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Customer Citizenship Behaviour towards customers and enterprises operating in medium high-tech sector

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Abstract: The paper presents customer citizenship behaviour (CCB), i.e. discretionary, voluntary and supportive actions towards other customers and companies operating in the medium high-tech sector as an emerging trend in customers behaviour, characterises the medium high-tech sector, identifies types of CCB in the analysed sector, as well as points at possible determinants of customer citizenship behaviour. Theoretical deliberation based on literature studies was supplemented by secondary data analysis, scientific case studies, observations as well as individual deepened interviews were used to identify the forms of CCB performed by customers in medium high-tech sector. Further fields of study and research were also identified.

Keywords: Customer citizenship behaviour (CCB), medium high-tech goods

1. Introduction

Every company functions in a specific environment constituted by its stakeholders, like: customers, competitors, cooperating partners and other entities. They all influence the company's existence and development. What may be observed nowadays is the increasing meaning of a company's relationships that is reflected in the relationship marketing concept. According to this concept, the marketing effectiveness of a company is depended on its partnering, advantageous relationships with the stakeholders, with special regard to its customers, and shall be based on mutual trust and engagement (Mitręga 2005).

Simultaneously, a relationship evolution has taken place: from reactive customers' behaviours, which may be described as their positive or negative reactions to marketing actions undertaken by a company, towards proactive ones. Customers initiate these behaviours and address them both to companies or other customers (the companies' clients). The proactive behaviours may be defined as customers' citizenship behaviours (CCB) which are discretionary and voluntary in nature (Groth 2005).

Attention shall also be drawn to the fact, that CCB is a relatively new concept in the literature on relationship marketing and customer behaviour. Therefore the main objective of the paper is to present discretionary and voluntary acts of customers towards other customers and companies operating in the high-tech sector. The specific objectives will be to: present the general concept of customer citizenship behaviour based on the literature studies and indicate scientific theories elucidating customer citizenship behaviour, identify types of customer citizenship behaviour in medium high-tech sector, as well as indicate determinants of extra-role behaviours of customers in the market.

A method of critical analysis of the literature of the subject and documentation method based on secondary sources concerning high-tech goods and the entities offering them will be applied in the paper. Additionally, qualitative research based on the analysis of scientific case studies and individual deepened interviews were used as well as observation method that performs an auxiliary function.

The paper presents CCB as an emerging trend in customers behaviour, characterises the medium high-tech sector, identifies types of CCB in the analysed sector, as well as points at possible determinants of customer citizenship behaviour towards medium high-tech goods. The research findings are presented and future fields of studies are submitted.

2. Customer citizenship behaviour as an emerging trend in customer behaviour

Customer citizenship behaviour (CCB) is defined as “voluntary and discretionary behaviour of individual customers that is not directly or explicitly expected or rewarded but that in the aggregate, leads to higher quality service and promotes the effective functioning of organizations” (Groth 2005). Other authors (Bettencourt 1997; Bove et al. 2009) present similar definition of CCB, describing it as “discretionary and pro-social actions displayed by customers, and bring benefits both to the companies and other customers”. Although these behaviours are not explicitly rewarded by a firm’s formal reward programs, they are considered critical to the success of a company (Yi, Gong, & Lee, 2013). Citizenship behaviours are extra-role initiatives beyond the requirements of the customer roles usually performed. Hsieh, Yen and Chin (2004) deem such helpful behaviours which are performed by customers as customer voluntary performance (CVP).

Customer citizenship behaviour derives from organizational citizenship behaviour (OCB). The author of the concept, Dennis Organ noticed that employees’ effectiveness may not be fully elucidated with such factors as competences or managerial methods, and there must be another explanation. The research findings showed that some employees spent more time helping others, creating a favourable organizational atmosphere etc., but these actions are not rewarded by employers, they are pro-social and voluntary in nature, so may be described as “organizational citizenship behaviours” (Organ, Podsakof, MacKenzie 2006). According to Lin, Lyau, Tsai, Chen and Chiu (2010) OCB creates a specific employer brand and makes employers perceived as fair and ethical workplace. Similar perception of citizenship behaviour was presented by Burmann and Zeplin (2005), who introduced a concept of brand citizenship behaviour (BCB), i.e. actions undertaken by employees to improve or sustain an employer brand.

According to Fowler (2013) customer citizenship behaviour derives from civic citizenship behaviour, as a subject of interest of various concepts, from ancient times, up till now. According to an ancient Greek philosopher, Aristotle, responsible citizens are obedient, loyal and eager to participate in social activities. In the modern-day concept, civic citizenship behaviour is revealed in information exchange and opinion sharing among individuals, which fosters the development of social autonomy and self-governance.

To summarise the idea of CCB, it may be assumed that customers citizenship behaviour is voluntary, discretionary, initiated by customers, who wish to support a company, its employees or other purchasers.

Second, CCB is not formally rewarded by companies in a form of mutual benefits system. Customer citizenship behaviours may be noticed and appreciated by enterprises, but not explicitly rewarded by a firm's formal reward programs.

Third, since the behaviour is voluntary, it should be driven by specific motives. A question may therefore arise: what may be the determinants of customer citizenship behaviours in general?

According to Fowler (2013), theory of motivation may bring the answer to the question, with special regard to intrinsic and extrinsic motivations. The intrinsic motivation refers to doing something because it is inherently interesting, enjoyable or in accordance with customer's values or attitudes. The extrinsic motivation however, refers to doing something because it leads to a separable outcome, for instance may be appreciated and rewarded by a reference group (Kotler 1994; Ryan and Deci 2000).

As far as the theory of motivation is concerned to explain customer citizenship behaviour, Abraham Maslow hierarchy of needs may be useful. What may be assumed is that customers present citizenship behaviour to fulfil their needs, mainly those described on higher levels (self-esteem needs, self-actualization needs or transcendence needs).

Other theories describing CCB's determinants are social capital theory in general, and the principle of reciprocity in particular. By helping others (i.e. other purchasers, companies), customers expect to be helped in future – not necessarily by the same beneficiaries, but they will become the recipients of other customers' citizenship behaviour (Falk and Fischbacher 2006).

Table 1. Five dimensions of customer citizenship behaviour

No.	Description of CCB dimensions	Author/s
1.	Customer behaviour that involves providing information and (positive or negative) opinions on companies, their goods and services, with the intention of improving the marketing activity <i>(providing feedback, voice, consultancy)</i>	Groth (2005) Soch, Aggarwal (2013) Balaji (2014)
2.	Customer behaviour that involves encouraging other customers (friends, family members internet users etc.) to use a company's goods or services, positive WOM and recommendations <i>(advocacy)</i>	Gruen (1995) Groth (2005) Garma, Bove (2009)
3.	Customer behaviour that displays commitment to a company, a favourable attitude towards its products, services and marketing activity by presenting a company's logotype (on clothes, bags etc.), presenting involvement in marketing events provided by a company <i>(displaying affiliation, social support)</i>	Groth (2005) Garma, Bove (2009) Soch, Aggarwal (2013)
4.	Customer behaviour consisting in helping other customers when product usage or company's proceedings may be troublesome and uneasy for other customers, benevolent acts of service facilitation towards other customers <i>(helping other customers)</i>	Groth (2005) Johnson, Rapp (2010) Soch, Aggarwal (2013)
5.	Customer behaviour that involves observing other customers to eliminate their inappropriate behaviour, e.g. not respecting the queue, misbehaving on company's fun page, being rude to other customers <i>(mitigating, policing)</i>	Gruen (1995) Bettencourt (1997) Soch, Aggarwal (2013)

Source: Soch, Aggarwal (2013); Garma and Bove (2009); Balaji (2014); Bettencourt (1997); Groth (2005); Johnson, Rapp (2010); Gruen (1995)

Literature studies prove that customer citizenship behaviour is multidimensional construct consisting of several dimensions. Researchers have mentioned conceptually distinct dimensions of CCB (Groth 2005; Keh and Teo 2001; Bove et al. 2009). These dimensions are presented in Table 1.

Customer citizenship behaviour seems to be a field of interest for both researchers and business practitioners. It is important to discover its dimensions and determinants to build the proactive relationship among companies and customers, who actively participate in the value creation process and act as promoters and innovators.

Attention shall be also drawn to the specific nature of CCB performed in different market sectors. The subject matter of interest of the authors in the paper is customer citizenship behaviour displayed in the medium high-tech sector.

3. Medium high-tech goods sector characteristics

The category of medium-high-technology goods is one of the four categories of high-tech goods distinguished by OECD in the classification of products by the criterion of the degree of technological advancement. Other categories in this classification include the following: high-technology products, medium-low-technology products, low-technology products (Hatzichronoglou 1997). The OECD classification is most often used in research concerning high-tech sectors and goods, conducted on international scale.

The category of medium-high-technology goods encompasses a wide variety of product groups of highly diversified features, functions and destinations. These include electrical appliances, machinery and equipment, motor vehicles and other transport equipment, scientific and precision instruments, non-electrical machinery, etc. Household appliances (from the group of electrical appliances) and passenger cars (from the group of motor vehicles) offered on the market of individual buyers (B2C) were selected for the research in the paper). The selected products are significantly diversified in terms of features and the range of usability (even within a single category of goods), and consequently, the scope and ability to satisfy consumer needs. They also have a different degree of technological complexity, which means that their purchase and operation require specific knowledge and skills from the consumer (the skills need to be constantly developed because of successively implemented new technological solutions in the products). They also differ with respect to conditions of purchase and use by buyers.

Household appliances and cars are multifunctional products that enable satisfaction of groups of needs of buyers of diverse character (both basic and higher needs, including those related to their self-fulfilment), such as bundles of housing needs, those associated with education, communication, leisure, health care, professional career, etc. Table 2 shows the needs that can be satisfied (now and in the future) by selected medium-high-technology products.

Table 2. Current and potential needs satisfied by medium-high-technology products (refrigerator and passenger car)

Product type	Needs that can be now satisfied by the product / Benefits resulting from the product purchase	Needs that could be satisfied in the future / Future benefits of purchasing a product*
fridge	<ol style="list-style-type: none"> 1. optimum food storage conditions allowing to preserve its natural taste and nutritional value thanks to the system preventing moisture loss and helping to retain vitamins 2. health, because of the possibility to keep food fresh thanks to the use of anti-bacterial coating that prevents development of mould 3. comfort of food storage thanks to air circulation that enables to maintain the same temperature on all levels of the refrigerator, individual control of the temperature by the user, door-in-door system, etc. 4. constant access to cold drinks thanks to built-in siphon 5. order thanks to appropriate racks and shelves, for example for drinks in different packaging, eggs, cheese, etc. 6. saving time because of rationalization of shopping time (e.g. less frequent shopping because of the possibility of freezing some products, no need of periodic defrosting (resulting from maintenance-free character of the device), possibility of fridge compartment express cooling 7. savings associated with lower energy consumption (e.g. through choosing energy saving, or holiday working mode of the device), reduction of mechanical losses (for example because of the use of a suitable compressor) 8. providing aesthetics and elegance to the kitchen thanks to specific design of the device, modern outer coating or the possibility to build in, in the way adjusted to individual needs (including those related to the kitchen design) 9. comfort of use, e.g. the possibility to separate the space individually, easy access to products thanks to sliding shelves, additional interior lighting, trouble-free control of the refrigerator setting and control of functions without opening the fridge door set on the control panel 	<ol style="list-style-type: none"> 1. the need to watch TV programs, including news programs and films, while preparing meals (thanks to built-in TV set and / or movie player) - this need may arise for example if the consumer has a small kitchen and there is no room to place a TV set there. 2. constant access to information, for example thanks to built-in LCD monitor, possibility of viewing web pages, or activating the e-mail, viewing cookbooks, own recipes and notes saved in the device memory, as well as information about the type of defects in the event of their occurrence (self-diagnosis function) 3. reducing the time spent on shopping thanks to self-control of by the supplies and sending the order automatically to the store (this requires cooperation of the manufacturer with the traders) 4. saving time resulting from the possibility to make automatic food orders online or identification of products in the kitchen (with the use of a special system) 5. improvement of the quality of everyday life through implementation of more and more intelligent solutions 6. health protection thanks to creating a therapeutic atmosphere, e.g. through equipping the device with the appropriate light signs
passenger car	<ol style="list-style-type: none"> 1. mobility of the consumer and his family possibility to transport luggage, animals, etc. 2. health and life safety thanks to various safety systems (including those allowing to minimize results of an accident, or even avoid accidents) 3. convenience and comfort (health) of driving thanks to proper ergonomics of the interior, ventilation and massage function in the seats, possibility to control various functions with the driver's voice command, etc 	<ol style="list-style-type: none"> 1. a higher sense of health protection and safety, comfort thanks to new smart technology solutions, such as systems that recognize typical signs of driver fatigue on time and warn them about it, use of sensors that send a signal about reporting the vehicle for service in the event of a malfunction, increase in flexibility of the interior arrangement, etc.

	<ol style="list-style-type: none"> 4. saving (because of the purchase of a more economical engine version, or a model with long-term warranty) 5. the ability to pursue or continue a professional career (e.g. in connection with multimedia equipment in the vehicle) 6. the possibility to relax or learn while driving thanks to appropriate hi-fi or DVD equipment, access to the Internet (this applies to passengers) 7. specific prestige depending on brand 8. better well-being, for example thanks to devices supporting the driver's skills (e.g. parking assistance systems, track control, brake assistants) that enable quick contact with roadside assistance, police, other services or family, and allow the owner to monitor and control the functions of the car with a smartphone (e.g. in the case of connected car) 9. freedom thanks to independence from public transport 10. better opportunities for pursuing own passions or hobbies (e.g. free access to places that may not be reached by public transport, easy transport of bigger sports equipment.) 11. environment protection (when buying an eco-friendly vehicle) 	<ol style="list-style-type: none"> 2. environment protection resulting from the use of new alternative drives, modern plastics and varnishes, as well as reduction of the vehicle weight 3. saving time thanks to self-cleaning of the car body brought by the application of nano-coating or antifreeze screens 4. saving money and time, and the feeling of aesthetics thanks to self-elimination of scratches on the paint of the car body 5. the will to be distinguished thanks to the coating of the car body that changes its colour depending on the weather 6. enhancement of the scope of usability through introduction of new functions of various character, improvement in the usability of existing features, and implementation of new IT solutions and development of services provided online. 7. greater comfort and security, and even relax in the case of autonomic vehicles (self-driving cars).
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* Products that can satisfy some of the aforementioned needs, such as a refrigerator with built-in TV set or computer with Internet access, cars with special paint coatings (nano-coating), which allows for self-elimination of small scratches, or with various modern technologies, including digital technologies among others, are already available on the market, but for the time being, these solutions are not mature enough to be fully applied in the mass market.

Source: Own case study based on source materials of the manufacturers

It can be predicted that future new discoveries and achievements in computer science, molecular and genetic engineering, nanotechnology and biotechnology, etc. will result in the fact that the number of needs satisfied with household appliances and cars will constantly be growing. New needs may also occur because of launching of next product innovations on market. Presumably, the degree of technological complexity of these products will grow, and the way they are sold (e.g. through cybershowroom in a larger degree) will change. Because of this, their purchase and efficient operation will demand from their users gaining new knowledge and skills.

A growing number of needs satisfied with the studied medium-high-technology products (especially higher rank) make them an increasingly more important element of consumer's life (whereas private life often permeates with business life). Their use is supposed to make their lives more comfortable, happier, healthier, safer, more exciting and even socially responsible. It can also contribute to their general personal development. It must be noticed that more and more consumers, especially those creative and highly creative, function in accordance with the rules of inverted pyramid of needs by A. Maslow. This means that the need of self-fulfilment (spiritual fulfilment, including moral and social spheres) is approached as a basic need (and not the highest need), therefore they are translated into material

fulfilment, which can be attained even as the last, for example as a reward for achievements (Zohar and Marshall 2004). Because of their increasing multifunctionality, the studied products can therefore play a significant role in consumers' pursuit of self-fulfilment, as well as in shaping of their world. They are looking not only for the products that will satisfy their needs, but also for the feelings and experiences that will affect their spiritual side (Kotler et al. 2010). The potential of medium-high-technology products is very large in this area. This particularly applies to buyers who are creatively and emotionally involved in various activities towards these products (sometimes they initiate them themselves), their producers and sellers, as well as other users, while showing diverse citizenship behaviours towards them.

Studied medium-high-technology goods are developing towards the so-called smart products that are characterised by built-in knowledge, artificial intelligence and communication capabilities (Jakki et al. 2009). Examples include smart household appliances (e.g. a smart refrigerator), autonomous (self-driving) cars and connected cars. This development trend is determined by the implementation of the concept of the Internet of Things (Miller 2015, Peppet 2015) concept. Therefore, the role of these products in everyday life of the consumer is likely to continue to grow in the future.

4. Types of CCB in medium-high-tech goods sector – an empirical approach

The degree of complexity of medium-high-technology products is constantly growing under the impact of technological innovations, including the marketing ones. Consequently, their purchase and operation are becoming increasingly more complex. Therefore, more and more consumers cease to be just passive consumers of these products, but are becoming prosumers. This results in their involvement (voluntary or intentional) in various activities, and therefore that they can influence both the behaviour of the manufacturers and sellers of those goods as well as the attitudes of other users.

Analysing CCB with reference to medium-high-technology products, four main types can be identified, including:

1. expressing opinions about the company, its products, customer service at the purchase and after-sales customer service, handling complaints, etc., as well as submitting suggestions and ideas concerning new products or improvement of current offerings,
2. word-of-mouth (WOM), providing recommendations, giving advice and clues to other buyers, sharing own experiences with them,
3. participation of consumers in open events, loyalty programs, contests, etc. that are organized or sponsored by manufacturers and/or sellers, as well as reporting such events by them,
4. helping other consumers if there are difficulties in the use the product or unclear procedures applied by the manufacturer or seller.

The aforementioned CCB types can complement and permeate each other. Consumers can, for example, simultaneously provide a company with the ideas on how to improve their offer, give various advice to other users of a product, and help them if there are any problems related to a given company or a specific good, as well as share experiences of participation in the ventures implemented by them. They are favoured, among others, by the same or similar tools of communication that most consumers use when assuming certain citizenship behaviours. They are primarily based on the Internet. They include, in particular, discussion

forums, blogs and microblogs, profiles and fanpages in social media, official websites of companies and internet platforms dedicated to an individual brand, specific products or ventures.

Considering CCB towards medium-high-technology products, their users most often express their opinion about companies, brands or specific products or models. They provide suggestions concerning improvements in product features, their functionality, sales methods and customer service, as well as promotions less frequently. Some of these consumer activities are undertaken individually by them, but their considerable part is also initiated by manufacturers and/or sellers.

Many manufacturers are trying to involve their current and potential customers in a variety of ventures initiated by them in many ways. In this case, cooperation takes diverse forms, but they require various levels of commitment and consumer knowledge. The easiest form, that does not demand great involvement and specific buyer knowledge, includes simple collection of opinions (including surveys), users' observations and recommendations of products, mainly through company website, brand fanpage in social media, and company blog. Furthermore, users of household appliances or vehicles of specific brands can set up a personal profile on the manufacturer's Web site (e.g. My Samsung, Moja Amica, My Audi, Mercedes me), thanks to which they not only gain information about a specific device, technical support or other interesting information or obtain mobile services, but they can also provide their opinions about the company and its offer.

Company interaction with current and potential customers with the use of for example social media (such as the expressive ones, i.e. external blogs, various social networking sites /Facebook, Instagram, YouTube, Pinterest, Twitter, Foursquare, Google+, Tumblr/ and cooperative, thematic portals, for example in the case of household equipment manufacturers, those associated with design of houses and flats, cooking, cleaning, etc. and in the case of car companies, those dedicated to motorization or motor sport). Noticing the growing level of consumer presence in social media, the manufacturers of studied goods approach them as one of the key channels of communication with consumers and between consumers. Company Internet forums (for example Electrolux community forum, Samsung community) and blogs (such as Samsung Village Blog, El Blog de Miele, LG Blog, Bosch History Blog, Das Daimler-Blog, Volkswagen Blog) are gaining special importance. Logged in users can present, among others, their ideas for product, sales process and customer service improvement in a specific company on a moderated forum or blog (this usually does not provide a reward). The manufacturer often indicates the areas concerning which, the forum members are requested to present their ideas. The ideas are usually visible to all forum members who can evaluate them and comment on them, and they can also form teams focussing on their further development. However, the decisions concerning implementation of the solution, are made independently by manufacturers.

Manufacturers also delegate specific tasks to the virtual community of consumers, e.g. by way of request for a proposal or a contest. This is done either through their own website or specially created web platform. The performance of the task by the participant may be rewarded. Such approach was applied by the FIAT car manufacturer in the process of designing of Fiat 500 model. In 2006, the company invited all potential users of the car to cooperation. They could express their expectations and wishes, as well as present their own ideas concerning solutions, through multimedia platform "500 wants you" platform

(www.fiat500.com). It was started 500 days before launching the product on market. their own ideas of solutions. The involvement of participants in designing the features of the new model was enormous. As a result of this cooperation between the producer and the consumer, a model that has won numerous international awards, as well as recognition of the very buyers has been designed. Such automotive companies as BMW and Jeep, among others, as well as Philips and Samsung, the manufacturers of household appliances, similarly cooperate with buyers. The communities of these producers are centred around individual projects, and the participants typically need to have specific technical knowledge. Brand communities (or even specific products and models) and customer clubs (users and owners) are other examples of virtual communities (of successively growing number of participants) created by medium-high-technology manufacturers, including producers of household appliances such as Samsung, Bosch or Electrolux and automotive companies including Volkswagen and Toyota. Their members share their opinions and experiences, their own photos and videos, give each other advice, inform about interesting projects related to an individual brand or product model, sometimes they also create specific improvements (in cooperation with the producer or independently), etc. They also provide the producer with suggestions on how to use the product.

Producers gather consumer opinions also using crowdsourcing (closed, i.e. limited to people of a specific profile, or open). This is the most advanced form of company cooperation with many consumers. In this case, manufacturers try to use the knowledge (wisdom) of "crowd" to find the best solution to the problem. It should be mentioned that crowdsourcing is applied by medium-high-technology producers mainly to improve existing products (i.e. incremental innovations), modernize the method of sale and modify communication campaigns, as well as to search for valuable content (e.g. advertising) and innovative solutions to various problems. Sometimes consumers must have specific knowledge (e.g. technical, design and IT-related) and skills. This especially concerns designing the features of a new product. Among manufacturers of household appliances, crowdsourcing platform under the name Marblar is applied by Samsung company, among others. Marblar is a platform serving product development that enables generation of innovative ideas for commercial applications, including the development of previous patents or forgotten scientific discoveries. It uses, among others, a gamification model that is to encourage cooperation and lateral thinking of scientists, specialists and experts in various fields, as well as ordinary consumers in the process of creation of innovative solutions. The authors of ideas that will find application in new products launched on market receive a certain fee.

Crowdsourcing is applied by a growing number of automotive companies, including BMW, Mercedes, Fiat, Ford, Honda, Citroen and Volkswagen (eYeka 2017). In this sector, Toyota Motor Corporation is one of the forerunners in this field (as early as 1936, Toyota commissioned the design of its logo in the form of competition; 27 thousand proposals were submitted for the contest). It has applied the crowdsourcing platform many times to create advertising content (including the video type) the buyers will identify themselves with, to design memes promoting new models (for example Yaris /yar.is/ developed in partnership with Cheezburger network, specializing in memes), as well as to collect personal stories of Toyota vehicle owners (e.g. "Auto-Biography" contest conducted on the Facebook portal). The company also applies crowdsourcing to develop new products and modernize previous models, search for advanced innovative solutions, as well as while planning CSR activities (the

company collected ideas concerning the use of automotive technology for social benefit in this way).

It can be noticed that the interest of consumers in participation in crowdsourcing-based projects is increasing. This is confirmed, among others, by "#SEATseekingName" project that has been implemented since June 2017 by SEAT car company. For the first time in its history, the company announced an international competition (consisting of several stages) for the name of SUV model (with 7 seats) that is going to be launched in 2018. It is interesting that the consumers themselves inspired the company management board to announce the contest. After gaining information about the launch of the new SEAT SUV in 2018 they started to propose their own names through social media. The aim of the "#SEATseekingName" project is to engage and encourage SEAT fans all over the world to propose and then to vote on the name of the new SUV. 133 thousand proposals from 106 countries entered the competition (submitted proposals will be pre-selected; it will be done by SEAT brand experts and its selected clients from various countries; during the focus studies, they will collectively select a minimum of three names). The consumers from all over the world will choose the name for the new model from these proposals. Apart from geographical criteria, the name should also reflect brand values (dynamics, design, and modern technology) and refer to the characteristics of SUV type vehicles. The final name of the new SEAT model will be chosen in global public voting, which will be held from 12th to 25th September 2017 (the contest finalists and their proposals will be announced on 12th September 2017 during the Motor Show in Frankfurt am Main), and the winning name will be announced on 15th October 2017.

Medium-high-technology buyers are also increasingly more involved in various activities in the sphere of civic behaviour on their own initiative. This is often caused by the complexity of operation of many devices, which results in searching for detailed instructions and advice related to their choice (purchase) and use by buyers. Consumers in particular give opinions and evaluate products (for example through independent reviewing services or review aggregators such as epinions.com, yelp.com, opineo.pl, wybierzagd.com.pl, mojeauto.pl), share their own experiences related to their purchase, use, or service by the company, they comment on posts on fanpages of companies or virtual communities centred around a particular brand (such as owners or brand fans) or specific products (such as a model of a particular car), they share photos and videos with the product, and they even initiate or voluntarily join projects based on open source approach in which they create products or specific solutions for other buyers.

Among the buyers of the surveyed products, Internet discussion forums, where they can share various information related to them with other consumers are increasingly more popular. This particularly concerns the forums dedicated to car users, fans and enthusiasts. Their number is constantly growing. Not only discussion forums dedicated to the brand (e.g. Ford Forums Online, Volkswagen Owners Club Forum, Toyota Forum), but also those dedicated to specific model or even the car version are very popular among them (such as Toyota Avensis Forum, Forum S-Klasse, BMW 3 Series Club, VW Golf MK7). Members of such virtual communities exchange opinions about a specific brand (they present reviews or recommendations for specific products and write about their advantages and disadvantages, i.e. faults and defects), hold discussions on a given topic, provide technical, operational and service-related advice to each other, as well as they help with purchase, complaint processing, etc. In addition, they post various instructions, test results, schemes, tuning-related information, and photos or

photo-reports (for example from car rallies, car trips, as well as events organized or sponsored by manufacturers, and dealers).

Discussion forums on household appliances or topics related to them, such as interior design and arrangement (kitchen, bathroom, etc.), construction and decoration, food preparation, cleaning, ironing and lifestyles issues have been less popular so far. However, it can be noticed that their number is growing, and consumers (especially women) are increasingly more willing to share their opinions and experiences. Depending on specific subject area of the forums (e.g. whatsbestforum.com, topix.com, appliance.net/forum, dekoriam.pl, kitchenplus.pl/spolecznosc/, elektroda.pl, netkobiety.pl), their users recommend (or dissuade) each other specific brands and devices as well as places of their purchase, explain the operation, provide advice on the best way to use them and share various experiences related to their use and servicing, etc.

Consumers also set up blogs focussing on either the very medium-high-technology products, or the areas where they find application. Blogs devoted to household appliances (e.g. Appliance Blog, Yale appliance, Olga's Laundry Blog), interior design of kitchen and other rooms (such as My Home Blog, Apdinteriors blog, House Loves, Fashionable), motorisation (e.g. Motor Trend Car & Driver, Auto Blog, MotorAuthority, Moto Soul) or a specific brand, regardless of the manufacturers (e.g. Amica Blog, VW Blog, BMW Blog, Mazda Blog) can be examples here. Bloggers present a lot of valuable information about models of a specific brand (e.g. new and/or used), places of sale and service locations, events devoted to brands, product test results, etc., and interesting texts and articles about specific models, technical solutions and trends in the interior design (for example kitchen), and trends of development of household appliances or automotive products, etc. They also provide operational advice and answer the questions of logged users. On the other hand, their users comment on posts presented on the blog and participate in discussions mostly initiated by bloggers. Furthermore, many bloggers also have their social networking profiles through which consumers also express their opinions and support other users.

Ventures based on open source approach are an interesting example of activity initiated by consumers themselves. Such an approach is applied, among others, in the sphere of development of product innovation. For the purpose of creation of innovation, consumers form their own communities that have rules and principles different from those established by producers (Weber 2007). Within such communities, buyers can not only share their knowledge about product features, operational circumstances, etc. but also organize a comprehensive development process of an innovation, and manage it appropriately. The prototype of the eco-friendly small car "OScars" is an example of innovative, technologically advanced product developed at the initiative of the consumers themselves, mainly students and enthusiasts of automotive products (the OScar project was launched in 1999 and its second version was implemented in 2006; everyone who was interested could design their dream car or contact with people who were creating such a car). Manufacturers sometimes apply the solutions developed under this type of projects.

It is worth noticing that already nowadays most medium-high-technology products have far bigger number of functions than an average buyer needs. For example, if their operation is not intuitive, the growth of feature fatigue phenomenon is observed among the customers (Thompson and Hamilton 2005). This brings a decrease in their loyalty towards a specific brand

or product, or dissatisfaction and resentment, and consequently, expression of their unfavourable opinion among other consumers.

5. Determinants of CCB in medium high-tech goods sector

CCB determinants vary depending on customers (their age, previous experiences) as well as on the market sector. At the end of 2015 surveys were conducted among Polish respondents in order to identify the reasons why consumers engage in activities conducted in virtual space and related to companies, brands and products (Kiezel and Wiechoczek 2016). It proved that the opportunity to spend time in an attractive way, possibility to see the effects of using their own solutions in practice and the opportunity to demonstrate creativity or verify their skills would most encourage consumers to engage more in such activities (figure 1).

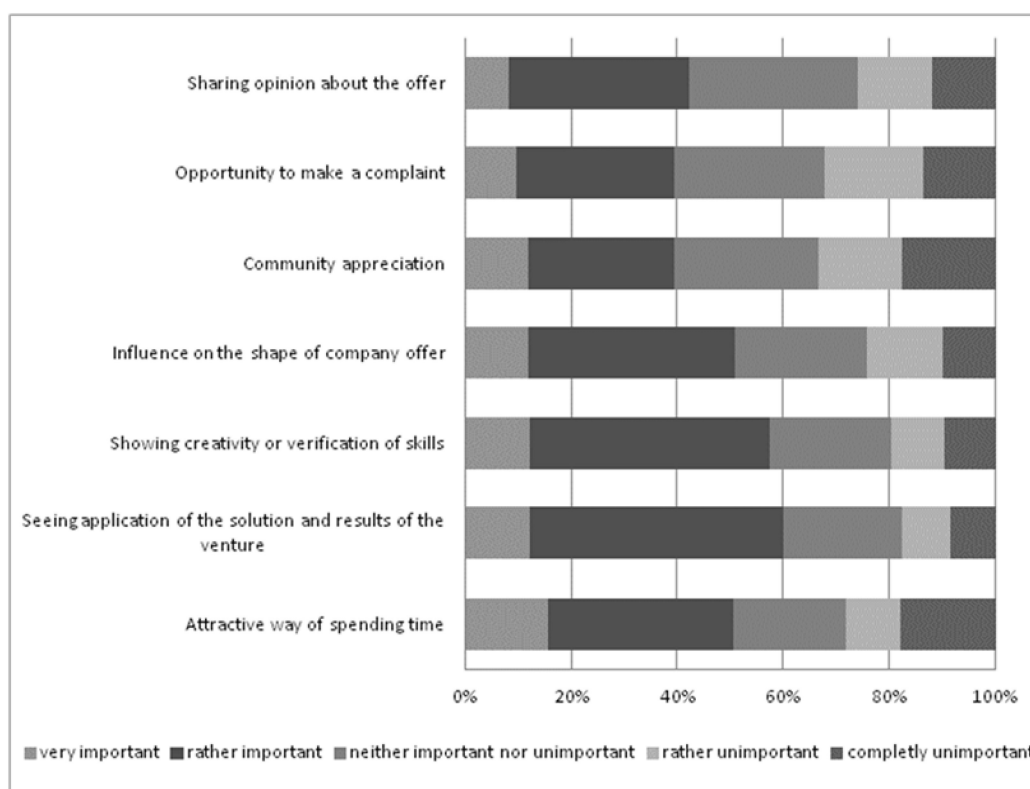


Figure 1: Reasons encouraging respondents to be more active in initiatives concerning brands and companies on the Internet as forms of customer citizenship behaviour

Source: (Kiezel and Wiechoczek 2016)

In order to discover determinants of customer citizenship behaviour, qualitative research was conducted in January and February 2017 based on individual deepened marketing interviews. Subjects of the research were customers from the Silesian region of Poland. 16 consumers participated in the study. Table 3 illustrates the sample characteristics.

Research has been conducted on a small and unrepresentative sample and thus does not entitle anybody to draw any general conclusions. However, the research in question allowed becoming familiar with the customers' opinions on the determinants of customer citizenship behaviour. Although the study lacks stochastic confirmation, the individual deepened

interview provides a qualitative method of data collection and thus does not require statistical confirmation.

Table 3. Sample characteristics

Specification	Sample (in %)
1. Gender:	
a. Male	62,50
b. Female	37,50
2. Age:	
a. 18 – 24	43,75
b. 25 – 34	31,25
c. 35 – 44	18,75
d. 45 and more	6,25
3. Internet usage:	
a. A few times a day	81,25
b. Once a day	12,50
c. A few times in a week	6,25
d. Once a week	-
e. A few times in a a month	-
f. Less frequently	-

Source: Based on own source

All those studied declared to provide customer citizenship behaviour. Research results show that customers are willing to provide citizenship behaviour when they are satisfied with a company service/goods or feel that they have received exceptional treatment beyond their level of expectation, they are more likely to reciprocate by engaging in voluntary behaviours that may benefit the employees and/or the organization. As such, customers develop feelings of trust, social bonding, and future obligations towards an organisation as a whole, rather than towards specific employees. When customers perceive support from the firm, they will return in the same way and exhibit behaviours that promote the development of the enterprise (making feedback on their own initiative). The quoted forms of citizenship behaviours may be classified as the reciprocity principle, within the social exchange theory (people involve in social exchanges with an expectation of getting some sort of social rewards).

As research results show, those who share their product/service information, knowledge and consumption experiences and help other customers have certain motivations to meet their own needs. Asked which needs (according to A. Maslow hierarchy of needs) citizenship behaviour satisfies, respondents gave rather diversified answers. Some of them display voluntary behaviours “to feel a member of a group”, “to be in relationships with others”, “to be noticed/ accepted by others” or to “be shown respect by others”. A few researched customers also pointed at “helping other people gratuitously” or “just being a good person”. It may be assumed that CCB satisfies mostly the esteem needs, self-actualization as well as transcendence needs.

The researched customers also declared engaging in citizenship behaviour for the pleasure of it or for altruistic motives, and are not reward-oriented. Should they expect any type of reward, they may act in ways that satisfy reference group members to gain first acceptance and then status, e.g., customers may behave as customer citizens to get positive feedback from other customers in their aspired groups (friends or other product users). These attitudes may be explained by integrated taxonomy of motivation, the intrinsic and extrinsic motivation to be specific.

6. Summary

Summarising both theoretical deliberation as well as the empirical research based on individual deepened interviews, observations and case studies, CCB may be perceived as an important trend in customer behaviour. So far, discretionary and voluntary behaviour towards other customers and companies operating in the medium high-tech sector was not the subject of interest of researchers, so the paper fills in the gap to some extent.

Although the paper presents findings which may be interesting for both researchers and business practitioners, some limitations are worth addressing. First, the present research utilized a cross sectional study in a single industry. This single-sector study raises some concerns about the generalizability of the findings. Second, the data collection methods (deepened interview, observation and case studies) allowed analyzing only several cases. However thorough the analysis of a certain phenomenon, case, system or process would be, the qualitative nature of the data collected makes it impossible to draw general conclusions. Additional research could be conducted using a quantitative method (a survey with a random probability sample). This leaves place for a future study which will allow for statistical verification of the CCB towards other consumers and companies operating in the medium high-tech goods.

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