

BEACONS AS THE TOUCHPOINTS ON THE CUSTOMER JOURNEY

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Purpose: The overriding goal of the presented considerations is to discuss beacons as consumer-brand touchpoints. In addition, the possibilities of using these sensors at various stages of the customer journey to implement the assumptions of the 5A model and build a lasting relationship with the buyer were indicated.

Design/methodology/approach: In order to build a lasting relationship with the consumer, it is necessary to conduct multidimensional marketing communication based on numerous touchpoints. This interaction is assisted by mobile devices and many different technological solutions. One of them may be beacons, supporting consumer service at every stage of the customer journey. As part of the considerations, it was examined how the sensors can support marketing activities at individual stages of the customer journey.

Findings: As part of the research, it was determined what role beacons can play at every stage of the customer journey, as well as their connections with promotion-mix elements. An attempt has been also made to indicate how these devices can create a holistic experience leading to buyer satisfaction and ultimately their loyalty.

Research limitations/implications: The article contains a preliminary study. In the future it is planned to conduct additional quantitative and qualitative research. The study will help to perform a comprehensive analysis of the application being discussed.

Practical implications: The article can help businesses to better realize the potential of beacons as a tool to support consumers during the shopping experience. It shows practical ways of using devices as part of individual promotional mix elements, which allows for their optimal use at all stages of the customer journey.

Originality/value: Although the topic of beacons in commerce appears in academic publications, only a few of them relate these devices to the customer journey. This paper comprehensively deals with this topic and focuses on the relationship between sensors, the 5A model and the promotion mix tools.

Keywords: Beacons, Customer Journey, Consumer Buying Behavior, Touchpoints, Market Communication, Model 5A.

Category of the paper: Technical paper, Conceptual paper.

1. Introduction

Before consumers buy a product, they go through the process of deciding about making a specific choice from among many alternatives available on the market. The final outcome of a case is influenced by many factors, both internal and external. The first group includes, above all, basic psychological processes – such as personality, attitudes, beliefs, motivation, perception, memory and learning (Munthiu, 2009; Jisana, 2014; Kotler et al., 2019). On the other hand, the second group comprises all stimuli coming from the environment, for example: cultural conditions, socioeconomic status, pressure from the society, reference groups (Madhavan, Chandrasekar, 2015; Oni, Oni, 2018; Sanak-Kosmowska, 2022). The decisions and actions that the buyer takes as a result of the forces acting on him can be defined as “behavior of the consumer”. It includes not only purchasing choices, but also a lifestyle, such as responsibility for the environment and society, activity and healthy eating.

The decision-making process is also influenced by actions taken directly by the brand to lead to a transaction. The places where the buyer meets the enterprise and becomes the recipient of marketing communication can be described as touchpoints. This contact can take place both in real and virtual space (Bajak, 2021a), and to establish it, brands use not only traditional media and employees, but also technological advances. In this context, beacons show an interesting potential in terms of application in marketing communication (Sanak-Kosmowska et al., 2018; van de Sanden, Willems, Brengman, 2019; Andrade et al., 2021). These are sensors that are one of the numerous components of the Internet of Things (Jeon et. al, 2018; Padiya, Gulhane, 2020; Spachos, Plataniotis, 2020). They use Bluetooth wireless communication standard to transmit messages to devices equipped with a compatible mobile application (Bajak, 2021b). It is the software that determines the spectrum of functionalities implemented by beacons.

The overriding goal of this study is to discuss beacons as the consumer's touchpoint with the brand. This publication indicates the possibilities of using these devices during the customer journey in order to implement the assumptions of the 5A model and build a lasting relationship with the buyer.

2. Customer journey

Before the consumers decide to make a purchase, a decision process is played in their mind. In its basic formula, it comprises five stages, which include (Engel, Blackwell, Kollat, 1978; Lamb, Hair, McDaniel):

1. need recognition,
2. information search,
3. evaluation of alternatives,
4. purchase,
5. post-purchase evaluation.

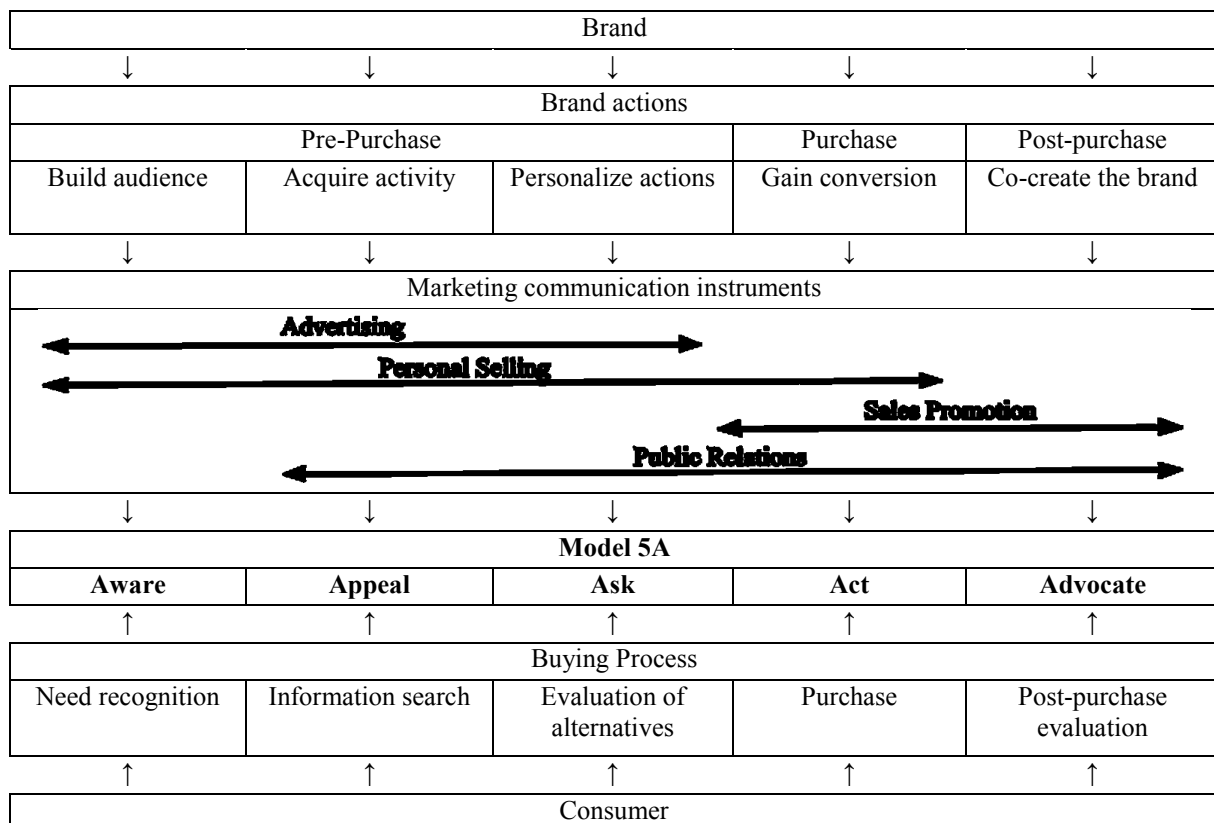
As a rule, brands do not look at the customer journey idly, but they accompany the consumer during making a choice (Kaczorowska-Spychalska, 2017; Smilansky, 2018). For this purpose, enterprises interact with the buyer through a variety of content – both unidirectional and bidirectional, thus engaging him in a dialogue (Verhoef, Kannan, Inman, 2015). Each single channel of transmission of the message is a new touchpoint in which the marketing communication takes place.

At the same time, it is worth noting that the modern consumer moves smoothly between real and virtual space. This is reflected in the actual course of the decision-making process, which is becoming increasingly complex through the multitude of purchasing alternatives and brand touchpoints. Therefore, brands are forced to conduct multifaceted marketing communication, engaging the recipient with the help of multiple online and offline stimuli at every stage of the consumer journey. This approach was considered in the 5A model proposed by Kotler, Kartajaya and Setiawan (2017), who indicate five elements depicting the consumer buying process:

1. aware – presentation of the brand's values and arousing the interest of the recipient with them,
2. appeal – shaping the desired image and building relationships with the consumer,
3. ask – conducting a dialogue with the recipient, educating about the range of products,
4. act – stimulating the buyer to action through direct incentives to encourage the purchase,
5. advocate – encouraging the client to provide an opinion about the brand and co-create it.

Effective conduct of the buyer through all points of the purchasing process requires the use of various forms and tools of marketing communication (Table 1).

Table 1.
Customer Journey



Source: own study.

It is also worth pointing out that the actions taken by the brand should not be limited solely to the online or offline world. In the era of ubiquitous technology, these environments should complement each other, surrounding the consumer and creating a multidimensional relationship with the brand. This approach is connected with the concept of omnichannel marketing communication, the assumption of which is the interpenetration of various message channels that focus around a single recipient (Królewski, Sala; 2017; Hajduk, 2019). In today's world, the customer is surrounded by numerous communication platforms, and interaction with the brand takes place in a variety of ways (Karasek, Hysa, 2020; Skurpel, 2020). This entails the need to create multidimensional yet coherent experiences for the buyer (Rogala, Pilarczyk, 2020; Bajak, 2021a), which include both unidirectional messages and above all entering into engaging interactions with the brand (Verhoef et al., 2015).

3. Beacons in market communication

Beacons use radio waves to transmit data to other devices equipped with compatible software, thus enabling automation, control and optimization of the communication (Bajak, 2021a). Sensors detect the position of objects connected to them, regardless of whether they are

outside or inside the building (Dudhane, Pitambare, 2015; Dasgupta, Nagaraj, Nagamani, 2016; Handojo et al., 2020). The possibility of navigation and the collected contextual information enable the optimization of the customer's visit to the facility, as well as individualize marketing communication (Thamm et al., 2016). As a result, these types of sensors can contribute to the creation of a digital environment of consumer service, which will be aware of his or her behavior and needs (Thamm et al., 2016; Betzing, 2018; Krishnansamy, Khan, Germack, 2018).

The era of the Internet of Things, of which beacons are part, will contribute to a change in the business model, putting even greater emphasis on proposing, capturing and creating experiences and values (Ng, Wakenshaw, 2017) that the company can share and exchange with the environment. These trends are consistent with contemporary trends in marketing communication (Doyle, 2008; Marinov, 2020; Sugai, 2021). Therefore, the marketing communication system is currently based on the identification and management of all touchpoints that connect the brand with the customer and shape its image (Rodgers, Thorson, 2012; Heding, Knudtzen, 2020), which creates an omni-channel environment. Beacons can conduct a dialogue with the consumers, contacting them at various stages of the consumer journey becoming, in effect, an element of a multidimensional marketing communication (Dudhane, Pitambare, 2015; Thamm et al., 2016). Moreover, their ability to monitor consumer's behavior allows for tailoring services and products to the individual needs of buyers (Schechner, 2017) and conducting a personalized dialogue with each individual recipient (Peppers, Rogers, Weber, 2019).

From an IT point of view, the main tasks of beacons include detecting devices equipped with a compatible application, establishing a connection and exchanging data (de Cerio et al., 2017). It is on them that the functions of sensors in marketing communication are based. They include (Sanak-Kosmowska et al., 2018, Bajak, 2021a):

1. Navigation function – locating devices equipped with a compatible application and showing the desired way to the user.
2. Information function – transferring knowledge to the recipient after being with-in the sensor's range.
3. Interactivity function – sending notifications in response to specific user behavior and replying to his or her messages.
4. Research function – collecting data on the recipient's activity in the real and virtual world.
5. Promotional function – activating special offers, discounts and providing information on promotional campaigns.
6. Image function – conveying messages about the brand and directly shaping the image through the fact of using new technologies.

These tasks are performed thanks to the use of a mobile application operating in cooperation with beacons (Garg, Shukla, 2016). It may be based on only one or several of them or use all sensor functions at the same time (Bajak, 2021a, thus increasing the extensiveness of customer

service. Moreover, these sensors are often not a self-used technology, but one of the elements of the Internet of Things (Geng, 2017; Lea, 2018). Systems of this type may have a different complexity of the structure (Zhang, Han, Feng, 2010). The use of other devices in the network may translate into an increase in the range of sensor functionality. In this context, beacons can be supported by retrofitting them with additional transmitters based on other data exchange standards (e.g. GPS, LTE) or by adding new independent devices to the system that directly or indirectly cooperate with sensors.

Furthermore, it is worth pointing out that solutions using beacons should, primarily be useful to the consumer – otherwise recipient will not want to use this technology. Therefore, it is necessary to treat the customer's needs as the starting point for creating systems based on these sensors (Bajak, 2021a). Content delivery to buyers should be based on generating brand interest, communicating value and building value across all touchpoints (Moriarty, Schultz, 2012). Only beacons used in this way will allow for a real improvement in the quality of the customer service process and contribute to increasing its involvement in interaction with the brand. As a result, these devices can become a factor that will help increase the company's competitive advantage on the market (Dudhane, Pitambare, 2015).

4. Beacons as touchpoints between the brand and the consumer

The ubiquity of mobile devices and intelligent technologies have become a direct support for brands in communication with consumers. These types of touchpoints provide an opportunity not only for one-way transmission of promotional messages, but also for direct interaction with the recipient (Kruse Brandão, Wolfram, 2018). The scheme of beacon's operation (Figure 2) means that these devices can be successfully used to initiate a dialogue with the buyers, and then, through personalized messages, lead them through the store space informing about the range, indicating particularly attractive products or by providing discount codes. It is also worth pointing out that the data collected by the sensors can be used for journey mapping (Paepcke-Hjeltness, Cecil, 2018; Rajagopal, 2019). Sensors allow buyers to monitor the customer journey in the market space in a similar way as it is possible on the Internet. The integration of data on consumer behavior in the stationary and online store makes it possible to create precise customer profiles (Bajak, 2021a).

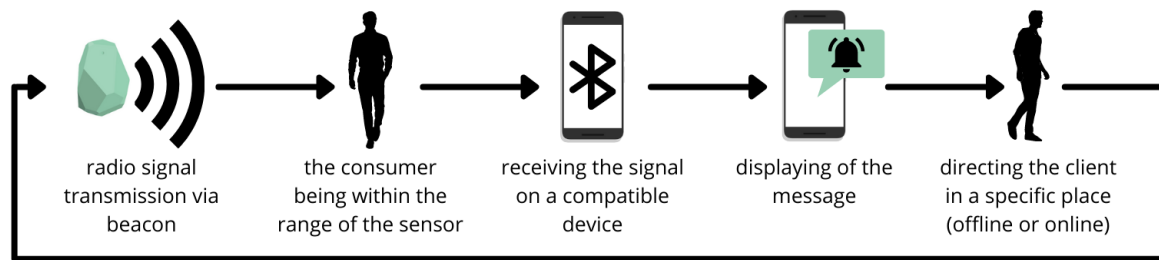


Figure 2. Beacons operation scheme. Source: own study.

It is important to emphasize that beacons should not be treated as single devices. Their effectiveness as touchpoints requires the creation of a network of sensors that will perform various and individual tasks during communication with the consumer. This will enable the creation of holistic experiences and create an authentic and stable relationship with the customer, which is the basis of the brand's success (Kruse Brandão, Wolfram, 2018). The multidimensional approach to the buyer is favored by the fact that beacons can perform a variety of tasks, supporting individual instruments of marketing communication:

1. Advertising – generic branding and purchase encouraging messages transmitted by sensors. Content can be displayed on the screen of a mobile device connected to the beacons once it is within range of the sensor, or via other devices connected to them (such as TV screens in a shop).
2. Personal Selling – personalized presentation of the company's offer based on the data collected about the buyer. It should take the form of interaction, so it can take place either through the use of virtual assistants or artificial intelligence mechanisms during communicating with a beacon or by calling a seller through an app.
3. Sales Promotion – sending codes and coupons and notification of price discounts and other benefits received after being in the range of the sensors, as well as due to signals indicating interest in specific products or simply making a purchase. These types of activities can also support cross-selling, up-selling and retargeting.
4. Public Relations – informing and inviting via sensors to events organized by the enterprise and social initiatives undertaken to shape the desired brand image, as well as the direct use of the devices to carry out socially responsible activities, for example by supporting people with disabilities through them (see Alapetite, Hansen, 2016; Manczak, Sanak-Kosmowska, Bajak, 2019; Antonić, 2021).

What is more, beacons are used at every stage of the consumer journey, which, combined with the use of a package of various marketing communication instruments, creates a coherent strategy of customer service leading to the implementation of the 5A model (Table 2).

Table 2.
Beacons on the customer journey

Beacons				
Welcoming the buyer to the store	General overview of the assortment	Personalized product notifications	Sending an individual discount and referral to the cash registers	Providing an invitation to an event organized by the brand
Build audience	Acquire activity	Personalize actions	Gain conversion	Co-create the brand
↓	↓	↓	↓	↓
Model 5A				
Aware	Appeal	Ask	Act	Advocate
↓	↓	↓	↓	↓
Buying Process				
Need recognition	Information search	Evaluation of alternatives	Purchase	Post-purchase evaluation

Source: own study.

It is worth noting that beacons enable balancing of the consumer between the real and virtual space, therefore the activities undertaken as part of the customer journey do not have to be limited to the offline or online space only. In the era of omnichannel marketing communication, it is even advisable that the actions taken by the brand should interpenetrate between these two worlds. The specificity of beacons creates an opportunity to freely combine stationary and online sales (Królewski, Sala, 2016). This integration can enhance the buyer's comfort while traversing the customer journey, help to optimally shape their behavior, and support the building of a relationship with the brand. Moreover, the ability to control the activities undertaken by the consumer in the real space via devices, combined with data collected about him online, creates a consistent profile of the buyer, and as a result, it allows for full personalization of promotional messages and more accurate selection of touchpoints.

5. Summary

Marketing communication focuses on the identification and management of touchpoints, which are the source of information about the brand (Solomon et al., 2019). The progressing technological development makes these tasks easier and the dialogue can be global with the simultaneous personalization of messages. The use of the full potential of touchpoints requires knowledge of the mechanisms of consumer behavior, a well-thought-out selection of marketing communication instruments and a thorough understanding of the spectrum of possibilities of the technological solutions used. The conducted interaction requires coherent and synchronized messages that are conveyed using various channels and instruments. This creates a network of relationships that connects buyers with the brand and its other customers, creating a platform

for exchanging experiences, expectations and emotions related to purchases. As a result, the tone of the conducted marketing campaigns and the general shopping experience of individual consumers is also enhanced. The way of leading the customer through the purchasing process and the touchpoints with the brand that appear during it, which in turn further tightens the aforementioned network of relations, becomes all the more important.

Modern technologies such as beacons create the opportunity to adopt a multi-dimensional and integrative approach to customer service. These devices can guide the consumer through all stages of the customer journey using a range of marketing communication instruments. Sensors have the potential to increase buyer's satisfaction and, as a result, gain their loyalty (Dudhane, Pitambare, 2015; Thamm et al., 2016) and turn them into brand ambassadors (Solomon et al., 2019). Creating this type of holistic experience of contact with the brand contributes to building a lasting competitive advantage on the market. The dialogue with the consumer is complemented by the beacons' ability to monitor their behavior. The obtained data can be integrated with knowledge obtained from other sources (in particular online), which allows for a better adaptation of products, services and the service process to the customer's needs, and consequently even more effective shaping of the relationship with the brand.

The practical implementation of beacons as part of the customer journey enables the brand to achieve numerous benefits. The most important of them include:

- integration of the real and virtual environment, which allows for contextual adjustment of actions taken by the brand to the needs and behavior of an individual recipient,
- adaptive support for the consumer during the customer journey,
- stimulation of the purchaser's involvement through appropriately adapted promotional incentives generated at particular touchpoints,
- creating the possibility to collect, store and analyze data on the customer in order to optimize purchasing processes.

Unfortunately, in Poland the use of beacons in commerce is still only a curiosity. There is still a lack of practical examples of this type of implementation, which is why such projects should be looked at particularly carefully. The potential of using sensors in commerce is an important issue for further research and analysis. Moreover, the presented study focuses on the benefits generated by the use of beacons to support the consumer along the consumer journey, while possible difficulties have been overlooked. These include, among others: the need to purchase a large number of sensors in order to create advanced systems, exposure to cyberattacks or the existence of substitute technologies. This thread will be developed as part of further research on the topic. It is also planned to conduct qualitative and quantitative research on the use of beacons as a consumer support tool.

Acknowledgements

The publication was financed from the subsidy granted to the Cracow University of Economics.

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