



## CCE: Digital Image Management and Lean Application Management

Enabling the Collaborative Customer Experience

### What You Will Learn

In addition to ongoing consolidation in the banking industry, the last five years have brought significant change to branch banking. Today, branch executives are dealing with:

- Renewed focus on the customer experience
- New competitive pressures from banks that are improving the branch experience
- Check 21 legislation enabling improvements in payments processing

This overview explains how branch executives can respond to these market challenges in the fastest and most effective way possible. By implementing a uniquely efficient and proven architecture in the branch, banks will be able to quickly adapt to the changing environment while maintaining reliability and efficiency.

### Challenge

Branches today face a convergence of challenges unlike any other time in the recent past. Just as banks realize that customers are still walking into the branch to conduct business, they also realize that the technology infrastructure serving those customers will not support additional functionalities.

For example, additional demands on the infrastructure came in 2004 with the passing of the Check 21 legislation, which allows U.S. banks to process checks electronically rather than manually, by capturing and forwarding images of checks presented at the branch. The challenge here is that the quality of the image of the check is sensitive to the size of the data file containing the image—the larger the data file, the better the image quality. So while electronic processing reduces operational

costs, it often requires banks to invest in expensive upgrades to their network in order to support this new functionality.

Tomorrow's branch will demand even more from the network. Voice and video are being added to the branch's toolkit, enabling collaboration with remote specialists and enriching the customer experience. Automation will play a bigger role in the branch of the future, impacting both self-service and aided-service devices. Meeter/greeter systems will enhance the customer experience, maximizing sales opportunities. And advances in security, authentication, and mobile payments are likely to affect the branch in unpredictable ways.

Unfortunately, the critical infrastructure that must support this workload is already costly today. Upgrading the network to handle image traffic adds more cost and complexity to the branch network that may be difficult to justify. And adding functionality through software creates even more cost and management challenges. If a bank is to remain competitive, it must find a way to build an underlying communications and applications architecture that is flexible, extensible, reliable, and efficient.

By offering an extensive technology portfolio, and by partnering with best-in-class providers of financial services solutions, Cisco's Collaborative Customer Experience solution portfolio addresses these challenges with Digital Image Management and Lean Application Management solutions.

### **Digital Image Management**

Digital Image Management is the foundation architecture ideally designed to support increased demand on the branch network, while continuing to leverage existing network investments. It is a solution based upon Cisco® and partner technologies that provide a highly available, scalable, and optimized infrastructure using existing communication networks. In short, banks can add imaging functionality to the network without upgrading the network itself—saving time and money and responding more immediately to competitive pressures and changing market needs.

Using traffic optimization, data redundancy elimination, and compression technologies, the Cisco Digital Image Management solution optimizes branch traffic over the existing WAN; including the significant workload created by teller or platform-based check imaging. Banks no longer have to choose between quality of images and the cost associated with the capacity needed to transmit them.

In addition, the Digital Image Management architecture uses robust quality-of-service (QoS) technology to ensure that priority traffic, such as voice, never suffers as a result of high-demand events. Payday Fridays at most branches generate peak teller transaction levels as the branches deposit and cash checks for customers and non-customers. Banks moving to an image-based deposit automation system would typically have to build a network capable of handling these peak volumes while maintaining adequate service levels for all other applications, even if that capacity is underutilized during other days in the week.

Deploying the Digital Image Management technology and QoS, branches use their existing communications lines without fear that a peak transaction period would degrade other, perhaps higher-priority, interactions.

## Lean Application Management

Taking the efficiency of Digital Image Management a step further, and building on its foundation architecture, is the Cisco Lean Application Management solution. This extension of the Digital Image Management architecture uses proven Cisco and partner technologies to eliminate the need for dedicated (and costly) application servers and complex desktop clients. Using Linux or Microsoft Windows platforms, Lean Application Management moves the bulk of branch application processing to the regional or central data center and migrates branch processing to standard network components and less expensive, simpler thin clients.

In essence, Lean Application Management moves the in-branch processing to a physical appliance that sits directly on the network. This appliance brings all of the benefits of Cisco Digital Image Management to the bank's business applications, while reducing the costs associated with multiple instances of business logic at the branch. Instead of running 10 to 20 copies of the same application on servers and "fat" clients in front of every teller and platform representative, the Lean Application Management environment reduces hardware costs and application management challenges by locating the application on a Cisco Integrated Services Router (ISR) that communicates with simple thin clients at the desktop.

The Lean Application Management environment brings the same robust and proven Cisco technology that manages complex networks worldwide to the bank branch providing unmatched efficiency, reliability, and growth. Cisco understands the criticality involved in branch processing, and uses mission-critical design and technology to implement and simplify application management at the branch.

### Business Benefits

Cisco Digital Image Management was designed for one purpose: to allow banks to deploy a network-intensive application without forcing an upgrade to the network itself. Using this solution, banks can feel safe about moving to an image-based deposit environment without worrying about the underlying network capacity.

Besides saving the costs associated with the proliferation of excessive hardware and operating systems at each desktop and teller station, the Lean Application Management environment simplifies the management of business resources. New or updated software can be deployed to a single device at the branch instead of to every desktop. And the core application logic resides at a central data center, where support resources can be deployed in a much more cost-effective way.

These solutions also provide the underlying architecture to support future solutions that will help the retail branches to enhance the Collaborative Customer Experience. But banks don't need to wait to realize real benefits from this network architecture—immediate benefits of Digital Image Management and Lean Application Management include:

- Easier application deployment and upgrades
- Reduction of branch downtime
- Increased operational efficiency (reducing costs)
- Decreased hardware costs associated with traditional branch automation
- Increased security and compliance within the branch network
- Improved ability to roll out new products and services as quickly as possible
- Improved ability to provide a superior service aligned to customer needs

- Secure connectivity that provides the safe transfer of sensitive information across open networks
- A self-defending network that provides dedicated security to networking devices and appliances
- Increased effectiveness of existing employees, reducing the need for additional new hires
- Trust and identity management, made possible by best-in-class security capabilities
- Improved network manageability
- Enabling the reduction of the bank's carbon footprint and decreasing energy costs

Digital Image Management is the new reference architecture for the branch network. It is the foundation not only for check imaging, but also for future growth of branch technologies. Lean Application Management allows banks to significantly reduce the cost of branch business processing by moving to an intelligent network and leveraging the lower cost and inherent stability of network devices and thin clients.

Together, the Digital Image Management architecture and Lean Application Management capability allow the bank to compete more effectively in the market by bringing new functionalities to its consumers without the undue expense and management challenges of ad hoc network upgrades and expensive server and desktop rollouts.

### **Intelligent Networking**

Digital Image Management and Lean Application Management are part of the Cisco Service-Oriented Network Architecture (SONA) for enterprises. This foundation architecture is designed to build an adaptive, agile, intelligent network that will serve as the platform for delivering superior customer experiences. SONA is the foundation architecture that brings the benefits of a service-oriented architecture into the network, enabling the speed, flexibility, reliability, reduced cost, and improved management of this important infrastructure. By using the intelligent network in the enterprise, the bank's assets can be used regardless of physical location.

By making services and information more readily accessible, SONA can directly improve the efficiency and effectiveness of the bank, allowing the institution to focus its investments on initiatives that increase revenues through innovation and growth.

### **Why Cisco?**

Cisco is the leading networking partner in financial services today. It uniquely provides an integrated voice, video, and data platform, coupled with a best-in-class branch application—providing a comprehensive solution that spans the entire value chain from bank to consumer.

Cisco's focus on reliability, scalability, and security has made it the trusted partner when it comes to supporting mission-critical environments. The Cisco Self-Defending Network responds to the challenges experienced with the untamed growth of the Internet—and buffers financial institutions from threats both inside and outside of the institution. Cisco networks give banks the foundation they need to meet their branch-level legal, regulatory, and security challenges.

Cisco understands the challenges that banks face today, and understands that investments must be made intelligently. It has developed an ecosystem of partners to deliver best-in-class capabilities and support to protect the bank's investment. Cisco's network infrastructure is also protected by an incremental upgrade model, where migration paths reduce the risk of change, versus an overhaul of the entire network infrastructure.

Cisco is dedicated to making the bank branch the most cost-effective and innovative channel it can be. Digital Image Management and Lean Application Management are fundamental to that success.

### For More Information

To learn more about how Cisco's Digital Image Management and Lean Application Management solutions can benefit your bank and enhance the collaborative customer experience, contact your account manager or visit <http://www.cisco.com/go/financialservices>.



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