I AS A SERVICE IS COMING OF AGE

New technologies and technological principles like cloud computing, virtualization, and IT as a Service are reshaping the way enterprises think of information technology. Business and IT are seeking a new balance to make their collaboration work better for the good of the company. EMC.com/CIO caught up with EMC's Global Marketing CTO, Chuck Hollis, for a chat about what these exciting times have in store for the IT industry.



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A time for transformation

Everyone is talking about IT transformation and IT as a service. Why is this happening now?

Great question. Let's see if I can make this simple.

I think the best starting point is to look at the IT function as standing between "supply" (various technologies and services available to the organization) and "demand" (what the business needs from IT).

If we look at the *supply-side* of IT, the landscape is very different than just a few years ago. The Infrastructure is very different, management is very different, and applications are very different. In addition, there are dizzying new sets of external consumption options that did not exist a few years ago.

The more important shift is on the *demand-side* of the business. Virtually every new initiative these days has a strong IT component to it. Internal IT either has to have the ability to respond quickly or smart business people will immediately consider those attractive external consumption options I mentioned before. If internal IT teams are bypassed frequently, they lose control and relevance. That's not good.

The more the business people depend on IT to achieve goals, the more they need their IT functions to act as a competitive internal service provider, and less as a traditional IT function.

The real challenge falls to IT leadership. They are now under enormous pressure to transform their organizations along these lines as quickly as possible. That's a sharp departure from previous years.

The promise of IT as a utility, just as ubiquitous as water or electricity, has been around for over a decade. Why are we being able to deliver on that promise now? Or will we just add some extra miles to this boulevard of broken dreams?

You're right. We are all familiar with other various non-IT utility models such as water, electricity, communications, transportation, and logistics. I also think it's fair to ask what has changed to make this more possible now. If you study each of these models in detail, you'll find that, at some point, there was a forcing function that caused a transition from a legacy model to a services and utility model. So what is different about IT in this regard?

Well, at a high level, we know that technology isn't the issue. It's mature, it's being deployed, and there are multiple options to consider. Look a little closer and you'll find that security and risk management, when approached properly, isn't the barrier that many people make it out to be.

In a nutshell, the forcing function here is that many IT organizations really don't have a choice; they either need to act like a competitive internal service provider or their internal customers will go outside to find better solutions. The current generations of business leaders are very technology savvy. They know what's out there, they know what other people are doing, and will inevitably ask the question: "Why aren't we doing this here?"

Based on our experience, the key here seems to be IT's organizational model. If you organize to deliver attractive and competitive services that the business wants, well, that's what you'll deliver. However, if you organize around technology silos or large-scale IT projects, then that's what you'll end up delivering to the business.



Making the shift from one IT organizational model to another one is not quick or easy. It puts heavy demands on both IT leadership and the organizations they lead. It's a journey, not an event. However, from our perspective, the transition appears inevitable.

Interestingly enough, the smaller IT organizations have demonstrated that they can move much faster in this direction than their larger and more established IT counterparts. Indeed, it seems that the size of the IT organization itself is a good predictor of the difficulties and effort involved.

CATCHING UP WITH OTHER INDUSTRIES

People sometimes think they have better IT at home than in the office: faster internet connections, and better PCs. Work appears to be the place where they are forced to use old technology. What role does the consumerization of IT have on the pressure of the IT department?

We now have an entire generation of business people who are very comfortable acquiring and using technology in their personal lives. This means that we've got a bunch of educated and demanding IT consumers facing off against traditional IT departments. They've discovered that they can go online and get what they want—simply, effectively and without a bunch of meetings, processes, and negotiations. Internal IT organizations need to deliver these people the experiences they expect; otherwise they will inevitably go elsewhere. I know I would.

A good example is end-user computing devices that are supplied by IT. I think each and every one of us has figured out how to buy and use a laptop, a smartphone or an iPad. We don't need an IT department to help us with the device, or more importantly, telling us what to buy! However, we'd certainly like our IT departments to deliver an experience on that device that helps us get our jobs done. That's a big shift from just a few years ago.

It looks like IT is finally maturing: IT is finally automating, like the industry has been doing for years. Why did it take so long for our industry to catch up?

One of the big keys to effective automation is standardizing the stuff you're automating. Specifically, there's enough of a critical mass around virtualization and VMware that IT organizations can now effectively automate a significant portion of their landscape without having to deal with the insane complexity found in more traditional IT environments. Automation of a standardized virtual environment is far easier than trying to automate physical IT.

Another big factor is greater understanding around the compelling payoffs: non-trivial cost savings, fewer errors and problems, and the speed and agility to react to new requirements, which is what the business really wants.

Changing roles, changing opportunities

Cloud computing constitutes a major shift in the way both consumers and companies approach IT. How is that changing the role of the CIO? Does the acronym CIO now stand for Cloud Interface Officer, directing business users to the cloud?

That's funny — I hadn't heard that one before — but there's an element of truth in it.

We think that, over time, the role of IT will be to broker both internal and external IT services back to the business, playing more of a role of consultant while retaining overall control. Some of those services will be generated internally using cloud-like models, while other services will inevitably be sourced externally from service providers



who are also using cloud-like models. As EMC, we're investing heavily to make sure that both ends of that conceptual wire are largely compatible, and ultimately controlled by the customer, and not by the service provider.

The other thing I really like about the phrase is that it clearly positions IT (and the CIO) as an advisor to the business – here are the cool things you can do with the new technology models that are out there and – in my book – that's real value generation.

CLOSING THE GAP- AT LAST

For years we have been talking about the gap between business and IT. The consumerization of IT and the advent of cloud computing is bringing IT and business closer together. What is the role of Business/IT alignment in making this IT Transformation a reality?

I think "alignment" is far too weak of a concept. "Empowerment" and "engagement" work better for me. The really progressive IT organizations that I meet have a mindset of empowering their users with the services and tools they need to make a difference in their segment. IT becomes one of the first places business people go when they're thinking about a big idea, rather than the last place they go.

We spend a lot of time these days with our customers talking about their next organizational model built to deliver attractive services instead of technology projects. Inevitably, we find that they're missing a key part of DNA, something we call the "retail gene." One of the things that competitive service providers have that IT generally doesn't is a well developed sales/marketing/product management function. That's no surprise, since they have to compete for customers, invest in understanding what their customers want, and make it look as attractive as possible. Just like you'd find in any retail environment.

Ninety nine out of 100 IT organizations don't have that sort of role or skill set, and it hurts them badly as they square off against external competitors that do. The frustrating part is that internal IT organizations know far more about the business and their internal customers than any external competitor could hope to achieve. The challenge is that the internal IT organization hasn't made even a minimal investment in that all important customer engagement. The good news is that we're starting to see that change occur— and fast.

The IT department is often considered to be a money pit, spending money, but not bringing much value. What is the role of the CFO in IT transformation?

Well, sooner or later, IT has to be paid for, doesn't it?

At a high level, I think there are three important areas where IT is going to need help from the CFO.

The first is in getting the support to transition to a shared services model instead of a project funding model. Finance organizations typically understand both; they just have to learn to apply the right model to IT. I know it sounds easy, but changing how people do things can sometimes be difficult.

The second area is having finance step up to the role of rationing aggregate IT consumption, the same way they ration a budget, headcount and other economic inputs. If IT is put in charge of rationing IT at the same time they're chartered with delivering attractive and competitive services, they're going to fail. This isn't about chargeback or show back; it's about who is in charge of the overall level of IT spend. That should be a dialog directly between the finance group and the people consuming the services.

The third area is giving the IT leadership team some breathing room to invest in the new models and to prove their effectiveness. So many IT leaders I talk to want to make this sort of transition, but feel so budget constrained, that



there's just no room to invest in moving up a few services ahead of demand. We're not talking enormous sums here; just a little wiggle room.

The good news? More and more CFOs are beginning to suspect that there's a better way to be doing IT, and when broached on the topic, they usually become receptive over time. Let's face it, IT is a big part of the expense side for many organizations, and just about every business initiative these days involves a significant IT component. Invest in internal IT to make them more agile, deliver better services, and do so for far less than they're doing today? It's a topic that really can't be ignored.

Gaining insight through agility

How can IT as a service enhance business agility? And how do we achieve that agility?

Classical IT is mostly about big projects, well understood ROIs, formalized requirements, pre-defined service levels and the like. Indeed, you'd be surprised at how many IT organizations are built around this kind of model.

While that sort of work doesn't go away entirely, competitive businesses need to move faster than this model can provide. They'd prefer to get 80 percent of what they need right now, rather than wait six months or longer for 95 percent of what they need. The other important factor is the shocking truth that most business people don't really know what they need in the long term; they need to test something out, learn from it, and then change their requirements based on their experiences.

These people crave agility above all else. If they can't get it internally, they're the first ones to go external.

A couple of interesting aspects that have come to light over the last year.

One observation is that even the large, traditional IT projects can be greatly enhanced by the presence of easy-to-consume IT services behind them. As an example, EMC is currently moving off of Oracle's applications to SAP. It's one of those enormously complex and expensive IT initiatives that everyone has to grapple with. The application team is getting their work done far faster and more effectively since anything they need such as infrastructure, a test database environment, etc. can be consumed off a portal as needed, rather than through a lengthy and complex process. Indeed, I think most people don't appreciate that one of the most important consumers of IT as-a-service is, well, IT itself.

Another observation is that having an ecosystem of compatible service providers can be a huge boon. At EMC, we're using VCE Vblocks for the majority of our internal virtualized infrastructure. That means we have the option of going to any of the compatible service providers who are also using Vblocks to essentially "rent" a compatible version of what we're deploying internally. The implications are pretty significant: our IT organization can now fund internal resources for the demand they're sure about, and rent external capacity if they get surprised along the way. It gives us flexibility that we've never seen before.

The external service providers also give you a useful benchmark to compare what kinds of services they provide (and at what cost) vs. the services you provide internally. As a result, you can look a business user in the eye and say, "you can't do better anywhere else than here." For many IT organizations, that's important.

Governance, risk, and compliance

How does security, risk management and governance enter in to this conversation? Many people believe security and agility have conflicting interests.



That's an important point, and I'm glad you brought it up.

Personally, I'm very frustrated by the perception that security concerns are an obstacle when adopting an IT as a service model. I'm frustrated because the exact opposite is true; IT as-a-service models can be far more secure, far more risk-managed, far more compliant, and far better governed, than their traditional legacy counterparts. Furthermore, they can do it with less cost, less effort, and better results.

Here is why. If you get people to consume standardized services, you can build the required mechanisms as a fundamental part of the service. Anyone who consumes the service will automatically have the appropriate controls and visibility. It's built-in vs. bolted-on.

Now, compare that approach with an environment where every project and application uses different technology components, different architectures, different security approaches, etc. You can quickly appreciate the power of standardized service catalogs built on standardized technology and processes. It ends up being yet another huge motivation to transition to an IT as a service model.

Are there any final thoughts to this interesting conversation about IT as a service?

Yes. Earlier you asked about other familiar utility models and what made IT different?

Here's the point—ultimately IT *isn't all that different*. It needs to deliver attractive and competitive services to its internal users while retaining control. That's the same sort of transformation as we've already seen in other corporate functions like manufacturing, HR, transportation, facilities, marketing, legal, and so on. It looks like it is now IT's turn to go through this exact same transformation.

This transition is putting a premium on IT leaders who have the skills and intestinal fortitude to tackle this challenge. Those that have made the investment are not shy about being proud of what they've achieved for themselves, their organizations, and their employees. It's great when you see it.

I'm guessing that we will see far more IT leaders going down a similar path before too long.



Chuck Hollis, Marketing CTO, EMC at Schlumberger Information Services Forum

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