A Practical Rollout & Tuning Strategy

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Outline

• Focus on Stage of Project
• Traditional rollout
• Controlled rollout
• What is tuning
• How does tuning relate to roll-out strategy?
Speech Project Methodology

**Analyze**
- Identify opportunities for speech & outline project strategy
- Review business requirements & processes
- Review of existing IVR
- Call center statistics & live-call monitoring
- Interview Subject Matter Experts
- Voice User Interface & Technical requirements (use-case scenarios)
- Define success criteria
- Map out solution
- Client review & sign-off on requirements

**Design**
- Persona/Branding
- Call Flow Diagrams
- Sample Dialogs
- Vision Clip
- Detailed Dialog Design
- Early Usability Research
- Architecture
- Client review & sign-off on Design

**Build**
- Application code
- Recognition grammars
- Prompt recordings
- Integration
- Logging & reporting
- Test plan
- Unit & system testing
- Dialog Traversal Testing
- Voice User Interface Review
- Recruited Usability
- User Acceptance Testing
- Performance Testing

**Deploy**
- Limited Pilot Deployment:
- Whole-call analysis
- Recognition tuning
- Full Deployment:
- Recognition tuning (round 2)
- Whole-call analysis (round 2)
- Finalize documentation
- Project handoff
- Transition to Tech Support
- Next phase in speech strategy
Why Tune?

• Un-tuned speech applications do not survive contact with customers … Since you can't modify your callers to fit your speech application, you'll have to modify your speech application to fit your callers. -- Lumenvox

• … because of their complexity and ambiguity, speech-enabled applications require extensive testing and tuning to ensure ongoing accuracy. – Pronexus

• Tuning needs to be scheduled in advance as part of the application roll-out strategy
Preparation

• Have whole call recording & recognition engine log analyzer in place.
• Have business level logging designed into application.
• Tools like log analyzers availability are dependent upon and vary greatly from recognition engine vendor to vendor.
• Whole-call recording capability is independent of vendor & is HIGHLY recommended. Many call centers have the infrastructure available. If not, plan to install it.
Rollout Strategy – Early Stage

• QA with development staff
• QA with limited (say 5, on video) controlled naïve users
• Turn IVR on with live customers, collect 100 whole-call recording calls, turn it off. Listen to calls. If OK, continue.
• Turn IVR on, collect 500 whole-call recording calls, turn it off. Listen to If OK, continue.
Later Stages

• Transcription & Log-based Tuning, Round 1
• If warranted, Transcription & Log-based Tuning, Round 2
What Can You Tune?

• Early Stages
  – Prompts & Dialogue
  – Grammars
  – Timing
  – Barge-in sensitivity

• Later Stages
  – Dictionary
  – Thresholds
  – Language Model
  – Acoustic Model
Statistics to Calculate

• Correct Accept
• Correct Reject
• False Accept
• False Reject
• Out of Vocabulary
• Barge-in Failures (negative & positive)
• Transaction completion rate
• Customer satisfaction
What is Genesys

- Leading call center solutions provider
- 100% software focus
- Genesys suite captures, routes, screen-pops, reports and analyzes voice and other interactions to ensure customers are quickly connected to the best available resource – the first time
- 125 million interactions managed per day
- 1.25 million agents enabled worldwide
- Eliminates customer frustration
- Enables world class customer service
Genesys Services
Deliver End-to-End Solutions
Gartner 2005 Magic Quadrant

Figure 1. Magic Quadrant for IVR Systems and Enterprise Voice Portals, 2005

Source: Gartner (June 2005)