

### **Presentation Outline**

Introduction

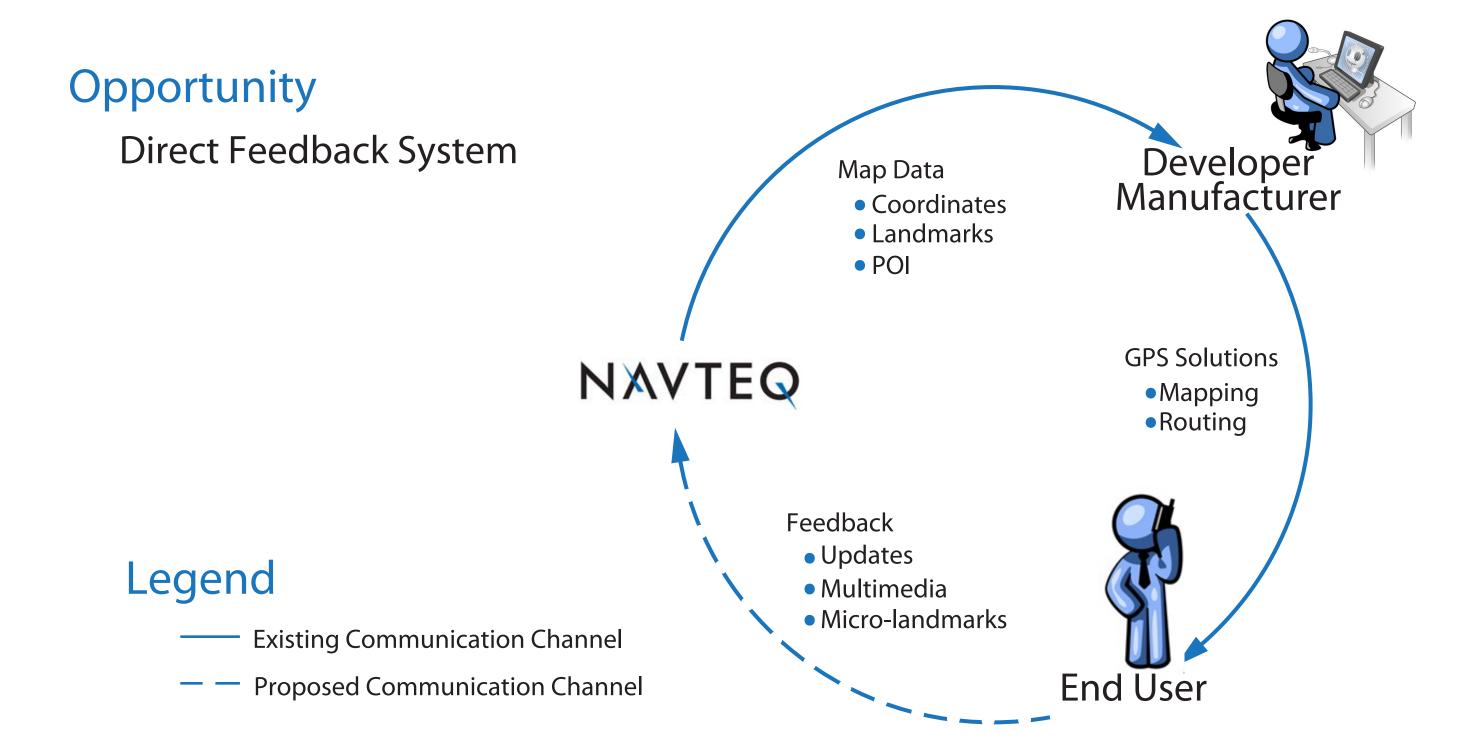
Research

Development

Demo

Deployment

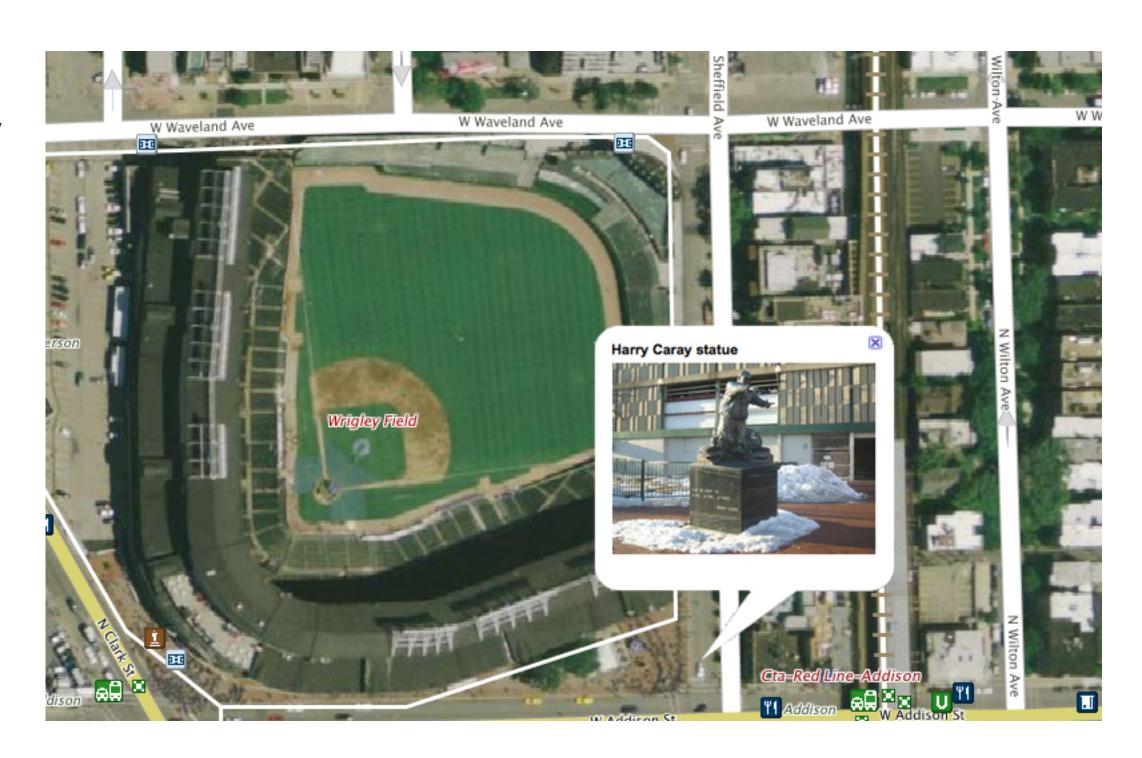
Future work





# Opportunity

"Micro-landmarks"





### Objectives

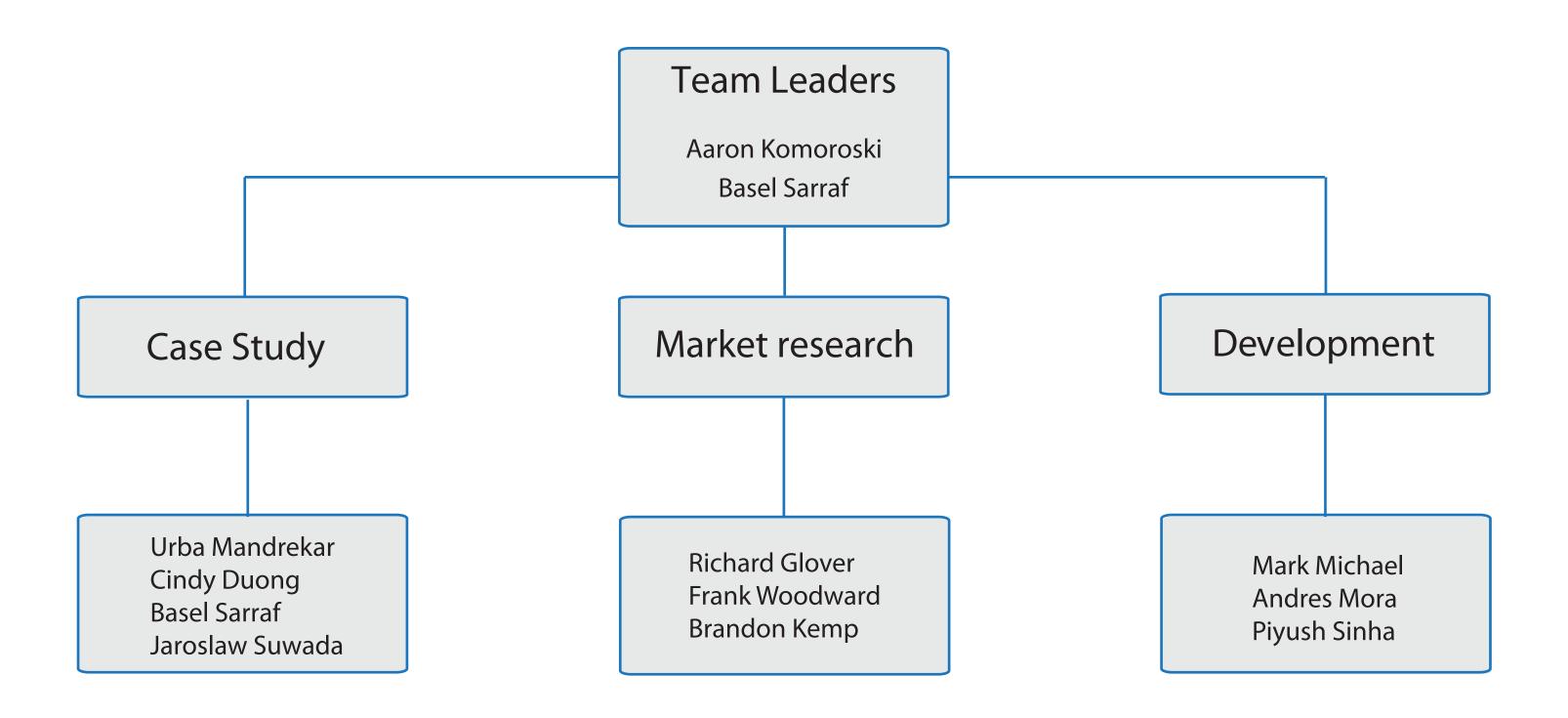
### Direct Feedback System:

- Create a demonstration
- User friendly

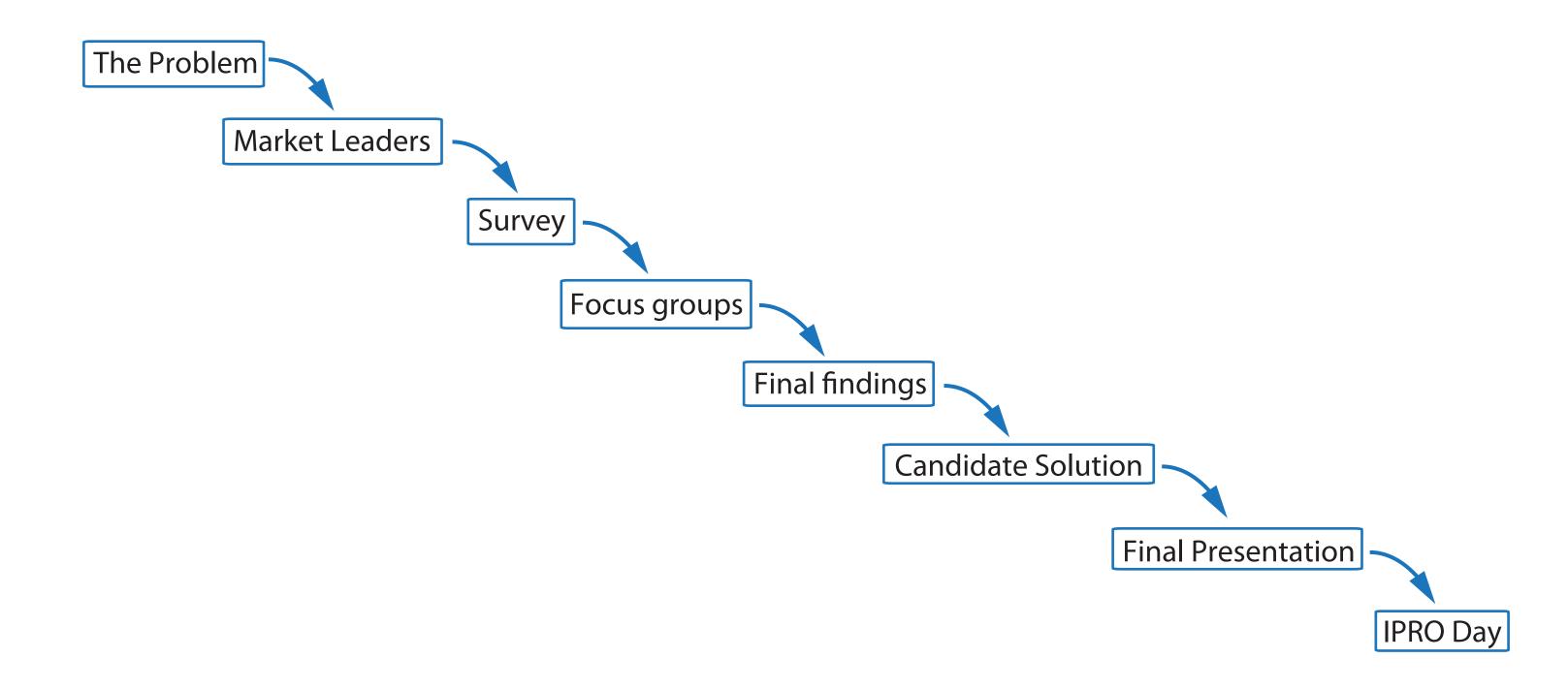
#### Micro-landmark:

- Who would use the feature?
- Would users report new micro-landmarks?















#### **Profiles**



Profile I

- Device used: Phones[iPhone, Blackberry ,Palm pre, Motorola, Nokia]
- Highest likelihood of providing feedback, IF simple , hassle free, and on the spot
- Impatient
- Familiar with new technology.



Profile II

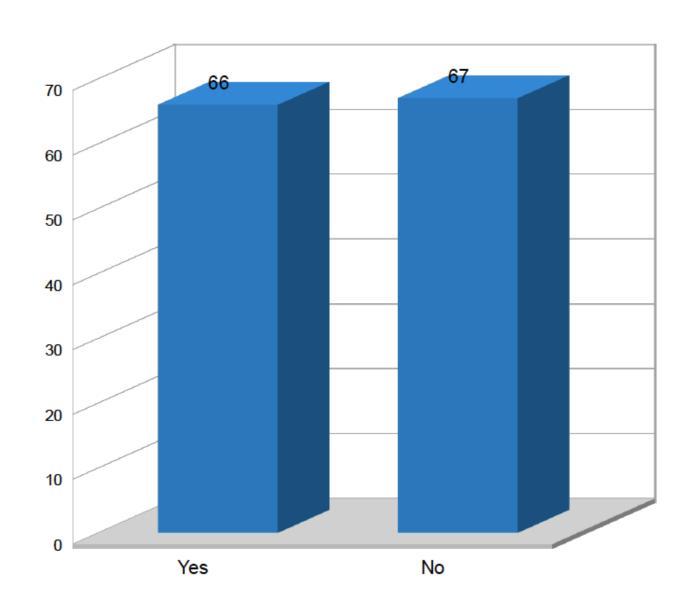
- Device used: GPS Device[In Dash, portable devices for street maps]
- Restrained Movement. So, lesser likelihood of providing feedback as compared to Profile I
- Trusting. Less adventurous.



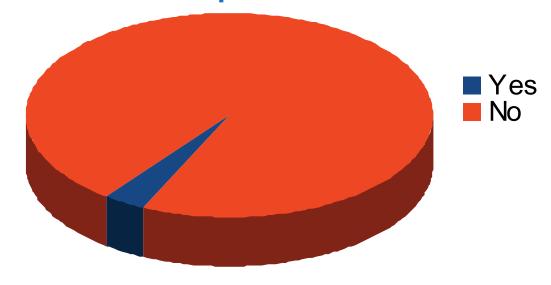
Profile III

- Device used:Computer aided mapping[Google maps]
- Very restrained movement. Too much hassle. Likelihood of providing feedback bleak.
- Plans ahead.

# Has your GPS device ever given you erroneous data?



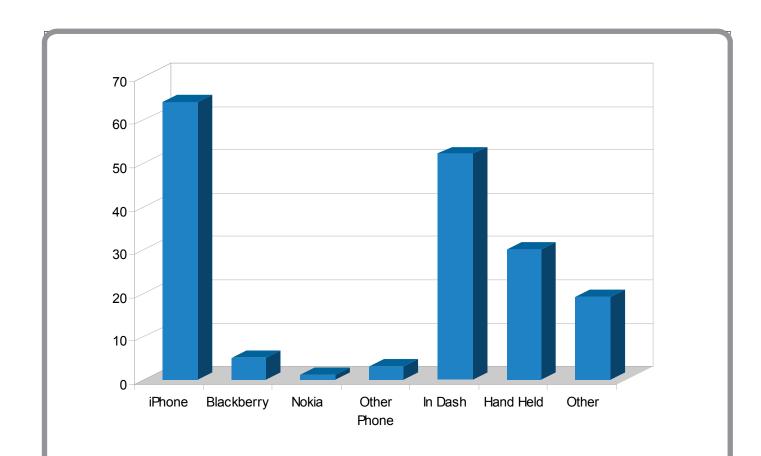
# Have you reported incorrect map data?







### What GPS navigation device do you use?

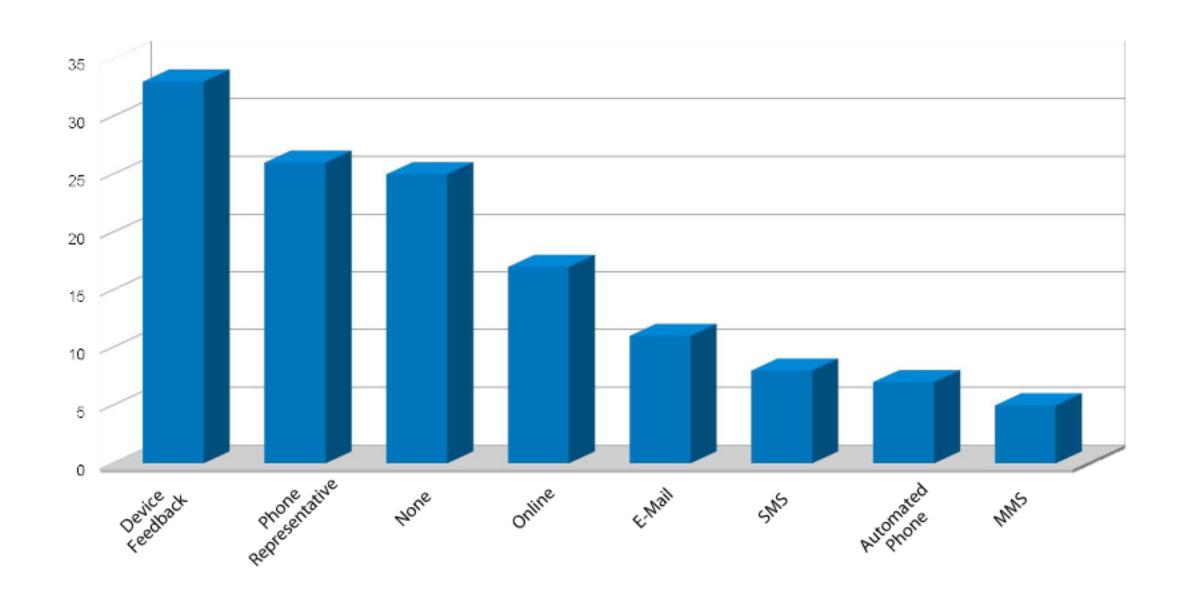


#### Conclusions

The two most used navigation devices are the iPhone and the in-dash units in cars.

- Amongst phones, the iPhone tops the charts in terms of usage for GPS navigation, while Nokia seemed to have the least usage.
- One of the reasons identified for this trend is because the iPhone is very popular and uses the popular online service Google Maps for navigation.

# What is your preferred method of feedback?





### Focus group

Two focus groups were conducted.

- 1. NAVTEQ
- 2. Hamilton, Thies, Lorch, and Hagnell LLP

Age Group: 26 – 35

#### Topics covered:

- GPS Devices they used.
- Interest in reporting feedback
- Preferred methods of reporting feedback
- Micro-landmarks
  - As a feature
  - Reporting the data

#### **Ethics**

- No personal details requested except age group
- Participant identities kept confidential





#### Market Research Conclusions

"One - Touch" solution

Built-in feedback mechanism

Supports a variety of modes of providing feedback

#### Micro-landmarks

• Feature: Strong customer base

Drawback: Hesitant to report feedback

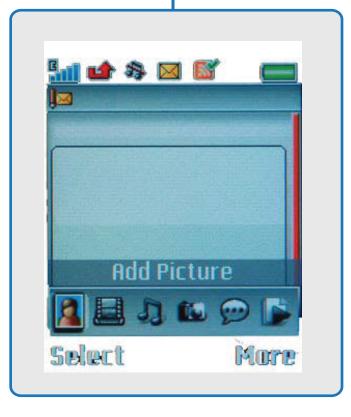


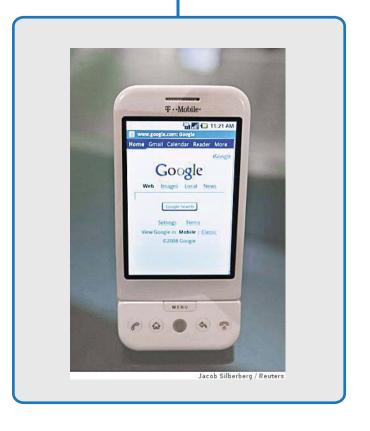
MMS

Mobile Website

Mobile Application

Voice









### **Proposed Solutions**

#### Flow Plan

- Series of questions
- Eventually collect needed information

### One Step

- Closer to One Touch
- Cleaner screen view
- Shorter than the flow plan



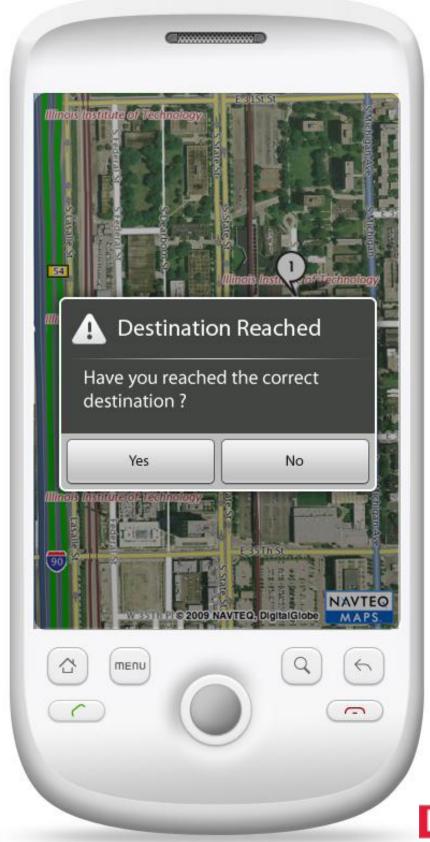
# One Program

- Built into the Device
- Multiple ways of feedback
- Simple design
- Allows for feedback to the user
- Gets the most data

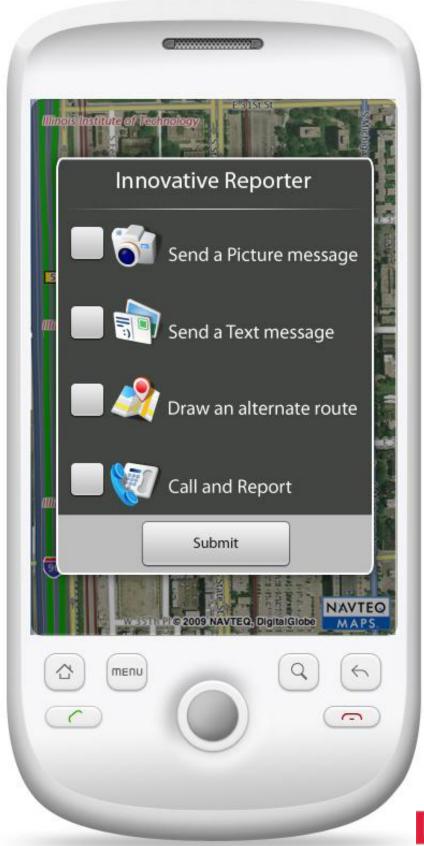




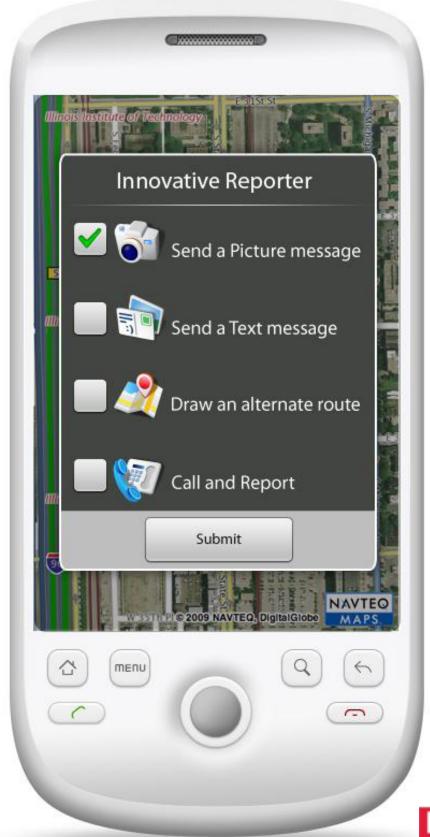




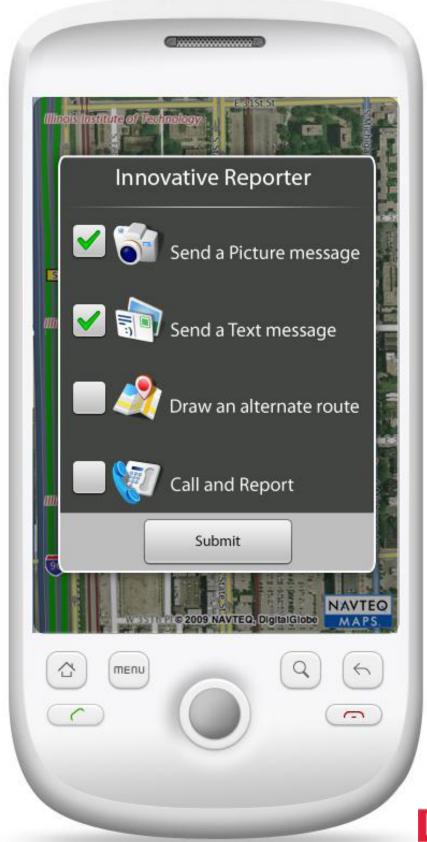




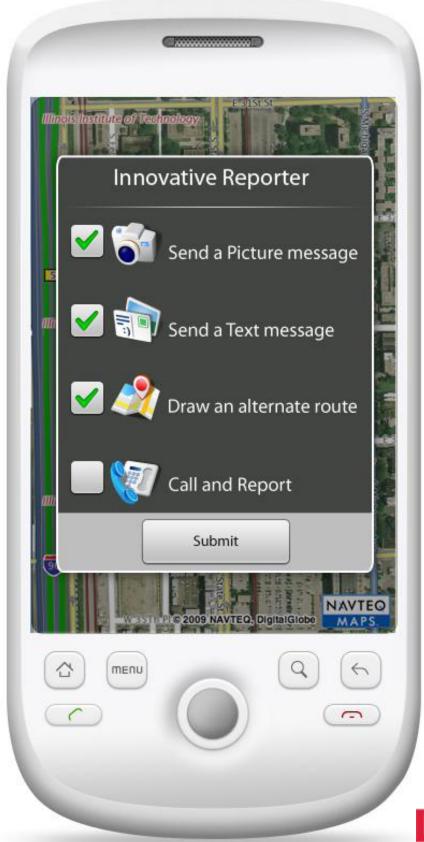




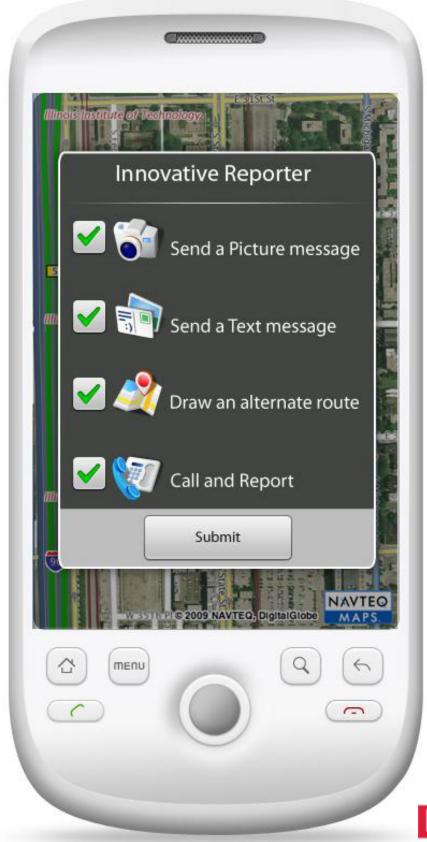


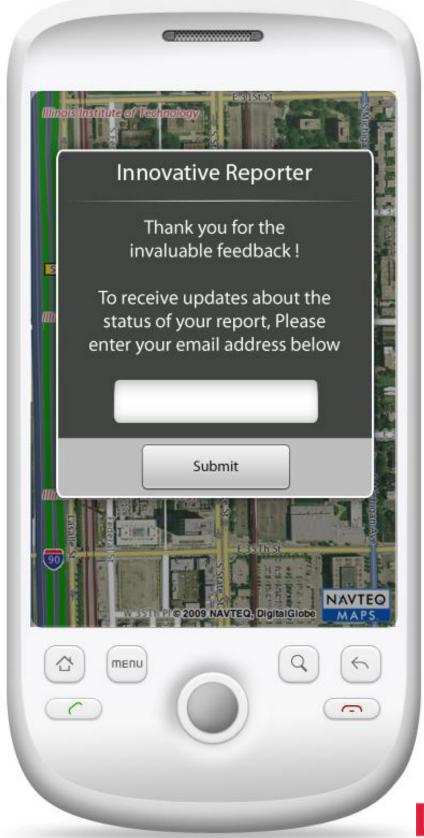






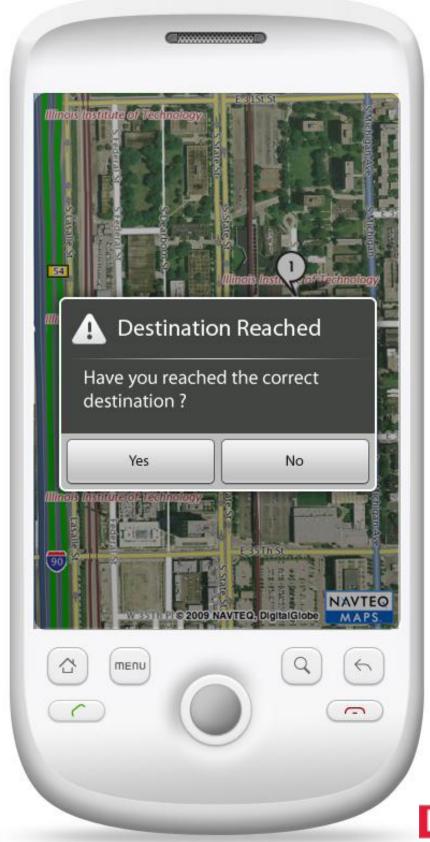




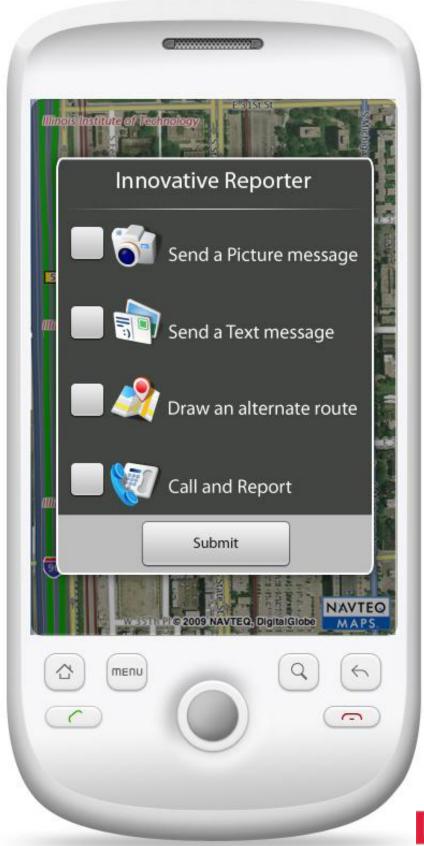


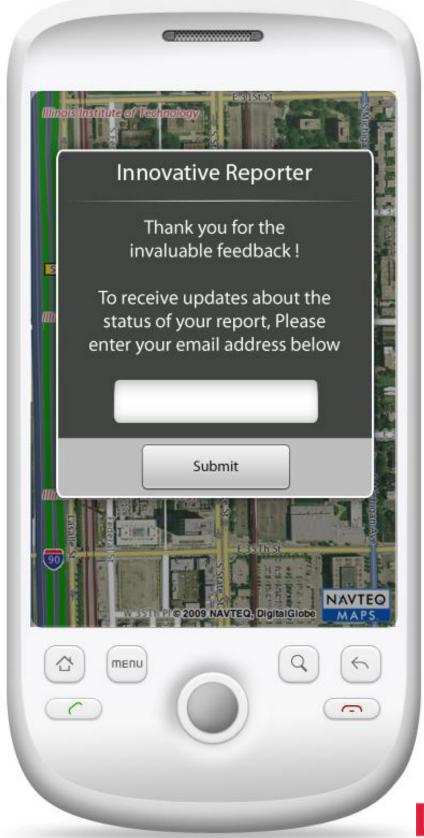












### Introduction Research Development Demo Deployment

#### Perks

- Automatic reporting
- Queue ordering
- Feedback back to the end-user
- Expandable with newer technology
- Portability





### Introduction Research Development Demo Deployment Future Work

### **Objectives**

### Direct Feedback System:

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- User friendly

#### Micro-landmark:

- Who would use the feature?
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### Introduction Research Development Demo Deployment Future Work

#### **Future Work**

#### Micro-Landmarks

- Redefine
- Find motivated providers

Create system for providing Micro-Landmarks

Implement current design







### Acknowledgements



Hamilton Thies Lorch & Hagnell LLP

**IPRO Office** 

Jim Burstein

Limia Shunia

IPRO 303 Team members



# Questions



