

PERSONALIZED EXPERIENCE THROUGH MOBILE APPLICATIONS IN THE RETAIL FIELD

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Abstract: *In recent years, buying habits have seen a change: even if traditional shopping in the store has remained the main channel, online shopping has become increasingly important. Hypermarkets have experienced the benefits of online commerce, but the trend is to expand these features in the store. With a digital buy assistant equipped with location-based personalization, a hypermarket can offer a new and enhanced experience to customers entering the store with a smartphone. The digital shopping assistant can be the tool that helps the hypermarket better know the customer and develop a strong relationship with him/ her.*

Keywords: *digital assistant, mobile applications, loyalty.*

1. Introduction

A hypermarket can create a new generation web store, where the experience and benefits of personalization can be seen from the customer's behaviour. Changing customer behaviour and basket size has proven that customers will appreciate if they are personally treated. The first major step is to give customers additional experience when they are in the store. Knowing the exact location, new offers can be offered, not only personalized, but localized, to offer a personalized custom product to make the customer more committed. The platform for this experience is a customized digital assistant application installed on the smartphone, as these devices are used by a large number of target customers; in addition, all functions can be done with the mobile implementation combined with a particular sensor technology. There are endless features to reach the goal of the app and to enhance customer satisfaction, but the first set includes the following features: call, welcome communication, push-to-person push notifications to offer a promotional offer to the customer. Furthermore, it is crucial to have an easy-to-use shopping list that can turn the use of your shopping assistant into a standard behaviour. With this concept and, of course, with the implemented application, a hypermarket can collect such data from its customers that were unavailable before. They will know when customers enter the store, how often they visit the store, how long they stay in the store, how much time they spend in each department,

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what is the department order visit etc. To collect this data, it is not necessary to ask customers to complete surveys or any other manual data collection technique, everything will be done automatically and can be easily analyzed digitally to generate useful information. The personal digital store assistant in the store is not just an app, it is an ecosystem between the customer and the store, which is beneficial for both parties: customers provide the store with data and information (location and shopping habits), but can receive more and more useful and relevant offers and promotions. As a result, customer satisfaction is on the increase, so they will visit the store more and more, and the market share can be increased without opening a new store.

Personalization and multi-channel retail are seen as a key that allows for customization. Adaptation allows the company to ensure a perfect integration of customer experience: consumers do not think about channels and expect their cross-channel shopping experience to be a business as usual.

2. The future with the Digital Assistant

There are many individual clients and each one needs a personalized experience and service. However, in order to have the common set of features, taking into account various possible reasons for using the application, the following categories of users have been identified:

1. *Buyer on a mission*. This type of customer comes to the store with a particular product in mind or because of a discount offered. His/ her main objective is to find products quickly. He studies the products in advance as well as discounts, wants the store to be well organized and is influenced by price, seasonal sales and product availability.

2. *Loyal member*. This type of buyer prefers the brand and expects to find the products that he/ she likes, and is also of interest to the brand story. His/ her main objective is to see new merchandise and to replace a product. He/ she wants personalized recommendations, receives product information, does not like to notice changes in brand quality or stops in finding the desired products. He/ she is influenced by the social media of brand and branded advertising.

3. *The browser*. This type of customer wants to be inspired and will buy something if it attracts him. The main feature is that there are no specific needs, as he/ she shops for fun or interaction. He/ she is looking for new experiences, a place to stay, do not like crowd or lack of customer service. He/ she is influenced by customer service and friends.

2.1. Main features

Based on the business vision, the following features of the mobile app are identified:

2.1.1. Search

The search function is represented in each application that is frequently used. This is one of the most used functions, so it is crucial to have a well-designed and implemented search functionality. This field is a top-of-the-line application control, which is always available to users and is also accessible from the main menu whenever the application is used. This feature is the main element that facilitates the "easy to find" concept. If a customer can easily search and get relevant results, it is a great step to help him find and buy it.

The search can be executed by searching for traditional text when the text is entered on the keyboard. In addition, it is possible to search by voice (dictation language) through the built-in function of operating systems. In Romanian, this feature works on Android and iOS. The third type of search must be done through the barcode scanner. The smartphone camera can read and recognize the barcode (or QR code as well).

It is essential that the search function should be customized in different ways: the suggestions for entering the search must be tailored to the client, the results and also the sorting of the results must be personalized.

Functional requirements: The search must be possible by: typing, voice or bar code, and it should also be available in the main menu; Search suggestions need to be well implemented and can significantly improve user experience. The search must accept review and refinement; the search should also recommend alternatives, and the search result, sorting the results needs to be customized.

2.1.2. Notification

Notifications are short messages sent directly to a user's mobile device from an application that, when properly used, with the appropriate timing and location, can notify important and personalized information to customers. Notifications are considered number one reason why users are using an app. If the notifications are too aggressive or have a low value, then users may feel upset to the point where they decide to uninstall the application altogether. Typically, 3-5 times notifications can be sent to a customer on a shopping occasion without being too offensive or disturbing. Irrelevant notifications are one of the main reasons why users can make the decision to completely uninstall an app. What needs to be always considered is the frequency of the app that sends the notifications, the quality of the information provided, and the personalization of the notifications. Users will always appreciate the relevant information, which seems to be directed specifically to them. Personalizing the content of the message ensures that users receive relevant and valuable information for them, which can easily be accessed by the store with the combination of customer localization and customization engine already in use. Functional requirements: notification to be customized, not to send more than 5 notifications during a visit.

2.1.3. Call to action, welcome communication

This type of notification aims to attract customer attention. Notification calls - for example, personalized retail coupons - are sent when customers are not in the store, but based on a customer-based forecast, they have to go to the store. With an appropriate recommendation of the product, the customer will enter the shop, but in the case of a guided solution, the opposite can easily be reached.

It is important to welcome the customer by name and offer him a very personalized offer with a store promotion or other relevant offer.

Featured content: personalized product offers (offering products with a personalized greeting message) or personalized store events (event recommendation with personalized call-to-action message).

Functional requirements: Welcome communication needs to be customized, time must be parameterized.

2.1.4. Personalized offers

All bids are generated by the referral engine, the main responsibility of the engine is to provide relevant and product recommendations. For each offer, personalization plays a very important role - if the customer gets the offer that is relevant to him, his loyalty to the store can be increased.

There are two main types of offers: one is based on previous customer activity, purchasing history, demographics etc., which can be sent to the customer's smartphone at the store entry or even in the call action. The other type is based on the above-mentioned inputs and, moreover, it uses information about where the customer is in the store.

Functional requirements: personalized customer-based deals, personalized store-based deals, personalized offers only.

2.1.5. Wish list

One of the most useful parts of the app is the list of desires where customers can collect and list their products and items for shopping. It is essential to create a list of good wishes, because, with this feature, the use of the application can turn into a daily routine. The other lists are collected by different product sets, where these wish lists are easy to maintain and display the same lists as on the web.

Functional requirements: multiple lists must be dealt with, new items can be added by text or voice, new items can be added from different input sources (wish lists, emails, notes, etc.), it is possible to display all the lists appearing on the site, personalized recommendations, easy to use and maintained.

2.1.6. Checklist

The checklist or, in other words, the shopping list in the store, is an essential part of the lists, as this is the main list, which is considered to be the main entry during the shopping itself; therefore, it has to be treated as a Dedicated list.

The shopping list in the store triggers the entire shopping process. This list must be a user-friendly checklist that is easy to use for store assistance. When there is no item in the shopping list in the store, the customer wish list will be displayed to pick a list of where the items should be imported. When the item has been added to the shopping cart while shopping, it is easy to "check" it from the list with a single touch.

Functional requirements: The store listing is a checklist, a new item can be added by text or voice, customized recommendations are made, easy to use and maintained.

2.1.7. Product details

The primary purpose of the application is not to collect information or research, but to see the details of each product that was searched by the customer or received as a personal offer. Therefore, the detailed product screen must be well designed and implemented to display relevant and detailed product information.

Among the main properties to be presented we can list: photo, category, price, location, but some descriptions of text, nutritional facts and other information (such as Romanian product, frozen product etc.) must be detailed.

Functional requirements: The screen is well-designed, easy to understand and use, provides useful and extensive information, and uses accurate photos.

2.1.8. Navigation

Navigating in the store can be a very useful feature during the shopping itself. One can easily imagine that a customer is looking for a product but does not know exactly where it is in the store with a surface area of say 10000 m². It is important to have consistent signage in the store.

Three types of navigation have been identified:

1. *Simple text-based position*. It is not a real navigation, but it shows the location of the item, where it is in the store, which row and which shelf. If row numbering is well visible and clear, this type of location can provide enough information to find all the products in the store.

2. *Location with route drawing*. This type of navigation can be used in shopping centres where there is a pre-installed kiosk. The customer's location must be defined, but it can be done by signalling technology (or Wi-Fi or Li-Fi, etc.). If the product location is known and stored in the application, it is possible to define and visualize the optimal path in the application.

3. *Real-time standard navigation*. After locating the customer and the item, it provides step-by-step navigation, continuously following the customer's position, as well as large-scale navigation applications such as Waze. Positioning inside is a technological challenge that needs to be addressed properly. In an outdoor environment, there is a mature technology for this (GPS), with in-house tracking being an emerging technology with many possibilities such as Galileo, WPS, etc., which will change this area in the next few years.

Functional requirements: The customer can be located in the store, product locations must be stored digitally, store maps must be digitized.

2.1.9. Survey, customer feedback

Surveys are a very useful method to collect feedback and information from the customers and to incorporate their feedback / opinion to create a customer-friendly store. This type of assessment needs to be treated with care, because not all types of clients are willing to take part in this type of collaboration.

The survey can address different topics: feedback for a purchased product, feedback to a store service, feedback to the application.

Functional requirements: Good information when requesting a customer survey, beautiful wording, use of images and lists, avoiding the need to write from the client, a reward for the customer providing feedback.

2.1.10. Digitalization of Loyalty card

The digitalization of the loyalty cards can be considered as the first step towards digital or mobile payment. This initiation allows customers to use smartphones and the fidelity card reader.

Digitizing the loyalty card is a comfort feature so customers do not have to bring their plastic card with themselves. As they use the app, smart phones will be used while shopping in the store, but also for loyalty validation.

This feature can be used to replace plastic cards for those who initially adopted a fidelity card and push them to use the application.

Functional requirements: to be easy to use, once the card is digital, one does not need to ask for the plastic one.

2.1.11. User Profile

Each of the information must be accessible and editable to users, and what can be edited from the web refers to: name, contact information, password, additional information etc. At the top of one's personal settings, it is necessary to see the loyalty member details (online and offline tickets plus first-time loyalty points, post-paid savings) and the transaction history. Graphical layout elements must be provided by adding profile pictures, personal background graphics, and so on.

3. Conclusions

Loyal customers are one of the most important customer groups for a store because they are already hired in the store and usually shop in well-known stores. The history of very detailed and long transactions is available from these people, so the precision of the recommendation can be very high.

These people often use their coupons and open up for new recommendations, but they can be frustrated by irrelevant recommendations. It is very important for loyal customers to be able to participate in surveys and provide feedback.

Let us assume our loyal customer is doing shopping weekly, every time in the same store. Before visiting the store, the loyal customer goes through the printed catalogue and also checks the site to see if there is a particular special promotion, which is useful to him/ her.

In the store, during the visit, he/ she uses the app just for help, the most important feature is the part of the shopping list, but the loyal customer uses it as a guideline, not as a strict checklist, so it is open to buy additional items which are useful to him/ her and his/ her family.

When these customers enter the store, they have the pleasure of receiving a personal welcome message, and while shopping, they check the location-based offers. While in the queue, they can enjoy watching videos on the phone and give feedback on their real shopping experience.

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