



## Google'izing – Search goes Mobile

Münchener Kreis "Wachstumsimpulse durch mobile Kommunikation"

Dr. Stefan Ortmanns

22. November 2006



# Google'izing - Mobile Search

## Mobility triumphs

Mobile devices are important to get informations

- 700 million cell phones growing to a billion in 5 years
- By 2008, 50% of all cars will have or offer speech
- 4.3 billion pages of content on Google alone

...

*Find the needle*



**Device menu complexity**



**Small keyboards**



**Small mobile browsers,  
buried content**



**Accessibility & driver  
distraction**

# The Speech Experience is Ubiquitous



**Search & Communications**  
(Dozens of Innovations Worldwide)



**NUANCE**



**Dictation**  
(Millions of Daily Users)

## Fields of Speech Solutions



**Customer Care**  
(7 Billion Calls Annually)



**Mobile Phones**  
(50 Million Handsets in Market)



**Automobiles**  
(100 Models on Road)



# The Nuance Mobile Vision

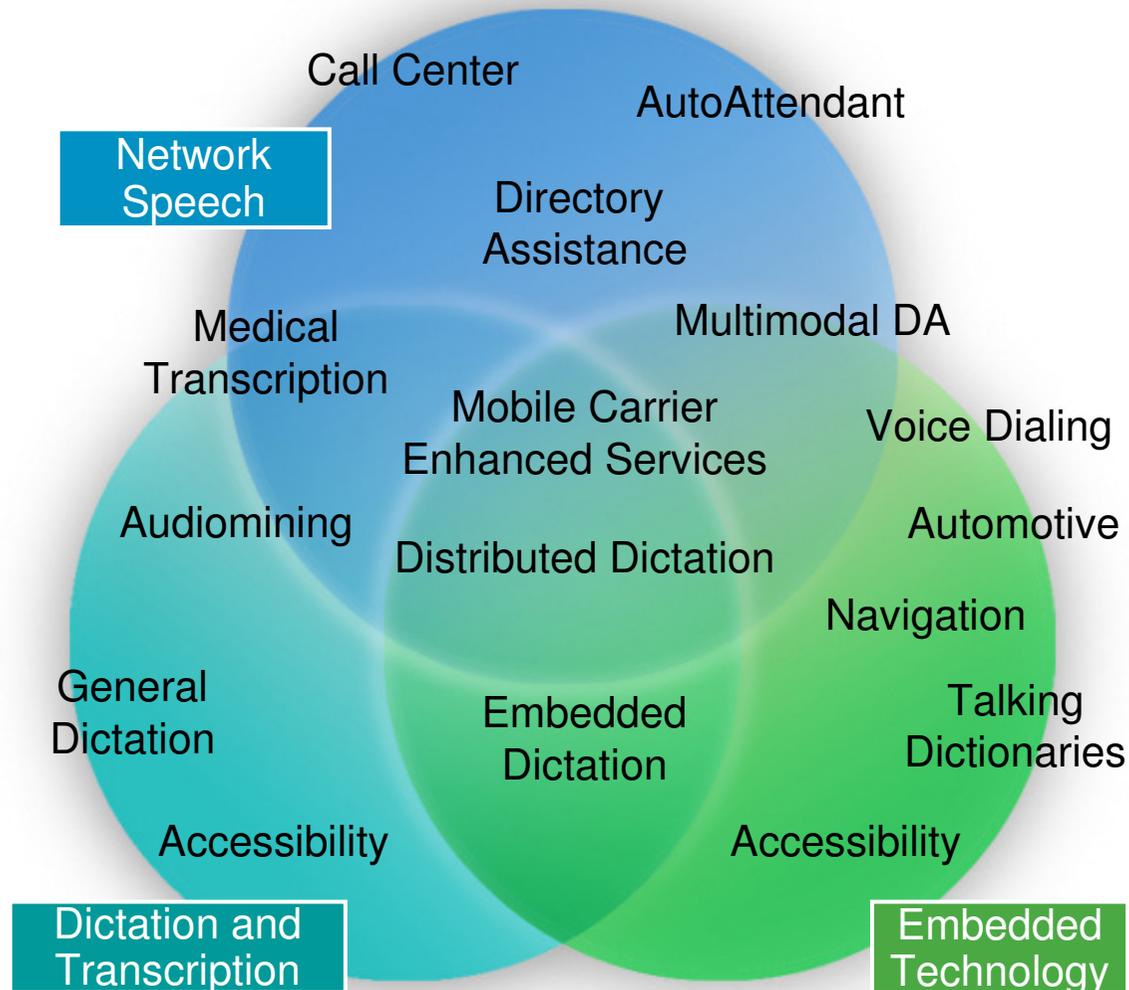
*To SIMPLIFY access to content and information on ANY DEVICE, on ANY NETWORK*



# Targeted Solutions from Common Technology

*Transactions*

*Information access*



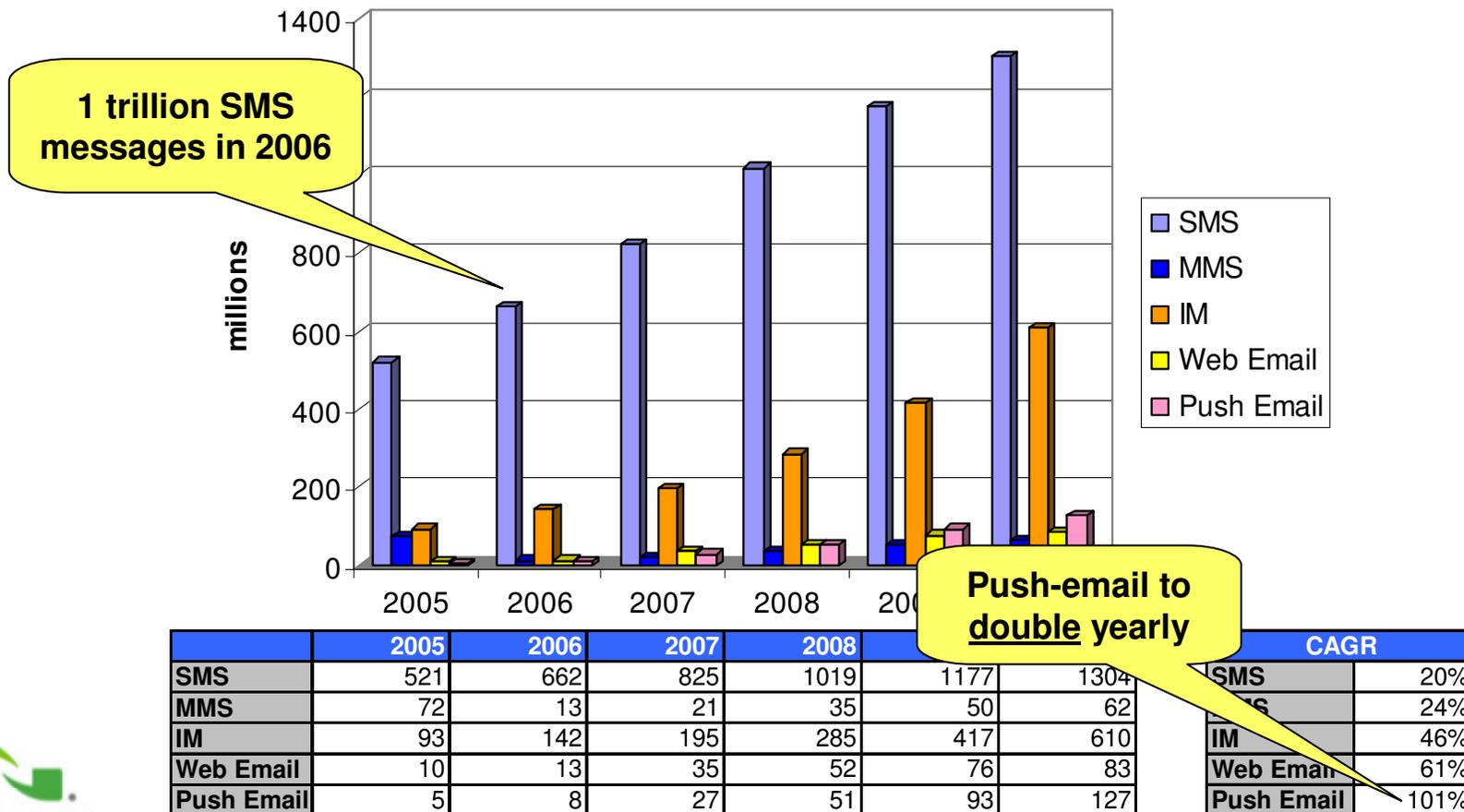
*Information creation*

*Command and control*

# Market: Global Mobile Messaging Market

*SMS is today's far leading application in today's messaging market, and push-email is the fastest growing messaging application.*

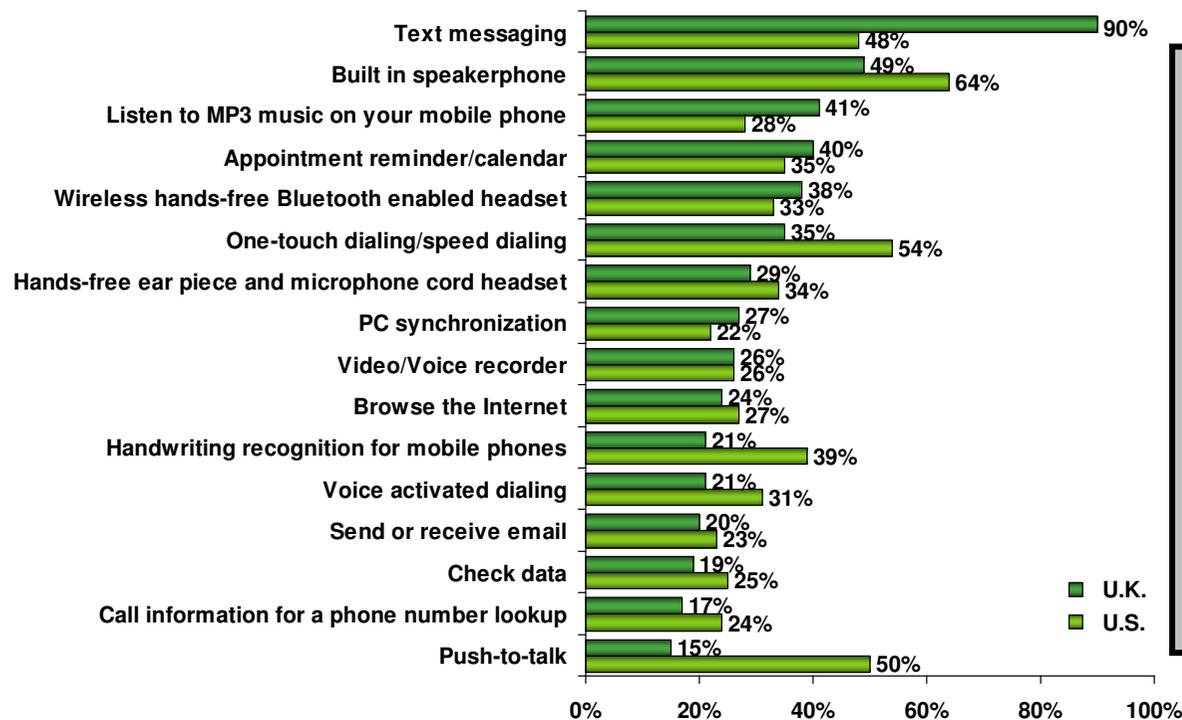
Global Messaging Market (millions of users)



# Market: User Survey

- Text Messaging is the most used functionality on the phone in certain countries
- An estimated 2 billion mobile messages are sent daily

Percentage of respondents using certain functionality at least once a week



E-Poll Survey of 805 UK residents & 837 US residents, commissioned by Nuance

## End-user Data

78% surveyed in UK and 69% in the US find message dictation appealing

52% surveyed in UK & 39% in the US say they are likely to upgrade to get dictation

E-Poll Survey of 805 UK residents & 837 US residents, commissioned by Nuance

# Nuance Mobile Speech Platform...

*...Enables natural, one-click voice-enabled access to any mobile application or service*



## **One-click access to:**

### Mobile Search

#### Content

- Tones
- Images
- Games
- Music
- Video

#### Local

- DA
- YP
- CitySearch
- Movies
- Weather
- Sports

### Mobile Communications

SMS

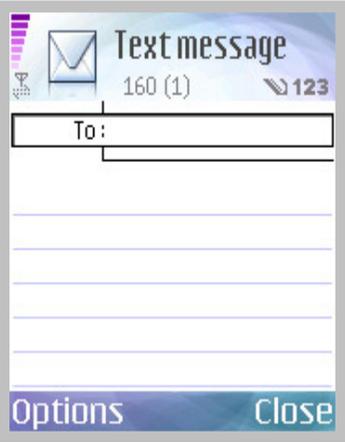
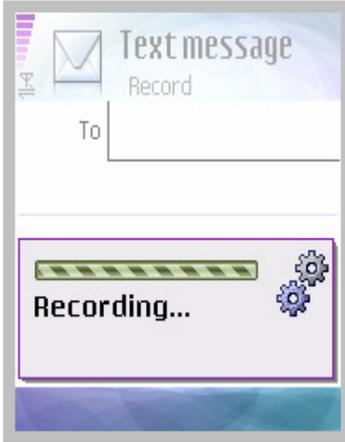
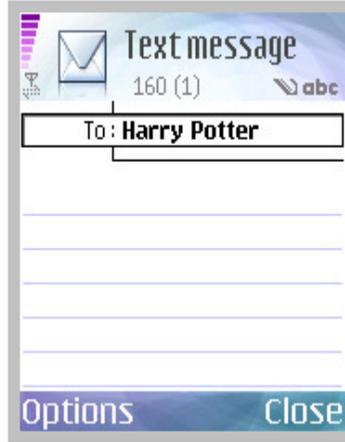
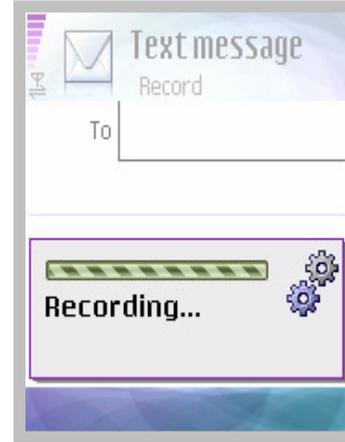
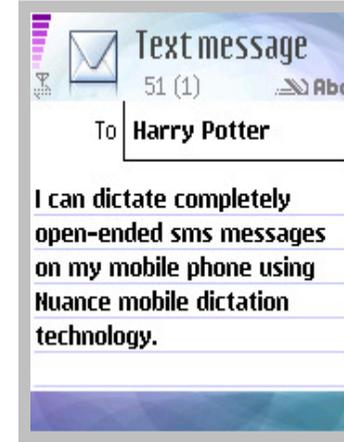
Email

IM

Blog

# Nuance Mobile Messaging

*Users can dictate an entire message by voice with a single button press*

Start new text message	Dictate name	Dictate message body	Recognized message	
				
Start new SMS message	Press <b>SEND</b> key to enter recipient name	Name is returned in less than <b>2 seconds</b> (3G)	Press <b>SEND</b> key to enter message body	Msg is returned in less than <b>2 seconds</b> (3G)

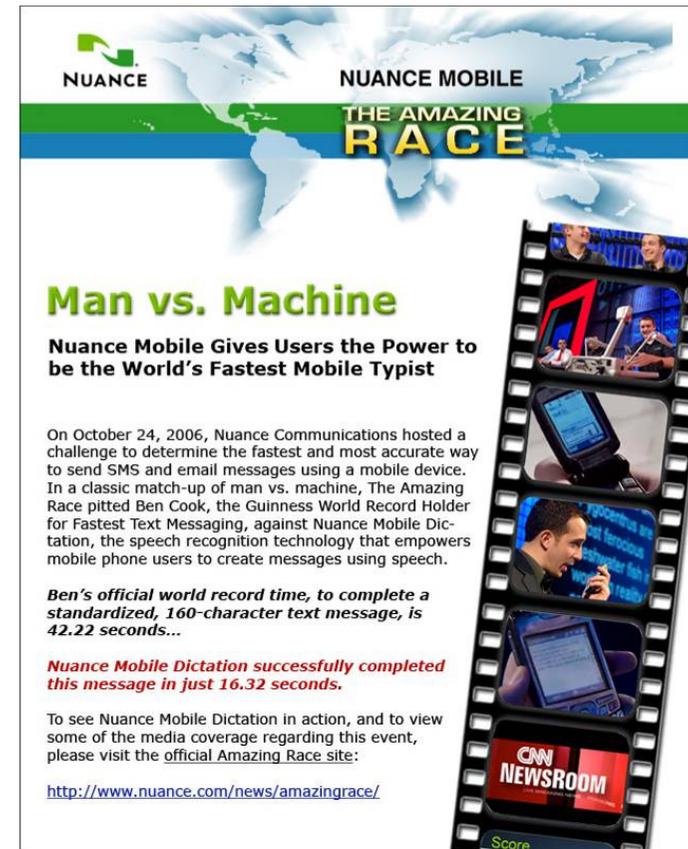
## Business Case (based on Nuance trials):

- Message entry **up to 6 times faster** than other input methods
- Up to **5x increase** in usage compared to typed SMS
- **One-handed** operation; much **safer** to use while driving
- Significant opportunity for **IM, Email & Blogging** services

# Preliminary Trial Results: Performance

## Average text entry time using various input mechanisms (small sample)

Input Device		Average Time	# Errors
Mobile phone keypad		1:57	6
Mobile phone keypad (T9 predictive text)		1:15	0
RIM Blackberry (QWERTY keyboard)		0:57	2
RIM Blackberry 7100 (predictive text)		0:59	0
Desktop PC (QWERTY keyboard)		0:22	0
Voice (Mobile dictation)		0:12	0



**NUANCE MOBILE**  
**THE AMAZING RACE**

### Man vs. Machine

**Nuance Mobile Gives Users the Power to be the World's Fastest Mobile Typist**

On October 24, 2006, Nuance Communications hosted a challenge to determine the fastest and most accurate way to send SMS and email messages using a mobile device. In a classic match-up of man vs. machine, The Amazing Race pitted Ben Cook, the Guinness World Record Holder for Fastest Text Messaging, against Nuance Mobile Dictation, the speech recognition technology that empowers mobile phone users to create messages using speech.

*Ben's official world record time, to complete a standardized, 160-character text message, is 42.22 seconds...*

**Nuance Mobile Dictation successfully completed this message in just 16.32 seconds.**

To see Nuance Mobile Dictation in action, and to view some of the media coverage regarding this event, please visit the official Amazing Race site:  
<http://www.nuance.com/news/amazingrace/>

**CNN NEWSROOM**  
Score

Dictation can be nearly 6x faster than T9 and 5x faster than mobile keyboards.

# Market Opportunity for Mobile Search

*Consumer research indicates there's strong consumer interest for location-based information access*

## Location-based Services Top List of Content Preferences for Consumers

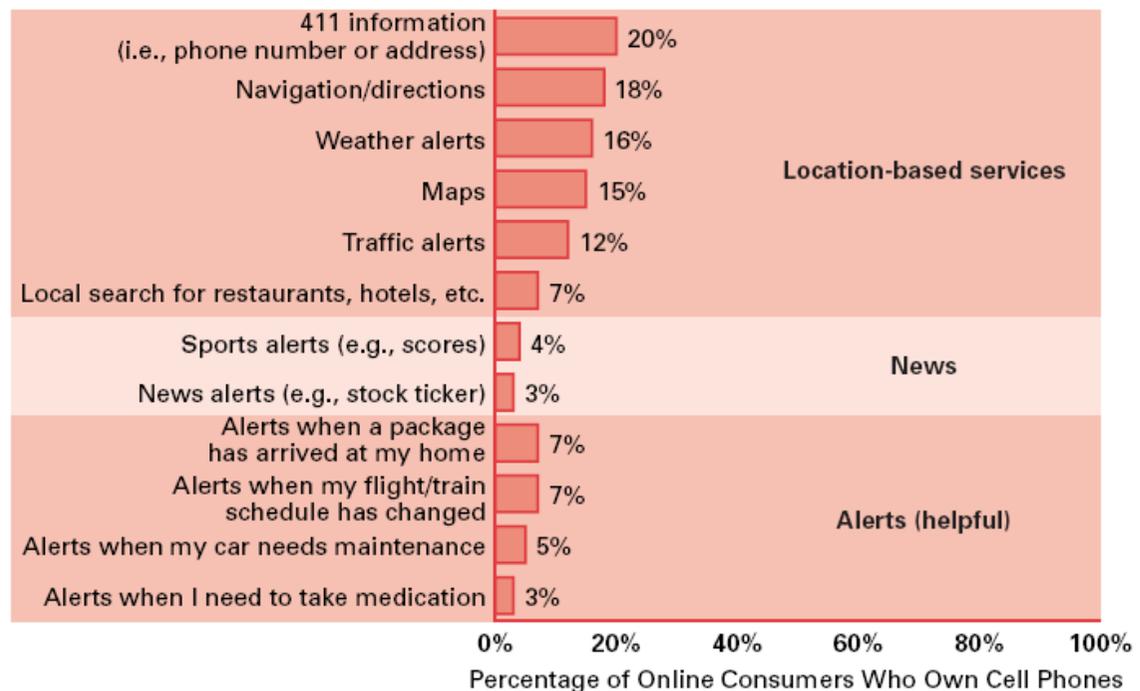
**Fig. 1 Consumer Willingness to Pay for Cell Phone Services**

Note: Not all survey responses are represented here.

Question: Which of the following services delivered to your cellular phone would you be willing to pay for? (Select all that apply.)

Source: JupiterResearch/Ipsos-Insight Consumer Survey (12/04), n = 1,733 (online consumers who own cell phones, US only)

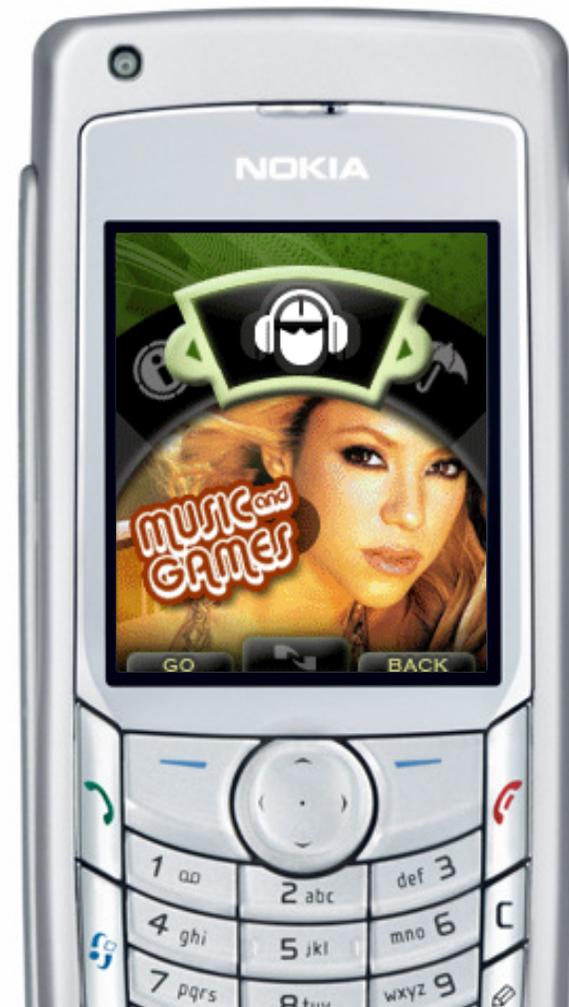
© 2005 JupiterResearch, a division of Jupitermedia Corporation



# Nuance Mobile Search™

*Nuance Mobile Search™ enables completely natural and instantaneous voice-based access to information and content*

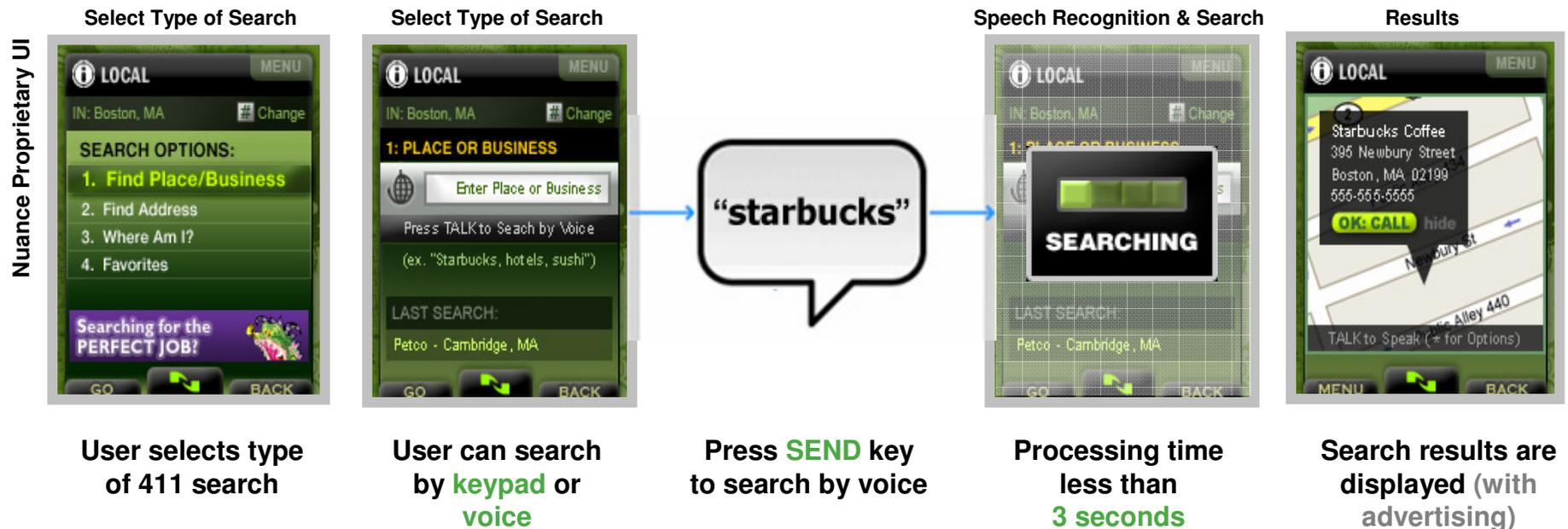
- Content Downloads
- 411 & Yellow Pages
- Maps & Directions
- Weather
- Dining
- Entertainment
- Sports
- Finance
- Price Comparison
- Travel



Nuance Proprietary UI

# Nuance Mobile Local Search™

*With Nuance Mobile Search™, users can search a 411 or Yellow Pages directory with a single button press*



## Business Case (based on Nuance deployments & trials):

- Searches are end-to-end **up to 10 times faster** than calling 411
- **80%** of users prefer voice search over calling 411
- Up to **8x increase** in usage compared to 411
- Significant **contextual advertising** monetization opportunity

# Breakthrough: Dictation & Search



- “Steve Chambers Boston MA”..... Phone number, etc.
- “5 Marshall St. Newton MA”..... Maps, etc.
- “Find me an Italian restaurant on Tremont St. in Boston MA”
- “Movie Pirates of the Caribbean 02114”..... Movie times
- “Find me Rolling Stones Ring-Tones”..... Merchandising
- “8048030102”..... Bar Code Bombay Sapphire Gin, retail
- “Define transcendentalism”.... Just general web search / ads

**Dictation Unleashes Totally Open-Ended Search, and a huge potential revenue source from listing services, advertising, merchandising, revenue share, click-to-call, etc.**

# Summary: Google'izing - Mobile Search



- # **Speech changes the way mobile consumers and professionals interact with the mobile environment**
- # **With Speech, *device control*, *search*, and *communications* applications become quicker, simpler and more seamless**



For a video of the live race, visit:  
<http://youtube.com/watch?v=-L4Jk6GDud0>

For CNN coverage and race results, visit:  
<http://www.nuance.com/news/amazingrace/>

Round	t9	QWERTY	Ben (T9 vs Tap)	Nuance Mobile
1	:58	:30	:16	:08
2	FAIL	1:30	1:17	:18
3	FAIL	1:09	:48	:16

