ITU Workshop on
"Origin Identification and Alternative Calling Procedures"

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AT&T's VoIP Experiences

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Early VoIP Exploration

- Provide VoIP transport over the AT&T long distance network
  - Used two-stage dialing
  - Normal originating and terminating access (i.e., local exchange carrier)
- Provide VoIP service as alternative to TDM service
  - Ported existing customer telephone number
  - Utilized existing customer broadband access

AT&T U-verse^{sm} Voice

- Through AT&T's IP platform, U-verse Voice offers powerful, advanced features integrated with U-verse TV, broadband and wireless services

  - U-verse Messaging combines AT&T wireless and U-verse voice mail so U-verse customers can access all of their voice messages anywhere, from any phone line or PC.

  - Voice mail can be listened to, managed and forwarded from the online portal, much like an e-mail inbox.

AT&T U-verse^{sm} Voice (cont.)

- Customers enjoy great sound quality and reliability, as well as innovative calling features
  - an online portal to manage your call preferences and settings from any PC
  - the ability to view your incoming calls and voicemail notifications on your TV with Caller ID on TV
  - the ability to view your Call History on your TV
  - The ability to initiate a call from your PC or TV using Click to Call
  - and more

Enterprise Environment

Converged Mobility simplifies the heterogeneous environment to meet the enterprise need for access to any application from anywhere at anytime.
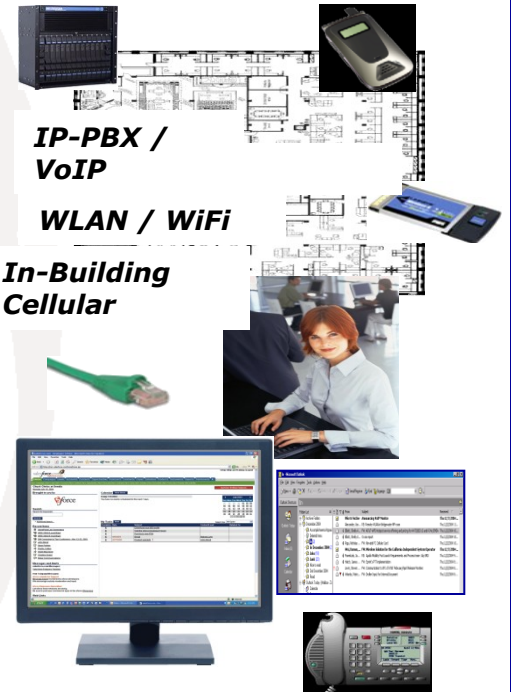
Public / Private Access

Service Provider Network

Customer Network/Application

- Dial-Up PSTN
- Broadband
- Wi-Fi
- Cellular Voice
- Cellular Data

Mobile Worker

IP-PBX / VoIP

WLAN / WiFi
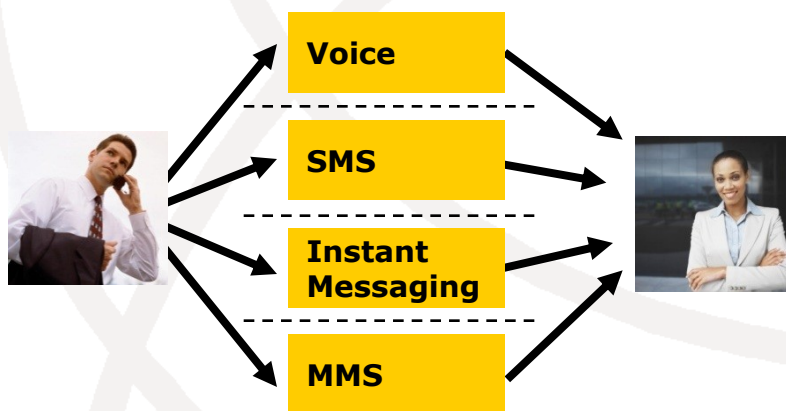
In-Building Cellular

CARTS

- **AT&T has designed a Common Architecture for Real-Time Services, CARTS**
- CARTS is based on 3GPP/IMS

CARTS Service Enablement and Benefits

A major benefit of moving to an IMS core is the ability to offer converged services and applications in a single session using multiple modes of communications
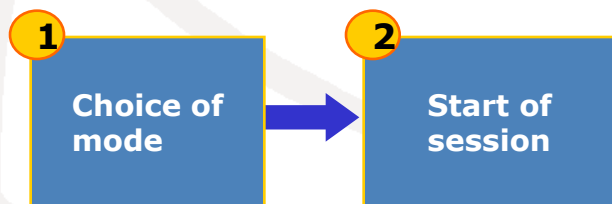
Pre-IMS Communication

Multiple Sessions

- Voice
- SMS
- Instant Messaging
- MMS

Multiple Modes of Communication

1 Choice of mode → **2** Start of session

IMS Supported Communication

Single Session

- Voice
- SMS
- Instant Messaging
- MMS
- Video Conferencing
- Application Sharing
- Others

Multiple Modes of Communication

1 Choice of _initial_ mode → **2** Start of session → **3** Dynamic choice of modes of communication _within_ one session
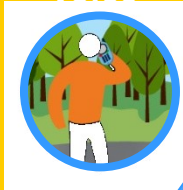
Network of the Future

Shared Infrastructure

Integrated Service Delivery Environment

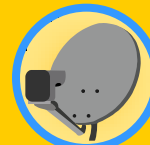| Voice | Conferencing | Messaging | Video | Other Apps | Your App |

Pro... Management of S...

...rk Capabilities

Multiple Access Technologies

Access/Device Independent Services

Access Technologies

Multiple-User Devices

End Devices

Multiple Personas per User