

# **Geolocation as a Marketing Innovation in Communications and the Conditions of its Use in the Polish Retail Sector and Retail Banking**

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## **Abstract**

The purpose of the paper is to identify and analyse the use of geolocation as an innovation in marketing communication by entities of retail trade sector and retail banks in Poland. Specific goals include determination of benefits and possibilities of application of geolocation in studied sectors while taking into consideration the favouring and hampering determinants and identification of the range of cooperation between the entities. It is assumed that geolocation is an innovative tool intensifying communication with customers of stores and banks and activating them in making purchase decisions. This results in favourable influence on the number of executed transactions and strengthening relations with customers, particularly with young people that actively use advanced mobile technologies.

The phenomenon of geolocation, its influence on communication between entities in described economy sectors and key functions associated with this innovative tool of marketing communication is the subject of this research. Selected retail chains and retail banks that apply geolocation in their marketing activities are the research entities. In spatial dimension, the paper refers to Polish conditions, although considering comparative references to examples from other countries is also assumed. The paper applies secondary research in the form of critical analysis of literature and with the use of documentation method and materials from both studied sectors, including the analysis of activities of selected entities, the leaders in application of geolocation (case research method).

**Key words:** geolocation, marketing innovation, retail sector, retail banking

## **Introduction**

Geolocation is a modern form of communication with consumers. It is useful in identification of customers' features, recognition of their needs in real time, offering new products and services and strengthening customers' loyalty in relationships with them. The opportunities it offers can be applied by retail trade shops and banks. These entities more and more frequently cooperate in this sphere to provide mutual advantages. Geolocation, which refers to determination of location through mobile phone, is also becoming more and more popular in Poland. Strong competition forces stores and banks to start applying this innovative technology to maintain current customers and acquire the new ones. The scope of its application is influenced by many factors. Determinants that favour development of geolocation in Poland include increasing number of smartphones and Wi-Fi hotspots and growth in recognisability and use of geolocation applications.

The first part of the paper presents the essence of geolocation and its functionality in the context of most important benefits and the areas of its application. The grounds for application of these solutions as well as determinants favouring and hindering application of geolocation in Polish conditions are shown. The second part describes examples of use of this tool in retail trade in Poland, including Foursquare characteristics and its functions, and also mCoupons implemented by commercial and service outposts. The third part contains description of application of geolocation tools by retail banks in Poland. Geolocation services that accompany mobile banking are indicated, and discount programs of selected banks are presented.

## **1. Geolocation as a marketing innovation and its functionality**

Nowadays Location Based Marketing influences more and more the way consumer is reached, and also affects adjustment of marketing news on the basis of geographical location and preferences of a particular potential customer. Geomarketing applies a series of tools among which Location Based Services (LBS) can be indicated. They are mobile applications providing information or entertainment to users on the grounds of their geographical location (e.g. recommendations of social events in the city, health supporting systems, navigation to any address but also location of mobile advertisement and searching for companies or services, including cashpoints, stores, etc.) (Ricevuti, Padovan, 2006) (). These tools also include Near Field Communication (NFC) that allows for wireless data exchange up to the distance of 20 centimetres, Bluetooth based communication that can cover the distance of up to 10 meters or Location Based Advertising (LBA) that also applies geolocation (Location Based Marketing – LBS, 2012).

Geolocation is a marketing innovation in the sphere of communication associated with technological and process innovation consisting in new methods of information transfer. It is a solution increasingly more often applied by enterprises from various trades, including retail trade entities and retail banks.

Geolocation is a procedure allowing for determination of geographic location of people or things, usually with the use of GPS or IP address of the device, for example a mobile phone or a tablet. To establish location, geographic coordinates or address data, e.g. post code, city or street are used. It can also be done on the basis of visibility of other objects of known position for example base stations via mobile phone or WI-FI routers. It is particularly important when the GPS receiver in the device is switched off or if the phone does not have one (Ionescu 2010).

From the point of view of marketing activity of enterprises, this modern technological solution has a very wide spectrum of applications. Geolocation can be applied in the process of analysis, planning and implementation of marketing activities accompanying market research, the process of segmentation or composition of marketing-mix tools. This is a perfect instrument for collecting information about buying habits of consumers, shopping places preferred by them or tracking their typical „routes”.

The possibility to present information that is interesting for a particular person and that depends on location and his or her features and preferences (e.g. a part of a map or advertising news from the area nearby) is one of important functionalities offered by geolocation, which enables to direct an offer at target segments. Geolocation also allows for establishment of the route between two places or finding an address (e.g. city, street and building number) on the grounds of geographic coordinates.

Having knowledge about broadly understood consumer’s location, enterprises of various industries can make decisions and communication activities in the sphere of sales, distribution and customer service in a more effective and efficient way (Isaca 2011, p.7). It helps, among others, in:

- analysis of demand and competition,
- use of micro-geographic criterion in the process of segmentation and creation of profiles of buyers’ segments,
- analysis of consumers’ behaviours in a particular area,
- analysis of buying habits and their movement, e.g. between stores in shopping centres,
- finding and selection of customers in particular areas,
- optimisation of the network of middlemen,
- rationalisation of distribution channels,
- making decisions about location of a new commercial outpost,
- intensification of movement in a shopping a store,
- stimulation of sales (e.g. special discounts for people who go past a particular shop),
- planning digital advertising campaigns,
- optimisation of loyalty programs (e.g. bonus discount vouchers for most loyal customers).

## 1.1. Grounds for application of geolocation based solutions

On a global scale, geolocation based solutions are developing very quickly and in a diversified way. This can be proved for example by implementation of Indoor Positioning System (Koyuncu & Yang 2010, p. 121), which is a system of determination of location of people or things that are in large area buildings.

In retail trade and in retail banks in Poland geolocation based marketing is only in its development stage (<http://leopold.nazwa.pl>). It is supported by applications based on geolocation that are used both by large commercial and entertainment chains while offering discounts, promotions and attractive offers (H&M, Reserved, Starbucks, Sfinks, C&A and others), and also small and local businesses (e.g. from service or gastronomy industry). Major advantages of these applications include first of all the possibility to precisely reach a particular user, convenience and also the speed of reaction.

Application of geolocation by commercial enterprises is a combination of promotional activities and consumer activity (Kiezel, Wiechoczek 2013). Mails, SMS and MMS messages are mainly used here. This is why geolocation is one of the most frequently used functions of smartphones and tablets. While logging in the application, a particular person receives notifications concerning current commercial, service and promotional offer in the places nearby. Information is displayed in a synthetic way; the user does not need to look through webpages but the whole communication is visible simply through scrolling the content of the screen. Some types of software allows for sending promotional codes (QR)<sup>1</sup> or discount vouchers to customers that authorise them to make a promotional purchase.

Application of geolocation based mobile marketing tools by enterprises must take the following into consideration:

- a) required by law consumer's consent for establishment of positioning and possible sending information about a particular promotion,
- b) database of users' profiles that allows for segmentation of information recipients compliant with expectations of promotional communication sender,
- c) communication carrier of „push” type, for example SMS, MMS or notification sent from the application after detecting that the device holder is in the shopping facility or service shop.

## 1.2. Determinants of geolocation application in Polish conditions

A growing number of smartphone holders is an important factor favouring application of geolocation in Poland. According to report by Mobile Life TNS Poland, at the beginning of 2012, 25% Poles had a smartphone and in January 2013 there were 33% of Poles who had them. In February 2014 this rate increased to 44% (<http://www.tnsglobal.pl> 2013). Thus, Poland reached the level of the European mean. If the pace of growth remains on the same level, it is predicted that in 2015 60% Poles will be the owners of smartphones. Very high activity of mobile network operators struggling for customers with increasingly better devices is a determinant contributing to this.

Dynamic increase in the number of active users of applications (the so-called light websites) and growing functionality of mobile systems (increase in the so-called transactionability) are vital determinants increasing the scope of application of geolocation in Poland. 46% smartphone owners use mobile applications (mostly free), and 64% search engines. Popularity of all mobile

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<sup>1</sup> QR codes defines as small square dot matrix barcodes that can be captured by the camera of a mobile phone and then decoded by software on the phone known as QR code reader to execute specific tasks. (Krum, 2010). These tasks could be opening a website, placing a call, sending a text message, viewing an online video, donating a pre-nominated amount to a charity, linking to a special promotion, or even 'like' a Facebook page (Krum 2010, and Tranter, 2012).

communicators such as Facebook Messenger, Viber or Snapchat that the youngest group of smartphone users are more and more interested in, is constantly growing. The device that was previously used mainly for making phone calls nowadays has additional functions. And so currently, their holders most often use games and applications that facilitate moving around the city, operating e-mail, musical applications and also social networking portals. Shopping applications constitute a large rate in this group (Sztand 2015).

The factors that may somehow limit the range of application of geolocation services include financial and psychological barriers, which seems similar to using the Internet and developing digital competences (Batorski, Płoszaj 2012, s.12-15). In spite of increase in the number of smartphones, their purchase still represents a remarkable expense for the consumer. Psychological aspect is also significant. A lot of users, particularly the elderly ones, do not have enough knowledge needed to use these applications, but they also frequently have no motivation to learn to use them and this results in self-exclusion („this is not for me”).

Accepting the feeling of breach of privacy to some an extent may also be difficult. Good application can suggest particular offers to the user if it works in the background on the phone and in real time. However it means that an enterprise has very precise knowledge where the customer is staying at a particular moment (country, city or street) and possibly it can be used later for other purposes. This psychological aspect of the loss of anonymity or even the feeling of security is relatively less important for young customers, who are often present on the Facebook or Twitter. They are accustomed to publish a lot of information about themselves in the network. However this can be a really serious problem for elderly people.

## **2. Application of geolocation in retail trade in Poland**

### **2.1. Foursquare and its functions as an example of use of social networking services**

Social networking services including Facebook with Places service, Google+ with Location Sharing service and the most popular service Foursquare, also often referred to as 4SQ, are systems aggregating physical location of users through checking into a particular location (Sejda, 2014).

Described service occurred in 2009 and since then it has gained 45 million users all over the world. There are 60 million spots in the application database out of which 1.3 million are commercial spots (*The Foursquare Blog*, 2013). It is easy in operation, free of charge and generally accessible on most telephones and operating systems (Simon 2012). Unfortunately, there is no Polish version yet, however the navigation is so intuitive that it can be operated in English. Finding places nearby or checking if there are people we know nearby is one of the ideas of 4SQ. This service also performs the role of a guide and a platform collecting opinions about places and brands.

The most important functions of the described service include:

- 1) check-in : informing others where we are – location is then displayed on the map,
- 2) commenting: through Foursquare we can for example recommend a favourite cafe, restaurant, store, etc.,
- 3) collecting awards: after checking into a location points and distinctions, the so-called badges are obtained (Simon, 2012).

Data concerning check-in are registered in a special system that operates the application integrated with a particular spot. The place where the person stays is displayed in the form of a tag and the address and the name of this exact place is also provided. However, on a single day it is not possible to check in more than 30 times and not more often than 3 times every 15 minutes. Points remain on the

customer's account for a week and then they disappear which forces regular visits to the places. The benefit is not only for the particular person but also for the premises or store in which the person stays.

Checking in is one of the methods of building relationships with users of mobile devices (potential customers) and establishment of the image of product brand or store. It is also a very authentic and automatic tool of the word-of-mouth marketing (Hudges 2008, Semovitz 2011)<sup>2</sup>. Thanks to „check in” application Foursquare service users can count on discounts and special premium offers. They can also collect badges for participation in its applications. Their types are presented in tab. 1.

Type of badge	Badge name	Needed check-in number
<b>Major</b> (first)	a) Newbie b) Adventurer c) Explorer d) Superstar e) Super User f) Super Mayor g) Century Club h) Ten Hundred	a) for the first check-in b) for 10 check-ins c) for 25 check-ins d) for 50 check-ins e) for 30 check-ins in 30 days f) for holding the Mayor title in 10 spots g) for 100 check-ins h) for 1000 check-ins
<b>Special</b> (additional) - when a definite number of people check in in one location	a) Swarm Badge b) Super Swarm Badge f) Super Duper Swarm g) Epic Swarm Badge	a) a minimum of 50 people checked in in one location (in 3 hours) b) a minimum of 250 people checked in in one location c) a minimum of 500 people checked in in one location d) a minimum of 1000 people checked in in one location

Table 1. Types of badges for activity in Foursquare

Collecting badges supports shaping loyal attitudes and buying behaviours among users of Foursquare service that similarly to other social networking services (e.g. Facebook, Twitter) or applications, developed a business model that aims at ensuring profits. Sponsored recommendations and discount offers are similar to those offered by other services.

The possibility to obtain advice concerning a particular location and a chance to gain a discount is a value in this business model that ought to encourage prospective customers to use a particular application (Teece 2010, pp. 172-194).

Foursquare service offers an innovative promotion and communication tool for commercial outposts operating in real locations that allows for directing advertisements to prospective customers who are close to a particular commercial premises. However, what is specifically important is the fact that it allows for identification of customers and their buying habits (Oleksiak, 2014, pp. 141-142).

## 2.2. MCoupons

The so-called mCoupons are another innovative marketing tool that applies possibilities offered by geolocation in retail trade. The notion of mCoupon represents specially prepared promotional

<sup>2</sup> The notion of the Word of Mouth Communications refers to informal and private communication defined as a sociological channel of interpersonal communication in which friends, family and acquaintances or even strangers who express their opinions about a product or a company are the entities.

information sent in the form of SMS or MMS message to specially selected, narrow group of recipients (*Introduction to Mobile Coupons*, 2007, pp. 1-5).

Apart from the possibility of narrow targeting, the speed of reaching a selected market segment is an important advantage of the described innovation. SMS or MMS messages are precise information carriers thanks to which it can be precisely defined when a particular target group receives the promotional mCoupon that was sent. Its determination is possible thanks to special T-Mobile transmitters, the so-called BTS (Base Transceiver Station). Thanks to them the chance that the promotional offer will reach the group of recipients interesting for the sender and staying in this particular location is higher (<http://nowymarketing.pl>). To illustrate the described solution the example of shopping mall „Golden Terraces” in Warsaw known in Poland is used.

Thanks to mCoupons interactions with consumer are enhanced (e.g. while involving them in participation in consumer lottery right after leaving the cash desk). This is because mCoupons allow for placing, in their message, a link redirecting to a selected webpage. Thanks to such solutions it is practically possible to involve the user and strengthen their interaction with a particular product, service or brand immediately. The campaign of a Polish grocery company Winiary promoting consumer lottery can be an example of such an activity.

Customers taking part in the lottery of Winiary company after they had left the cash desk area, could register their receipt on a mobile version of Internet website and take part in drawing for the prize in the amount of PLN one thousand (around € 240) awarded every hour.

Forming conclusion it ought to be emphasised that marketing innovations in retail trade that apply tools based on the capacities of geolocation enable presentation of commercial offers to consumers in the right place and at the right time which constitutes their fundamental advantage and benefit. Thanks to this they are gaining increasingly more interest in Poland. From the point of view of marketing, Poles use geolocation tools mainly for the purpose of searching for offers of stores and service providers which allows for finding discounts and comparing offers.

### **3. Application of geolocation by retail banks in Poland**

#### **3.1. Geolocation in mobile banking**

Mobile banking provides customers with a series of elementary functionalities associated with checking balance, ordering money transfer or making payments for goods or services by phone. Access to bank account from the level of mobile phone is becoming more and more common. According to statistical data growth in the number of customers of mobile banking of ten largest banks was reported in the sector between 2011 and 2014. In 2011 there were fewer than 900 thousand of them, in the middle of 2013 there were 1.6 million, in 2014 there were almost 3.5 million and at the end of March 2015 their number was higher than 4 million (Boczoń 2015).

Geolocation services that accompany mobile banking more and more frequently, create a value added that increases possible profits for customers who use it. The offer based on geolocation elements should be carefully selected and most interesting for a particular customer. Excess of information, especially this badly selected may successfully discourage the use of a service (Sznajder 2014). For the purpose of optimal offer customisation, banks have to increase the knowledge they have about customers. For this purpose they can apply the elements of behavioural analysis on the basis of history of transactions and additional surveys (e.g. as an element of applying for a new product). Thanks to

information about conducted non-cash transactions in recent months the bank may for example perform calculations of possible savings and show possibilities of their optimisation. The can also present potential possibilities of making profitable purchases in the form of promotional offers in the sphere of goods and services purchased by the customer in particular time (www.finance.egospodarka.pl 2012).

Thanks to geolocation banks can respond to customers' needs and suggest customised offers to them. In applications of many banks, including Pekao, Millenium, Alior, mBank, Multibank and ING, the customers can for example find the bank and cash points near their location, and also particular stores or service shops. Pekao and BPH have an interesting form of search that combines geolocation and Augmented Reality.

Thanks to the function of augmented reality (Wiechoczek 2014), while applying the device camera, the customer can localize cash points, bank branches and discount spots. The search engine allows for finding the outposts and presenting them on the camera view. Geolocation in mobile banking can also show places where payment can be made by contactless card (Sajewicz 2014).

### **3.2. Discount programs of selected banks**

Search engine of discount spots that thanks to GPS system shows the closest shops in which customers can obtain discounts, offers a great advantage. Such a service is offered for example by Pekao, CitiHandlowy and mBank. The bank localizes the place where the customer is staying and suggests in which store nearby discounts can be used while paying by card. The customer can determine how far from the current location such places should be found: 1 km, 5 km or even 10 km. The results are presented in the form of list or tags on the map (Boczoń 2012).

Geolocation based mBank discount program called mOkazje [*mBargain*] can be applied through electronic banking service, application on the Facebook and mobile banking application (www.mbank.pl 2013). The application informs the customer that there is a store with mOkazja [*mBargain*] nearby. Such locations are „downloaded” on the telephone and customers can check the distance between them and these locations on the map. The offers are customised to a particular customer so that they are most attractive for them. It is also the customer who decides which discount they want to take advantage of. However, what is important, every customer can switch off the geolocation option at any time. Currently, it is used by over half of the users of the new mobile application of the bank.

Regular banks offer discounts to all their customers for buying in a specific store chain. Consequently, the chains offer rather small discounts. mBank invented the concept that discount offers will be slightly different for every customer. There are not many of them (only a few active offers), but the discounts are supposed to reach even 50%. This results from the fact that if the bank selects a group, out of their customers, that a particular chain would possibly like to reach, the chain is usually willing to offer them larger discounts.

Alior Bank started a discount program called Mapa Okazji [Bargain Map] several months later (www.aliorbank.pl 2013). It is available for customers of Alior Bank and its virtual branch Alior Synca. It is based on the application for smartphones with Android and iOS systems (downloaded from Google Play and AppStore). After registering and logging in the application, a map of the closest surroundings is displayed (geolocation mode must be switched on). It shows tags with stores or restaurants in which discounts can be obtained. Every place is displayed in the form of an icon thanks to which it is clear what type of outpost it is.

Clicking the icon the customer finds out what discount and in what form they can get, because Alior prepared several models of rewarding. It can be a percent model, amount model, additional service or product at purchase, or two services for the price of one. If the customer is interested in a particular discount they have to activate it. The discount is active for 24 hours. Realisation of discount takes place during a visit in a shop after the customer switches on the application and shows the salesperson the telephone with activated discount at the moment of purchase.

There is a special webpage for customers who do not have smartphones. Outposts offering discounts can be found there. To realise them, it is necessary to make payment in the store by any debit or credit card issued by Alior Bank or Alior Sync. This program also allows for acquisition of new customers because after they install the application they can use the discount once.

Within the program Alior Bank cooperates with many commercial and service shops, both large chains such as Telepizza, Sphinx, Chłopskie Jadło restaurants, iSpot or Medicover and also small service outlets operating in smaller localities (e.g. Alior customers will obtain 44% discount on the purchase of the pass for the gym in Condizone club in Legnica, they will get the second pair of glasses for free in Optician shop in Trzemeszna and 25% discount at the purchase of at least 1 kg of coffee in coffee roasting shop in Bochnia in Maestrocafe). In total there are currently around one thousand partners in the program.

Presented examples show that to ensure larger effectiveness of geolocation reaction, the banks customise the offer and suggest services tailored to every customer. Such a selection of information sent through geolocation is important so as not to spam the user with useless data.

## **Conclusions**

Modern information technologies and development of Internet contribute to occurrence of innovative solutions in enterprises of various industries and determine changes in consumptions models. Functionality allowing for identification of location available on mobile devices is becoming increasingly popular thanks to market expansion of smartphones and tablets.

For customers, the range of use is associated for example with determination where the closest cash point or commercial outpost in which they can get an attractive loan or discount on shopping is located. For an enterprise, a store or a bank, it is an opportunity to direct customised promotion and advertisement, also within partnership programs, on the grounds of their current location. It can be seen in analysed examples that studied enterprises apply the possibilities offered by geolocation to optimise loyalty programs. At the same time it affects increase in sales and enhances relationships with customers. Identification of the degree of interest and application of geolocation solutions and how much they encourage making decision about a purchase among customers of studied sectors is also an interesting research trend.

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