Making New Services Real

Moderator: Jerry Gavin, Director Systems Engineering, NMS
Panelists: James Colby, VP Marketing, Comverse America
Ewalt Anderl, CTO, Kirusa
Ranieri Mestroni, President, Netcom Voice Technologies
Agenda

- Jerry Gavin, Director, Systems Engineering, NMS
  - Situations
- James Colby, VP Marketing, Comverse America
  - Video Mail
- Ewalt Anderl, CTO, Kirusa
  - Multimodal Messaging
- Ranieri Mestroni, President, Netcom Voice Technologies
  - Carrier-grade IVR
Making New Service Real

WAR STORIES!!!

- 100s of them......
- Type of customers
  - Optimists
  - Pessimists
  - Realists
Optimists

- Offer it and they will come
  - Field of Dreams theory
- Technology is magic
  - New player in the market
- Operations can catch-up
  - Rely on good faith
  - Finding the right person
- Planning is for wimps
  - Create small teams
Pessimists

- Most new technologies fail
  - Combined services
- Starry-eyed marketeers
  - Need to prove it to them
- Operations will never agree
  - Work supply chain management
  - Find a champion
- Your problem, not ours
  - POC
Realists

- New offerings critical
  - Where the action is
- Attack technical challenges
  - Know what you don’t know
- Build the right team
  - All major stake holders
  - Partners
- Trust the process
  - Key milestones
  - Constant communication
Video Mail

James Colby, VP Marketing, Comverse America
User Benefits

I want to see...
I want to share...
I want to be seen...
I need to build that relationship...

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What?
Carrier Dilemmas

How do I generate a return?

- Do I use my 3G network just to improve spectrum efficiency..?
- Data services aren’t offsetting the decline in voice traffic ARPU…
- These new services aren’t appealing to the mass market…
- How do I differentiate from the 2.5G service..?
Video Telephony
Challenges

Many barriers to success...

- Sub-critical mass of users
- Pricing compared to that of voice telephony
- Emotional barriers - privacy, camera shyness, communication choices
- Complexity – device ergonomics, configuration, service initiation
- Lack of promotion
- Network reliability
- Technology compatibility
**Solutions**

**Promotion**
- Generate excitement, user familiarity. Emphasize values e.g. fun

**Stimulate User Adoption**
- Intelligent packaging – “Twin Packages” (3 Italy)
- Connect all mobile users – Inter-network calling (3 & DoCoMo)
- Connect all video users – Mobile users & PC users (3)

**Pricing Creativity**
- Free voice & video calls between customers (3 Sweden)
- Free video calls up to number of bundle voice minutes (VF Sweden)
- Pricing the same as voice calls (Vodafone Italy)

**Usability**
Video Messaging
Push-to-Show / Video IM

- Near real-time video communication
- Asynchronous
- Can utilize available presence information
- Can integrate with desktop IM solutions
- Good video communication starting point
Videomail

Mike initiates a video call

Call is diverted to the Call Answering system
Key Videomail Features

**Message Deposit**
- Allow callers to review and change their message; to feel comfortable in front of the camera

**Outgoing Message**
- The ability to record and personalize their message
- Allow use of default greeting

**Notification**
- Include message type indication, so that users can select how to access the system

**Message Retrieval**
- 3G video retrieval is a must
- Don’t make users wait till they are in 3G coverage to retrieve messages
Video User Interface – Implementation

- **Branded**
  - Visual Element Injection
  - + audio prompts

- **Video Skins “Talking Heads”**

- **Audio-Visual Menus**
  - Video Prompts
  - Prompts are pre-defined audio-visual clips

To PLAY, press:

1. Video
2. Voice
3. Greeting

* Exit
Message Retrieval: Flexibility

1. 3G Network
2. 2.5G Network
3. Any Telephone Network
4. Internet

Message retrieval via web access
The Prognosis
When & How?

It will take time... Phase 1

- Start now!
- Start with asynchronous messaging
- Develop a video service user base
- Engineer delivery to 2.5G and PC users
- Integrate with other messaging solutions
When & How?

Phase 2

- Start now!
- Real-time two-way communication
- Video mail is key
- Make sure the user experience is smooth!
- Make it fun
- Don’t overprice – 50% premium over voice
james.colby@comverse.com
Multimodal Messaging

Ewalt Anderl, CTO, Kirusa
About Kirusa

Kirusa is the leading company developing multimodal applications and infrastructure

Fast Facts
- Founded: 2000
- Location: New Jersey, USA, Bangalore, India
- Products: Voice SMS, Multimodal Platform
- Investors: Seasoned management team with entrepreneurial and large company experience
Kirusa Voice SMS Solution

- **Voice Initiated SMS**
  - Bob initiates an SMS to Alice with voice
    - Dials * followed by Alice’s number
    - Dials a short code

- **Group Addressing**
  - Send to family, friends, colleagues

- **Reply to any SMS**
  - Using text
  - Using voice

- **Works with any mobile phone**

Kirusa Platform

Wireless Network

Kirusa Voice SMS Application

Send SMS ...
- Using Text
- Using Voice

Receive SMS
- Read Text
- Listen to Voice
- Option to reply with Text or Voice

www.kirusa.com Slide 27
Multimodal Broker

- First commercial multimodal application launched in EU
- Launched by Bankinter in Spain in Summer 2005
  - Services available through all three mobile networks in Spain
    - GPRS, EDGE & 3G networks
    - Symbian Series 60 phones
  - Partnership with Vodafone Spain
- Allows banks brokerage customers to:
  - Search for stocks
  - To manage their brokerage accounts
  - To do brokerage transactions
  - Give stock orders
  - By speaking into the phone in Spanish, and seeing the results on their screen

www.kirusa.com
Kirusa Multimodal Solution
IP Voice

- Enabling delivery of mobile applications with a multimodal user interface
  - Add voice to
    - Messaging (SMS, MMS) apps
    - Downloaded apps
    - Web-based apps

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Kirusa Multimodal Solution
Circuit Voice

- Enabling delivery of mobile applications with a multimodal user interface
  - Add voice to
    - Messaging (SMS, MMS) apps
    - Downloaded apps
    - Web-based apps

www.kirusa.com
Service Drivers Summary

- **Subscriber**
  - Adding voice makes mobile applications easy to use
    - Makes many tasks possible in a mobile context
  - Saves time and removes stress

- **Business drivers for operators and service providers**
  - Profitable services
  - Deploy and scale in network
  - Standards
  - Support for network roadmaps (IMS)
  - Ability to
    - Customize / localize
    - Add services
Challenges Summary

- Multimodal user experience is new and different
  - Services must be easy to use and consistent
- Network Integration at scale
  - Number and diversity of network interfaces and standards (e.g., PRI, SS7, Billing, Messaging …)
  - Dimensioning and scale considerations
  - Integration with and evolution to IMS
- Voice must work well
- Support the full capabilities of today’s authoring standards
  - Full use of VoiceXML 2.0, HTML, XHTML, and Java standards
- A single server platform and architecture to deliver services and applications across …
  - SMS applications
  - Web-based applications
  - Downloaded applications
NETCOM FENIX IVR
Business Case

Ranieri Mestroni, President, Netcom Voice Technologies
The Scenario

- Wireless carrier in South America
  - 5 million subscribers
  - 92% prepaid
  - Over 250,000 fixed wireless customers

- Business goal
  - Card replenishment (activation)
  - Balance inquiry

- Technical environment
  - E1, SS7 infrastructure
  - Oracle database
  - Prepaid application integration
Netcom Solution

- IVR platform for carriers
  - Carrier core services
  - Prepaid card processing
  - Added value services

- Architecture
  - Client/server distributed environment
  - FENIX studio
    - PC-based
  - FENIX server
    - Solaris, Windows

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FENIX Programming Interface

```plaintext
  0) SELECT CASE(DNIS) -> [-1] ; iParent = -1 ; iTree = -1 ; iLevel = 0
      CASE "611":
        0=0  1) AppToRun = 10 -> [-1] ; iParent = 0 ; iTree = 0 ; iLevel = 1
      CASE "21":
        0=0  2) AppToRun = 20 -> [-1] ; iParent = 0 ; iTree = 1 ; iLevel = 1
      CASE "5":
        0=0  3) AppToRun = 55 -> [-1] ; iParent = 0 ; iTree = 2 ; iLevel = 1
      END SELECT
```
Current Carrier Needs

- The carrier needs a fast and reliable method for prepaid card processing
  - Activate in one single call number (*21+PIN)
  - Activate via traditional IVR
  - Serve both mobile and fixed wireless subscribers
  - Balance inquiry
    - Voice
    - SMS
NMS Technology Deployed

- FENIX Platform configured with
  - One SUN ct800 Server
    - One TX 3220C
    - One CG 6000C (4 E1)
    - Two CG 6500C (8 E1s ea.)
    - Total 20 E1s (600 ports)
Today’s Performance

- Over 5M transactions per day
- Queries Four Oracle Database
- DNIS-based application
  - Four applications
- Blazing fast response
FENIX Performance

Actual Activation Time
One transaction
FENIX IVR vs. Other SS7 IVR

Minutes

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Next Steps

- Add VXML and SIP into the current environment
- License from NMS into FENIX Environment
- Speech and TTS
Questions?

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