
Voice Enabled Services

Lisbon 19-21 May 2003

Post Conference Workshop

22 May 2003





VoiceXML

Thanks to:



Voice Enabled Services
Lisbon 19th - 21st May 2003

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- **Why develop speech applications for the telephone?**
- **How speech applications work**
- **Introduction to VoiceXML**
- **Making the computer talk**
- **Making the computer listen**
- **Improve your Application**
- **A step forward: MultiModal website**





VoiceXML VIUG



- **B-date 16Th July 2001**
- **Non-profit internet community**
- **Voice Technology especially VoiceXML**
- **Adressed to developers, experts and inquisitive persons**



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- **IWA / HWG – Web Guru Area**
- **Cambridge Voice Tech**
- **Marcus Evans Telecoms**
- **Voice Forum Org**
- **VoiceXML Passport**
- **Member of VoiceXML Forum**



- **Tutorial on following italian web sites: VisualC#.it, DevSpy, iwa-italy.org, and others developer websites resources**
- **Training Courses: e-classes**
- **Articles: Programmi@amo**



- **What is a Voice-Application?**
- **The parts of Voice-Application**
- **How they relate to each other?**
- **How to use them**



Your voice is your mouse

VoiceXML is a language that opens your computer-application to ANYONE

Allowing its use without keyboard or mouse

Easy Developing



VoiceXML

Why develop?

- **Speaking and listening is fundamental for our lives**
- **Speaking and listening to a computer is natural and convenient**
- **When it may be inappopriate**
- **Speech applications challenges**
- **What can you do with a single phone call?**
- **Voice Portal applications**



VoiceXML Advantages

- **Despite physical handicaps such as blindness or poor physical dexterity**
- **Bypass the limitation of small keyboards and screens**
- **Devices with no keyboard**
- **While callers work with their hands and eyes**
- **Anytime during the day**
- **Instant connection without being placed on "hold"**



- **Using languages that do not lend themselves to keyboarding**
- **Convey emotions**
- **Access time-sensitive data**
- **Access location-sensitive data**
- **Access public and personal information**
- **Control computerized processes and activities**



VoiceXML

Disadvantages

- **Hear graphics**
- **Point to edit**
- **Listen actively for a long period of time**
- **Overcome "Human memory" (cognitive psychology)**
- **Be heard and hear in noisy environment**
- **Privacy**
- **Callers' false expectations (out of entry data syndrome)**



VoiceXML

Type of Apps

	Touchtone -only	Speech - Only	Touchtone and speech	Multimodal
Speech in	No	Yes	Yes	Yes
Keypad	Yes	No	Yes	Yes
Mouse and keyboard	No	No	No	Yes
Speech out	Yes	Yes	Yes	Yes
Display monitor	No	No	No	Yes



- **Mass-Market voice portals:**

E-mail, driving instructions, traffic conditions, weather, telephone number search, business reminders, local information services, stock quotes, personalized news, sport news, horoscopes

- **Corporate external voice portals:**

Call centers, telephone attendant, product and service information, order entry, troubleshoot product failure, banking

- **Corporate internal voice portals:**

Customer relationship management, product availability and pricing, Order status, SCM, Human resource informations



VoiceXML

Introducing VXML

- **A markup language for building speech interface**
- **Simplifies application development**
- **Minimizes internet traffic interaction**
- **Separates user interaction code from application logic code**
- **Provides portability and simplicity (compliant and conformance)**
- **Supports rapid prototyping and interactive refinement**

