



The CutterAdvantEdge Commentary on Investment Systems and Operations

CIO Perspective: The Evolution of the Technology Office

Recently Cutter Associates had the chance to speak with three executive members of our research community about the evolving nature of their role as CIO and what the future holds for technology. Joining us for the discussion were Matthew Oakeley, Head of Group IT, Schroder Investment Management, Gudrun Neumann, Senior Vice President and Chief Technology Officer, American Century Investments, and Sean Kelley, Chief Information Officer, Deutsche Asset Management.

Cutter: *Recently, many people seem to be talking about changes to the role of the CIO. Have you seen changes in your role? What potential changes do you see for the future?*

Kelley: The role of the CIO has always revolved around change. You could say that change is our oxygen. Each time the environment dictates that a CIO morph into a new facet of being, it is usually for the better in the long run. On a personal note, I see the CIO role changing from a service provider to a catalyst. Or in my case, my role has become more of a "Chief Ideas Officer" - looking for new opportunities to leverage the world of technology into the world of finance. The type of conversations I am involved in are more along the lines of M&A opportunities, new product development and joint ventures with unique technology partners to foster a competitive edge. While we still have the day-to-day duties of getting the processing done and keeping systems up, the job of the CIO in this new economy is more interesting than ever before.



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Sean Kelley, CIO Deutsche Asset Management

Neumann: IT is moving more into the fabric of our business. For me, IT is no longer as distinct as it was. Even though our IT shop is centralized, lines are blurring in our interactions with the business as more technology is being driven by the business community and our IT people have become experts in their business areas. I believe this is providing increased levels of value as we have experienced a speedier adoption of technology solutions. This has also helped break down the existing artificial silos, eased governance, and reduced politics. As a result, my role as CIO has become more focused on the larger issues of solving business problems, driving our strategy and reducing cost. It has also allowed me to spend less time on day-to-day issues, governance and relationship issues.

Oakeley: I am skeptical of this. I think individual CIOs grow and develop their ambitions and there is a temptation when talking to journalists to generalize about the industry as a whole when particular CIOs are talking about their own personal journeys. It is clear that as a more technically-aware generation moves up the corporate ladder, technology will be less and less held at arm's-length as more senior people understand it. This will inevitably change the way in which IT leaders interact with their senior colleagues and open other doors. I suspect that such change is quite gradual and that discussion of "sea-change" moments has more to do with the column inches from particular individuals than reality: the IT press has always had stories about the changing role of the CIO.

Cutter: *The economic challenges of the past 12 months drive home the fact that the economy is truly global. How has globalization affected your firm and your job?*

Oakeley: In one sense, I find myself out of step with the common language of globalization. Yes, we are fundamentally interconnected across the globe and subject to pan-national trends and issues. I find in my industry, however, the increasing need to recognize the importance of "local." Understanding this is critical and understanding the balance between scale and efficiency (which might lead to thoughts of "global") and being close to your customers (which leads you to be "local") is very important. As with all buzzwords, the over-simplification of the topic can be a big problem.

Neumann: What is happening overseas is affecting us here in the US. For example, the labor market is now global, so supply and demand of overseas resources affects even our local markets in the US. Also, because of globalization there are more technology solutions from overseas which can work for us here in the US.

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Gudrun Neumann, Senior Vice President and Chief Technology Officer, American Century Investments

Kelley: I have been in and around some of the largest firms on Wall Street over the last 30 years and many of them have purported to be global in nature. My tenure at DB has really exposed me to a firm that is truly global in nature in every facet of its being. Thus, the notion of a globally integrated economy has always been prevalent in how we operate. The big thing with being global boils down to having a mindset of always walking in the other person’s shoes. We have to constantly think about how a change on one side of the planet will impact the other side – something that requires forethought and constant communication.

Cutter: *What recent trends in technology have had a positive impact on your ability to deliver solutions to the business? What technology trends have had a negative impact?*

Neumann: Our experience with Software-as-a-Service has been positive. So far for us it has lived up to its billing in terms of speed to deliver and stability, (though we have seen an increase in integration complexity), and we are actively pursuing additional opportunities. I would also mention, technologies enabling mobile (smart phone) access have been tremendous in terms of people productivity. On the downside, I continue to be frustrated by the lack of truly user-friendly security solutions, both for our clients and our internal users. This whole topic is a huge opportunity for vendors who can break through the multi-step security clutter and give us truly seamless, secure options.

Kelley: Technology trends tend to be gimmicks if you cannot operationalize them and use them to change the landscape of the playing field for your business. Luckily, we have been pretty much on the right side of these trends. Hype notwithstanding, cloud computing is probably one of the areas that, if we get it right, will position us on a different playing field. On the Data Center Operations side, it means potentially never having to buy another data center, even though we continue to invest deeper into technology as an overall proportion of our business. On the agility side, it means that developers can “spin up” test/development environments at will and get right to the business of cranking out great code, rather than waiting on an internal provisioning process. On the real time - or “just when we need it” - side, elastic computing models will allow for instantaneous peak provisioning for models and algorithms to capture market opportunity. And the list goes on.

A second trend we see is a focus on the experience of computing. Given rich media and advances in collaboration technologies, we will be able to provide an “experience envelope” around the user, thus personalizing and enriching their interaction with technology. While functionality of processing remains key, emphasis on the human-to-computer interface is something that people now realize matters just as much. Design matters. If you question this, then give up your iPhone.



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Matthew Oakeley, Head of Group IT, Schroder Investment Management

Oakeley: In a cost-controlled environment where the key driver has been to “weather the storm”, we have to pick our innovations. We have focused on our web offerings and I am keeping an eye on collaboration technologies. Incessant emails on Cloud computing drive me nuts... but I agree with Gudrun Neumann, software-as-a-service is an interesting area for me. Some people think that the key for the total-cost-of-ownership debate is to re-examine the desirability of component “best-of-breed” architectures. For me, exploring new ways to deliver those components may well be a better option.

Cutter: *What emerging technologies are you keeping an eye on, and why?*

Kelley: Hardware advances over the next five years will result in an arms race on Wall Street. With the emphasis on flow and “algo” businesses, it is all about who has the fastest machines, the smartest algorithms, the best co-location strategy, etc. Hardware advances such as those born out of the Sun/Oracle alliance and others will start to move the latency chase to new

parts of the chain. For example, the large-scale use of flash memory has removed the spinning disk drive as the slowest link in the chain ... so now where do we look to eke out that next sub millisecond?

Oakeley: I am keeping my eye on collaboration technologies - the time for the next revolution in end-user computing is not yet (despite what my techies think) but I suspect not far. The Apple iPad may not turn out to be interesting in its own right as a business tool but is fascinating for what it implies may come next. Certainly the pressure for convergence of personal and professional computing devices is going to cause issues for our security policies and bring centre-stage the debate about where the "corporate police" stop and personal responsibility takes over.

Neumann: Platform-as-a-service is of interest to us because we want to see how it could help us with speed and cost variability.

This May, Cutter Associates will host the next Executive Roundtable focusing on trends and topics relevant to the industry. CIOs and other executives from our membership selected the following topics for discussion at the event, which will take place on May 4th in New York City:

- Technology Outlook: Effects on the Asset Management Business
- Leveraging Agile Development
- Talent Management

For more information on the Executive Roundtable and other events, please visit www.cutterassociates.com or contact info@cutterassociates.com.