting to think that the hard work of creating a sustainable enterprise architecture (EA) is also behind us. So, as many companies make the move to cloud computing, they anticipate leaving behind a lot of the headaches of EA. But is that how things will really play out in the real world?

Here’s the debate.

	Point	Counterpoint
The cloud rules.	We’re outsourcing our EA headaches. No more having to manage the underlying IT infrastructure, operating systems and software patches.	Even when you push jobs and processes into the cloud, none of it will be standalone. Enterprise architecture will still have to govern how everything works together and supports the business.
<i>We’re moving everything to the cloud. We don’t need EA.</i>	Vendors will bring best-of-class standards and processes that we can adopt. No need to fix ours.	Your business processes aren’t going to be self-contained on the cloud – so how will you manage delivery over the whole network without a coordinated EA plan?
	Our move to cloud is about being agile and nimble. Enterprise architecture is the polar opposite of that. If we add a layer of EA onto the cloud, we’ll lose most of the benefits.	In the cloud, expect to have a lot of the same problems – and in some areas like data ownership, security and reliability, they’ll be tougher. That’s where a comprehensive EA approach comes in.

	Point	Counterpoint
Enterprise architecture rules. <i>The cloud makes EA more important – not less.</i>	There aren't any standards today for integrating all the bits and pieces you have on the cloud. So unless your business is completely served by cloud services, you'll have a hybrid solution – which will require EA.	The standards are coming. And when they do, cloud solutions will provide all the integration we need.
	Security. Reliability. Flexibility. How can we expect to meet the business's needs in those areas if the service level agreement (SLA) doesn't cover everything?	Contract the right way with the right people and the unexpected stuff will get handled. Don't buy into the stigma around the unreliability of cloud services.
	No matter how great the tools are or where they're housed, you still have to define and manage the relationships and dependencies between mission, processes, technologies and business initiatives.	Making the move to the cloud will finally free up IT to be more strategic. There won't be a separate function called "EA." It'll just be a core part of what IT does.



My take

Scott Rosenberger, Tourism, Hospitality, Leisure & Transportation Sector Leader, Deloitte Consulting LLP

Shifting your portfolio to the cloud should make a lot of behind-the-scenes processes easier, particularly when it comes to some of the more technical implementation issues. But it doesn't change the underlying reality that there has to be a strategy for putting together all the people, processes and tools that the cloud supports in order to maintain security and reliability. The business never really cared what it was running on anyway – it just cares about results. That means IT isn't off the hook at all when it comes to EA. If anything, this complicates things.

Not long ago IT departments had the luxury of having full control of their entire landscape – often times, built on top of mature, stable software packages. Enterprise architecture was still a challenge, but in hindsight that may have been as easy as it will ever be. Now, it's splintered into a bunch of smaller projects that are distributed all over the place. Cloud services, whether by way of Software-as-a-Service or Infrastructure-as-a-Service, are simply another set of implementation options.

Just think of what all this means for security and reliability. If you don't have a solid EA in place to spell out which technology is required, how it should be approached and how it all fits into the big picture, eventually you'll drown.

The good news is that the shift to cloud services will actually free up IT to operate more strategically. Whether you have a separate group responsible for managing and overseeing it, or it's built into the group's DNA, EA will be one of the prime enablers of IT in this new world.

A consumer products perspective

Omar Trujillo Segura, Senior Consultant, Deloitte Consulting LLP

After investing more than \$200 million implementing a massive new ERP system over the course of two years, a client in the food and beverage industry asked me if a cloud-based system could have solved their problems instead – without all the time spent on design, implementation, configuration and rollout. It's a fair question. Here's what I told them: No matter what tool you use, the core problem isn't the technology. It's in defining the relationships between all the different components of their vision, from business processes to technology. And that's where EA comes in.

Had this client gone with a cloud solution, we still would have invested significant time and resources in designing and customizing the solution to fit their needs and unique business processes. Now, after two years spent implementing this solution, they still plan to spend nearly as much to complete the project. If they decide to shift to a cloud ERP service today, it may cost less – but it still won't link their business vision and drivers to all the supporting technology and processes. No matter which technology route they choose, EA is a critical tool for doing just that.

A defense perspective

Dan Spar, Specialist Leader, Deloitte Consulting LLP

As an organization that spends billions of dollars on information technology annually, sponsoring more new technology development projects than all the VCs in Silicon Valley combined, the Department of Defense (DoD) has reached an important conclusion. According to the DoD, the most important factor in the successful use of technology is the ability to clearly understand, analyze and stabilize business requirements and transition plans from the start. In other words, it's all about EA.

The DoD, of course, even has an acronym for their own EA framework: DoDAF. DoDAF includes a thorough analysis of the business separate from all the systems, services and technologies in place to support it. Then the business analysis is mapped to a similar, separate analysis of systems, services and standards. Every major project – cloud, ERP, whatever – has to go through this process to ensure the right fit before receiving funding.

At the DoD, achieving information superiority depends on having stable business requirements in place more than on any single technology, cloud included.

A health care and life sciences perspective

Florian Quarre, Manager, Deloitte Consulting LLP

In the health care and life sciences industries, bringing costs down to earth isn't just a business imperative – it's now a mandate, thanks to health care reform. The government is pressing companies in these industries to become more efficient through technology, so the appeal of cloud services is abundantly clear. And there's no shortage of technology vendors with new cloud solutions that promise the world and then some.

The truth is, cloud solutions may have a big role to play in reducing costs in health care and life sciences. But these new solutions have to fit a clearly defined systems need that has been spelled out in an operational model. This is where EA comes in; because selecting any technology outside of a business-driven enterprise framework is risky business. And the health care industry doesn't have time for any false starts.

For further information, please visit: <http://www.deloitte.com/us/debates/cloudcomputing>.

For further information about this debate, please contact:

Scott Rosenberger

Tourism, Hospitality, Leisure &
Transportation Sector Leader
Deloitte Consulting LLP
srosenberger@deloitte.com

Omar Trujillo Segura

Senior Consultant
Deloitte Consulting LLP
otrujillo@deloittemx.com

Dan Spar

Specialist Leader
Deloitte Consulting LLP
dspar@deloitte.com

Florian Quarre

Manager
Deloitte Consulting LLP
fquarre@deloitte.com

Related Insight:

[Federal Enterprise Architecture](#)

Learn more about the offering.

[There Is No Cloud](#)

Learn how cloud is what you make it.

Related Content:

Library: [Deloitte Debates](#)

Services: [Consulting](#), [Technology](#)

Industries: [Consumer Products](#), [U.S. Federal Government](#), [Health Care Providers](#) and [Life Sciences](#)

This publication contains general information only and is based on the experiences and research of Deloitte practitioners. Deloitte is not, by means of this publication, rendering business, financial, investment, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your business. Before making any decision or taking any action that may affect your business, you should consult a qualified professional advisor. Deloitte, its affiliates, and related entities shall not be responsible for any loss sustained by any person who relies on this publication.

As used in this document, 'Deloitte' means Deloitte LLP and its subsidiaries. Please see www.deloitte.com/us/about for a detailed description of the legal structure of Deloitte LLP and its subsidiaries.

Copyright © 2010 Deloitte Development LLC. All rights reserved.
Member of Deloitte Touche Tohmatsu Limited