Very Personal, Personal Assistants for Mobile People

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www.excendia.com
Trends leading to speech assistants

Business Trends
- E-mail Proliferation
- Cell Phones Everywhere
- Internet & Web services
- Downsize without compromise

Technology Trends
- Speech technologies
- IP Telephony
- Mobile Access to Business Data
Virtual Assistants Deliver Real Benefits

1. **Increase Revenues & Profitability**
   - More Deals Closed
   - Higher Customer Satisfaction

2. **Improve Productivity**
   - Work *safely* while on the road
   - Faster, better decision making

3. **Reduce Costs & Complexity**
   - Make Use of Driving Time
   - Efficient Office Communications
   - Costs Less + Works More than Human
What can Personal Assistants do for you?

1. Answer People Who Call You
2. Help You When You Call

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1. Speech Attendant with Personalized greeting
2. Call Filtering - User Status & Call Importance
3. Rule-based Call Forwarding
4. Unified Messaging & Notifications
Helps You When You Call

- E-mails, Calendar, Contacts
- Call contacts & colleagues
- Send voice emails to contacts
- Set Status & Call Forwarding
- Schedule Appointments
- Call Back People
- Speech Dial Numbers

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Web-based Account Management

1. View Call Logs
2. Manage Contacts
3. Call Forwarding Rules
4. Manage Preferences
Virtual Assistants & Unified Communications

EVA is a Major UC Component

Access Data Anywhere, with Any Device…
- Use Any Phone or PDA
- Anywhere on the Road and at the Office

Intelligent Call Forwarding …
- Presence-aware
- Call Forwarding Rules
- Call Filtering based on Importance

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Who Needs Virtual Assistants?

Service companies with a mobile sales force

- Financial & Insurance Advisors
- Lawyers & Accountants
- Real Estate Agents
- Consultants & Entrepreneurs
- Mobile Salespeople
# Virtual Assistants vs Handheld Devices

## Handheld Devices
- Too Small as a Computer
  - Limited Visual Interface
  - Limited Data Entry
- Too Big as a Phone
- Multiplicity of Devices?
- Useless while Driving

## Speech Virtual Assistant
- No Special Device Needed
- Speech Content is Richer
- “Speak vs Thumbs”
- Easy Call Forwarding
- Safe, Hands-Free, Eyes-Free

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How Virtual Assistants Work?

Speech Gateway to Business Tools

Direct Access to Business Tools ...
- Telephony
- Messaging
- Business Data

To Deliver New Services ...
- Intelligent Call Management
- User Mobility
- Productivity & Safety on the Road

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Implementations

Hosted Service (ASP)

- IP Gateway integration
- Remote Data Access
- Subscription-based services
Implementations

Enterprise Solution

- PBX integration
- Speech Access Data
- No recurring fees
Technologies Used

Speech
- VoiceXML, ccXML
- MRCP

Mail Access
- HTTP, IMAP, POP3, SMTP

Data Access
- Web Services, SOA

Telephony
- SIP

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Will Speech Assistants Succeed?

Simple, Yet Effective Solution to Mobility Problems

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Personal Assistants Make Speech Better

1. Personal data improves speech recognition
   - User Skill
   - User Preferences
   - User Language

2. Intelligent agents improve search results
   - Use Context to Reduce Grammar Size
   - Reduce Search Space
Virtual Assistant Obstacles & Hopes

1. **Speech Technology Cost**
   - From $2000/port to $300/port

2. **Speech Recognition Quality**
   - Getting closer to natural
   - Manage noisy environments

3. **Computing Power**
   - Moore’s Law is still working

4. **Data Access**
   - Web Services opening the doors

5. **Industry Standards are Maturing**
   - VoiceXML, ccXML, SIP, SOAP
Virtual Assistant Applications

1. Follow Web Footsteps
   More services: Info, Transactions, Entertainment

2. More Human Interface
   Natural speech improvements

3. Integration in Communication Tools
   Multilingual IP-PBX/IP-Centrex Receptionist

1. More “Intelligent” Assistants
   • “My EVA will arrange our meeting with your EVA.”
   • “My EVA will setup our conference call.”
   • “My EVA will buy it for me.”
What Other Applications?

1. Disaster recovery & business continuity
2. Rescue me from never-ending meetings
3. Remind me of birthdays and events
4. Check bank balances, pay bills
5. Buy tickets, get stock quotes
6. Brief me for my next meeting
7. Play games: Trivia, Bulls & Cows
MOBILITY

EFFICIENCY

SIMPLICITY

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Will They Serve Coffee?

Maybe One Day!

Thank you!

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