Alan Knipe
Founder
StarNet Systems
Cultural Differences in Designing Speech Interfaces for Former British Colonies in Asia

How should we design speech applications for different cultural contexts?
Where on earth are we? (3 zones)

- Australia and New Zealand: more casual in everyday manners in many contexts, yet more British in accent and more formal in speech than North America.
- English speaking Asia and the Pacific including Singapore and Hong Kong: key cultural difference relates to issues of ‘respect’ and ‘saving face’.
- North America: May fall between the other two zones with respect to business etiquette.
Relevant standards

• Australian Standard
  – Interactive voice response systems user interface – speech recognition (AS 5061: 2007) – draft
  – This is a companion to published Australian/NZ touchtone standard AS/NZ 4263:2003

• US gethuman guidelines
  – Aim is for the gethuman guidelines to become a standard
English is not always English

- Imported words
- Morphed words
- Jinglish
Pronunciation and phrase differences

• The letter Z: Zed versus Ze
• Aluminium versus aloominum
• Uranus versus urannis
• From the start, versus from the ‘get go’
• Finished versus ‘done’
• Six (Aust) versus sex (NZ)
• Mobile versus ‘cell’
The Issue of “Face” in Asia

• Social boundaries
• Respect – personal and social hierarchy
• Age – Respect for elders
• Gender – caring female, instructional male
• The “face” issue will define the persona selected.
### Persona

- The personality or persona of the speech application must be chosen to reflect the cultural context.
- The following table provides guidance on which characteristics of a persona are most likely to be important to Australia/NZ, Asia and North America.
<table>
<thead>
<tr>
<th></th>
<th>Australia &amp; NZ</th>
<th>Asia</th>
<th>North America</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Efficient</strong></td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Professional</strong></td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Serious, not jokey</strong></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Warm</strong></td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Respectful</strong></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Business-like</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Voice Biometrics

• In Asia, but not only in Asia:
  – Web transactions may produce issues of trust
  – Human telephone operators unknown to customers may not be trusted
  – There may be more trust in automated recognition
Tips for Working in Asia

• Essential to have established relationships prior to selling the benefits of speech applications.
• Spend time developing relationships
• Build on existing solutions, for example, areas where touchtone applications have been successfully deployed.
• Human resources are traditionally cheaper.
• Understand that the business philosophy will be to make money not save money.
Designing for Demographics

• In Asia, compared with Western countries, older people (Gen X and older) may be more comfortable with face-to-face interactions (see following table for demographic categories).

• Younger people in Asia (Gen Y and Gen Z) may be more accepting than USA of mobile technologies which are seen as fashion and status symbols.

• Gen V (virtual) primarily use portable devices – which involve no data entry. One third primary students in Japan do not know how to use computer keyboards.
# Generational differences

<table>
<thead>
<tr>
<th>Generation</th>
<th>Age Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre ‘boomers’</td>
<td>61+</td>
</tr>
<tr>
<td>Boomers</td>
<td>47-60</td>
</tr>
<tr>
<td>Gen X</td>
<td>32-46</td>
</tr>
<tr>
<td>Gen Y</td>
<td>17-31</td>
</tr>
<tr>
<td>Gen Z</td>
<td>Under 17</td>
</tr>
</tbody>
</table>
Finally!

• A new voice system
• Designed by me!
• With an Aussie accent
• It will be popular world wide!