Official White Paper

The Credit Union IT Department of the Future

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Introduction

For decades, credit union IT departments have taken the lead in ushering in change to their organizations. In the near future, technology executives and their staffs must be prepared to assume shifting responsibilities given the likelihood of increasing reliance on technology solutions outside their credit unions. IT professionals may need to take on new roles and develop new skills to manage a virtual infrastructure and collaborate with other business units.

Increasing reliance on cloud computing is just one of the influences behind the evolving form and function of the IT department. In his online column "The IT department we have today is not the IT department we'll need tomorrow," Australian technology consultant Peter Evans-Greenwood identifies global financial upheaval and the "restructuring of the economic order" along with the demands of constantly changing regulations as key forces steering businesses to focus more intently on their core business competencies and to rely on partners and third-party service providers for other functions. Business organizations have less capital available for major projects and a need for speed in taking advantage of new opportunities and side-stepping obstacles. "The challenge is to reconfigure our departments, transforming them from asset management functions into business optimisation engines," Evans-Greenwood suggests.

In this snapshot of the future, the role of the IT department is less about developing in-house systems and maintaining hardware and much more about guiding the credit union to identify and implement solutions already available in virtualized environments to meet the demand for new services such as mobile banking and to capitalize on new efficiencies in areas including core systems, payment processing, e-mail, and system backups. IT professionals will continue to occupy a central position in operations, but their interactions with other business units will likely become more collaborative and consultative.

The annual technology survey by Callahan & Associates bears out the notion that IT continues to maintain its essential place in operations. The majority of credit unions responding to the survey reported that their technology budgets increased in 2010, and IT staff levels are for the most part expected to remain constant.

Restructuring for New Directions

As it has since credit unions began deploying their first ATMs, technology continues to be a great leveler in the financial services industry, permitting financial cooperatives of all sizes to offer sophisticated delivery channels to their members. Though members'

expectations for secure, convenience access to their accounts may take new forms—the growing demand for mobile banking is a current example—the human engine that powers those services has roughly the same working parts. Thus, the primary job functions of IT—security; core processing; help desk and staff support; and server, network and database management—remain fundamental to credit union operations, though the basic responsibilities of these positions are evolving.

IT managers may need to transition their skill sets and those of their staffs from a hardware to a virtual environment. Position descriptions currently calling for mechanical engineering know-how to maintain complex power, cooling, and switching systems and a detailed knowledge of database management will likely shift to emphasize the ability to guide the credit union in leveraging its data and technology tools in the landscape of cloud computing. A thorough understanding of the workings of Internet applications will be critical in this transition, as will the ability to interface as advisors and consultants with other departments assessing cloud-based solutions for everything from basic operations like e-mail to service delivery and marketing outreach.

The pace and scope of regulatory change will continue to have an impact on IT operations and the support the department provides for other business units. According to the Callahan technology survey, the need to comply with new and changing regulations was a major factor behind budget increases in 2010, and the impact of regulatory requirements is not expected to lessen anytime soon.

Looking to the Future Case Study

State Department Federal Credit Union, Washington, D.C. (www.sdfcu.org)
The focus of the IT department of State Department Federal Credit Union is based on the organization's strategic objective "to extend our reach to everywhere our members are stationed or deployed," which, with its global membership, requires a high reliance on electronic and remote delivery of financial services, says Chief Information Officer Charlie Roberts.

A shift to cloud computing supports the credit union's strategic direction and permits a nimbler and more efficient means of delivering technology services, Roberts suggests. That means State Department FCU no longer needs to host key applications or add infrastructure, which is a boon for expense control. What won't change is, "first and foremost, our concern for security and the requirement for robust infrastructure and bandwidth we need to connect to the Web."

"One of my basic philosophies is that we're a financial services company, not an IT company. IT is the means to the end of delivering member service," he says. "Embracing cloud technology allows us to find the best of breed solutions to deliver the services our members want and need. That overall change in philosophy and approach requires an increasing reliance on vendor relationships."

The IT staff of the $1.2 billion credit union with 68,000 members encompasses 17 professionals in two functional areas: (1) network/infrastructure and desktop support and (2) systems, including the core processing system and Internet support for online account access, bill pay and other e-delivery services. While Roberts anticipates that the roles and

responsibilities of the IT staff will continue to evolve, along with their day-to-day activities, he believes they will have more, rather than less, opportunities to support member service and colleagues in other departments.

Infrastructure management will shift to a focus on bandwidth, "managing the large pipes coming in and out of the credit union," where traffic will likely increase as the credit union adopts voice over Internet protocol technologies to support video conferencing and new forms of member service.

The other central responsibility of IT that is likely to grow in importance is security. Technology specialists will be charged with securing sensitive financial data and "ensuring that our vendors provide the level of security the provision of financial services demands," Roberts says. "The cloud being the cloud, we may not always know what's on the other end. Our staff will have to shift gears to develop the expertise so that we can monitor what vendors are doing to protect our perimeter."

The careful scrutiny of the security of new applications will be the purview of the IT staff. Dual authentication systems and multifactor security will become even more important, while keeping these security measures as unobtrusive as possible. "The last thing members need is more passwords to memorize," he says.

Technology professionals will need to continue to develop their understanding of Web technology, HTML code, and browser, search engine, and other Internet systems. "We may not have to know how to write apps, but we have to know enough to work with vendors and app writers to ensure that their security is up to our standards," he maintains.

Roberts also foresees more collaborative working relationships between IT, operations, marketing, and other professionals in the credit union as they assess how new technology tools can support their departments and whether and how those tools fit within the organization's overall technology strategy.

Though the term *cloud computing* is now in vogue, Roberts notes that credit unions have been using various forms of this interface for years. For example, State Department FCU recently signed on to Wire Exchange, a utility from Fiserv that automates the wire transfer process, performs required security and regulatory checks, and formats the transaction for ACH or wire transmission.

Another example is the credit union's Internet banking and bill pay services, hosted through Intuit Financial Services through what is fundamentally a cloud application in which members interact with the credit union through a hosted program.

"Cloud computing isn't new, but it is only just now coming into its own," Roberts says. "Exchange is a good example of next step toward wider adoption of cloud computing by letting someone else host your e-mail system. The credit union industry is looking at the advantages of having more traditional applications hosted elsewhere."

Disaster recovery and business continuity planning remain crucial as credit unions move toward cloud computing, he adds. "Just because an application is hosted elsewhere, it's

still up to you to make sure you provide for continuity of service. There's a huge reputation risk at stake if you lose connectivity. Members say, 'My credit union let me down.'"

Becoming More Strategic

Let's consider how the role of IT in supporting the credit union's strategic objectives will influence the department's structure and focus in the future.

As a partner in progress. Other business units will increasingly look to IT for support in identifying which tools and products fit best within the credit union's technology environment.

As a security expert. The whole organization will look to you and your department to ensure and enforce security requirements in the virtual/cloud environment.

As a specialist in vendor management. Building on those first two roles, IT will work with the rest of the administrative team and legal staff to define the credit union's requirements for security and assess the contract terms of technology providers to ensure that they comply with those requirements. For example, you and your staff may be called on to help clarify roles in protecting credit union data in cloud applications: What are the credit union's responsibilities for security breaches under the terms of contracts with third-party providers, and for what are providers responsible? This will require a thorough understanding of cloud-specific solutions for data confidentiality and integrity, system availability, authentication/identification of users, audits, upgrades, accessibility, compliance, and risk management.

In some applications, IT's role will evolve from developing systems and maintaining hardware to working alongside colleagues to review responses to RFPs from vendors. These proposals may be lengthy and complex, and it will be your job to help identity missing requested information and incomplete or conflicting responses.

As third-party providers deliver secure services for everything from mobile banking applications to back-office systems, IT must ensure efficient and secure system integration, helping the credit union to steer clear of opaque cloud services, data "leakage" or loss, and malicious activity in the cloud environment. The trust the credit union places in third-party providers must be based on effective encryption and key protection, monitoring, and verification.

As a guide to efficient regulatory change. Compliance with new regulations is sometimes hampered by the existing structure of management in separate silos. At least as far as the technology element of compliance is concerned, IT can help ensure an organizational response to new laws and regulations and help head off duplication of efforts or departments working at cross-purposes under deadline pressure. The role of IT in fostering a more cohesive approach to compliance may even pay dividends in the form of permitting implementation of a more global response to new systems and updates.

As a leader in disaster recovery planning. IT continues to take the lead and support other business units in disaster recovery; however, more of the recovery is likely to

involve key vendors as less physical hardware is stored at the credit union. Your staff must update risk assessment and disaster response plans with the new technology environment in mind. Be on the lookout for efficiencies in this area: Cloud solutions should reduce complexities of disaster response as there are fewer hardware issues and backup systems.

Looking Forward to a Cloudy Forecast

Seamless, secure, convenient access to data remains the ultimate aim for credit union members, staff, and management, and it's IT's job to deliver. Just a few examples of the areas where technology professionals will take the lead include:

- Providing the access and working with vendors for mobile banking apps that are in increasing demand and standing ready for the Next Big Thing
- Providing staff support in transitioning to new systems and environments
- Remaining vigilant on security and regulatory issues as they apply to every aspect of technology solutions on which the credit union relies

Intriguing ideas spread quickly in cyberspace. Roberts says he was struck by a quote from C. K. Chesterton, an English writer at the turn of the 20th century and early decades of the 1900s, that Bill Murphy of the CIO Executive Series recently shared: "There are no rules of architecture for a castle in the clouds." However Chesterton might have applied that statement, it certainly reverberates today as IT professionals pursue opportunities offered by cloud computing to improve member service and operational efficiency while simultaneously applying necessary security standards. Roberts appreciates the dichotomy of the ephemeral image of a castle in the clouds alongside the very real "rules of architecture" that technology specialists will be tasked with developing in this new environment.