

iBeacon – the device which could change your World

Still partially known in Europe, it became rapidly popular in the Anglophone countries (USA, United Kingdom and Australia). There was already some of them on the market under Android exploitation system but two years ago, one of the biggest worldwide known company launched silently his own new technological product, targeted mostly in business, tourism and hospitality sector. Apple created in autumn 2013, the *iBeacon* under IOS exploitation system. As simple as his name, this new device is low-cost and revolutionary. Indeed, it is an information transmitter based on a micro localization. It works, mostly inside, on a short distance, in the contrary of a GPS system which works more effectively outside on long distance.

How does it work ? At first, companies using the *iBeacon* have to place it strategically, as the beacon is static, it has to be fixed preferably in a passing place. Secondly, customers have to download an app and activate their Bluetooth connexion. As the *iBeacon* permanently sends a signal, when the customer is passing close to the information transmitter, the connexion between both devices will immediately pop up useful information, advices or promotions on the phone through the app. For instance, you are browsing around in the shopping mall and get close to the Macy's *iBeacon*, you will, in a second, receive their current sales, opening schedule, information about their new collection and even more.



This product is still new on the market, therefore, there are some disadvantages. To allow the app user to receive the *iBeacon* information, he always has to switch on the Bluetooth and this phone function uses a great amount of power. So, the cell will quickly run out of battery. The second negative point of this novelty is that the signal is efficient only on a short distance. Thereby, companies have to either place a few *iBeacons* in a room to make sure that the phone gets the signal or improve the extent of it. Furthermore, as the app uses your localisation data, it will at the same time inevitably collect your personal information. However, those data may be use in a close future to target more efficiently their customer segment in order to focus the news on the customer actual consumption and needs.

Despite the above mentioned arguments, the *iBeacon* is a promising product, with a little bit of creativity and imagination it can be used in many branches. For example, the Dallas Forth Worth airport has the most *iBeacon* of the industry. It shows to the passengers the path to follow to go to their gate, the approximate distance and time. The guide is also adapted to visual disabled travellers and indicate aurally how to get to the gate.

The tourist attractions are also using the beacon in order to enrich the experience. Indeed, the Belgian museum "Maison de Rubens" takes advantage of it by placing the device at some strategic points. Whereas the standard guide gives only basic information about the paintings and their painter, the app deliver detailed information of the history of the picture and its author, auditory content, but also focus on specificity hardly visible to the naked eye. This "Maison de Rubens" app also creates personalized path to avoid loss of time by queuing or seeing twice the same masterpiece.

VIDEO <https://vimeo.com/84760383>

In the hospitality sector, the iBeacon will be a virtual concierge by informing customers about the daily activities, shops suggestions and restaurants. By the way, in restaurants you will be able to have specific details about the dish's ingredient and their provenance to prevent allergy. For instance, to live an ultimate luxury experience, the Marriott Hotel designed an app where the client can control the main feature of his room such as light, heat, TV and the top one, order the room service only by using one finger !

Last but not least, as we all know, festivals and events are usually very crowded. In order to make easier the transfer between stages, the app will inform the festival goer where and when the affluence peak is, the program for each places and to establish customer loyalty the "Coachella" festival offers some VIP tickets.

In conclusion, the *iBeacon* has an enormous potential in many industries but mostly in tourism. It is economic, ecologic and has a nice sober design.

Some of the examples are ideas which are already implemented or are going to be. In our opinion, it is possible to push even more the concept by using the beacon in transportation to search a schedule, buy a ticket, and modify your reservation or check-in. Nowadays, tourists or visitors are also travelling a lot by car, we thought of developing the innovation in parking. An app could be designed to mix parking information and guidebook. Indeed, the parking part could locate your car and give you the closest parking lot, with the availability and prices. As soon as you are parked, the app would register your car GPS coordinates. After your city tour, wherever you are, the app gives you the way back to your parking space. The other useful tool of this app would be a guidebook which according to your location provides sightseeing, restaurants, museums and more. In hospitality, it will replace the information brochure. Based on the customer reservation, the front desk could adapt the transmitted information of the iBeacon such as the activities offer, the restaurants advices or the hotel promotions, also depending on the customer segment.

ABI Research¹ foresees between now and 2019 that the United States will have around sixty millions iBeacon device on their territory.

Sources:

- Jérôme Marin, April 21st 2014, "*Les beacons, ces petits capteurs qui vont révolutionner le commerce*", LeMonde.fr, visited the September 28th 2015, retriever on <http://siliconvalley.blog.lemonde.fr/2014/04/21/comment-les-beacons-vont-revolutionner-le-commerce/>
- Chantal Neault, October 2nd 2014, "*Brève incursion dans le monde des beacons*", veilletourisme.ca, retriever on <http://veilletourisme.ca/2014/10/02/breve-incursion-dans-le-monde-des-beacons/>
- Alex Hern, January 13th 2014, "What is Apple's iBeacon ?", The Guardian international, retriever on <http://www.theguardian.com/technology/2014/jan/13/what-is-apple-ibeacon-retail-tracking>

Source of title image: Mikael Kindborg, September 2nd 2014, "Quick guide to writing mobile iBeacon applications in JavaScript", evothing.com, retriever on <http://makezine.com/wp-content/uploads/2015/08/Estimote%E2%80%99s-new-Platform-even-as-Beacons-Tech-gets-overshadowed-by-NFC.jpg>

¹ ABI Research is a technology market intelligence company with a 25 years' experience in advising and informing businesses on technology and market investment. <https://www.abiresearch.com/pages/about-abi-research/>