POTENTIAL OF USING ICT BY CONVENIENCE STORES

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Abstract:
The article concerns the use of the opportunities offered by ICT in communication between the convenience stores and its customers. In the first part a review of the literature on the specificity of sales in convenience stores and communication possibilities by using the ICT was presented. This part is the theoretical background to the results of the quantitative study, which were presented in the second part. The authors have reached their research goal – that was a positive verification of the following hypothesis: there is a possibility of adapting in convenience stores ICT-based solutions, which are now commonly used by larger format stores. Managerial implications and directions for future research were also discussed.

Keywords: ICT, communication with customers, convenience store, c-store, marketing channels, touchpoints

1. RETAIL TRADE IN CONVENIENCE STORE – THEORETICAL BACKGROUND

1.1. Convenience store as one of the retail formats

Gonzalez-Benito, Bustos-Reyes and Munoz-Gallego (200) draw attention to the fact that transformations in retailing during recent decades have led to the significant diversification of retail formats. Simultaneously, the growing heterogeneity of consumers demands ever more heterogeneous retail offers, through which, for example, different store formats attempt to satisfy the shopping needs of different segments of consumers in different shopping situations. Azizi, Kapak and Tarhandeh (2014), pay attention to distribution – according to them, among the marketing 4 Ps`, marketing channels or distribution channels are still an important source of competitive advantages, since in the other Ps. What is more, distribution channels are seen as the area of the biggest changes in twenty-first century business (not new methods of production or consumption, but distribution) (Irani, Shahanaghi and Jandaghi, 2011).

According to Kulkarni (2011), the convenience stores (c-stores) format of the retail industry is highly competitive and volume driven with high pressure on the margins, and it throws a tough challenge to the convenience stores format. In the light of this reality, the focus of the convenience stores in the organized sector should be on managing consumers' expectations effectively leading to repeat purchases and converting them into life-time customers. Jayasankaraprasad (2014) draws attention to the fact, that today's consumers are pampered for choices on purchasing sources that could give them maximum value for their scarce resources (money, time, effort). While this array of choices offers a myriad of shopping opportunities, the choices have ultimately become blurred in the minds of consumers because they could buy the same products seemingly everywhere. The parallel usage of store formats and channels is also becoming increasingly multilayered. Researchers note an interesting shift in consumer behaviour – the increasing use of multiple stores and formats since they offer different opportunities to satisfy bundles of needs and wants depending on the shopping need and shopping situation (Prasad 2010; Reutter and Teller 2009; Cummins et al. 2008). In the light of the literature, there are two types of cross-shopping behaviour from a retailer's perspective – intertype crossing and intratype crossing. The first one is referred to as crossing between different types of outlets (e.g., crossing from supermarket to a hypermarket). The second one refers to crossing between the same types of outlets (e.g., crossing from one supermarket to another supermarket) (Hansen, 2003). In turn, according to Ganesh, Reynolds and Luckett (2007), cross-shopping is characterized by shoppers who change their retail patronage patterns and turn to other retail formats to fulfil shopping needs that had traditionally been met by a long-preferred and patronized retail format. However, regardless of how this new pattern of consumer behaviour is defined, there should be noted that consumers' store/format choice is based on expectations of how alternative options will perform taking into account criteria such as value for money, convenience, merchandise variety, merchandise price and quality, price promotions, discounts and offers, credit sales, personal attention and empathy, ambience, and superior shopping experiences (Jayasankaraprasad, 2014). As Campo and Breugelmans (2015) noted, the large majority of online grocery shoppers are multichannel shoppers who keep visiting offline grocery stores to combine convenience advantages of online shopping with self-service advantages of offline stores. An important retail management question, therefore, is how these consumers divide grocery purchases across the retailer's online and offline channel. Interestingly, according to Nielsen's report (2014) convenience itself may be the most creative and energetic example of retail innovation. Researchers agree that, the shift towards multichannel offline-online retailing is one of the most important and successful practices of these convenience-oriented retail innovations. By increasing their service levels, multichannel retailers aim to retain existing customers and gain new customers in the increasingly competitive retail environment (Neslin and Shankar, 2009; Zhang et al., 2010; Chintagunta, Chu and Cebollada, 2012).

Retail convenience is defined as consumers' time and effort costs associated with shopping in a retail environment (Seiders, Berry and Gresham 2000). It is a multidimensional construct or second-order construct consisting of various types of time and effort costs. Taking into consideration offline and online shopping, Beauchamp and Ponder (2010) note that while shopping at a traditional store is certainly faster than waiting for delivery of online orders, consumers must put forth effort at other stages of the shopping process to reap the benefits of immediate possession. So, while in-store shoppers can obtain the purchase quickly, they expect to expend a certain amount of effort to gain possession. On the other hand, online shoppers obtain the purchase easily through parcel delivery; however, the ease associated with delivery is accompanied by a longer wait time.

Grubor and Milicevic (2015) rightly emphasize that technology development over the past several decades has been accompanied by an increase in the amount of information possessed by customers, whose needs and demands are becoming the initial point of business activities in marketing channels. Bianchi (2009) notes that convenience stores constitute a successful format in developed markets such as the U.S., Canada, Europe and Japan. The author also emphasizes that only a few studies of convenience stores are found in the literature, and they have all been held in a developed market context. These studies show that salient convenience-store attributes for consumers are location, product assortment, knowledge of sales associates, speed of checkout, service, store layout, and parking. Yet, little is known about consumer expectations of convenience store attributes and preferences of products and services in different countries. According to definition by Kirby (1986), convenience stores can be as small as a kiosk of a size of around 800 sq ft or as big as 4000 to 5000 sq ft. Their prime attraction is the easy location and convenience that they provide to the customers. The items stocked by convenience stores are the daily use products. Most of the sales of convenience stores come from refrigerated goods. The product categories range from beverages, snacks, and confectioneries, groceries, gasoline, fresh or frozen food and limited use items (Iqbal and Sharma, 2012).

1.2. Retailing in Poland - selected aspects

During the economic slowdown since 2008 the strengthening the position of trading companies with foreign capital, especially in the FMCG industry, is observed on the Polish market. In the years 2008-2014 number of shops owned by foreign capital increased by 91% and their share in total sales area in Poland increased from 20.4% in 2008 to 27.1% in 2014. Entities with foreign capital offer a wide range of goods and have large area objects of different formats (hypermarkets, supermarkets, discount stores, convenience store) – therefore their share in the sales area and achieved turnover is accordingly higher.

The changes in trade on the Polish market include reducing the number of stores belonging to the traditional trade (small format), development of large formats and progressive process of integration of small independent shops.

Table 1 shows that the Polish retail trade is characterized by a fragmented structure. Independent small-format stores (c-store) have in stores network established tradition on the market. This is due to the following factors:

- strong orientation to proximity to the customer,
- domestic products sales,
- innovation sales, e.g. self-service, product promotions,
- advanced consolidation process.

Table1: The ownership structure of the retailers of the domestic and foreign property according to the number of owned stores and the number of employees, Poland 2014

Company (retailer)	Domestic property		Foreign property	
	Number	Structure (%)	Number	Structure (%)
Total*	288,044	100.00	451	100.00
In this:				
companies with up to 2 shops	282,148	97.95	191	42.35
companies with 3-10 shops	4,888	1.70	127	28.16
companies with 11-20 shops	633	0.22	37	8.20
companies with more than 20 stores	375	0.13	96	21.29
Total	288,044	100.00	451	100.00
In this:				
Companies employing up to 9 people	273,997	95.12	1	0.22
Companies employing 10-49 people	11,198	3.89	184	40.80
Companies employing more than 49 people	2,849	0.99	266	58.98

Note: * data refer to companies employing more than 9 people.
Source: [Kłosiewicz-Górecka, 2015].

The most popular form of consolidation of small independent c-store are franchise agreements. Poland's largest franchise network is ABC (7,500), Żabka (4,000), Lewiatan (3,000), Odido (2,000). Network integrators are often wholesale distributors, who support small retailers by providing know-how and employees training, offering attractive conditions for goods supply, private labels, marketing support. Developing a dynamic network of grocery stores are convenience stores – in 2010-2014 there was an increase of 2,630 stores.

A significant direction of changes in the activity of convenience retailing brings the development of information and communication technologies, which directs its business model to the need of connecting stationary sales forms and customer service witch e-commerce. Consumer access to the Internet and mobile communications leads to virtualization their purchasing behavior in each phase of the purchasing process – from the pre-purchase stage, to evaluate post-purchase. Selecting the final place of purchase – offline channel or online channel – depends on many factors of external environment, and above all on the characteristics of the consumer and situational. Such conditions of the consumer market are called the era of "I con" (I am a consumer), which is an intelligent, multi-channel and ubiquitous consumer (Reformat, 2015). According to Mróz (2013), in the twenty-first century consumers are realizing significant portion of their activities in the virtual space, they are becoming more aware, critical and independent. At the same time the tools of new information technologies enable the rapid and efficient communication both with other consumers and companies (through social media, online forums). Consumer activity here is connected with the search for information, advice, expressing their opinion on the basis of purchase and consumption of goods. Hence the need to examine the use of modern technology to communicate with customers (Lipowski and Angowski, 2014).

There can be formulated a thesis that virtualization of consumers purchasing behavior forces retailers to introduce new solutions in the use of advanced information technologies (internet and mobile devices) in small independent convenience stores. Innovation buyers understood as their ability and willingness to accept new solutions introduced by the retail trade is increasing (Kucharska, 2015).

2. ICT AT THE SERVICE OF CONVENIENCE STORES – SURVEY RESULTS

2.1. Methodology

The study was conducted in IV quarter of 2015 on a group of 257 respondents. The research sample was determined by random method. CAWI (*computer assisted web interview*) method was used with a standardized questionnaire. The characteristics of the study sample are presented in Table 2.

The authors have formulated the following research hypothesis: there is a possibility of adapting by convenience stores ICT-based solutions in communication with customers (solutions which are now commonly used by larger format stores). According to the authors, the network economy and modern technology enable the implementation of communication solutions in small shops. The result is the improvement of their position in a competitive market. A number of communication tools are better suited to small retail outlets, where buyer often knows the seller / owner and establishes a close relationship (more personal relationships) with them. According to the authors, however some of the other character can have both the information provided to buyers by small shops, as well as ways to communicate with them.

Table 2: Characteristics of the study sample

Characteristics		Percentage of sample
Gender	Female	70.0
	Male	30.0
Place of residance	Rural area	32.0
	Small city	25.0
	Big city (over 100,000 inhabitants)	43.0
Employment status	Full time employed	23.0
	Part time employed	15.0
	Not employed	52.0
	Other	10.0
Number of people	1	14.0

in the household	2	25.0
	3	17.0
	4	24.0
	5 or more	20.0

2.2. Research results

According to the survey, there is a link between shopping in a convenience stores and specialist shops (bakers, butchers) and marketplace. Usually in this type of retail outlets in Poland price level is slightly higher (than for example in discount stores), but also quality product is higher. Thus, consumers who purchase FMCG products in such places have higher expectations for quality, with simultaneous the lower price sensitivity.

Interestingly, consumers who spend relatively little money per month (up to 200 euros) for the purchase of FMCG products, in the c-store carry up to 20% of such purchases (tab. 3). It is possible to notice the following relationship: the higher the amount spent on FMCG products, the lower the propensity to make large purchases of such products in c-stores.

Table 3: Purchases scale of FMCG products in convenience stores

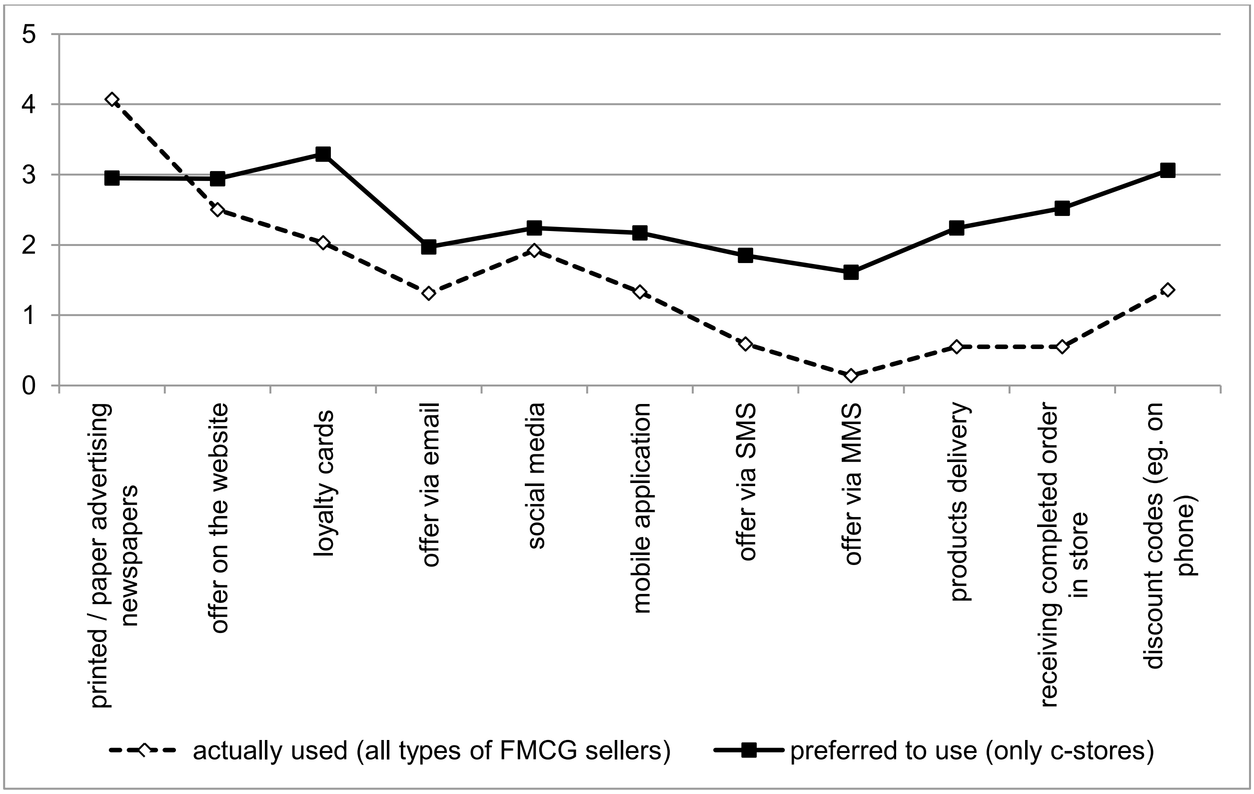
Monthly expenses (FMCG products)	Percent of purchases made in the c-store				
	No purchase	Up to 5%	6%-20%	21%-40%	above 40%
Up to 100 €	6.6%	10.5%	9.3%	3.9%	4.3%
100-200 €	2.3%	8.2%	10.1%	5.1%	5.4%
201-300 €	1.9%	3.1%	5.4%	3.1%	2.0%
301-400 €	1.2%	1.6%	2.7%	1.2%	2.7%
Above 400 €	2.0%	2.4%	3.1%	1.2%	0.8%

Source: Own research.

Taking into account the research topic, it was interesting to identify forms of communication with the c-store preferred by consumers. However, the starting point was to get to know a monthly frequency of using by consumers various forms of communication with (all type of) sellers with FMCG products.

It turned out, that the most popular were printed/paper advertising newspapers, offer on the website, the loyalty cards and social media (Picture 1).

Picture 1. Forms of communication with the buyer of FMCG products

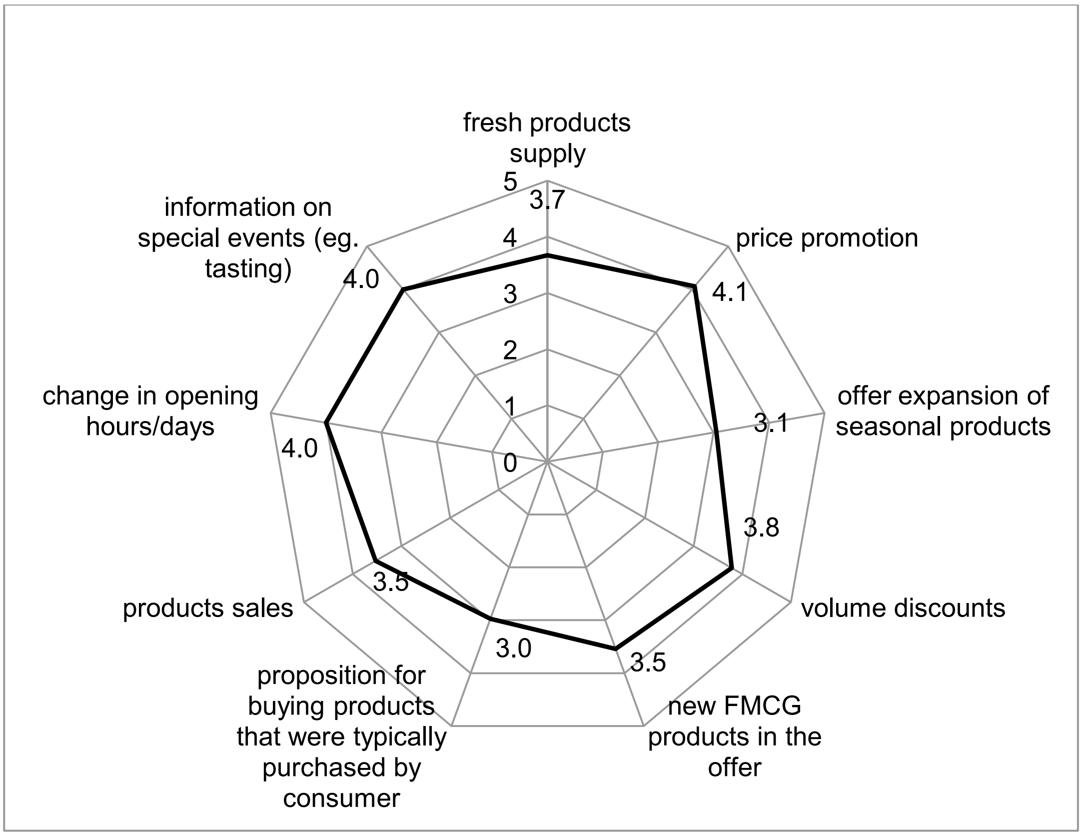


Note: actually used – digit represents the average monthly number of client contacts with shop using a particular form; preferred to use – from 1 (certainly not) to 5 (certainly yes).
Source: Own research.

It is worth noting that there is a discrepancy between the current scale of using certain communication forms and their attractiveness for the consumer in contact with the c-store. It is mainly about discount codes sent to the customer on mobile, and loyalty cards. It should be clearly underlined the difficulty in applying by c-stores these forms of communication with clients, mainly due to the costs.

Another issue is to determine the content that consumers want to receive during communication (based on ICT) with the convenience stores (Picture 2). The most desired content are price promotions, change in opening hours/days and special events in convenience store.

Picture 2: Desired content in communication between convenience store with the customer



Note: scale from 1 (certainly not) to 5 (certainly yes).
Source: Own research.

According to the study, these information customers would like the most receive via email, social media and mobile application. The acceptance of such communication forms is much higher than the same types of communication shown in picture 1, when consumers know what information would be transmitted in this way. Therefore, the acceptance of content /content desirable determines acceptance of a particular form of communication based on ICT.

3. FINDINGS AND DISCUSSION

3.1. Conclusion and practical implications

Currently, communication between shops (selling FMCG products) and consumers is based on forms typical for large retailers – these forms are: printed newsletters, offer posted on websites or customer cards. Network economy and ICT give also to small shops great opportunities to communicate with customers. In the case of c-stores customers' expectations relate to similar forms of communication to which customers of large formats are already used to. However, these communication forms are not always possible to use by convenience store. Meanwhile, customers show interest in communication with small shops that concerning in particular price promotions, changes in opening hours, special events (eg. tasting) or volume discounts.

This information in communication with clients (using remote technology) should be presented via e-mail, web sites in social media and mobile application. Customers' interest in this type of communication with small shops increases when consumers are aware of the usefulness of the information that they receive in this way. According to the authors, in the short term there will be development of tools for communication small shops with suppliers. As a result, it will reduce the advantage of today's large-area retail in this regard.

A key factor in this regard may be the development, availability and easy service of platform integrating communication between small shops and their customers. Crucial could be also noticing the growth potential, which is achievable through modern pre-purchase communication.

3.2. Further research and limitations

Although interesting issues emerged from our work, there are some limitations which should be taken into account, these also suggest directions for further research.

The main limitation concerns the sample size and sampling methods. Another limit refers to change in ownership structure of small independent shops, this format is increasingly penetrated by a network of large stores. Network of large-format stores have recognized one of the basic needs of the client in the purchase of FMCG – the proximity of purchase location and convenience of purchase. As a result, some of large format shops implement the development strategy of small local shops.

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