Mobile Search Deployments

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Scary Stats

• 80 percent of crashes involve some sort of driver inattention within three seconds of the event.
  – The most common distraction is the use of cell phones and other mobile devices
  – Cell phone distraction causes 2,600 deaths and 330,000 injuries in the US every year.
  – The U.S. (NHSTA) recently claimed that more than 1 million drivers use their phone at any given time and that dialing a mobile phone was one of the major causes of driver distraction – second only to falling asleep as a cause of accidents.

• Text messaging popularity continues to increase. Over a trillion messages were sent worldwide in 2007 with double that expected this year.

• Driving while texting, or DWT, is an increasing problem – especially for teens who live in a connected, multi-tasking culture and insist on instant interaction with peers, even while driving.
  – The number one killer of American teens on the road today isn’t alcohol-related accidents; it’s distracted driving.
  – According to the AAA, distracted driving currently kills more teenage drivers than drunk driving.
  – More than 45 percent of teens read or send messages while behind the wheel.

• At Nuance we believe that a multimodal user interface, a combination of voice, text and touch input options, yields a more convenient, simple way for consumers to control features and access information on their phones. But for drivers, speech is most often the safest user interface option.
Can it be True ???
Nuance Mobile Vision

One Button, Infinite Possibilities: Simple Access

- Caller IDs can be read out so that drivers don’t have to look at a screen to see who’s calling
- Drivers can speak addresses into navigation systems and listen to turn-by-turn directions, eliminating the need to look at a screen
- Drivers can dictate and listen to text messages or emails
- Drivers can speak their MP3 requests or say a radio station’s call letters to have the radio tune itself

... Increase ARPU and Reduce Churn
"You and your friends are in downtown Boston and are looking for a restaurant for lunch. Obtain a list of nearby restaurants that serve Mexican food."

- Participants struggled to complete first local search (directory assistance) task

<table>
<thead>
<tr>
<th>Metric</th>
<th>Average Value</th>
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</thead>
<tbody>
<tr>
<td>Average # of app launches</td>
<td>4.21</td>
</tr>
<tr>
<td>Average time to complete task</td>
<td>2:04</td>
</tr>
<tr>
<td>Average # of assists</td>
<td>1.16</td>
</tr>
<tr>
<td>Average # of incorrect cmds</td>
<td>2.26</td>
</tr>
</tbody>
</table>
• Once users were familiar with the “Find Business” category, they did not have trouble switching the search task domain to look for a ringtone

  Average # of app launches
  1.02

  Average time to complete task
  :17

  Average # of user errors and assists
  0

• Participant comments
  – “This is so easy.”
  – “Voice recognition makes downloading ringtones very simple compared to browsing to it. I might actually do it [if I had this in my phone].”
Usage Insights – Palm 755 and Centro

**NVC Usage Stats**

- 29.8% Search & Web
- 18.0% Calendar
- 6.3% Call
- 3.6% Email
- 42% SMS

**Usage Summary (Palm 755 & Centro):**
- 50k downloads to date
- Calling is the “hook”
- 30% messaging
- 20% search
- 18% of requests “monetizable” via advertising

**Service Summary**
- NVC preloaded
- 1-click access to 15 services
- Web, Search, Messaging and Calendar
- 63 transactions per user/month
- 12 voice-based searches/month
- $6.00 subscription fee
DPP - Usability Findings. Internal

Top 3 Subscriber Activities

- **Info** (news, sports, stocks, weather, 411, entertainment etc…)
- **Media & Content** (ringtones, music, video, images, games)
- **E-commerce** (wireless accessories, movie tickets, books etc…)

- **Web Browsing** (cnn.com, espn.com etc…)
- **Web Search** (Google, Yahoo etc…)
- **E-commerce** (movie tickets, electronics, books etc…)

- **Navigation** (Telenav, NIM etc…)
- **Local Search** (LBS, yellow pages)
- **Mobile TV, Media Player** (EPG, on-device libraries)

- **Email, SMS, IM, VM** (Blackberry, Good, ActiveSync, OZ, Seven)
- **Calendar** (Blackberry, Good, ActiveSync)
- **Contacts & Dialing** (on-device contacts, network address book)

- **My Wireless Account** (billing, minutes, balances, change plan)
- **B2C Applications** (banking, healthcare, retail etc…)
- **B2B Applications** (CRM, SFA etc…)
2008 to 2012 Search Frontier: Intelligent Access

The Voice Button

The Smart Keypad

Ease of Use, Convenience and Speed to Drive Consumer Adoption