Unwrapping Packaged Speech Applications
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August 9, 2006
Packaging A Custom Solution…

“You can buy a car of any color as long as it’s black.”
– Henry Ford

• Speech early adopters, speech scientists and researchers were industry makers
  – Early Adopters experienced the pain points
  – Early experiences enriched the industry & technologies
  – Researchers & Scientists grew an industry methodology

• Skills had to move out of the hands of specialists to gain mass adoption
  – Through process refinement, technology evolves to support process and methodology – this is the natural path for technology
  – Software help industries scale and supports industry best practice

• Packaged applications are the next generation to help move more “science” into an organization from the bottom up without requiring specialist skills
The move toward packages...

- Momentum has picked up in the last 5 years

- Early packaged solutions were exclusive
  - Focused on a silo of technical skills
  - Focused on functionality rich vs. best practice and methodology
  - Fell short on supporting critical VUI principles and ignored out of the box persona
  - Forced a change in methodology

- Early packaged solutions focused on vertical application vs. common functionality
  - Most solutions were to high-level in focus – boiling the ocean
  - Required a lot of customized work – marketed as supporting the 80/20 rule, in reality it was 20/80
Goals of Packaged Applications

- Low risk, low cost and availability are the goals of packaged applications.

- Packaged applications aim to overcome the initial hurdles:
  - Reduced Risk
    - Incorporate thousands of hours of service refinement, mitigating risk of adoption.
  - Reduced Cost
    - Functionality being pre-written, aim for an 80/20 mix of pre-built to custom – always be a certain degree of customization.
  - Increased Agility
    - Tried and tested capability for rollout – this should be available from day one.
  - More Accessible
    - Traditional systems integrators or technical roles can configure & maintain the solution.
  - More Flexible
    - Accommodate technical switches, preventing the investment from becoming obsolete.
What defines a packaged speech solution?

- Works in a generic form
  - Packaged infers a degree of “out of the box” functionality
  - Ask for a demonstration to prove the generic form
- Provides templates for development and refinement
  - Should be template based, not component based
  - Enables general skill sets to develop and maintain, reducing cost and time during implementation
- Supports change and maintenance, at the appropriate pace
  - Accommodate the intended users within your organization based on area of change
- Supports standard enterprise development tools and interfaces
  - Proprietary tools reduce flexibility
- Innately supports best practice
  - Incorporates and supports VUI design principles
  - Includes logic to reinforce
Are packages right for you?

- Development technologies range in functionality – from granular to holistic

Custom → Framework → UI Based Software → Packages → UI Based Package Management

- Organizations must consider many things when determine whether and which packaged solutions are good fits:
  - Organization Change – Assess change within the organization
  - Required Skills – Determine the skills required to support the solution
  - Availability – Is the application available?
  - Intellectual Property – Do you need to own the IP?
  - Cost Justification – Does the cost of change justify the investment?
Considerations for Buying Packaged Solutions

1. What type of change is occurring within your organization?
2. How frequently does business change?
3. Who manages this change area?
4. How will change be managed?
5. What is the skill split required for support?
6. Do you have the skills in house to develop and maintain the solution?

Feature Considerations for Packages:
- Mix of functionality to accommodate the different roles within an organization
- Has an easy-to-use interface supporting change
- Applications limit the amount of risk by controlling functionality through login credentials
- Logic and rules are built into the prevent a mixed group of users from making errors
- Has a richer set of APIs, adaptors and plug-ins to make the technical changes more efficient
- Has an interface that supports high-level report generation of the service
- Incorporates and supports VUI design principles
Final Considerations

- **Overall Strategy** – what life will speech have within your organization?
  - If short-term, hosted solution may be appropriate
  - If long-term, might be wise to invest in building infrastructure
- **Availability** – does a packaged application exist to support your requirements?
  - If breaking new ground in speech or have a high number of peculiarities, custom may be a better fit
- **Intellectual property** – do you need to own the IP?
  - Packaged applications suppliers own the IP of their solution, which is configured to fit your business
- **Frequency of change** – does the cost of packaged justify the investment, given upcoming change?
  - Determine the total cost per change
  - Estimate the amount of change over a three year period
  - Determine the cost per change for packaged vs. custom
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Thank You