Introduction

• Corporate sponsor: NAVTEQ
  – Digital map content provider
  – Over 80,000 data sources

• Clients and consumers
Value Proposition

- Best incentive structure to obtain quality user-generated map data
  - Tailored per community
Problem Statement

No prior model exists to investigate crowd-sourcing for user-generated map data.
Goals

- Identify 4-5 community groups
- Determine group incentives and incentive structure
- Collect and analyze community generated map content
- Draw conclusions from data analysis
- Formulate future IPRO305 goals
Project Approach

• Design map data-collection experiment
  – NOKIA N97 mini mobile device
  – ‘King of The Road’ mobile application
• Design data analysis strategy
• Enlist community groups
• Conduct experiment trial-run
• Learn from the experiment
Project Monitoring/Tracking

• Project plan monitoring
  – Tasks creation and resource allocation

• Weekly status reporting
  – Sponsor updates
  – Community group updates
  – Tasks status updates

• Tools used
  – Microsoft Project Plan
  – Timesheet application
  – Discussion board
  – File sharing
Risk Management

- Risk identification, assessment
  - Data collection experiment feasibility
  - Data analysis validity
  - ‘King of The Road’ - readiness

- Risk mitigation
  - Data collection experiment trial-run
  - Data analysis prototype
  - Provide users time to explore ‘King of The Road’
Project Execution

**Chicago Nightlife**
Community: College students and business professionals
POI data: Restaurants, bars

**Downtown Evanston**
Community: Business people
POI data: Tenancy

**Northwestern University**
Community: Football coaching staff, interns
POI data: Restaurants, practice fields
## Project Execution

<table>
<thead>
<tr>
<th>Group</th>
<th>Control (no incentive)</th>
<th>Individual Incentive</th>
<th>Community Incentive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>Weeks 2-3</td>
<td></td>
<td>Weeks 4-5</td>
</tr>
<tr>
<td>Group B</td>
<td></td>
<td>Weeks 4-5</td>
<td>Weeks 2-3</td>
</tr>
<tr>
<td>Group C</td>
<td></td>
<td>Weeks 2-3</td>
<td>Weeks 4-5</td>
</tr>
</tbody>
</table>
Project Execution

Results

• 1st place: Downtown Evanston: 1330 Points
• 2nd place: Northwestern Football: 200 points
• 3rd place: Chicago Nightlife: 40 points

• Individual winner: Stamata Blanas
Challenges

• ‘King of the Road’ user interface
• Preaching patience
• Adjustments
  – Economical constraints
  – New online data-collection tool
Major Accomplishments

• Development of the experiment
• Establishment of relationships with community groups
• Identification of highest quality incentives
Conclusions

• Real world issues
• Executing alternate strategies
• Collecting useful data for NAVTEQ
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