VUI: Tuning the VUI, Not Tuning The Parameters

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Speech has delivered many new and innovative solutions for self-service

- Natural Language menus for rapid route to appropriate areas
- Ability for cell-phone users to self-serve in a “hands-free” way
- Ease of use in entering long text strings
- …and many more
One important area of speech optimization focuses on speech performance - recognition, confidence levels, etc.

Most often the underperforming modules are evaluated and “tuned” – leading to tactical improvements in performance.
Evaluating customer behavior across the entire application is important as well.

What is equally, if not more important, however, is the performance of the entire application when the various modules are joined together to make an experience.
Further complication: Customers interact with companies in a number of different ways…

Interaction Channels

How does your company perform against these expectations?

…and they want a unified experience.
Next Challenge: Customer Behavior is Changing Constantly

**Environmental**
- Competitive Offers
- Tastes & Preferences
- Needs & Wants
- Channel Adoption

**Interaction**
- Logic & Flow
- Technology
- Scripts/Language

**Enterprise-driven**
- New Products
- Promotions
- Billing & Operations
- Communications
Final Challenge: Enterprise goals are not always completely aligned with customer goals.

Challenge: how to continuously align the user goals with the business goals of the enterprise...without knowing customer goals or their experience?
Example: Customer Knowledge?

Fortune 500 Telco profiles typical pay-by-phone customer…

“Jane”

- 24-35
- Female
- Technophile / heavy cell phone user
- Professional
- Median income: $75k
- Time constrained
- Prefers email offers to direct mail

What I can do with this data:

- Develop messaging
- Design tailored marketing programs
- Configure product / price / packaging

What I cannot do with this data:

- Understand real user experience
- Design optimal service delivery experiences for this customer segment
- Improve self-service delivery for targeted customers
Solution:
Customer Behavior Intelligence
Aligning Customer Data with Interaction Data

**Fortune 500 Telco profiles typical pay-by-phone customer…**

- **“Welcome”**
- **“Please speak your tel. #”**
- **“I’m sorry, please repeat that.”**
- **“What would you like to do?”**
- **“I’m sorry, I didn’t get that. What would you like to do?”**

545,000 calls do the following…

**“310-555-8020”**

**“310-555-8020”**

**“Pay”**

**“Agent”**

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**What I can do with this data:**
- Understand real user experience for some callers
- Design better service delivery experiences for all callers
- Improve self-service overall
- Prioritize self-service improvement efforts based upon volume
- Access significant, immediate ROI

**What I cannot do with this data:**
- Understand whether these calls are my best customers
- Understand what customer segment has a better chance of success
- Use to develop targeted messaging
- Design marketing programs tailored to key customer segments
- Deepen relationship with target segments
- Configure product / price / packaging
Example: Aligning Customer Data with Interaction Data

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“Welcome”

“Please speak your tel. #”

“I’m sorry, please repeat that.”

“What would you like to do?”

“I’m sorry, I didn’t get that. What would you like to do?”

“310-555-8020”

“310-555-8020”

“Pay”

“Agent”
Integrating customer interactions across multiple channels yields understanding into their activities and behaviors in and across multiple channels.

**Channel**
- Phone
- Web
- Survey
- Direct Mail
- eMail
- Retail Store/Commerce
- Agent Desktop

**Additional Data Integration**
- Business Process Data
- Non-interaction-related Customer Data

**Behavioral Framework**
- Aligning all data to Customer Behavior

**Existing Customer Segmentation**

**Customer Segmentation by behavior**
Customer Behavior Intelligence delivers the “why” by tracking step-by-step how your customers behave within and across customer channels.

What happened and why?

- Increased Revenue
- Reduced Cost
- Reduced Churn
- Improved Customer Satisfaction
- Interaction-driven Customer Insight
- Product and Service knowledge
Putting it together, e.g.

- Targeted email campaign to abandoners: “you spoke and we listened”.
- Acknowledgment of efforts to make experience quicker and easier
- Consistent customer messaging
The Customer Behavior Intelligence Cycle

1. **ClickFox Data Collection**
   - CTI
   - ACD
   - CRM
   - IVR / Speech
   - Web
   - Kiosk/ATM
   - Branch / Store

2. **ClickFox Data Collection Algorithms**

3. **Build Model of System**

4. **Analysis of User Behavior and Experience**

5. **Map Findings to Business Needs (gap analysis)**

6. **Build ROI Model**

7. **Prioritize Improvements**

8. **Virtual**

9. **Physical**

- New call flows/scripting
- Menu structure changes
- Build/extend automation
- Expanded/improved speech
- Improved logging
- Campaign changes
- Customer messaging changes
- Resource optimization

**Partner/Customer**

**ClickFox Technology**
Empowering Your customers and employees with speech technologies

SpeechTEKI 2006
The Voice Solutions Showcase

Thank You