

Leading Cable Provider Brings Next-Generation TV Experience to China

Executive Summary

CUSTOMER

Oriental Cable Network

INDUSTRY

Service Provider

CHALLENGES

- Meet government mandates for cable providers to offer digital and next-generation interactive-TV services
- Transform business model from operator offering basic services to leading provider of next-generation digital broadcasting services
- Invest in new IPTV services in the areas of education, community, and entertainment

SOLUTIONS

- Converged media service delivery platform composed of content and applications
- Services roadmap and bundling strategy for IPTV services
- Cisco technology to support interactive-TV services, upgrade existing network infrastructure, and improve access coverage to meet increasing video traffic demand

RESULTS

- Upgraded 800,000 existing customers to digital network
- Implemented new high-definition pay-TV channels, resulting in 50,000 subscribers
- Provided broadband services to 300,000 consumers and 20,000 corporate VPN customers over new network
- Selected by Shanghai government as trial city for government's next-generation broadcasting (NGB) initiative

Background

Oriental Cable Network (OCN) is one of the largest cable-TV operators in Shanghai, China—one of the fastest-growing areas in the world—serving 5.9 million households. Driven by government mandates (the 3-Network Convergence policy and next-generation broadcasting [NGB] initiatives), OCN launched a new entity in Shanghai to create an innovative, interactive-TV experience. OCN partnered with the [Cisco® Internet Business Solutions Group \(IBSG\)](#) to conduct a comprehensive pay-TV market assessment, define and prioritize interactive-TV services, and develop a technology roadmap.

Challenges

Despite its dominant position in the pay-TV market, OCN faces competition from Internet Protocol television (IPTV) service providers (SPs) and has undergone major transformation to upgrade its cable network to digital to deliver new, feature-rich media and entertainment services that increase revenue and meet the demands of a growing middle class in China.

State-owned Oriental Cable Network is challenged with transforming its fundamental business model from offering general programming with monthly fees to providing next-generation digital broadcasting services.

Opportunities

This presents a compelling opportunity for OCN, as Shanghai consumers are starved for content and now have discretionary income for new services. Investments in new IPTV services promise to generate significant revenue through choice, upselling, and interactive services in the areas of education, community, and entertainment, creating a new television experience and increasing customer loyalty.

Solutions

Cisco IBSG engaged with OCN in early 2008 to develop a holistic approach for transforming OCN's business model, technology architecture, and service offering. Both companies worked together to conduct a comprehensive pay-TV market assessment, define and prioritize interactive-TV services, and develop a technology roadmap to capture market share and expand OCN's services portfolio.

"The convergence of voice, video, data, and mobility networks with advanced communication devices presents a wonderful opportunity for Oriental Cable to upgrade to a fully application-flexible network. We determined that the best way to transition to these next-generation broadband services would be to migrate to a Cisco network, which is best suited to support our increasing IP traffic volume."

Wan Qianrong, CTO

Oriental Cable Network

Pay-TV Market Assessment. To start, Cisco IBSG and OCN completed an assessment of the pay-TV market and OCN's competitors. In addition, they performed a benchmarking exercise to formulate a high-growth, lucrative services portfolio. The assessment included segmenting the customer base and identifying targeted customer tiers based on household income, spending patterns, and geography.

The benchmarking study was developed to analyze pay-TV spending as a percentage of income level, an interactive-TV service portfolio and respective adoption rates, and service-bundling options across different global markets.

Interactive-TV Services. Cisco IBSG built a business case for a services roadmap and bundling strategy based on the group's global experience in "Connected Home" thought leadership and learnings from IBSG interviews and discussions with OCN and selected customers. The objective was to help OCN increase customer loyalty, given growing competition from IPTV, satellite TV, terrestrial TV, and Internet video providers, while simultaneously increasing revenue.

The result was a converged-media service-delivery platform composed of two major components: content and applications. Building on OCN's existing content proposition, the company launched new, value-added TV services—including replay, time shifting, personal video recording (PVR), and video on demand (VoD)—to allow users more control and maximize the opportunity to monetize content resources.

The applications platform was designed to simplify subscriber lifestyles by providing them with public information such as traffic and weather conditions and stock market prices, transaction capabilities such as payment for public utilities, and entertainment capabilities such as gaming and karaoke. In addition, Cisco and OCN performed a benchmarking exercise to formulate a lucrative, high-growth services portfolio. The assessment included segmenting the customer base and identifying targeted customer tiers based on household income, spending patterns, and geography.

Technology Deployment. Providing a new television experience through service differentiation is key to strengthening OCN's leading position in the competitive pay-TV market. Cisco IBSG recommended a technology strategy for supporting interactive-TV services and expanding and upgrading existing network infrastructure and access coverage to meet increasing video traffic demand. Several Cisco solutions were implemented, including:

- Cisco two-way hybrid fiber-coaxial conversion technologies and digital head-end products for digitizing OCN's TV platform
- Cisco PowerKEY® Conditional Access System inside OCN's set-top box (STB) to ensure network security and user authentication
- Cisco 8488 high-definition STB with PVR functions

- Cisco Content Delivery System (CDS) solutions to initially support at least 10,000 VoDs
- Cisco IP technologies, including Cisco 7600 Series Internet Routers, CRS-1 Series Routers, and ONS15454 Multiservice Transport Platform for fiber switching. The company also deployed ASR 9000 Series Aggregation Service Routers, making them the first routers of their kind to be installed in the China cable TV industry.
- Cisco DOCSIS 3.0 technology for OCN's top-tier broadband customers

"We are grateful to have engaged with Cisco IBSG. They brought valuable global experience and knowledge in the local media and entertainment market to help us shape our business architecture to drive growth during our transition. We are thankful to have set a timely roadmap and execution plan to further compete and make us the leading innovative cable TV operator ahead of our peers."

Liu Jiu Ping

Vice President, Business Development

Oriental Cable Network

Results

This major transformation to deliver new, high-value, feature-rich media and entertainment services took more than 18 months. Today, OCN has upgraded 800,000 existing customers to its digital network. Of that number, 350,000 customers now subscribe to interactive-TV services. In 2009, OCN launched high-definition pay-TV channels, and 50,000 customers now subscribe to this service. In addition, OCN provides broadband services to 300,000 consumers and 20,000 corporate VPN customers over the new network.

The government of Shanghai selected OCN as the trial city for its NGB initiative based on its success in service innovation and state-of-the-art network architecture. By the end of 2010, OCN will complete Phase 1 of the NGB network expansion and will be able to support 500,000 super-high-speed connections that provide higher bandwidth for Internet access and other bandwidth-intensive services such as consumer Cisco TelePresence™ (the latter is currently under discussion). Benefiting from the 3-Network Convergence initiative, OCN plans to develop and offer voice services based on voice-over-cable technology.

Next Steps

This major transformation to deliver new, high-value, feature-rich media and entertainment services took more than 18 months. OCN will continue to bring new digital lifestyle services and home entertainment to Chinese consumers. Under the leadership of its major shareholder, Shanghai Information and Investment Incorporation, OCN plans to adopt cloud-computing technology to improve the lifestyles of Shanghai citizens by connecting government agencies, citizens, and enterprises via an information network that would enable citizens to enjoy interactive one-stop services in education, healthcare, transportation, sports, and entertainment in Shanghai—all via their televisions or connected-home devices. Cisco IBSG will continue to provide strategic consulting to OCN along its journey to become the leading provider in China.

More Information

Cisco Internet Business Solutions Group (IBSG), the company's global consultancy, helps CXOs from the world's largest public and private organizations solve critical business challenges. By connecting strategy, process, and technology, Cisco IBSG industry experts enable customers to turn visionary ideas into value.

For further information about IBSG, visit <http://www.cisco.com/go/ibsg>



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