

# Architecting the Collaborative Customer Experience

## The Challenge of Achieving Customer Intimacy in Retail Banking

Retail banking customers have more choices available to them today than ever before, in terms of where, when, and with whom they can bank. Increasingly, the difference between attracting and maintaining customers and losing them to the competition comes down to providing a compelling experience each time they interact with your enterprise. This can be challenging given the demographic and behavioral diversity across the consumer base.

Effectively appealing to the preferences of any single individual will require providing services ranging from high-touch to self-service options. Understanding customer needs and responding with new and profitable offerings are only made more difficult by the concurrent operational imperative to control costs wherever possible. Institutions are faced with transitioning from the historical approach of pushing products through designated delivery channels to enabling their employees to effectively respond and sell to customers whenever and wherever the customer chooses to interact with the bank.

For retail banks, reducing customer wait times, effectively matching staff expertise to customer needs and integrating information from multiple products to effectively deliver to multiple channels (branch, web, phone, ATM, kiosk) are critical to enabling better sales and service. Key to achieving this is properly educating internal staff and facilitating effective internal collaboration to quickly resolve customer issues and dynamically respond to sales opportunities. Retail banks must balance their focus on increasing revenues while reducing operational expenses and mitigating risks, in order to achieve their ultimate goal – sustainable, profitable growth.

To achieve these business outcomes, the focus for IT is to define technology architectures that integrate disparate silos of customer-related information, maximize internal employee effectiveness, and minimize security risks – while simultaneously enabling reuse, adaptability, and performance.

## Succeeding With an Architectural Approach

Retail banks can get closer to their customers while managing costs by adopting an architectural approach to enhancing the customer experience. The first step is to identify existing customer service business processes and then map them to target business processes. Next is to document the corresponding IT interfaces and interactions that support the current environment and identify those required to support the targeted environment.

As part of this analysis, opportunities to reuse IT services such as compute, storage, application, and network communications across an organization should be identified. These common services should then be considered as building blocks from which new innovative offerings can be developed.

Businesses are increasingly using enterprise architecture, whether following a de-facto industry-standard framework such as The Open Group Architecture Framework (TOGAF), Zachman, or an internally developed approach, to improve the linkage of business objectives to technology architecture. Cisco provides the network infrastructure and services necessary to integrate business tools and devices across silos. Working with your existing enterprise architecture

framework, Cisco® network-based services are among the reusable assets that can help to lower operating costs, increase productivity, and generate new revenue streams.

### Enhance Business Applications with Network-Based Services

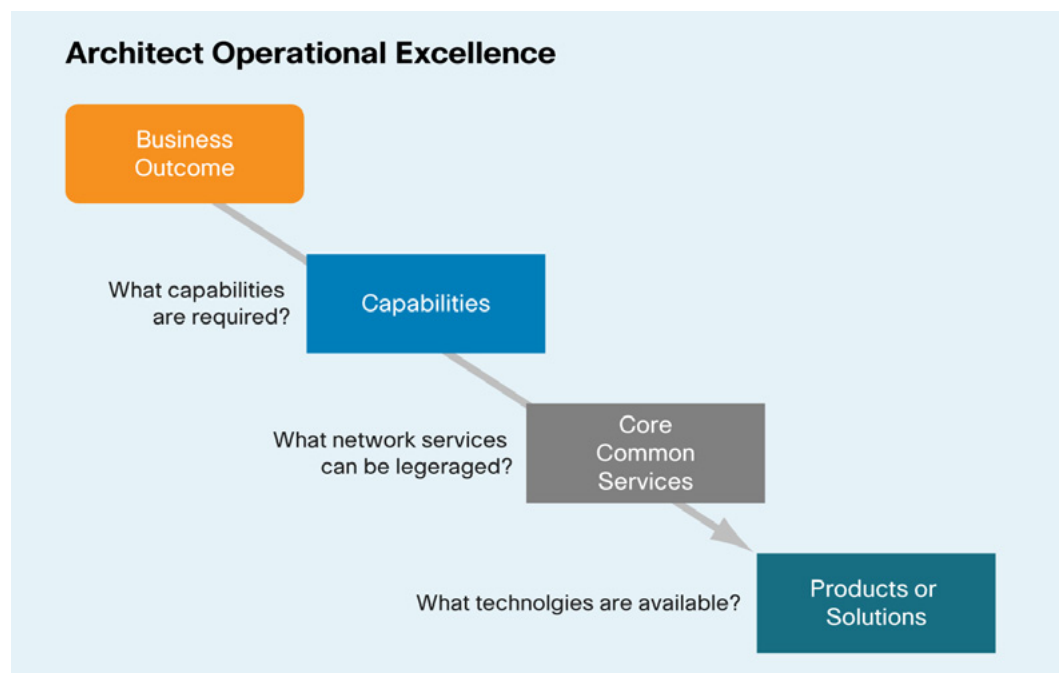
Retail banks deploy a diverse set of applications that perform designated functions – everything from providing remote customer access to execute online transactions, to offering in-branch services such as electronic check processing, to digitally displaying advertisements positioning bank products and services.

Using common infrastructure services to replace or enhance custom-built application functionality is a proven strategy for cost-effective application development and deployment. The use of common services allows for greater standardization, centralization, and control over the application environment, as well as the ability to efficiently develop new capabilities and integrations previously not available.

Well beyond basic transport functionality, Cisco technologies provide network-based services that can be made available across the retail banking enterprise for reuse across business-productivity and banking-specific applications, whether internally developed or externally sourced.

The Cisco Service-Oriented Network Architecture (SONA) is an open framework for network-based services used by enterprise applications to achieve business results. By taking a top-down architectural approach focusing first on desired business outcomes, and then identifying business capabilities necessary to support these outcomes, SONA can be used to identify the core common network services required to enable applications to optimally deliver business capabilities. SONA also provides guidance to architects in how to properly build a solid foundation for network service delivery.

**Figure 1.** Steps of a Top-Down Architectural Approach

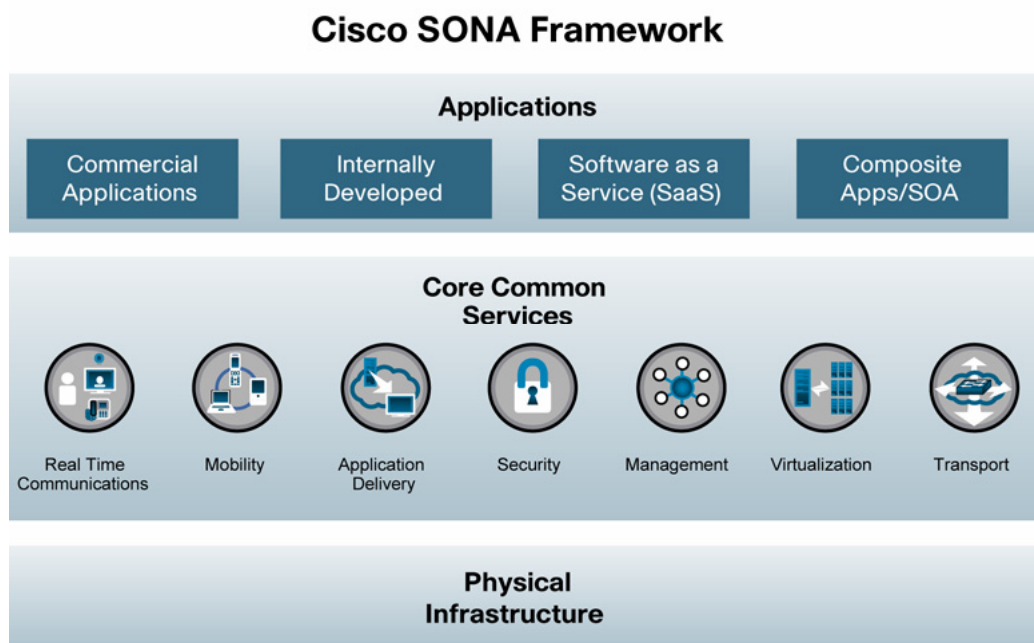


The Cisco SONA framework consists of seven core service groups that deliver consistent and robust capabilities throughout the network. A core service group is a collection of one or more functional services that create a common quality, ability, or feature that can be used or developed by higher-level applications such as loan origination, teller, sales and service, or digital signage

applications. The core services are delivered by physical infrastructure, which may include one or more products or solutions. The core service groups consist of the following:

- **Real-Time Communication Services** offer session and media management capabilities to enrich communications and collaboration between employees and from the consumer location to the advisor's office.
- **Mobility Services** offer access to physical location information and provide connectivity for wireless devices and sensors.
- **Application Delivery Services** help ensure that applications perform to users' expectations regardless of location of either the user or the application itself.
- **Security Services** help protect the IT infrastructure, data, and application layers from constantly evolving threats, and also offer access control and identity functions.
- **Management Services** offer configuration and reporting capabilities across the infrastructure.
- **Virtualization Services** increase the utilization and efficiency of infrastructure for financial institutions seeking to optimize their capital investments and limit power, cooling, and space usage.
- **Transport Services** are the common foundation that enables the breakdown of information silos and delivery of applications that enhance the customer experience.

**Figure 2.** Core Services Categories



### Utilizing Cisco Core Services to Improve Efficiency

The Cisco portfolio of Collaborative Customer Experience (CCE) solutions for the financial services industry provides a clear example of how core common services can be used and reused among multiple business applications. Each of these solutions constructed by Cisco and its partners makes use of network-based services. Conversely, once a given CCE solution is deployed, the core common services it instantiates can be used again by subsequent solutions and

applications, thus driving development efficiency, enabling faster time to deployment, and reducing operating costs.

Cisco core services are pervasive across the networked environment and retail banking domains and may be centrally managed by existing Operation Support Systems (OSS) or operational workflow applications. The portfolio of Collaborative Customer Experience solutions is focused on increasing revenue, reducing costs, and mitigating risk while building closer relationships with your customers. The core services used across this portfolio of solutions include: transport, real-time communications, application delivery, security, and management (Figure 3).

**Figure 3.** Common Services Reuse

## Build Upon Existing Services and Solutions

### Cisco Collaborative Customer Experience Solutions for Retail Banking

Customer Interaction Management	X	X	X	X	X	Customer Intimacy ↑
Virtual Expert Management	X	X	X	X	X	
Digital Image Management	X		X	X	X	
Lean Application Management	X		X	X	X	
Secure Self-Service	X			X	X	
Common Network Services	Transport	Real-Time Communication	Application Delivery	Security	Management	

### The Collaborative Customer Experience Solutions Portfolio

Cisco's Collaborative Customer Experience solution portfolio gives your business better access to more accurate and timely information throughout your organization despite potential limitations in network bandwidth to branch, ATM, or financial center locations. These solutions offer the level of security necessary to give your customers both the convenience they desire and the confidence they deserve, by adequately protecting their transactions. They also provide innovative approaches to meeting customer expectations that each interaction with your bank will be time well spent – all while keeping costs down by using common infrastructure services.

The following Collaborative Customer Experience solutions use the Cisco SONA framework to address many of the key issues facing retail banking leaders today as they seek to offer an outstanding customer experience.

### **Customer Interaction Management**

The Cisco Customer Interaction Management solution provides an integrated communications platform that optimizes customer flow within a branch, while increasing the effectiveness of customer-facing staff. By integrating the Cisco Unified Wireless IP Phone 7920, Cisco Digital Media System (DMS), and queue-management applications provided by Cisco partners, the solution enables bank staff to match the needs of visiting customers with the expertise of product specialists, directing customers to the right person as quickly as possible.

Should a specialist not be available immediately, the solution can deliver targeted, personalized digital marketing messages while customers wait, informing them of related product offerings of interest.

To learn more about how the Cisco Customer Interaction Management solution can optimize the time your customers spend in the retail branch, visit:

<http://www.cisco.com/web/strategy/financial/branch-optimization.html>.

### **Virtual Expert Management**

Extending the specialist-matching concept behind the Customer Interaction Management solution, the Virtual Expert Management solution gives branch visitors access to the financial product expertise they expect at every branch. Customers seeking information about loans, investment products, or other products and services that cannot be provided by onsite staff can quickly connect over two-way interactive video to an appropriate financial expert – regardless of where that expert is located. Specific questions can be answered on the spot by knowledgeable advisors who provide the personal touch essential for building strong customer relationships.

To learn more about how the Cisco Virtual Expert Management solution supports collaborative customer experiences, visit:

[http://www.cisco.com/web/strategy/financial/virtual\\_expert\\_management.html](http://www.cisco.com/web/strategy/financial/virtual_expert_management.html).

### **Digital Image Management and Lean Application Management**

Banks can support the surges in network traffic generated by check image capture applications without major network upgrades using the Digital Image Management solution. The solution uses proven technologies to optimize branch traffic over the WAN and quality-of-service (QoS) technology to help ensure priority traffic such as voice never suffers interruption. The Digital Image Management solution eliminates the need to build a network capable of handling peak volumes in order to maintain adequate application service levels.

Taking this efficiency a step further, the Lean Application Management solution reduces the need to maintain and manage costly application servers and desktop clients in the branch by allowing you to move the bulk of in-branch processing to the data center, while still meeting the performance requirements of application users in retail locations. The remaining local processing can be further consolidated to an in-network appliance that presents branch applications to thin desktop clients. This solution allows you to provide the services your customers want while reducing per-location costs.

To learn more about the Cisco Digital Image Management and Lean Application Management solutions for retail banking, visit: <http://www.cisco.com/web/strategy/financial/dim-lam.html>.

### **Secure Self-Service**

As your bank begins to offer convenient self-service banking through unattended touch points such as ATMs and kiosks running on converged IP networks, you will need a comprehensive security solution that provides the same level of protection that your branches enjoy. The Secure Self-Service solution helps your retail bank safely extend branch services to self-service locations,

thereby protecting not only your assets against attack but reducing costs associated with fraudulent transactions and compromised customer data. In turn, you can elevate customer confidence, expand your brand equity, and translate positive sentiment into greater profits.

To learn more about how the Cisco Secure Self-Service solution extends the customer experience beyond the branch, visit: <http://www.cisco.com/web/strategy/financial/secure-self-service.html>.

## Summary

The portfolio of Cisco Collaborative Customer Experience solutions helps address many of the key issues faced by retail banks today in providing a customer experience that creates competitive differentiation. Starting with a robust foundation of secure wired and wireless infrastructure and extending it to enable cost-effective image transfer and voice and video communications, this solution portfolio creates new ways to serve your customers in a manner that is both efficient and customer-centric – so your customers know you are focused on their personal needs and preferences.

By deploying these solutions, your business not only benefits from increased customer satisfaction and employee efficiency, but also accrues cost savings and faster time-to-capability through the use and reuse of Cisco core services. Because Cisco Collaborative Customer Experience solutions utilize the network-based core services described in the Cisco SONA framework, these solutions support your business goals while achieving rapid return on investment. Working in concert, they will help you increase revenue, reduce operational expenses, and mitigate risks while supporting sustainable, profitable growth.

## For More Information

To better understand how your network can become a strategic asset through reusable services, contact your local Cisco representative or visit:

[http://www.cisco.com/en/US/products/ps8222/serv\\_group\\_home.html](http://www.cisco.com/en/US/products/ps8222/serv_group_home.html)

Cisco Collaborative Customer Experience solutions are in widespread use by financial services organizations worldwide. For more information on successful implementations and best practices, visit: <http://www.cisco.com/go/financialservices>.



Americas Headquarters  
Cisco Systems, Inc.  
San Jose, CA

Asia Pacific Headquarters  
Cisco Systems (USA) Pte. Ltd.  
Singapore

Europe Headquarters  
Cisco Systems International BV  
Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).

CCDE, CCENT, Cisco Eos, Cisco Lumin, Cisco Nexus, Cisco StadiumVision, Cisco TelePresence, the Cisco logo, DCE, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn and Cisco Store are service marks; and Access Registrar, Aironet, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, EtherFast, EtherSwitch, Event Center, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, IronPort, the IronPort logo, LightStream, Linksys, MediaTone, MeetingPlace, MeetingPlace Chime Sound, MGX, Networkers, Networking Academy, Network Registrar, PCNow, PIX, PowerPanels, ProConnect, ScriptShare, SenderBase, SMARTnet, Spectrum Expert, StackWise, The Fastest Way to Increase Your Internet Quotient, TransPath, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0807R)