Mobile Search Drives New Opportunities for Ad Revenue

Mike Wehrs
Vice President, Nuance Mobile & Consumer Services
"Prototype"
"...but has to be real."
"And show me on either Android or iPhone"
"And show me C&C, Search and Messaging"

If anyone has built the PowerPoint to Reality converter, please see me after this talk
INTERNAL: Mobile access to information

- Content is available. Consumer desire fulfillable. Devices capable.
- So what’s not happening?
  - Google/Yahoo/etc have made finding information easy
  - Users want to access the same information from their mobile phone
  - Current options have challenges
    - Business models are very challenging
    - Surfing via carrier’s portal: slow, tedious, walled garden
    - Search via WAP/Web: slow, static pages
    - Specialized applications (Nokia Mobile Search, Google Local Mobile, Yahoo One Search): Rich results but difficult input
    - DA via phone calls: simple voice interface, but limited results
what do we know

assume nothing
Google iPhone usage shocks search giant

By Slash Lane
Published: 03:00 PM EST

Google on Wednesday said it has seen 50 times more search requests coming from Apple iPhones than any other mobile handset -- a revelation so astonishing that the company originally suspected it had made an error culling its own data.

"We thought it was a mistake and made our engineers check the logs again," Vic Gundotra, head of Google's mobile operations told the Financial Times during this week's Mobile World Congress in Barcelona.

Should other companies follow in Apple's footsteps by making web access commonplace on their mobile handsets, Gundotra believes the number of mobile searches could outpace fixed internet search "within the next several years."

That of course means big increases in incremental advertising revenues for the
‘fast’ compared to what?

‘simple’ compared to what?

There are 10x more mobile devices than PC’s and people carry them all the time. Of course the number of searches on mobile will outpace searches on PC’s

The important question is WHY
Target Market = Schizoid?

Demand for Advanced Features

Consumers want
• More features
• More data access
• More productivity

“Feature Fatigue”

#1 complaint: “Too many functions I did not use”¹

89% of users: Never use or don’t know how to use mobile search²

84% of users: Want features that save time³

Simultaneously On the Rise

¹ CMO Council: Feb. 2007 Global Mobile Mindset Audit™
² Mobile Marketing Association
³ eBrain Market Research, July 2006
DPP - Usability Findings. Internal

1 SMS = 47 clicks

“Call Bill Murphy on his mobile.”

Dial by name = 30 seconds

“I will be there soon.”

1 ring tone download = 50 seconds

“Find ring tone from the Beatles.”
Example: Downloading Music

Standard UI vs. Multimodal UI

43 Seconds 14 Clicks vs. 19 Seconds 2 CLICKS
• One-shot v. multi-step

• Users prefer answering a series of questions to input a mobile search query, rather than “thinking of everything all at once”
  • Support for multi-step dialogs

• It’s possible to create a playful and positive 1st time experience
  • System tutorials and tips
  • Let users proceed at “their own pace” to encourage exploration and discovery of new mobile search services

• Users can be easily conditioned to say the mobile search commands as displayed on screen
  • No need to build a system that recognizes “everything”

• For those users in the one-step unconstrained condition, not a single participant used a command other than “Find” to initiate the search
  • Learning multi-step first influenced how users were concatenating one-step commands in second part of test
“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>Average # of app launches</th>
<th>Average time to complete task</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.21</td>
<td>2:04</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Average # of assists</th>
<th>Average # of incorrect cmds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.16</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.

- **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].”
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Drastically reduces keystrokes needed to find any feature, any content

87% of users say T9 Nav makes finding features easier.

Example: Locate clock settings
- Spell “TIME”
- Press: 8 (tuv)  4 (ghi)  6 (mno)  3 (def)
- Choose “Clock (Time)” from the list

87% of users say T9 Nav makes finding features easier.
DPP - Usability Findings. Internal

**Not just Voice... T9 Nav: Simple & Quick**

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**Key Feedback**

- 100% take-rate
- Associations:
  - “That was really easy”, “Very fast”, “It makes that evil phone totally easy to navigate”
  - “Is this available now?”
  - “Can I keep this phone?”
Voice Search: Directory Assistance with Cat-Search

CUSTOMERS

Case Study: Jingle
- Over 20 million calls per month
- Growing at 5-10% per month
- 50-70% Automation
- Advertising Model (CPM, Pay-per-Call)
Usage Insights – Palm 755 and Centro

NVC Usage Stats

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

Search & Web Include:
- Find Business (YP)
- Go to Website
- Search the Web
- Stock Quotes
- News
- Sports Scores
- Find Movie
- Weather
- Navigation

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

Nuance
Nuance Voice Control 411 Highlights:

- 70% of searches are food-related
- Pizza accounts for nearly half of all requests
- Pizza Hut is #1 most popular listing, Starbucks next
- McDonald’s is ~5x more popular than Burger King
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…)

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**DPP - Usability Findings. Internal**
2008 to 2012 Search Frontier: Intelligent Access

The Voice Button

The Smart Keypad

Ease of Use, Convenience and Speed
to Drive Consumer Adoption
The Answer to Unlocking Ad (and other) Revenue

• Engaging and Intuitive User Interface
• Embrace multi-modality, it isn’t text vs speech vs image
• Focus like crazy on the real End User Experience
• Make the solution work for the Customer via whatever means necessary
  • It isn’t poor customer training that hampers usage
  • It is our job is to improve accuracy of automation