

# Argyle Conversations

by Argyle Executive Forum<sup>SM</sup>

Daryouche Behboudi, North America CIO Advisory Practice Lead and Partner, Kurt Salmon, discussed the changing role of the CIO brought about by the advent of new technologies. They also addressed the impact of cloud computing and social media on IT departments and businesses as a whole as they fundamentally change the way in which businesses are run.

**SCOTT ROBBIN: Can you tell us a little about your background and your role at Kurt Salmon?**

DARYOUCHE BEHBOUDI: I'm the managing partner for CIO Advisory in North America, which is one of three global practices of Kurt Salmon. After spending years in semiconductor research, I decided to go into consulting and got my start in 1996 with Computer Systems Development Corporation in Fairfax, Virginia. I went on to KPMG, which ultimately became BearingPoint, and was a member of their consulting practice until joining Ineum Consulting as a partner in 2009. Inaugurated in 2003, Ineum was a French management consulting firm that was spun off from Deloitte France. By the time I came along, Ineum had become a prominent consulting firm in Europe and was eager to expand its footprint in the U.S. In 2006, U.K. company Management Consulting Group (MCG) acquired both Ineum and Kurt Salmon Associates (KSA), the latter being among the first management consulting firms established in the U.S and widely known for its advisory in retail and consumer goods. Recognizing the synergies between both companies, MCG decided to merge the two, and Kurt Salmon, the global management consulting firm, was launched on January 1, 2011.

**What does Kurt Salmon do, and how do you work with CIOs?**

Kurt Salmon is a management consulting company with expertise in four lines of business—CIO Advisory, Financial Services, Health Care and Retail and Consumer Goods. In the United States, our Consumer Group has been delivering management consulting services for retailers and consumer products companies for over 75 years. Kurt Salmon—the man—was one of the founders of management consulting in the United States along with Marvin Bower, founder of McKinsey, and Edwin Booz of Booz, Allen and Hamilton. The CIO Advisory practice was launched in 2010. Although it is the youngest of our practices in North America, we're growing rapidly.

The main objective of our CIO Advisory Practice is to apply management consulting and best practices to the chief information or chief technology officers of a company. As the importance of IT in supporting company operations has increased, the CIO's role has been enhanced and his or her organization has become more complex. We apply traditional management consulting best practices to help CIOs manage this new level of complexity in their organizations and assist in making them more efficient and aligned with the objectives of the business.

**How has the role of the CIO taken a new direction with its challenges in the past five years? How have the skill sets changed?**

Previously, CIOs—who were called the chief information system officers or the heads of IS departments in the 1970s—were only responsible for the computers and networks interconnecting them. It was a very technical job that encompassed running the data center and the applications development teams that wrote the code. But as technology evolved and became embedded in business processes, CIOs were asked to assume a greater role in streamlining the business processes using their knowledge of IT. This required them to become educated on how their businesses were being run. At Kurt Salmon, now more than ever, we are witnessing firsthand the emphasis on the role of the "new" CIO. Indeed, in some organizations the lines are often blurred between the COO and the CIO roles, and in some cases, we've noticed that the IT responsibility is being assumed by the same individual. IT has become so embedded in the business processes that companies don't see much of a difference between the two roles.

The advent of cloud computing and social media has awakened corporations to the reality that they need to rely more on new technologies to reach their customers, employees and business prospects to compete with their competitors. As a result, more IT is getting integrated into business processes. Thus, the role of the CIO has changed in that respect as well.

The trend for CIO interaction within their field is less about managing people and more focused on the management of valued service providers. As they become more specialized, there is an increase in outsourcing of applications and processes from service providers, such as Salesforce.com, and CIOs are to a great extent acting as brokers of services as well as leaders of large in-house organizations.

**So the role of the CIO has really evolved into a strategic partner. How are IT departments responding to some of the economic pressures to reduce costs and contribute to revenue in this new role?**

Cost cutting has always been the main lever used by an IT department in response to economic pressure. In the past, this translated into headcount reduction. However, over the past few years, IT departments have shifted so

much of their personnel that most are now running fairly lean; further cuts would compromise their operations. The new model is to move more of the operations to various service providers to avoid bearing the capital cost for the equipment, hardware and networks, which are all required to keep the organization going. In doing so, capital costs become an adjustable expense item. For example, if I need 2,000 computers, I can purchase the use of those computers from an infrastructure service provider, such as Amazon, HP or IBM. In the event that this need is reduced—whether as a result of reduced business demand or perhaps a seasonal need—I can dial it back down to 1,500 computers or so. This way, I can rapidly respond to changes in the business. Another model is the use of Application Service Providers (ASPs). A significant amount of sales activities are being outsourced to Salesforce.com and similar businesses. Of course, outsourcing either onshore or offshore is still prevalent. For example, in the legal practice, activities and processes are outsourced to both offshore and onshore sources.

Many organizations often contend with a legacy sunk cost, and structural change is gradual and occurs service by service. The maturity of service providers in a certain area is also a consideration. In some cases, the investment required to outsource is actually greater than what would be needed to maintain it in-house.

### **How has new technology such as social media and cloud computing made an impact on the CIO? How do CIOs successfully manage all of these new technologies?**

IT departments have had to become ever more nimble and knowledgeable about new technologies with the advent of cloud computing and social media. However, there is no ready answer to your second question. We've seen various trial models, but we don't know which model will truly be successful and take hold.

Regarding social media, if you're not using it, you are missing out on a huge opportunity to receive valuable, instantaneous feedback from your customers. Know that your deft competitors are taking full advantage of that. In the old days, a marketing department invested exhaustive time in assembling statistically relevant focus groups to test their new products. Today, a company can receive immediate feedback through Facebook, Twitter, Pinterest and a myriad of other social networks. Before the major rollout of a product occurs, products can be tested, consumer reviews can be gleaned, and any negative feedback can be addressed by taking advantage of a significantly larger focus group through social media crowdsourcing. So, if you're not using it, you're at a great disadvantage both in cost and improving your product set.

Notwithstanding the benefits, interacting through social media also has its risks. It can be a great tool to enhance your reputation, but it can also expose an organization to far-reaching (read: worldwide) public criticism that can potentially be damaging. Recognizing this, negative feedback generated through social media requires an immediate response to minimize its impact, and a company should have a good "damage control" plan in place.

Cloud computing has completely changed the way in which companies go about deploying and procuring new applications and infrastructures, and companies have begun going into procurement on demand. The provision cycles have been reduced from months to weeks to even less in some cases. On the Amazon cloud, if the offering is already in place, you can provision an abundance of computing power online in a matter of minutes. This holds true with other service providers as well.

Many of the organizations we work with that haven't already deployed some aspect of cloud computing have imminent plans to deploy it. Within the next decade, most new businesses and the majority of applications are going to rely on cloud service providers to make those transactions, and company-specific data centers will begin to wither away into warehouses for legacy applications that run on outdated technology. Legacy applications will likely never go away, but they'll take a backseat to new technology.

### **How can social media campaigns and applications be optimally used to help companies connect with customers? What are some of the effects of social media platforms on an organization's internal communication culture?**

Social media provides instant feedback from customers—both bad and good. That's a key benefit for businesses dealing with customers. Internally, social media is a little trickier. It gives employees a forum to communicate with their superiors and coworkers on a less-formal basis, so you can get immediate feedback on the status of the workforce. For example, they may not be happy about a specific procedure within the organization. Ideally, through social media, the managers can hear about it in this informal setting and correct the matter, and you can

presumably provide satisfaction to your employees. This is, perhaps, an oversimplification, but it illustrates one positive aspect.

Social media is also a great repository of innovation. If you make an internal query using social media as your vehicle, you're unleashing the power of all of your employees to help fix your problem. In the old days, if you had a problem, you had to rely only on your department or immediate organization to help you. Now you have the capacity to reach a colleague in Germany who has faced the same problem. That colleague can tell you how he or she resolved it, and you may very well be able to use all or a part of that solution in the U.S. This is particularly valuable to large, global corporations. In my opinion, this is the best internal use that social media technology has unleashed. It has also helped to connect employees across the world to make the company's mission more coherent and effective.

On the other hand, you have to be very careful that employees don't use social media as a forum to vent their frustrations about the company. Venting complaints can quickly get out of control, and it can have a very bad effect on the reputation of the company and the morale of the employees. So it has to be monitored to ensure its effective and correct use.

### **What are some of the key benefits of cloud computing for a business? Does it effectively cut cost and improve productivity?**

Cloud computing does not necessarily cut costs, but it certainly reduces capital costs. That reduction is offset by higher operating costs. It does, however, make an IT department more agile and allows it to respond quickly to changes in demand from the business by adjusting the supply of those services that are cloud-based. When demand increases, IT can increase their presence on the cloud to provision more servers and provide more bandwidth to an application when needed. When the demand decreases, they can give it back without needing to pay for it.

Before this technology was developed, IT departments had to provision well in advance for occasional or seasonal peaks. A bank in Canada once presented me with statistics indicating that the Friday night before Christmas Eve has the highest demand for automatic bank machines (ABMs), which is what ATMs are called in Canada. They had to specially provision the backend for their machines to handle the demand on Christmas Eve, which was around 100 to 150 percent greater than the demand of a regular day, and it was only for that one day in the year. It wasn't possible to repurpose those systems for other days, as a far more complex process than was necessary would be required. That's a lot of waste.

Cloud computing allows enterprises to repurpose those machines to do other things when they are not being used for that capacity. IT can provision for a normal day inside the company and purchase additional capacity from a cloud service provider for a given week. This is certainly helpful for retailers, where the period between November and December generally represents a significantly higher volume of business than other months. And it applies to other industries where there are seasonal increases and decreases in demand as well.

Let's say you own a ski resort, for example. The peak demand for ski resorts is during the ski season, which runs approximately three or four months out of the year. The balance of the year essentially involves your systems sitting idle. Why have a data center during the off-season? Why provision a system? With cloud computing, you can have those systems and infrastructure on demand through a service provider during the three or four months that you need them, and when you don't need them, you don't have to worry about maintaining a system. It creates a new avenue for business owners. Previously, a resort owner may not have wanted to invest in advanced IT services to their clients. Now they can provide the most advanced services to their client base, knowing that they only have to pay for it for four months out of the year. So IT is akin to an electric utility service—it goes up and down as demand increases or decreases.

### **How has the proliferation of mobile devices changed the way that CIOs do business? How do you see the future of mobile devices in the workplace?**

Mobile devices present a brand-new problem for CIOs; they never had to face this kind of challenge prior to the advent of mobile. Before, the enterprise could easily define the perimeter of its organization. As IT became more significant and the Internet became more accessible, corporations have had to build fortresses around their IT infrastructure using firewalls, proxy servers, intrusion detectors and intrusion prevention services. The first device

that breached that firewall was the Blackberry, which is now being supplanted by smartphones such as the iPhone and Android. Because people can connect their iPhones and other devices to cellular networks or Wi-Fi, they can connect to the company network. This signifies a breach, and the first reaction of any CIO was to bar it. That lasted maybe six months, and then it was retracted because everybody wanted to be able to check their emails on their smartphones. So CIOs have to bring in new technology to better manage that.

Another issue—and this one has really jolted CIOs—is that for the first time in history, company employees have better technology at home than what they have access to in the workplace. That's a complete paradigm shift. At the beginning of my career, the companies I worked for had far superior technology than what I had at home. Computers were very expensive back then, and access to the networks we have now was not available. Back then, I had dial up. Now, with the advent of broadband and FiOS, bandwidth is much greater at home than what you have at your office. You can buy a laptop, a MacBook or even an iPad that has far more computing power than your desktop at work. Employees are becoming frustrated by the slow processing power of their work computers along with its outdated software and, not surprisingly, want to take work home and use their own, more updated software.

All of these problems have forced CIOs to loosen the perimeter a little and investigate how to implement a bring-your-own-device (BYOD) policy. However, if you do offer a BYOD option, all applications must be delivered to the end user via a web browser so that applications won't need to be adapted to work on the end user's software. This is currently not possible with legacy applications. There are also liability questions—who is responsible if the laptop breaks; who is liable to fix it; whether the company should be responsible for providing replacement laptops so that employees will have the ability to work while their devices are being repaired. All of these issues must be worked out.

Mobile devices have completely changed the workforce management side of the business. CIOs need to tailor all of their websites and older offerings to ensure that they are both smartphone- and desktop-compatible for the end user.

**You've mentioned that organizations are a generation behind with technology, with people having better technology at home than at the office. Do you see this changing? Do you see organizations working harder to have the most up-to-date technology?**

The main reason that organizations are one generation behind with technology is that organizations need to make sure that all of their legacy applications work on the new technology. As the inventory of legacy applications becomes larger, it becomes more difficult for organizations to introduce new technology, and every single application on the new technology must be certified. The certification process can be time consuming and cost prohibitive, and consequently, organizations sometimes dawdle in introducing new technologies.

There are ways around that, but CIOs are responsible for IT operations, and there is often a reluctance to contend with change because, during periods of change, things break. If you don't change anything, you reach a steady state where things rarely break because the hardware is reliable. Some CIOs will offer that decertification is the reason they are avoiding adoption of new technologies. This is the reason why many companies are still using Windows XP, which is already two generations behind. Microsoft is going to release Windows 8 by the end of this year, which will make XP even more outdated. And forget about trying to introduce the Apple operating system or trying to take advantage of the new Android software offered by Google. I'm not saying that CIOs should embrace every new technology, but I do believe the reason they are not considering it is because it is prohibitive to introduce new technologies into the organization. However, not introducing those new systems and tools also creates greater risk and can spur considerable negative employee feedback. Again, one of the big dangers is having the business say that IT cannot support the demand and expect their employees to bring in Windows 7 on their own machines.

The CIO's role in the organization is to bring in new technologies. The business grows impatient if the CIO does not move fast enough, but CIOs—by nature and by prudence—tend to drag their feet and need to be guided by the business. There are some cases where the CIO is highly proactive, and I've worked with plenty who are happy to implement new technologies. These are the most successful CIOs.

**You have worked with many CIOs across a multitude of industries. What are some other key issues they face?**

The key issue for CIOs going into the future is figuring out how to operate in a world where the infrastructure and most applications are provided by various service providers. Remarkably, we're noticing that business processes are being provided as a service. There are companies that propose to automate an entire organization's business processes and charge them per transaction for that service. As more and more businesses become reliant on other service providers, it's up to the CIO to orchestrate and manage all of those service providers so that they provide the best operations to the business. Here, CIOs must assume the role of broker as well as orchestra leader in managing all of these moving parts. It's a completely different model and requires a different kind of training than the old CIO role, which was a technology lead.

You have likely seen the host of articles contemplating whether CIOs will have a place in the future. I believe they will because businesses still need somebody to perform these functions—to harmonize the software within the enterprise's own data center, all of the software brought in from the outside, and a variety of other services in order to provide a seamless support for the business processes of the company. The "CIO" nomenclature may be modified, but the function and role of the CIO will still exist. [AJ](#)

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**BIOS:**

**Daryouche Behboudi**

Dr. Daryouche Behboudi is the managing partner leading Kurt Salmon's CIO Advisory practice in North America. He has over 13 years of experience in managing and delivering consulting engagements with top-tier financial services firms, focusing on IT operations and organizational design, IT integrated planning, IT procurement and outsourcing, enterprise data center strategy, enterprise network architecture, IT cost takeout, IT strategy articulation, and enterprise program management office design and implementation.

Prior to joining Kurt Salmon in 2009, Dr. Behboudi was a managing director in the Cross Industry Services Group at BearingPoint, focusing on financial services clients.

Dr. Behboudi was assigned to the Oak Ridge National Laboratory as a research fellow during his postdoctoral study, where he worked on modeling advanced materials for use in aircraft design. He earned his doctorate in electrical engineering from Lehigh University.

**Scott Robbin**

Scott Robbin is a director at Argyle Executive Forum. In this role, Mr. Robbin manages content development, editorial speaker recruitment and execution for 20+ annual business events. He has over five years of experience working on the production and implementation of senior-level events. He holds a Bachelor of Arts degree from Columbia University, where he was the captain of the varsity tennis team.