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Staying on IT's cutting edge

Shell CIO Alan Matula discusses innovation, cloud computing, and the challenge of managing tech life cycles.



The IT industry and innovation

The IT industry has actually lost its ability to innovate. And I think pretty hard about this and about why. In the late '80s, with some of my mentors, they would be really heavily involved with the senior leadership of many of the big IT companies, whether it was IBM or whoever. We used to cocreate and codesign chips with IBM way back in the late '80s. I think when the CIOs got together and we really kind of started to push standardization, to basically drive operational excellence, we trimmed down that IT industry, the suppliers, and we also kind of pushed them into a commodity world.

And I think that has slowed down innovation. If you look at the joint-venture capital, it used to be invested really heavily in IT firms or small IT firms. You don't see it much anymore. And actually, if you get a successful small IT firm that starts to emerge, it gets eaten up pretty quick.

And so some of that innovation, I think, over the years has evaporated. My belief is we can get it back, and we *need* to get it back. But it's going to take more collaboration from the IT industry. I think the financial crisis is also pushing the boundaries of these companies, which I also think is healthy—that they're getting into each other's space because they're trying to take things like cloud [computing] and the next-generation data center and some of these things to try to figure out, "OK, so how is this market going to shake itself out?" I think that will get them talking to each other more than they have. But I think it'll raise competition, which is good for all of us.

The potential of cloud computing

I've learned through many scars that there's this massive hype phase. But the industry can't be pouring as much money as we're pouring into it for there not to be something there. We think virtualization is absolutely spot-on. I mean, what we're doing with T-Systems, putting all our SAP systems in their virtual piece, which is kind of a cloud—a first iteration of the cloud—has been great.

It allows us to do peak-and-valley performance. On our HR system, it has been absolutely fabulous. If you think of the perfect-use case, it is in HR. You have segments of time where you do huge activity: at the end of the year, you do performance reviews; in March, we pay people because of bonuses and other things. If we didn't have it in that virtual environment, we'd have to scope our landscapes and our performance to meet the peak load. And when we're not at peak, we waste money.

In the new model, we just ride virtualization. We optimize for the peak and we optimize for the valley. So there's value here, you just have to be selective and a little bit patient.

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Managing the long life cycle of IT projects

A lot of the projects that we do now are large, multiyear global projects. Some of them last four or five years. So what you have to do is you have to peel apart against the competitive landscape: where is everybody in their technology-investment cycle?

Everybody goes through these seven- to ten-year cycles, I call them. And the challenge on the project side is, "So where am I versus Exxon?" If I look at investment in a desktop and the end-user computing, you can look at the spend level, but I don't know if Exxon Mobil is harvesting and I'm investing.

Then the second thing on top of projects is, am I doing it differently than my competitor? Am I introducing a capability that's different, and why? So that's what I always ask: am I introducing a capability, and why? Is it a waste, or is it really a differentiator? What we want to do is have much better competitive information. What are our competitors doing? Or, what are others in the industry doing? And what I'm really interested in is not that we're doing the same—because in IT we all follow each other, right? It's the pack mentality—what we're really interested in is, where are we different, and, more importantly, why?

What happens to some CIOs is, it's heavy lifting. You do a two- or three-year program and you get to the end of it and then you don't refresh and say, "OK, what's next?" In a large global organization like Shell IT, people can't really think [ahead] more than two to three years. And so that's why you see me break things up into phases and almost refresh what we want to do every two to three years. \circ

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