

What People Do with Voice Search Services

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Tellme Brief History

2000: Launched 1-800-555-TELL Voice Portal

2001: Branched into Enterprise Customer Care and Directory Assistance

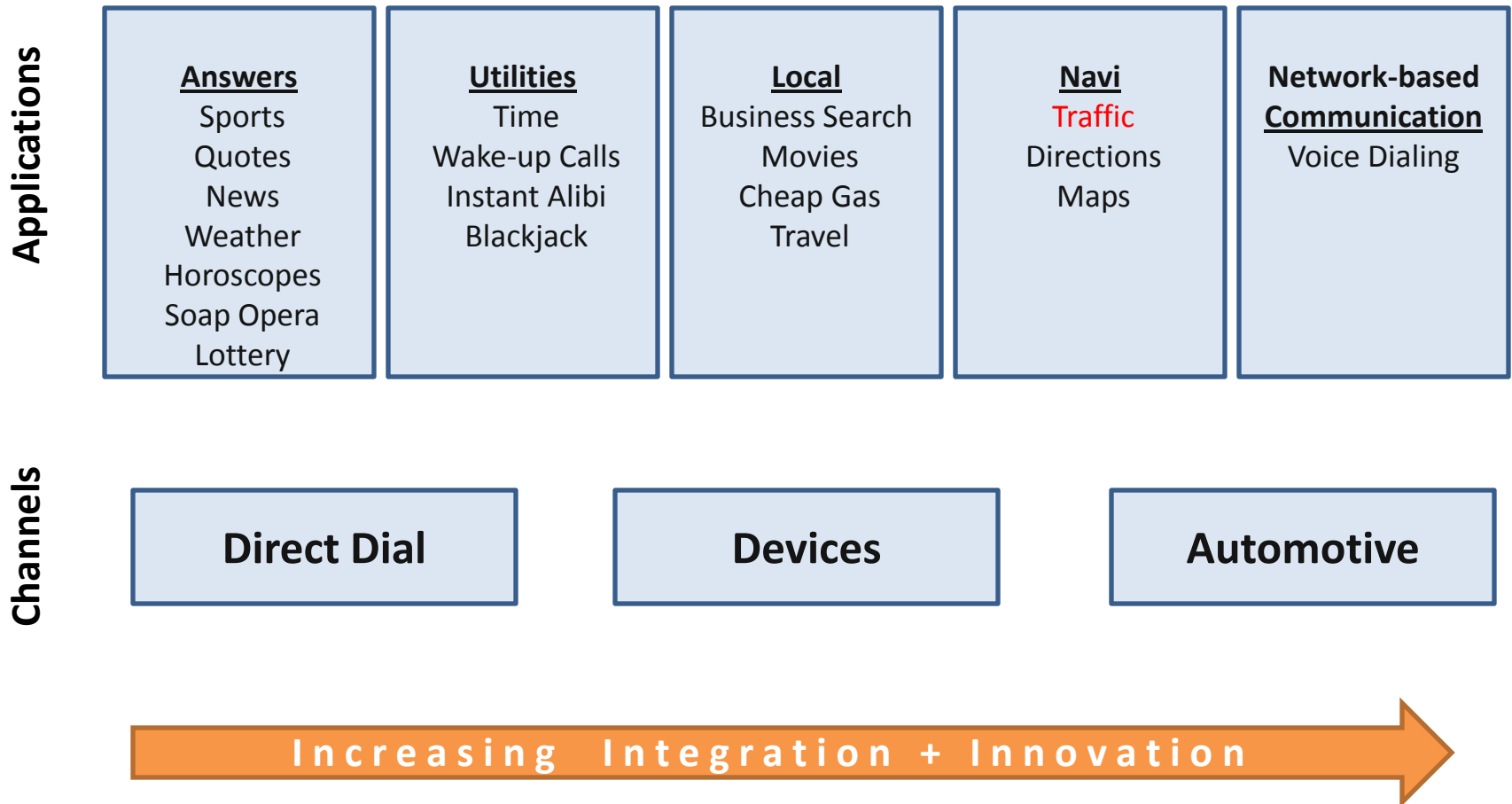
2006: Launched Multimodal Mobile Client Application

2007: Acquired by Microsoft, Launched Live Search 411 (1-800-CALL-411)

2009: Tellme Announced as part of Ford Sync v3 (Traffic, Directions and Information)

Voice Services:

(Primarily) Speech In/Audio Out over the Voice Channel



What People Do with Voice Search

It Depends

Direct Dial

Reach 85% of the mobile phone users who do not use mobile data

Top Voice Portal Applications: Sports, Weather, News, Stock Quotes, Horoscopes

Top Free DA Applications: Business Search, Movies, Weather, Stock Quotes, Sports

Automotive/Devices

Navigation users, frequent drivers, technologically savvy (often have a smartphone)

Top Applications: TBD (Traffic, Driving Directions, Business Search ...)

Key Trends in Automotive

more time spent driving

790 hours spent in the car each year

desire for productivity & entertainment

77% of motorists drive alone to work

45% of motorists admit to text messaging while driving

location awareness

GPS

regulatory constraints

Hands-free laws enacted throughout US and Western Europe

connectivity options beginning to emerge (but early)

GPRS, Bluetooth, Data-over-Voice, WiFi, SMS

industry is seeking voice interfaces

Ford, Toyota

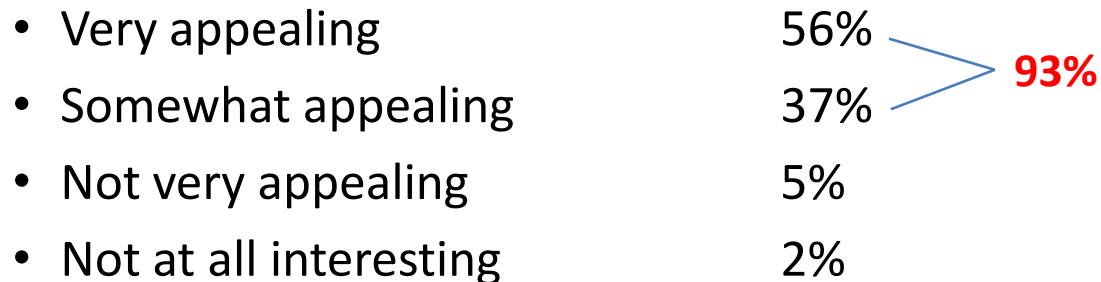
established & rapidly growing market

\$3.0B (2006) to \$7.5B (2011) for search and navigation solutions

\$20B for advertising targeting motorists

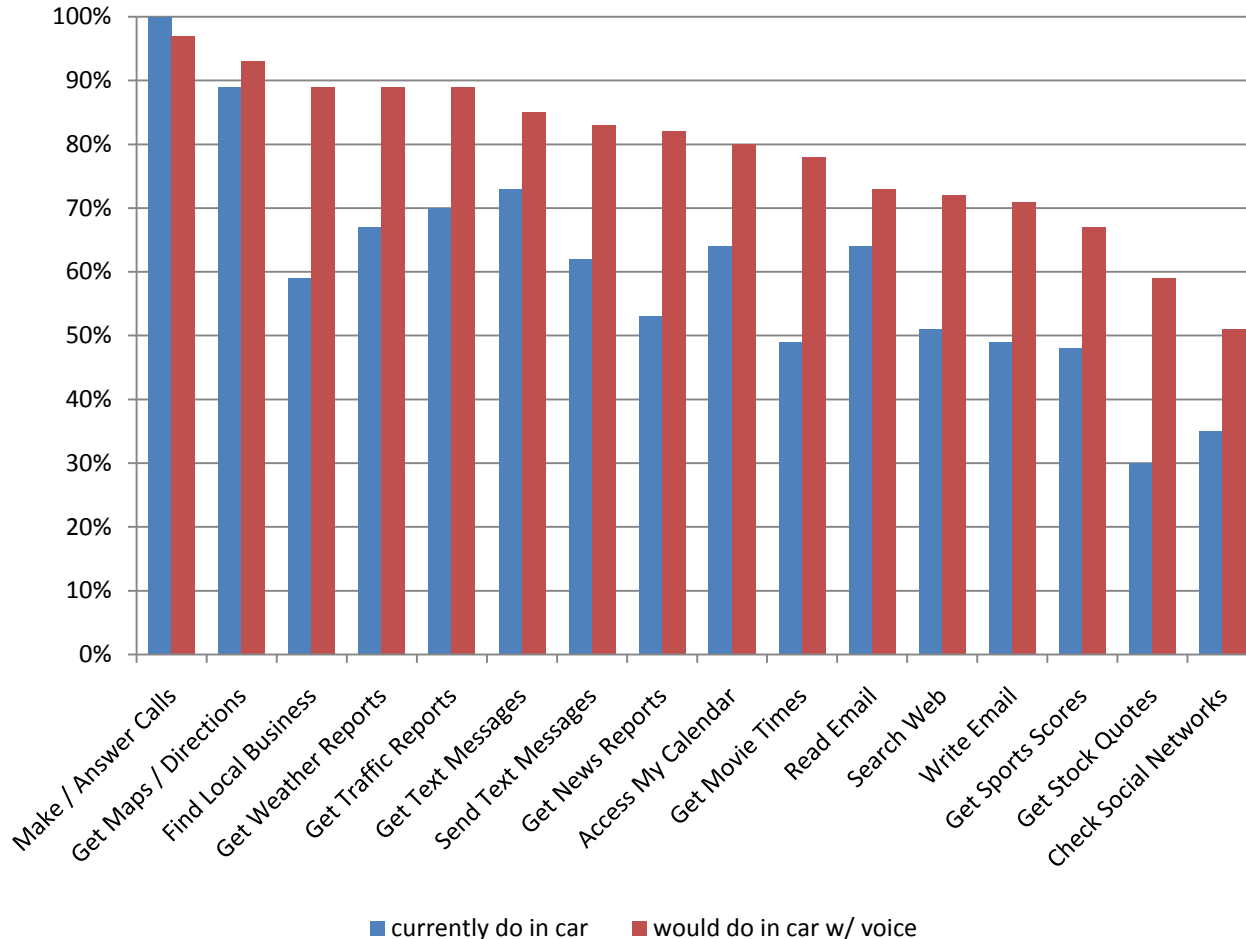
People Want to Use Voice to Get Information in the Car

How appealing are the types of services that Tellme provides and can provide, in the car?



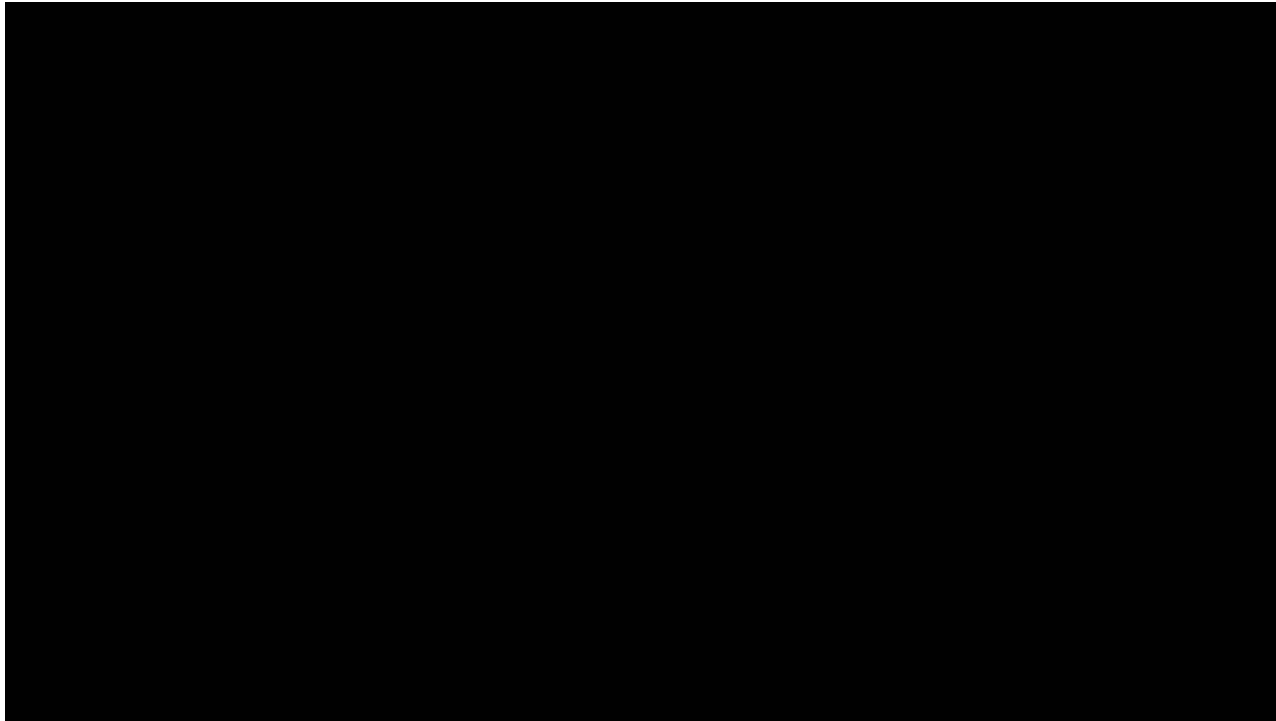
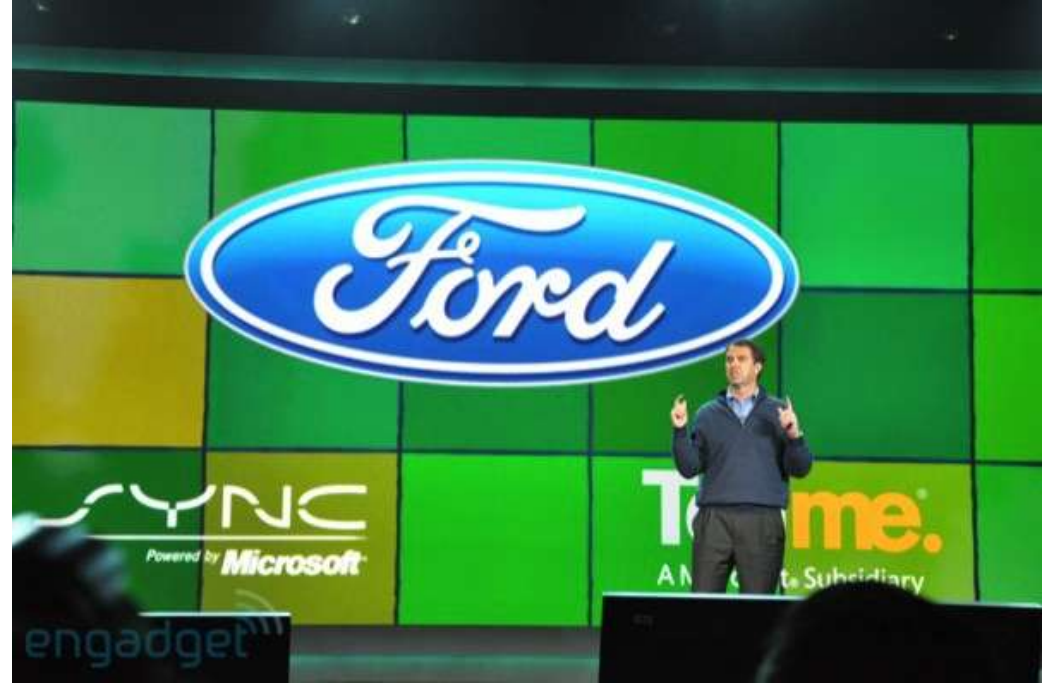
Voice Increases Task Activity In The Car

Business Search, Weather and Traffic get big bump with Voice

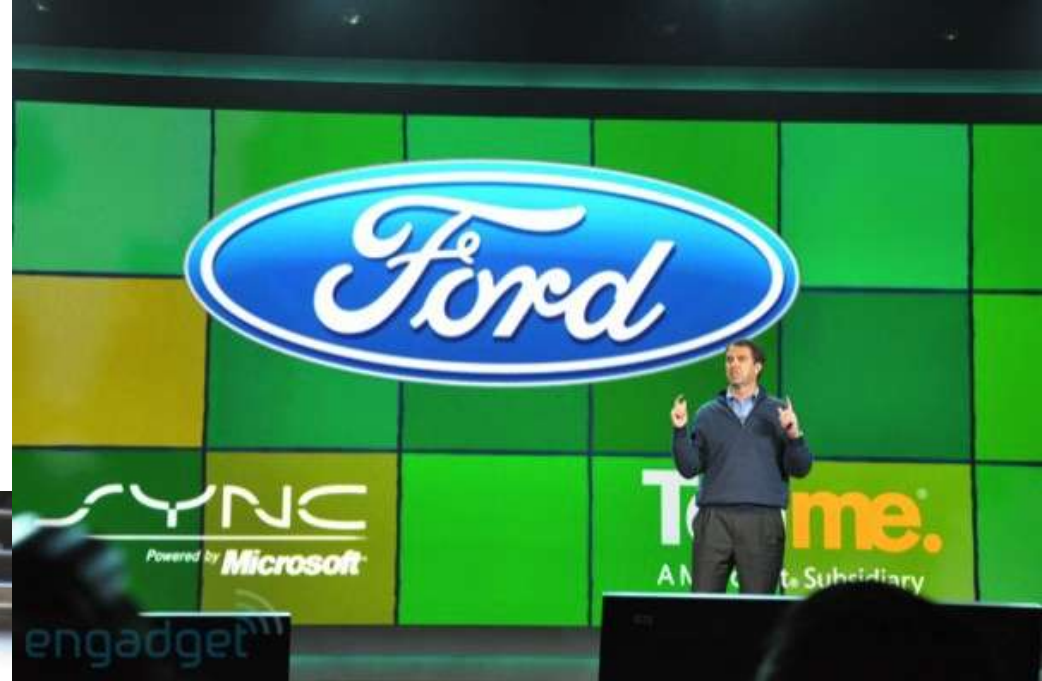


■ currently do in car ■ would do in car w/ voice

Tellme at CES



Tellme at CES



Challenges

Reco is hard in the car

Touch-to-Interrupt reduces noise and side-speech

Use Personalization, History and Location-Awareness to minimize reco interactions

Tune for in-car data and user behavior

User is highly-distracted

Audio output: Eyes on the road, hands on the wheel

No fallback mechanism, type or touch. Requires voice-driven disambiguation

User-directed interactivity: Interrupt, Repeat, “Services”

Driving task is unique

Evolve local search for more navigation, less directory assistance model

Data freshness/accuracy becomes paramount

Network-Based Voice Search Resonates in Car

User Demand

93% users find Voice Services in the car Appealing
Ford cars with Sync sell twice as fast as cars without

Current and relevant information

Off-board speech reco and online search delivers fresh results

Cost-effective

No dedicated modem, hardware costs are much lower
Connect to Internet services through a normal voice call

Highly-Integrated

Button on the steering wheel
GPS-enabled, location aware – data from car to network
Send-to-Car – data from network to car

Radio Paradigm

Clear audio output as critical as voice input for distracted scenarios
On-demand, personalized “radio” content
Radio advertising is a \$20B market targeting motorists

Summary

Today, network-based speech recognition via the voice channel is a cost-effective and appropriate way into the car

Deeper integration (data-in/data-out) with the car and other devices affords new opportunities for greater innovation in voice applications

Over time, other devices in highly distracted scenarios will leverage the interaction model of audio-out and greater personalization (perhaps with glance-able visual display secondary)