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Speak, *Find.* ...*EASY!*

SingTel deF!ND: Localized and Targeted Mobile Voice Search Deployment in Singapore

Adeline Tang, *SingTel*

Melvyn Hunt & Yoon Kim, *Novauris*

2012 Mobile Voice Conference

SingTel's Requirement

- Proliferation of voice-enabled mobile apps and services in the US
- SingTel needed a version of mobile voice search customized for Singaporeans
- Existing solutions – *Google* and *Siri* – don't work well enough for Singapore English speakers
  - and they lack the Singapore-specific vocabulary

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Novauris's Solution

- **What we had**
  - Proven technology for spoken access to information
    - Verizon Wireless *Get It Now Search*
  - Experienced ASR R&D team that is customer-focused
- **What we provided**
  - Rapid prototyping for Singapore English
  - Full-scale, custom speech recognition for SingTel
  - Consulting on mobile voice UI integration
  - Preparation for launch from concept to launch & more
- Collaboration has led to launch of voice search for SingTel's IPTV and mobile applications

Rapid Prototyping of Singapore English ASR

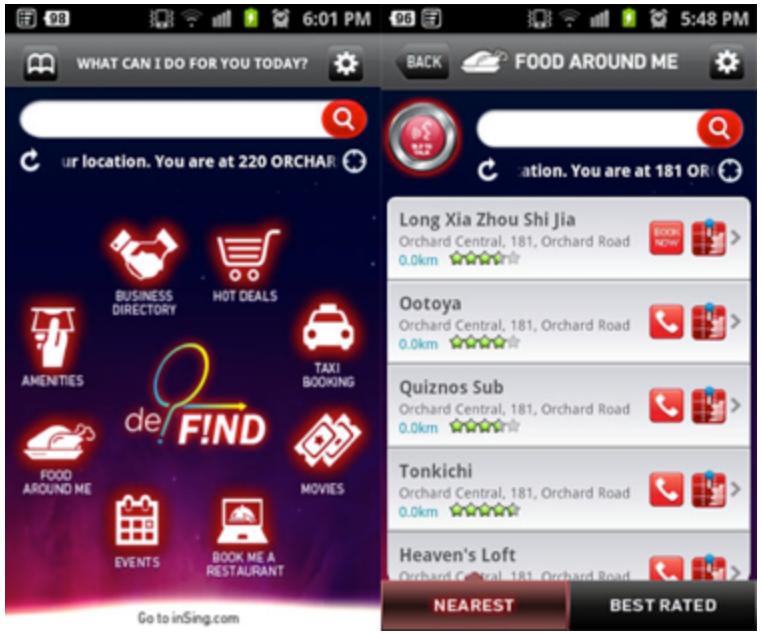
- Tight time constraints initially ruled out a normal development path for Singapore English
- We therefore took our US English system and modified the pronunciation dictionary to match Singaporean speech
- SingTel included voice input UI for the launch of its fiber-optic network based Web TV service, ***exCite TV***
- **This formed the basis for the full-scale development of Singapore English ASR for *deF!ND***

SingTel deF!ND – Location-aware "Digital Concierge" for Singapore

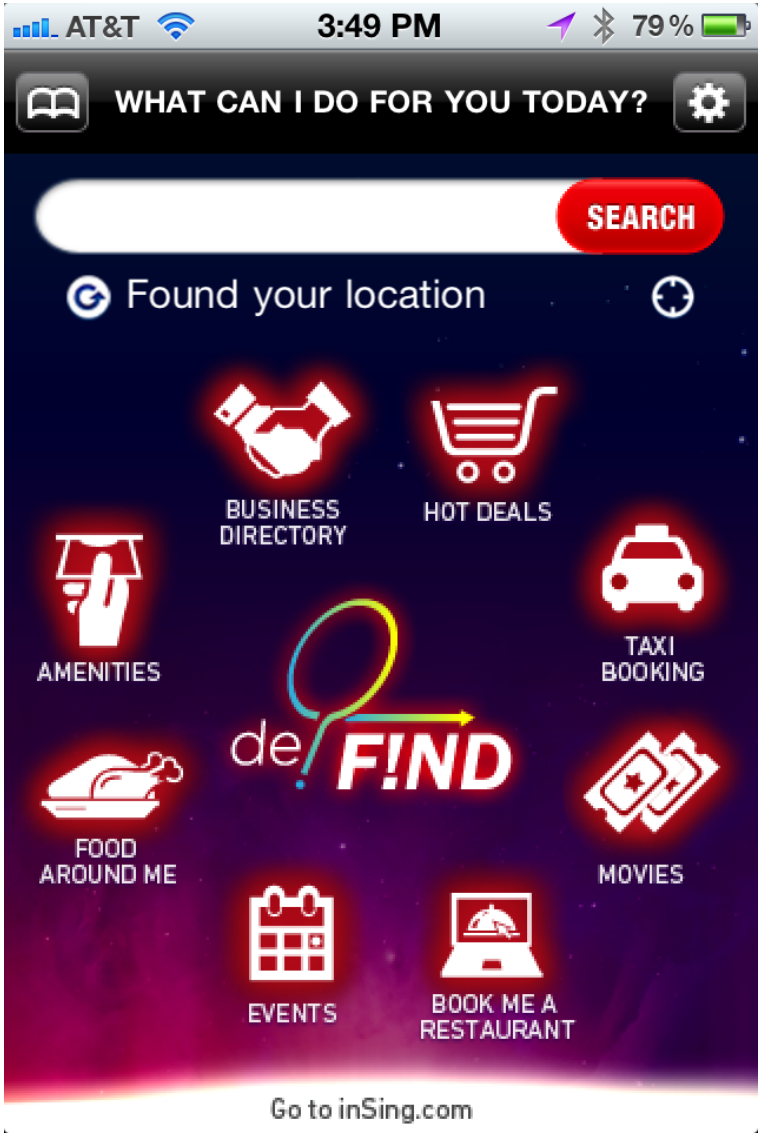
SingTel deF!ND

"Digital concierge app" for smartphone users in Singapore

- Launched in November 2011
- Available for iOS and Android
- Top lifestyle app in Singapore
- Pre-loaded on Samsung Galaxy S2
- Adapted to Singapore English and local terms
- Covers all businesses including shops and restaurants in Singapore
- Well received because Siri doesn't understand Singaporeans



SingTel deF!ND: Use Case

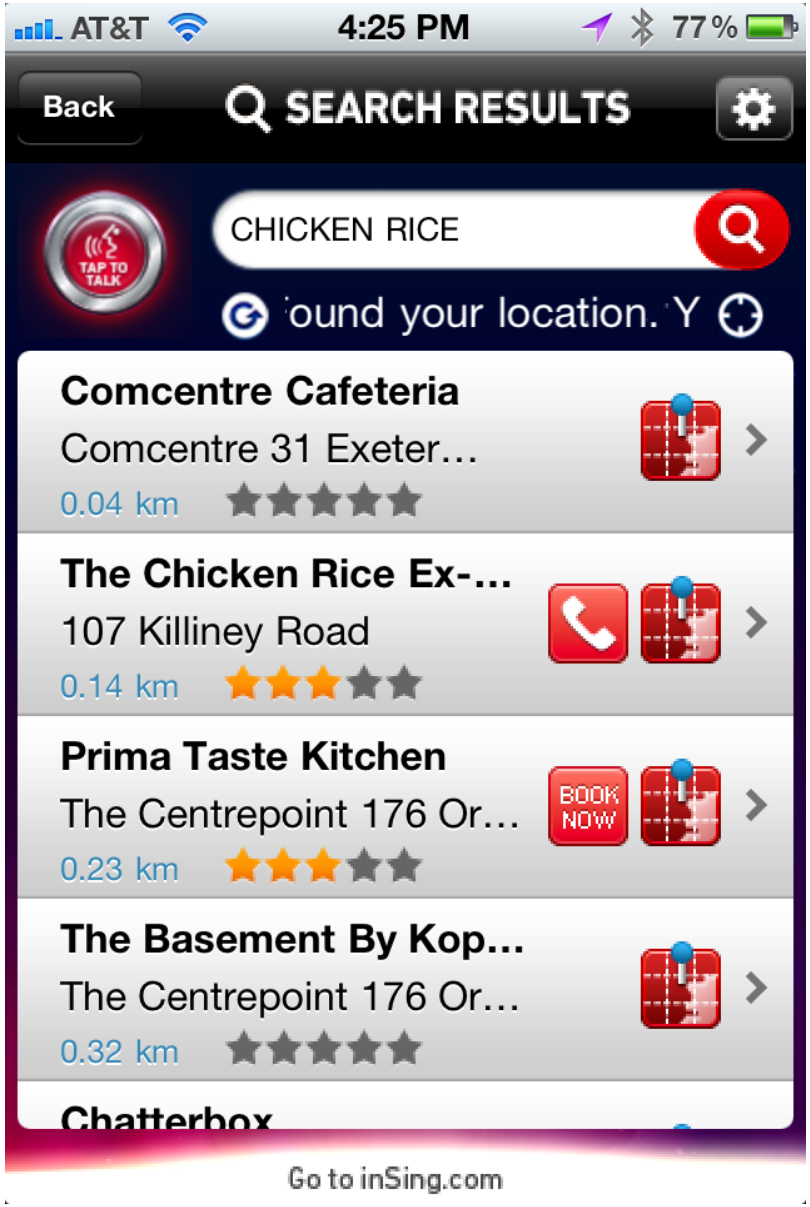


- Discover anything you want around you
- Categories
  - Search
    - Food Around me*
    - Amenities*
    - Business Directory*
    - Hot deals
  - Transact
    - Taxi Booking
    - Movies
    - Book me a restaurant
    - Events

* Voice enabled

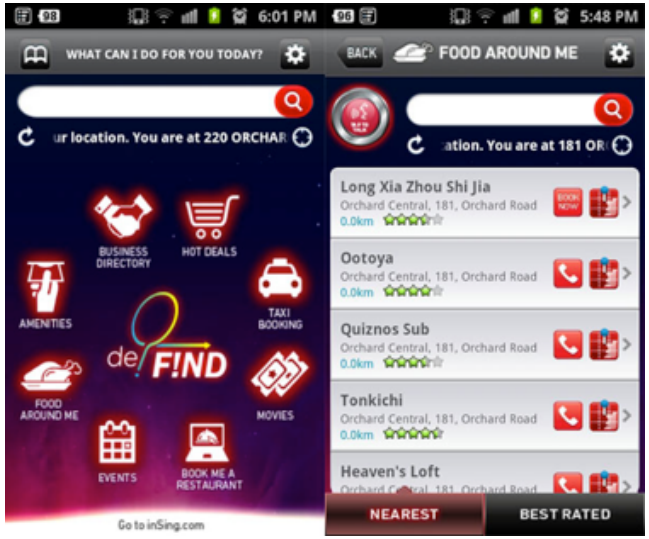
SingTel deF!ND: Use Case

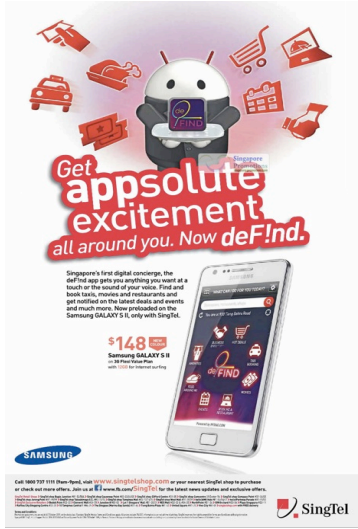
- Food is the #1 search item
- Key lessons learned
  - Providing examples of what can be requested
  - UI in providing visual prompts on speech input
  - Providing options for next steps



Summary

- SingTel and Novauris have collaborated to launch a mobile voice application in Singapore
  - For users to access location-based information and complete some relevant transactions using voice
  - Understands local dialect and app-specific vocabulary
- Successful model of rapid localization and adaptation for custom mobile voice search





Thank you!

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