Cisco Interactive Services Solution: Engage Your Audience the Way They Want to be Engaged

Executive Summary

The Cisco® Interactive Services Solution uses the network as the platform to transform customer experiences with interactive digital media. Taking full advantage of Cisco's video, collaboration, and cloud architectures, the solution allows large and small enterprises and public agencies to transparently provide updated product or service information including educational content in real time, improving the customer experience and increasing customer retention. Through the simple reuse of web applications, the solution allows organizations to get feedback from end users to measure marketing effectiveness as well as to dynamically provision and disperse relevant content. Effective reuse of web content and applications along with remote delivery of content and advertisements helps to increase advertising revenues and improve business and customer processes through effective management of digital displays and open online spaces.

Engage Your Customers with Interactive Digital Media

The focus of digital media technology is quickly moving from communication and broadcast signage to interaction, collaboration, and integration of web, mobile, and signage technologies. Digital media, video, and collaboration solutions are often compartmentalized, making integration difficult and deployment and management expensive. Traditional digital signage requires a significant investment for content creation, applications, and technologies but has limited reuse. Cisco developed the Cisco Interactive Services Solution to address such market trends, integrate technologies, and leverage previous investments in content creation.

The Cisco Interactive Services Solution brings together multiple digital media endpoints to provide efficient management and consistent user experiences by delivering, interactive multimedia content and web-based applications to interactive kiosks and displays that engage audiences in a meaningful way. The solution allows businesses and public agencies to combine applications built on web technologies for consumer, passenger, and citizen information as well as marketing and branding promotions. The solution combines digital media devices, a management platform, collaboration applications, and a network infrastructure to deliver a comprehensive set of customer engagement services, built on a platform that can quickly and efficiently add new applications over time.

- The solution supports management of interactive kiosks and noninteractive digital signage from a common platform.
- The solution delivers real-time collaboration services such as video concierge for rich, live interaction with customers and citizens, in multiple languages.
- The solution brings together a network architecture that supports mobility, collaboration, and digital media to provide comprehensive services and a scalable platform.
- The solution allows businesses and agencies to quickly use their existing web content on multiple, interactive form factors, greatly reducing the time and cost to deploy new content and applications.

Figure 1. An Interactive Kiosk

Business Incentives

Businesses need to improve customer experiences by providing real-time information and giving consumers or passengers access to the information and services they need to complete their journey or purchase goods and services. Businesses also need to improve efficiency by providing effective self-service solutions and the ability to efficiently scale crucial resources. Businesses must find new sources of revenue generation through advertising, up-selling, or cross-selling. Furthermore, businesses need to address major challenges with current interactive digital media deployments - costly content creation, inconsistent experience across different devices, and siloed, nonscalable solutions for different types of digital media, interaction, and collaboration.

Meeting Customer Expectations

Today, companies across a wide range of industries and public agencies are under increasing pressure to improve their consumer experience and increase revenue opportunities, while reducing operational expenses. Additionally, with the introduction of customer-sensitive and interactive-media terminals, **face-to-face** interactions are slowly giving way to **face-to-interface** interactions. Therefore, businesses need to provide valuable services to customers even in the absence of a human medium.

Effective self-service options are becoming increasingly important across industries, from retail to banking to transportation. With self-service options, customers can quickly get the information or services they need, while businesses and agencies get a cost-effective service delivery option.

Technology is changing the nature of customer engagement across industries and the way we interact with our customers. Customers today have increasing options and tools to get information and make buying decisions. To engage customers effectively, capture revenue, and maintain customer loyalty, you must provide a compelling experience that includes up-to-date information and relevant services in the way the customer wants to receive them.

Retailers, banks, and other business are also increasingly using digital advertising - either at the point of purchase or outside the premises - to achieve increased revenue through cross-selling, up-selling, and customer awareness. Digital advertising is also an increasingly important source of revenue for transit operators and other public agencies.

Challenges and the Cisco Interactive Services Solution

New digital media technologies are providing an opportunity for leading businesses and agencies to change the way they communicate, interact, and engage with customers and citizens. But there are also major challenges involved in deploying digital media technologies.

Challenges include disparate systems, outdated or irrelevant content, high operational costs, and poor reliability. Most businesses and agencies have multiple, disparate systems for different types of signage - travel or product information, advertising, employee information, and so on. This complicates management and operations and results in an inconsistent experience for customers. Lack of timely and relevant content and information can be the result of several problems including limitations in the management platform and network capabilities and the need to create unique content for multiple systems.

The Cisco Interactive Services Solution addresses these challenges and allows businesses and government agencies to deliver a compelling experience and a new way to communicate, collaborate, and engage with their customers and capture new sources of revenue. The Cisco Interactive Services Solution creates new revenue opportunities by increasing the digital advertising footprint and delivering more context-sensitive advertising, along with the integration of interactive and noninteractive signage.

Cisco Interactive Services Solution Components

The Cisco Interactive Services Solution consists of client hardware and software as well as management software (Figure 2).

Figure 2.   Cisco Interactive Services Solution Components
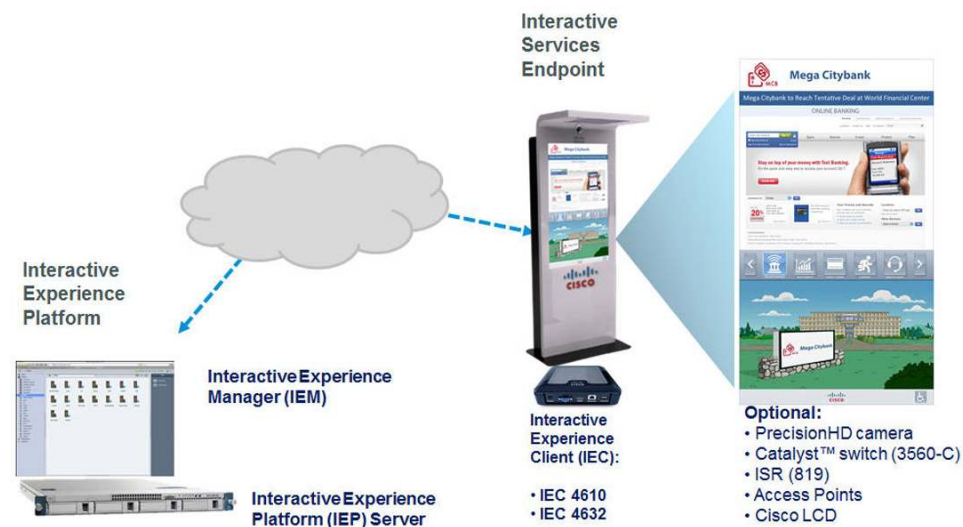
Cisco Interactive Experience Client

The Cisco Interactive Experience Client 4600 Series (IEC 4600) provides the client hardware and software. It includes a full-featured, configurable, reliable, and manageable web computer designed for public venues and web-centric computing. The Cisco IEC 4600 Series is manageable, convenient, secure, and easy to deploy, upgrade, and use.

The Cisco IEC 4600 Series is integrated with digital signage technology to add interactivity to existing signage products and to provide a single compelling solution for both kiosk and signage needs. The Cisco IEC 4600 Series has a web browser developed especially for highly reliable, embedded kiosk and digital signage applications. The kiosk application is based on a template that includes local information, Really Simple Syndication (RSS) feeds, web-based services, and advertising content. Content is integrated with the current service selection to provide highly effective targeted advertising.

The Cisco IEC 4600 Series allows users to access the information they want, when they want it. The user interacts with the kiosk through a high-definition touchscreen featuring a virtual keyboard and smooth kinetic scrolling. The user can connect to a virtual attendant or remote expert using video collaboration technologies. External keyboards and mice and other point-of-sale products such as scanners and printers are supported for ease of business accessibility compliance and administration.

The Cisco IEC 4600 Series features:

- Multiple zones of content
- Web clipping
- Web client automation: Scripting of web pages, automatic login, navigation scripting, and resident Asynchronous JavaScript and XML (AJAX) clients for auto-refresh
- Portrait or landscape orientation
- Touchscreen integration
- Kinetic scrolling
- Integration with peripherals (high-definition video camera, printer, scanner, speakers, and headsets)
- External keyboard and mouse support for accessibility compliance
- Support for customer applications

The Cisco IEC 4600 Series devices are configured remotely from the Cisco Interactive Experience Manager.

Figure 3. Cisco Interactive Experience Client 4600 Series

Cisco Interactive Experience Manager

The Cisco Interactive Experience Manager (IEM) is a browser-based management console that allows the administrator to configure, control, and monitor Cisco IEC 4600 Series devices. It provides for user and device management as well as advanced device configuration through the use of policies and groups. The Cisco IEM is accessed through a web portal with a menu-based GUI.

The Cisco IEM allows real-time monitoring, live viewing of remote screen content, notification of events, and other management and monitoring capabilities. It is also responsible for operations and maintenance. It manages by groups, provides intelligent workflow and scheduling, and supports integration with third-party applications.

With the Cisco IEM, an administrator can perform the following functions.

- Configuration: The Cisco IEM allows the administrator to configure the Cisco IEC 4600 Series devices, including their startup URL, network settings, and peripherals.
- Policy management: Policies provide an easy and flexible way for administrators to apply settings to a group of users or devices.
- Session management: An administrator can apply a session time limit to control the kiosks' usage.
- Remote control: Administrators can control the behavior of the kiosk in real time, including muting the audio, locking out the user, or sending the user a message.
- Logs: The Cisco IEM can be set up to log the traffic from the Cisco IEC 4600 Series devices, making it easy for administrators to analyze the data.
- Upgrades: Cisco IEC 4600 Series client software may be remotely upgraded by an administrator, using the Cisco IEM and its grouping capabilities.

Solution Benefits

The Cisco Interactive Services Solution is unique in the marketplace by bringing together web-based content and applications for interactions, video collaboration capabilities, and easy-to-use remote management capabilities. The ability to handle and integrate data, web, voice, and video content through multiple endpoints helps businesses engage their customers in a new way, delivering an improved experience and ultimately increasing revenue. The Cisco Interactive Services Solution is the most compelling platform to effectively reach customers, travelers, partners, and employees with important information, news, training, promotions, events, and interactive services.

The solution provides the following benefits.

- Improved customer experience: Customers and travelers access information they want, when they want it. There is better visibility for the customer and traveler through capabilities such as real-time information, context and language-based information, wayfinding, virtual attendants, and more.
- Collaboration: Customers can interact with virtual customer service representatives and travelers can connect to virtual station attendants through a two-way high-quality video chat.
- Interactive services: Customers search for information or make inquiries. For travelers, the solution can provide interactive trip planners, service advisories, and translations for international travelers and multilanguage communities. Retail customers can interact with store maps, product demonstrations, and virtual store assistants; watch customer testimonials; print promotions and coupons; and order products or services. Bank customers can perform transactions, access online banking, and calculate investment, credit, mortgage interest, or payments.

- Extended community reach: Context-sensitive community information can be delivered at public sites around town such as recreation centers, libraries, museums, and tourist information centers.

- Advertising: The solution supports the delivery of digital coupons and promotions, and more effective cross-selling and up-selling opportunities by delivering content that is real-time and context based.

- New revenue streams: Content can be drawn from varied digital repositories of prerecorded or live video, static images, and animations. This provides an architecture for a centralized marketplace where content playback time and interval can be monetized to create additional business models and revenue streams from advertisers on prepaid as well as pay-per-display, duration-based billing plans. Transportation agencies, for example, can sell advertising space on the kiosks that promote businesses, local restaurants, and tonight's television shows.

- Increased operational efficiency through centralization: Centralized management helps to ensure availability, flexibility, and efficiency across wide-deployment touchpoints.

Figure 4.   Example of an Interactive Screen
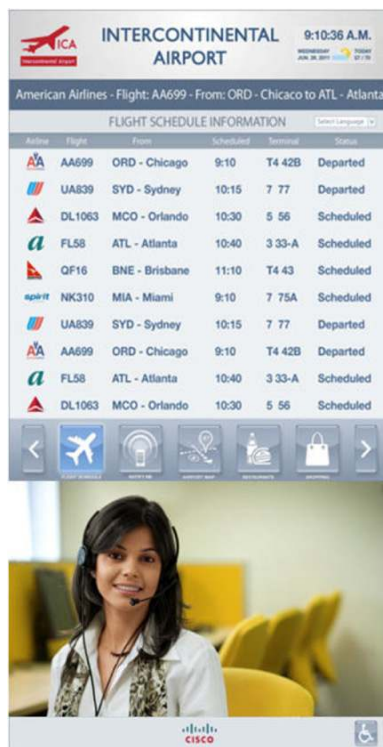
A Broad Partner Ecosystem

The Cisco Interactive Services Solution offers a broad partner ecosystem. Our partners provide solution development, content creation, and deployment to support a successful digital media implementation. The Cisco partner ecosystem includes the following.

- Deployment partners: These trained channel partners and systems integrators specialize in Cisco Interactive Services Solution deployments.

- Solution-development partners: These partners continue to develop integrated solutions to further extend the capabilities of the Cisco Interactive Services Solution.
- Content-creation partners: These partners know how to plan, create, design, and optimize content for the Cisco Interactive Services Solution.

Service and Support

Cisco and its partners provide a broad portfolio of end-to-end services and support that can help you lower total cost of ownership and increase business agility and network availability. This portfolio is based on the Cisco Lifecycle Services approach, which defines activities needed, by technology and by network complexity, throughout the six phases of the network lifecycle: prepare, plan, design, implement, operate, and optimize. For more information about these services, visit http://www.cisco.com/en/US/products/svcs/.

For More Information

For more information about Cisco Interactive Services, visit http://www.cisco.com/go/dms or contact your local Cisco account representative.