CIO ROUNDTABLE:

What's Your Magic Wand Infrastructure?

An Enterprisers Project Virtual Roundtable | March 2014

Most, if not all, IT problems are symptoms of complexity and the costs involved in managing legacy infrastructure. A 2013 Forrester survey of IT leaders at 3,700 companies found that they spent 72 percent of their budgets on replacing or expanding capacity and supporting ongoing operations and maintenance.

But what if you were handed a magic wand and could wave away the past?

Panelist Profiles

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CIO
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ROUNDTABLE: What's Your Magic Wand Infrastructure?

Roundtable Highlights

THE ENTERPRISERS PROJECT (TEP): Let's start this conversation with the first things that come to mind, now that you've been handed an IT magic wand. What would you get rid of, what would you keep, and why?

Cliff Tamplin

CLIFF TAMPLIN: I'd start by getting rid of all the legacy applications, because in most cases it's the applications that drive the goofy infrastructure we have to maintain. Generally, the complexity you talk about is introduced by the variety of different systems we brought in over decades, and we still have systems around that require completely different infrastructure requirements to the new systems that are currently being deployed. That diversity and heterogeneity are the real killers.

TIM ELKINS: If I were to start over, I'm not sure I can give you any system I want in house. Our philosophy is that we want to work on strategic things and not waste our time on anything that is not a differentiator. No one gets rewarded for hosting Exchange really well. I don't have any interest in having staff maintain systems if it can be done equally well at a third party. Our core system here is actually hosted; we don't have it on site. The great relief for us is not having to worry about disaster recovery or the updates or the refresh on the hardware or any of those types of things.

That being said, I may want to wave that magic wand you've handed me a bit differently. Where we run into problems is where we don't have control over the applications to make updates and changes. We are dependent on that third party that may or may not move as quickly as we can. So if I'm thinking about the perfect structure, there are some core systems I may eventually want to host, but I also want to have full control to making changes to help it grow and strengthen.

Cynthia Stoddard

CYNTHIA STODDARD: I agree with that. I'd love to have a magic wand to wipe out everything in our data center. I'd actually start by looking at the framework of where I'd want to be in the future and frame that around a services model. Because I agree with Tim: It would nice to put things outside the data center and not focus on it, but I think in some cases, because of the speed and how you want to differentiate yourself, you will end up still with some infrastructure and applications internally. But I'd start with the basics to make sure that IT was positioned to provide services, and provide those services out of a true cloud environment either private or public.

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Making Software a Bit More Magical

TEP: When you said, Tim, that you don't have control over the SaaS applications, was that referring to what Lee Congdon, the CIO of Red Hat, calls upgrade cadence?

TIM: Absolutely. And probably even more so than that, I'm talking about a very specific struggle we have with a hosted SaaS solution we have in place. The updates or upgrades to the solution and the base product roadmap are certainly one thing, but there are things in core systems that when you host them, you may want to do something different from other customers. And to be able to move quickly, and to have some control over that to move quickly has been really important. The flipside is, that application, if I'd hosted it internally, I would have a much larger control over the changes that I don't have now.

TEP: Cliff, when you used that word "goofy" for infrastructure, does that also extend to the software customizations that often have to happen to meet the specific needs at a company?

CLIFF: Yes, although I was focusing more on an application that is kept in-house that requires very specific versions of UNIX, and it requires very specific processes. I guess I could think of two or three very specific applications that require that level of attention. That then spills into needing specialist skills to look after those elements.

So it really is the whole gamut, which is where the desire Tim was expressing came from: If you can get out of the business and have someone else run the infrastructure for you, that obviously makes you more nimble because somebody else has that problem and enables you to focus on things that really add value.

Pete Buonora

PETE BUONORA: I totally agree with that, especially around creating services to meet our immediate needs and also being able to have some customization capabilities in SaaS. We're really trying to break these things down into the differentiating and non-differentiating, those that keep the lights on, those that help us to grow, and those transformative things that help us move into different markets. These needs break down into different delivery models, which means IT is becoming the broker for those services. This is very different from always choosing the traditional, in-house data center, whereas now we're building up a new data center with services, starting on that public and private cloud capability for things that are differentiating, things that are transformative and give us that ultimate flexibility so we can go out to the cloud when we need to but also other areas where we may get more benefit from say hosting on an external platform as a service.

So one of the struggles is not just technologically but culturally, the way we've been running things through the years is drastically changing now, for example being a broker but somehow competing with the outsourced model where you have to deliver with the same cost structure and at the same pace. I think it remains to be seen how much stays in privately-owned data centers, and as security barriers and other areas improve in cloud services, there are times when it won't make sense to even try to compete on that level.

Waving Away Complexity

CYNTHIA: One other area that would be great to wave the magic wand around at would be integration and management, which today are either complex or thought about after the fact. It would be desirable to be able to build a certain amount of simplicity and interoperability and openness into the infrastructure so that, for example, you have the flexibility of moving from one SaaS provider to another and maintaining the integrations that you need in short order. Whereas today, if you want to switch out to the next best thing it's always a huge project.

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And then on the manageability side, understanding that your systems are up and running, delivering capabilities to the SLAs your business needs, and having that proactiveness built in on the front end would be a wonderful wand event.

PETE: Definitely. That's just a great point, and if you look back at 2004 when Jeff Bezos mandated at Amazon that every-thing must have an API, if we could take a step back to have that mandate in our company and look at where we could be now, it would be fantastic. The same is true for that SaaS model; there are a lot of considerations for tying the data within SaaS services together via APIs as we start to procure different SaaS capabilities.

TEP: A few people mentioned this, but are there categories of applications you'd prefer to keep in-house, even with the IT magic wand?

CLIFF: I think you've got to quantify what you mean by 'in-house', because I would love to get all of the infrastructure outsourced. Hyatt only has about 8,000 servers and these days that's too small to run the infrastructure ourselves. On the other hand, I don't think we either can or should outsource the control over our strategic applications. So whilst I'd love the idea of getting Microsoft Office as a complete turnkey service, if it's something where I needed to control the application, then that I would say you run Infrastructure as a Service and make that more like Apple's service model.

TIM: Completely agree.

Voila! New Staff, New Mindset

TEP: Another 'wand event' would be the ability to replace any existing staff today. What kinds of people would that ability to create your own infrastructure allow you to bring in and what kinds of people would you look for?

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CYNTHIA: I guess I would look for people who were open to exploring a broker role, understanding what's in the marketplace, and crafting solutions using tools that are available to them. Versus somebody who has the attitude that it has to be either built or configured by themselves and their teams. Because I still think there's a belief out there that you can only create something that provides new value if you build it from scratch, as opposed to taking different components, looking at the wide variety of tools you might have in a broader tool kit, and bringing them together. That's the kind of skill or personality change I'd look for, people moving past the traditional attitude of builders to one where they have an active desire to want to go out, explore, learn, change things, and craft solutions from a broader view.

CLIFF: I agree with that, Cynthia. I think if we can't use the wand to eliminate the systems, the other thing we need are experts who are capable of handling the integration between new and/or legacy systems and can do it far faster.

CYNTHIA: That's an absolutely great point. And I think for the foreseeable future, if you have the magic wand and the systems are there, the integrations are still absolutely key.

Tim Elkins

TIM: What we did at Prime was to bring in some folks from the business who were a little bit more strategic and know where the business was trying to go. We're actually working with third-party vendors who are moving a bit more outside the box on how things could get done. But to lead those teams. You don't need team leaders who are as technical as they used to be.

CLIFF: I'm not sure I'd say you don't need the technical skills. With some of the outsourcers you might need even sharper people, if fewer, who can make sure that the outsourcers are doing what they're supposed to do. The days when you could just have someone sitting in the corner who knows everything there is to know about payroll are gone.

PETE: I'd agree. I think as these systems get more complex you get into more integrated cloud systems that go across all the infrastructure and applications, you need staff who understand how all these pieces fit together, not just experts in one specific area who are focused on one specific thing like servers. It's a bit like moving from an individual handcrafted mentality to a more industrialized one. As everything gets more automated you need someone who is skilled enough to be able to see all of the work going across the areas of the "factory" and see where the bottlenecks are to be able to correct them.

Barriers to Making Magic

TEP: I'd love to hear some comments on the barriers you'd like to eliminate with your magic wands. Would one of those be the 'not invented here' syndrome Cynthia mentioned, or the reality that some of the most core systems you need to run your business are getting dated and needing more specialty niche skills to operate?

CLIFF: I think you hit the nail right on the head there. The cost of replacing some of these big custom systems can be astro-nomical if it truly is something that provides a competitive edge to the company. There's an element of 'If it's not broken don't fix it' to this, or more importantly the sense that it's IT's problem if the maintenance cost is high and they need to suck up the cost to replace it.

CYNTHIA: Along with that, you still have to keep the business running, so to stop and replace becomes difficult because you need to stay focused on the needs of everyday business and the business must adopt and assimilate the changes. Because of this, it takes time to unravel this complicated infrastructure. So unless you wave your magic wand and all the systems are changed out, and all business process are adjusted, it may not work. In reality it takes time to go piece by piece and unravel the ecosystem to get to that new infrastructure.

TEP: Tim, your infrastructure is relatively recent. Do you feel you're mostly in a good place from that perspective?

TIM: Yeah, I think I'm very fortunate. We built our complete infrastructure starting about five years ago and moved over our core systems about two years ago. Where we have work to do is in building out an Exchange environment onsite. I don't want to host that, Microsoft can do a better job than I can; I want to push it out there. There are still things we've got to cost-justify tearing down and moving them over and that's something we're working on now.

Training the Next Generation of IT Wizards

TEP: In closing, how do you speak to an up-and-coming CIO who is looking to effect some meaningful change in his or her IT environment but doesn't have that magic

wand? How do you make a move? Where do you start to generate some momentum within the business?

CYNTHIA: I was talking to an up-and-coming CIO who was looking to simplify their infrastructure platforms and I recommended starting with some of the standardized, out-of-the box business processes that every organization should have but aren't really differentiating. Areas such as HR, Payroll, Talent Management. There are a lot of good, standardized solutions there. I would say start with the easy, show some successes, and show that you can simplify and go up the complexity curve from there.

CLIFF: I'd throw things like email out there as an obvious thing to outsource. Nobody ever got promoted for running email.

PETE: If you look at where you and your team are spending time, that you're spending X number of hours on non-strategic things, I'd target that Shift focus towards real business outcomes and constantly ask yourself how the work you are doing will make customers' lives better.

TEP: That's great. And as a thank-you to everyone, your IT magic wands are going out express mail to you right now.

CLIFF: I think anyone who finds one will make quite a lot of money from it.

CYNTHIA: That's right, and I think most of us would be willing to give it a try!

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