



CUSTOMER SUCCESS STORY

TIME WARNER CABLE SUCCEEDS WITH INNOVATIVE “TRIPLE PLAY” VOICE SERVICES

EXECUTIVE SUMMARY

CUSTOMER NAME

Time Warner Cable

INDUSTRY

Cable

BUSINESS OPPORTUNITIES

- Create a differentiator in a highly competitive market
- Establish the framework for further differentiated services
- Capture additional revenue from existing subscribers

NETWORK SOLUTIONS

- Adding telephony to Time Warner Cable’s services bundle required a communications-grade infrastructure for voice, video, and data.
- Cisco Broadband Local Integrated Services Solution (BLISS) is a fully integrated residential voice solution that helps cable operators deliver IP-based voice services over their IP network infrastructures.
- The standards-based, open-platform architecture provides a strong foundation for future services.

BUSINESS VALUE

- Create new revenue streams with minimal investment in new technology
- Maximize return on investment (ROI)
- Increase average revenue per user
- Lower customer churn

Forward-looking cable service provider uses voice services as a differentiator, a source of increased revenue, and the foundation for future services.

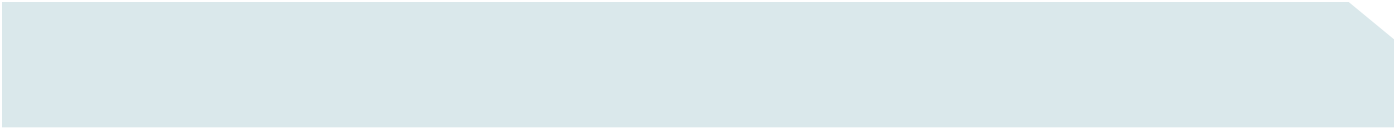
In May 2003, Time Warner Cable launched its “Digital Phone” residential voice service, beginning with customers in Portland, Maine. Using standards-based technologies and intelligent networking from Cisco Systems®, the forward-looking cable service provider delivers “Triple Play” services bundles which include: voice over IP (VoIP) communications, subscription-based and on-demand video services, and high-speed Internet access. When Time Warner Cable began to offer VoIP telephone service to its large broadband customer base, it allowed those customers to bypass traditional phone companies and receive bundled communications and entertainment services from a single company. This move signaled a significant technological shift that is fundamentally changing the telecommunications industry.

After a successful launch in Portland, where more than 12 percent of Time Warner Cable subscribers signed up for Digital Phone service in the first year alone, the service was gradually deployed in additional markets. By December 2004, Digital Phone service was available in all of Time Warner Cable’s 31 operating divisions, including large metropolitan markets, such as Greensboro, Raleigh, and Charlotte, North Carolina; Syracuse, New York; and Austin, Texas.

The availability of Digital Phone is an important milestone, both for broadband service providers and residential telephone customers, and is as significant as the first introduction of high-speed Internet access broadband services and the launch of HBO. It also represents a significant opportunity for Time Warner Cable to expand its service offerings.

STRONG MARKET DIFFERENTIATION

By offering Digital Phone, Time Warner Cable has differentiated itself from its competition and has helped ensure ongoing profitability and success in a crowded communications services market. “As cable operators, we’re able to offer a combination of services that potentially no one else can,” says Gerry Campbell, senior vice president of Time Warner Cable’s voice group. “We can offer a full suite of services, whereas the consumer would have to go to two companies to get the same range.”



Subscribers to the new service enjoy unlimited local, in-state, and domestic long-distance calling in the continental United States for one low, fixed monthly price. The service includes standard features, such as 411 directory assistance, 611 service calls, enhanced 911 service, operator-assisted calls, and the ability to view call-detail records online. The package, which is offered to consumers at as little as \$39.95 per month, also includes caller ID, call waiting, call-waiting ID, voice mail, and a number of other highly valued customer features. By using technology on its existing advanced managed network with quality of service (QoS) standards, Time Warner Cable is able to offer phone service at a flat price and help ensure that customers receive the level of quality offered by traditional telephone service. Consumers who switch to Digital Phone can keep their existing phone numbers and retain their directory listings.

INTELLIGENCE AND QoS IN THE NETWORK

To add telephony to its bundle, Time Warner Cable needed a communications-grade infrastructure for voice, video, and data. Cable operators face challenges when preparing their infrastructures to support voice services. For example, providing toll-quality telephony requires a cable network infrastructure capable of delivering the QoS required for voice communications, coupled with a voice infrastructure that provides the call-processing intelligence and voice features that customers demand. Recognizing the challenges associated with delivering a voice-over-cable infrastructure, the cable industry collectively developed a common architecture and set of standards to help enable voice service delivery. The results of this collaboration are reflected in the PacketCable standard.

For Time Warner Cable, offering voice services was not difficult. The Digital Phone primary-line service was built on top of the company's existing IP infrastructure for high-speed Internet access. The enhanced network helps enable reliable voice services that can scale as the Digital Phone service grows in the future. It has also helped the cable service provider put another revenue stream—voice—in place with minimal effort and cost.

“We have greater utilization of an asset, which means greater return on our investment in existing systems,” Campbell says. The standards-based IP technology provides many advantages. For example, a standards-based packet network allows Time Warner Cable to integrate new multimedia and interactive capabilities more easily. Further, the equipment will endure in the cable service provider's network for many years without becoming obsolete.

Open-platform, flexible architectures are important because they help enable interoperability among different vendors. “As the cable industry rolls out IP communications, using common platforms will allow us to interconnect our systems to one another and greatly expand the reach of our services,” says Campbell. “We'll also have a choice of different vendors that support the same technology. And Moore's Law comes into play—so the cost to deliver the service will continue to go down.” Time Warner Cable's infrastructure also provides a reliable foundation for future services.

“We already had a strong relationship with Cisco,” says Campbell of his company's decision to work with the networking technology provider. “We wanted to work with a company that was sure to move forward with the PacketCable standard so that we knew our network would adhere to future standards.”

CISCO SOLUTION FOR PACKETCABLE VOICE

To upgrade its network to support VoIP services, Time Warner Cable selected the Cisco® Broadband Local Integrated Services Solution (BLISS)—a fully integrated, tested, and supported residential voice solution consisting of the Cisco and partner products necessary to deliver a PacketCable primary-line voice service offering. Cisco BLISS helps cable operators deliver IP-based voice services over their IP network infrastructure based on CableLabs DOCSIS® technology. The Cisco BTS 10200 Softswitch, the Cisco uBR7246VXR Universal Broadband Router and the Cisco MGX® 8850 Voice Gateway products are the primary elements of the network infrastructure.

Cisco BLISS is the first carrier-class, end-to-end voice-over-broadband service that is compliant with PacketCable. The Cisco uBR7246VXR was qualified as PacketCable 1.0 in 2002—making it the first cable modem termination system (CMTS) to achieve this distinction. The Cisco BTS 10200 Softswitch was formally qualified as PacketCable 1.0 by CableLabs in April 2003—making it the first softswitch to receive such certification. Softswitches provide the call-control plane and service intelligence needed to deliver telephony over packet networks. Softswitches appear as an application server on IP networks and help service providers support new, enhanced communications services and features by combining voice communications, data communications, and entertainment services in unique ways.

PUBLIC SWITCHED TELEPHONE NETWORK INTERCONNECTION

Time Warner Cable addressed the requirements for public switched telephone network (PSTN) interconnection by partnering with two established interexchange carriers (IXCs): MCI and Sprint. Through the partnering arrangement, Time Warner Cable’s regional IP networks now interconnect to the nationwide networks of these established IXCs to transport calls outside of its service area, as well as to deliver enhanced “911” service and local number portability, and carry long-distance traffic. Voice calls destined for users not on Time Warner Cable’s VoIP network are transferred directly to these carriers for termination of IP voice traffic to the PSTN.

Through these relationships, Time Warner Cable can immediately take advantage of a nationwide network and offload complex PSTN interconnection requirements. This helps facilitate its rate of service deployment in new markets. As the company enters each market, the value and strength of these partnerships increase and bring more service revenues to all parties.

ACHIEVING SUCCESS AND BUILDING MOMENTUM

As a result of Time Warner Cable’s addition of voice services, consumers now have a choice of residential voice service providers. They can also enjoy the convenience of receiving all bundled services from one company, offered at competitive rates. Digital Phone provides the same standard features as consumers’ current local carrier, including emergency 911 services, in addition to innovative offerings, such as unlimited long-distance calling in the continental United States. The company also provides a single, convenient, monthly phone bill for all its services.

Time Warner Cable experiences numerous benefits, as well. By adding these new voice service to its existing advanced multiservice network infrastructure, it gains a new revenue stream from existing subscribers with minimal investment in new technology. Its scalable, standards-based network also establishes the framework for potential future differentiated services, such as online gaming, videotelephony, and streaming media. The bundle helps the cable service provider maximize the return on its IP network investment, while increasing the average revenue per user.

Voice services also help reduce customer churn, which extends the value of each service, provided by lowering the costs associated with acquiring new customers. Kagan Research determined that voice services could help reduce churn by as much as 50 percent. “We’re the only ones with a network capable of competing with phone companies,” says Campbell. “We’re ahead of the game.”

Table 1. Bundled Services Help Reduce Subscriber Churn Rates

Monthly Churn	Services Subscribed
2.5 percent	Cable TV only
2.2 percent	Cable TV + high speed data
1.2 percent	Cable TV + high speed data + voice

(Source: Kagan, December 2003)

Time Warner Cable has been pleased with the acceptance rate for its Digital Phone service to date. "It has proven to us that this is going to be a good service to continue to roll out across the country," says Campbell. As the service expands, the network can easily be upgraded to provide capacity for millions of users across Time Warner Cable's network. In the near future, the company expects to begin taking advantage of the unique capabilities of a multiservice infrastructure to offer integrated services, such as unified messaging, caller ID notification on the TV, and other features, such as voice recognition and variable dial tone (sports, weather, or news instead of standard dial tone).

"Time Warner Cable is making a strong commitment to develop techniques and tools and to enhance our network to support voice technology," says Campbell. "It's signaling a change that, for the cable industry, is equal to our introduction of broadband data services."



Corporate Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

European Headquarters

Cisco Systems International
BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: 31 0 20 357 1000
Fax: 31 0 20 357 1100

Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-7660
Fax: 408 527-0883

Asia Pacific Headquarters

Cisco Systems, Inc.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

Cisco Systems has more than 200 offices in the following countries and regions. Addresses, phone numbers, and fax numbers are listed on **the Cisco Website at www.cisco.com/go/offices.**

Argentina • Australia • Austria • Belgium • Brazil • Bulgaria • Canada • Chile • China PRC • Colombia • Costa Rica
Croatia • Cyprus • Czech Republic • Denmark • Dubai, UAE • Finland • France • Germany • Greece • Hong Kong SAR
Hungary • India • Indonesia • Ireland • Israel • Italy • Japan • Korea • Luxembourg • Malaysia • Mexico
The Netherlands • New Zealand • Norway • Peru • Philippines • Poland • Portugal • Puerto Rico • Romania • Russia
Saudi Arabia • Scotland • Singapore • Slovakia • Slovenia • South Africa • Spain • Sweden • Switzerland • Taiwan
Thailand • Turkey • Ukraine • United Kingdom • United States • Venezuela • Vietnam • Zimbabwe

Copyright © 2005 Cisco Systems, Inc. All rights reserved. Cisco, Cisco Systems, the Cisco Systems logo, and MGX are registered trademarks or trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

CableLabs and DOCSIS are registered trademarks, and PacketCable is a trademark, of Cable Television Laboratories, Inc. 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. (0502R) RK/LW8066 03/05