

innorange

The Footfall Loyalty Company



innorange

- **Samuli Silanto**
CEO
- **Jukka Honkola**
VP
Total Quality
- **Mario Llorente**
Designer
Customer Solutions
- **Antti Lappeteläinen**
VP
Key Accounts and Relations
- **Sverre Slotte**
VP
Key Accounts and Relations

- **Founded on February 2011**
- **The company has total of 50+ years expertise in Mobile computing, applications, radios and wireless sensing**
- **Experience in innovation commercialisation at start-ups**
- **EIT start-up**

What do you do ?
What do you sell ?
Where is the value ?

Business knowledge to reach beyond competitors

Innorange offers solutions for real-time and continuous consumer behavior analysis

- **The path** of the consumer

- The observed path of the consumer in a physical space

- The stores in where consumer visited
- What shelves where browsed while shopping
- The services consumer uses and their efficiency
- Consumer retention

- Continuous **consumer loyalty** survey

- Information about **consumer's perceived value** about the provided services



Innorange Footfall and Loyalty Services



Innorange Footfall

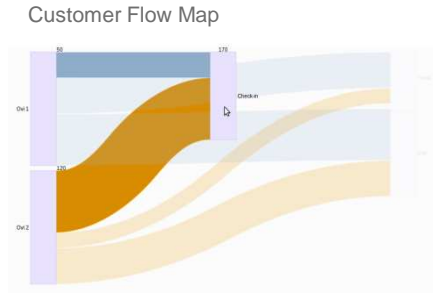
- **Discovers your sales drivers and uplift potential**
 - Total sales potential
 - Footfall-Sales conversion rates
 - Development of customer retention
 - Peak hour staffing
- Innorange's dual-mode Bluetooth and WiFi^(*) sensing gives **x5 more data**^(§) compared to competitive solutions
- Does not require any installed applications



Innorange Loyalty

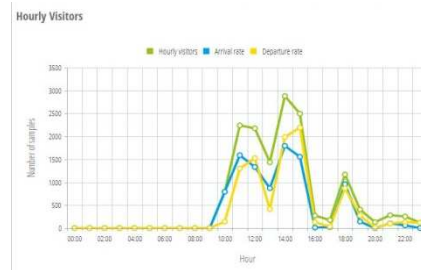
- **Turns free WiFi to a value source**
- Run time and location tagged customer surveys on top of Your free WiFi
- Consumer's opinion is the password
- Optimised for mobile device use
- Plug-and-Play installation
- Provides indoor location aware mobile apps and web-pages^(*)

Innorange Footfall

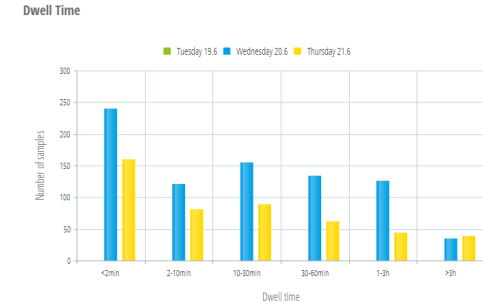


Customer routes

Quantitative Physical World Analysis

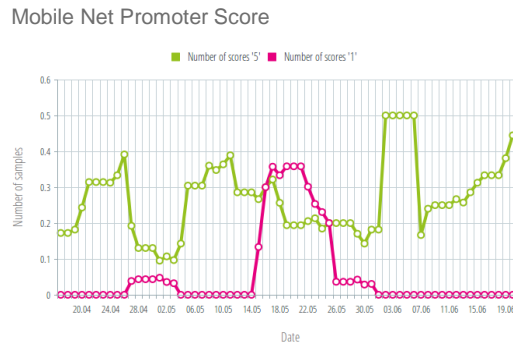


Contact potential and staffing

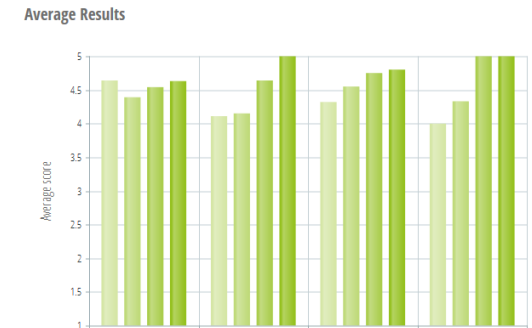


Customer Waiting Times

Innorange Loyalty



Mobile Net Promoter Pulse



Development of Customer Satisfaction Drivers

How this is done

Technology

- Background: participation in Smart-M3 project
 - Data integration from multiple sources
 - Ontological / free-form data
 - Smart-M3 platform
- Insights:
 - Integration problems are rarely technical
 - Data will eventually have a schema – in startup schema can still be changed relatively easily
 - Smart-M3 is not production ready yet

Footfall Sensor development

- Android phones
 - unreliable and unmaintainable, BT only
- Bluetooth server
 - stable and maintainable, BT only
- OpenWRT based
 - stable and maintainable, BT & WLAN

Sensor deployment does not require existing network infrastructure

Technology

- We use open source almost exclusively
 - Django for BI platform
 - OpenWRT for Footfall sensor infrastructure
 - OpenWRT or Linux for Loyalty
 - MongoDB for data storage
- Backend is running in AWS cloud
 - Pay for what you use (almost)

Technology: Lessons learned

- Open source software can be very cost effective solution, however:
 - Should have long enough history
 - Should have large enough userbase
 - Licence may matter – GPL is very strict

Conclusions

- WLAN / BT sensing technology is still at late research / early commercial stage
- Commercialization is mainly about adding business value generating components to the system
- Research background has been useful