

**IBM WebSphere Voice:
Making conversational
e-business a reality.**

“The IBM solution was the best for ensuring that we achieve our goal of a multichannel centre in a multiclient environment.”

B2Win — turned a cost centre into a profit centre using IBM WebSphere® Voice Response with DirectTalk™ Technology



Today, thanks to Web and telephony growth and convergence, voice technology is showing up everywhere — and the number of uses and applications is growing exponentially, in particular in the contact centre, voice portal and Service Provider environments. With that convergence comes a new method to interact with applications and services — conversational e-business.

Focusing on conversational services — the IBM term for technology that puts a natural, voice interface on the computing infrastructure and behind-the-scenes processes — IBM is working to help its customers break down communication barriers. IBM Conversational Services, delivered through the IBM WebSphere voice family, includes speech input and output technologies, voice processing technologies and offerings that provide language translation for the written word.

IBM: Benefits of conversational computing

The benefits of conversational services extend across most industries. Today IBM is focusing on the business benefit in market segments where voice-based services are growing at an explosive rate — contact centres, portals and enhanced telecom services. The demand by users for access to information and transactions on a around-the-clock basis in a self-service manner makes voice a critical component for e-business.

Contact centres provide multichannel access to information

The growth of e-business and the demand for improved customer satisfaction has forced traditional call centres to evolve into multichannel contact centres. These self-service contact centres provide multichannel access to information over the telephone, e-mail, fax, instant messaging and the Web — virtually anywhere, anytime. By adding voice services, the enterprise can improve customer service, decrease costs and expand market reach.

IBM is extending the reach of the contact centre with IBM WebSphere Voice Server and IBM WebSphere Voice Response with DirectTalk Technology. Expectations loom large for the growth of contact centres. Winterberry Group predicts that by 2004, 70 percent of all existing contact centres will become multichannel centres. With today's emphasis on payback, voice-enabling contact centres can represent an economical way to serve the customer's needs, while reducing costs.



Portals

Voice portals are Web sites that can be called on the phone to request and receive information by voice. voice portals give voice access to enterprise applications and data, voice assisted services, voice-enabled commerce and Web content from multiple devices, virtually anytime, anywhere, using speech-processing software.

The potential growth in voice-based access to the Internet is explosive. Suddenly, Web content is accessible via telephone; and there are far more telephone users in the world than there are computer users. Datacomm Research projects that by 2005 more people will surf the Web from phones than from PCs. Already, many consumers use their cell phones to make purchases, check on investments, conduct research, schedule events, receive and respond to e-mails and faxes, check show times and countless other Web-based activities. Hands-free usage and access to information, via a mobile telephone, is driving the need for Web sites that can hear what you say and answer back.

Banks, securities firms, insurance companies, telecommunications firms and Internet-based companies can use voice portals supported with IBM WebSphere Voice technology to improve business efficiency and employee productivity. Service Providers — both wireline and wireless — are using voice portals to move applications and information to market quicker, add new revenue streams and expand their subscriber base.

Service Providers use speech for competitive differentiation

Voice-enabled access to information is giving rise to new service models — and revenue opportunities — for Service Providers, telcos, carriers, Application Service Providers (ASPs) and Internet Service Providers (ISPs) are using voice technology to provide value-added services to their subscriber base such as: unified communications, Voice-Activated Dialling (VAC), voicemail, automated alternate billing services and wireless Internet.

By bundling these services with others, Service Providers are able to differentiate themselves from competitors. Bundled offerings can be more competitively priced. Overall network infrastructure spending can be reduced, for a stronger return on investment. With voice, profit can be realised through the rising consumption of bandwidth, which is now driving the need for multi-purpose infrastructures and next-generation networks.

The emergence of the ASP model makes it possible for small Service Providers to act like their bigger competitors. As the telecom industry cuts back on expenditures, due to the slow down in the global economy, the key to survival will be keeping the level of customer satisfaction high. IBM voice solutions can help Service Providers win and retain customers.







IBM WebSphere voice products family

The IBM WebSphere voice family, which includes WebSphere Voice Server and WebSphere Voice Response with DirectTalk technology, takes e-business to the next step by voice-enabling business applications and helping IBM users take advantage of the convergence of telephony and voice. Offering support for the open VoiceXML standard as well as for Java™, this family of products is based around conversational services: technology that puts a natural, voice interface on the computing infrastructure and behind-the-scenes processes. The WebSphere Voice offerings seamlessly link a voice front-end with a business' back-end infrastructure, allowing companies to take full advantage of mobile e-commerce.

IBM WebSphere Voice Server

IBM WebSphere Voice Server provides a solution for developing and deploying voice applications. Voice-enabling your legacy and telephony applications or Web site can make it easy and quick for customers to access information by speaking naturally in a self-service fashion. With WebSphere Voice Server, enterprises have the capability to improve customer service and extend their reach to anyone with a phone.

IBM WebSphere Voice Server supports the open VoiceXML standard, is available in multiple languages and delivers human-like concatenative Text-To-Speech (TTS). WebSphere Voice Server includes a developer toolkit and ready-made building blocks called Reusable Dialogue Components (RDCs), helping developers with limited speech application development experience to create applications in a short period of time. Speech-enabled applications are hitting the market and businesses and consumers are now realizing the benefits of voice, the most natural way to access information either from the Internet, corporate intranets or enterprise databases.

IBM WebSphere Voice Toolkit

The WebSphere Voice Toolkit can help developers to create voice applications in less time, using a VoiceXML application development environment. The WebSphere Voice Toolkit features grammar and VoiceXML editors to facilitate the speech application development process. Web developers, telecommunications developers and other developers can build applications that take advantage of voice as a means of accessing information.



"IBM enabled us to deploy a speech system with high accuracy...which we can easily scale — as its popularity grows."

TOM.com, the first voice portal in Mainland China





*“The power of Intel** standards-based modular building blocks and the IBM WebSphere voice family brings the system owner the greatest flexibility for speech-enabled applications in the industry.”*

Howard Bubb, VP and General Manager Telecom and Embedded Group

IBM WebSphere Voice Response with DirectTalk Technology

IBM WebSphere Voice Response with DirectTalk Technology is a state-of-the-art voice-processing platform. It provides Interactive Voice Response (IVR) capability that extends information retrieval far beyond traditional “Press 1 to continue” menus. Applications can now combine keypad entry with speech recognition. e-business applications supported with WebSphere Voice Response are executed with ease, enabling ‘personalised self-service customer’ applications and voice access to customer data, via telephone or Web, on a 24x7 basis.

IBM WebSphere Voice Response with DirectTalk Technology allows businesses to offer new or out-of-hours services, reduce contact centre wait times and/or reduce contact centre costs. Benefits can be realised by Network Service Providers, Customer Relationship Management (CRM) Service Providers and by business support functions — such as customer service, human resource, registration or appointment management.

IBM WebSphere Voice Response JavaBeans technology facilitates speech recognition and IVR application development, enabling easy-to-integrate Web and telephone self-service applications across IBM WebSphere Voice Response platforms.

IBM WebSphere Translation Server

If you’re on the Web, you’re international. How do you make your information available to a diverse worldwide community? The IBM machine translation offering, IBM

WebSphere Translation Server, can provide translations — from one language to another — on-the-fly. There’s no need to re-create separate Web pages in different languages, as it translates up to approximately 500 words per second.

Specifically designed for enterprise use, IBM WebSphere Translation Server can provide text translation for Internet and intranet pages, e-mail messages and chat conversation in multiple languages, in realtime. It also allows companies to leverage their existing Web infrastructures to provide content to users in their native languages, at a fraction of the cost of professional translation. Whether used by an enterprise or offered by Service Providers, WebSphere Translation Server is helping companies remove language as a barrier to global communication and e-commerce.

IBM Message Centre

IBM Message Centre is an industrial-strength unified messaging/communications system. With up to 500,000 mailboxes on a single system, IBM Message Centre can manage employee and customer voicemail, e-mail and faxes, for virtually anywhere, anytime access over the telephone or the Internet.

Whether it’s a Service Provider looking to deliver a high-quality unified messaging service, or an enterprise looking to make life easy for customers and employees, IBM Message Centre proposes an ideal solution that can simplify messaging and improve overall responsiveness.

WebSphere software platform: building on a firm foundation

The WebSphere voice family is part of the IBM WebSphere software platform — a comprehensive set of integrated, award-winning e-business solutions. No matter where you are in the e-business cycle, the WebSphere software platform delivers the flexibility you need to grow — at the speed the market demands. Building on this robust platform, you can connect diverse Information Technology (IT) environments to maximise your current investments and leverage existing skills. Deliver your core business applications to the Web using industry standards like Java technology and XML and create next-generation applications that differentiate you from the competition. Advance to a powerful platform for integrated e-business — the WebSphere software platform.

IBM: Conversational services

For more than 40 years, IBM has been working to make voice the most efficient and natural user interface to access data. With over 150 voice technology patents, IBM can provide comprehensive solutions for multiple operation systems and multiple devices. IBM can provide the foundation needed to build an integrated solution that delivers real business value to users. IBM removes the complexity of deploying voice technology by delivering the comprehensive e-business solution through the integrated technologies and capabilities of IBM and IBM Business Partners.

Whether you are an enterprise or a Service Provider, IBM offers a wide choice of voice-enabled products, end-to-end solutions and services. As one of the leaders in open standards, IBM can integrate best-of-class hardware, software and services from IBM, IBM Business Partners or other leading vendors. In all, IBM is delivering solutions and technologies that help businesses capitalise on the exciting convergence of voice, Web and enterprise data.

For more information

To learn more about how IBM can help your business take advantage of conversational e-business, contact your local IBM Business Partner representative or visit either:

ibm.com/software/voice/partners/list

or:

ibm.com/software/voice

or send an e-mail to: Talk2Me@us.ibm.com







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