

Creating experiences with the iBeacon technology showcased through the media industry.

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Project Partners

- De Telegraaf
- Dansk Supermarked (A large danish supermarket chain)

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Why

The iBeacon technology enables new ways of advertising and targeting the readers by paying attention to their physical location. More specifically, the technology enables what we call iBeacon Based Experiences - Engaging and informative experiences tied to their physical location instead of spamming the readers with intrusive ads.

What

These pages presents a summary of the findings gathered in the work with our master thesis. We have explored what kind of experiences the iBeacon technology enables for the media industry. In addition, we identified what challenges and opportunities the newspapers should be aware of when working with the iBeacon technology.

How

We have participated and conducted several activities with relevant stakeholders within the media industry. Based on this, we have built several prototypes in collaboration with the project partners and tested them in the context of a supermarket owned by Dansk Supermarked.

Recommendations Media Industry

We have the following recommendations for publishers who wants to work with the iBeacon technology:

- *Focus on creating value for the readers through these iBeacon Based Experiences instead of focusing on the revenue.*
- *Believe that radical innovation will emerge from experimenting with the iBeacon technology and other new technologies.*
- *Utilise the user base on your existing mobile app by integrating the iBeacon technology into your mobile app. This will enable you to deliver iBeacon Based Experiences to your readers.*

Challenges

We have identified the following challenges to be aware of when working with the iBeacon technology:

- **Accuracy** - *The accuracy of the technology is influenced by environmental factors and the position of the Beacon.*
- **Environmental obstacles** - *The signal strenght of the beacon can be affected by different objects in the environment, depending on their material.*
- **Permissions** - *There might be restrictions in certain areas for installing beacons e.g. public areas, areas with privacy concerns etc.*
- **User control** - *There are three decisions the user must make before you can trigger a notification on their smartphone. They must:*
 1. *Download your app.*
 2. *Turn on bluetooth.*
 3. *Allow your app to send notifications to them.*
- **Obtrusive** - *Only send notifications when they are relevant and generating value for the reader. Otherwise you will be obtrusive and users will delete your mobile app.*
- **Privacy** - *With the iBeacon technology it is possible to to log behavioural data about readers e.g. how many times a user*

have been at this location this month or how long time a user have spend in this store or this department. Remember to tell them why you are logging data about them - otherwise users will feel your are stealing their data.

- **Growth and Maintenance** - *Since we started our thesis the popularity around the iBeacon technology has grown significantly. Big companies like Google and Samsung have announced their entrance into the iBeacon race. This popularity and growth will create future challenges, like maintenance. All these new beacons needs maintenance because they are running on battery and could be exposed to vandalism when placed in public spaces.*

Opportunities

We have identified the following opportunities to utilise when working with the iBeacon technology:

- **Known contexts with a (almost) fixed group of people** - *The density of a specific group of people might be higher in certain contexts, e.g. universities have a high density of students, football stadiums have a high density of football fans, etc. This creates interesting opportunities in terms of targeting your notifications even more, because you (almost) know the present group of people, which will receive your notification.*
- **Integration of sensors** - *Some beacons already comes with embedded sensors e.g. estimote beacons includes a temperature sensor and accelerometer. This enables other use cases worth thinking about. An example could be a newspaper only delivering specific ads when it is above 25 degrees celsius outside e.g advertisement for ice cream, cold drinks etc.*
- **Trigger behaviour change** - *Beacons placed in certain contexts can enable the possibility to trigger a behavioural change for the user. If a newspaper knows that one of their readers wants to lose weight, they could provide a sponsored ad from a*

fitness center. The ads would try to guide the reader in making the right healthy choices.

- **Personalised experiences** - *Companies reaching users on multiple platforms can think about using this data on different platforms. This could be used for delivering more personal and relevant experiences to the user.*
- **Digital content in physical context** - *Readers can attach content to a beacon, which other readers could download to their phone or built upon.*

Closing Remarks

Part of the thesis contribution is a process including a framework and a deck of inspiration cards making it easier to work with the iBeacon Based Experiences. See the full report for more details.