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On the road: customer motivation and non-petrol purchases of petrol station customers in Poland

Abstract. The fact that a lot of people in Poland travel by car creates a lot of different business opportunities for the retail sector. Petrol stations are among various entities that attempt to take advantage of this situation. The main purpose of this article is to identify and assess the behaviour of petrol station customers in Poland regarding their motivations for choosing particular facilities and their non-fuel purchases. The study is based on results of a CAWI survey of 603 customers. To make sure that sample was representative, its composition was controlled in terms of the following respondent variables: sex, age, size of the town of residence and province. Consumer behaviour can be affected by a number of factors but only some of them could be addressed in the study, which can be regarded as one of its biggest limitations. Nevertheless, the results provide an interesting insight on this topic. The main contributions of the study include the creation of a typology of petrol stations, identification and assessment of consumer motives for selecting a given facility and information about non-fuel purchases made by customers. The most frequent motives for selecting a given petrol station include convenient location, brand, and the price of petrol and other products. In addition to fuel, customers usually stop to buy coffee and fast food, alcoholic beverages and basic groceries. The authors discuss statistically significant differences between different types of petrol stations in the above mentioned respects. The results of the survey can be of interest to owners of petrol stations as guidance on how to adjust their marketing strategies, especially in terms of the composition of their offering.

Keywords: petrol stations, consumer behaviour, motive, purchase structure, decision making process

JEL Codes: D90, D91

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1. Introduction

Petrol stations are examples of retail outlets that have clearly changed their function over the years – from places selling mainly petrol to outlets offering various goods and services, ranging from catering services, through a selection of food products, to the sale of vehicle insurance or the pickup of courier parcels. Nowadays, petrol stations or (service stations along motorways) are an indispensable element of any longer car journey. Contemporary petrol stations, apart from selling petrol, are places of consumption, meetings and relaxation (Wyciszkiewicz & Zawadzki, 2018, p. 134), thus playing a special role in meeting the diverse needs of the economy and society. The aforementioned changes in the offering of petrol stations reflect the general trend in customer behaviour towards more convenience, which, according to a report by Euromonitor International (2020) is likely to have the greatest impact on business in the nearest future. The behaviour of customers of petrol stations is a very specific niche, which has not been the subject of any research.

According to a report published by Triverna.pl (n.d.), most Poles travel around the country up to five times a year. Only every seventh respondent travels alone and as many as six out of ten go on longer car journeys. This fact creates an incentive for petrol stations to match their offering to suit the needs of potential consumers and to study their behaviour. Moreover, petrol consumption in Poland is seasonal and reaches the highest level during the holiday months. Holidays are traditionally a period of increased demand for liquid fuels in Poland and the CEE region, as a result of a much bigger number of leisure trips made in this period by various means of transport (Furman, 2019).

Consumer behaviour and motivation are among the most common subjects described in scientific literature in recent years. From a holistic perspective, this topic has been addressed, among others, by Solomon, Russell-Bennett & Previte (2012); Sethna & Blythe (2016) or most recently by Hoyer et al. (2020). Motives of consumer behaviour are discussed in the context of various industries and areas (Diaz-Moriana et al., 2020; Niehoff & Oosterwijk, 2020; Schütz, Schultheiss, 2020). A review of the existing literature reveals that there are few studies on the petrol station sector in Poland. The situation is similar when it comes to studies investigating motivations of customers using petrol stations (Zawadzki, 2016); most of which are industry reports (POPiHN, 2020). The majority of publications devoted to the petrol station sector in Poland concern ecological aspects (Mozga & Stoeck, 2018), focus on petrol as a chemical product (Samociuk et al., 2017) or on logistics (Kaleta, 2016). Only a handful of scientific articles, mainly written by one of the co-authors of this article, concern the issue of broadly understood marketing. It is difficult to find scientific articles analysing petrol stations in relation to

tourism. Similarly, no typology of petrol stations has been developed on the basis of customers' purchasing preferences and the method of facility management. So far, there have been no comprehensive studies of broadly understood marketing in the petrol station sector. The identified research gap was one of the reasons why the authors decided to investigate the topic.

As a result of the study, a new typology of petrol stations has been created. The survey revealed the following reasons for visiting a petrol station: to buy fuel (91% of responses), to use the toilet (35% of responses) and to buy some other articles (32% of responses). The most common reasons for choosing a given petrol station were: 1) convenient location 2) petrol station brand and 3) the price of petrol and other goods in the store. Answers given by customers of petrol stations located along motorways and expressways turned out to be the most different (in terms of statistical significance) from those referring of other those station types. These differences included both the reasons for stopping at a fuel station and the structure of non-fuel purchases.

The main purpose of this article is to identify and assess the behaviour of customers of petrol stations in Poland regarding their motivations for choosing particular facilities and their non-fuel purchases. Specific types of service stations are identified, which are used to indicate statistically significant differences in relation to customer behaviour. The discussion is based on a review of the literature, particularly on the analysis of industry reports about the petrol station sector in Poland and on the results of a survey conducted by the authors.

2. The petrol station sector in Poland and its typology

According to the Polish Organization of Oil Industry and Trade (POPiHN), on December 31, 2018, there were 7,765 petrol stations in Poland, including, among others, 1,787 stations belonging to the PKN ORLEN network and 3,779 stations owned by independent operators (POPiHN, 2020, p. 1). After analysing reports on the petrol station sector in Poland (prepared by POPiHN, petrol companies and commercial research agencies), it can be concluded that there is no single, consistent and universal classification of petrol stations in Poland. This is clearly due to the fact that oil companies tend to use different classification criteria, such as:

- market segment (i.e. premium stations vs. economy stations),
- facility size (i.e. "MOP" rest areas vs. other facilities),
- management form (i.e. stations owned by petrol retailers, franchise stations, or already disappearing patron stations).

In view of the above situation, one of the authors of this article conducted a questionnaire among experts participating in the "PetroTrend 2017" forum (peo-

ple with real impact on the shape of the petrol station sector in Poland), which contained a question about factors that currently differentiate the petrol station sector and those that, in their opinion, should differentiate this sector (the purpose was to compare the current state with the desired state of the sector). 30 correctly completed questionnaires were returned out of 300 that had been distributed among the forum participants. Because the conference was only attended by invited guests and members of top management, the number of responses can be regarded as satisfactory. The respondents were asked to rate the importance of particular factors on a 7-point Likert scale. The set of factors to be assessed was created after analysing industry reports on the petrol station sector (published by POPiHN, Statistics Poland (GUS) and marketing agencies). The first question was about the extent to which a given factor differentiates the petrol station sector in Poland, while the second was about the extent it should differentiate this sector. A summary of responses is presented in Table 1.

The respondents' answers reveal a possible discrepancy between the current and the desired state. From the results in Table 1, it can be concluded that the existing classifications of petrol stations in Poland should be less dependent on their form of ownership (i.e. private station, franchise station, station owned by a petrol retailer). On the other hand, more attention should be paid than is cur-

Table 1. Factors differentiating the p	etrol station sector –	current and desired state
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Factor	Rating of the current state*	Rating of the desired state*	Difference
Station brand	5.8	5.7	-0.1
Location	5.4	5.3	-0.1
Station's offering:			
the range of goods offered in the store	4.8	5.3	+0.5
• additional services, e.g. car wash, shower for drivers	5.0	5.7	+0.7
• additional catering service (e.g. restaurant or bistro)	5.4	6.0	+0.6
Price of petrol	5.1	4.9	-0.2
The presence of an attendant in the driveway	4.4	4.9	+0.5
Ownership type	4.8	3.8	-1.0
Petrol station area	4.2	3.8	-0.5
Opening hours	4.0	4.8	+0.8
Possibility of payment directly at the pump	3.7	4.4	+0.7
Number of fuel types sold	3.9	4.4	+0.5

 $^{^*}$ The scale of responses from 1 to 7, where 1 – should not differentiate at all, 7 – should definitely differentiate the petrol station sector.

Source: own study.

Table 2. Petrol station typology

Petrol station type	Description
1. Petrol stations located in cities	stations located within city limits or in the suburbs (with the exception of facilities listed in points 4 and 5)
2. Petrol stations along motorways and expressways	petrol stations located along motorways and expressways (denoted as "S" roads)
3. Transit petrol stations	service stations not located in cities or along motorways and expressways
4. Supermarket petrol stations	a relatively small group (190) of stations owned by supermarkets but with a considerable share of petrol sales in the whole petrol station sector
5. Others (including automatic petrol stations)	all petrol stations that do not fall into the other categories

Source: own study.

rently the case to factors related to the range of the offering i.e. the number and type of products and services on offer as well as implemented innovations (e.g. possibility of paying directly at the pump).

In an effort to address these discrepancies, a new classification of petrol stations is proposed (Table 2), which takes into account the results of the questionnaire conducted among industry experts, the analysis of the offering of individual petrol stations and many years of professional experience in the petrol station sector gained by one of the authors of this article, who is a long-time panellist at the PetroTrend forum, a columnist for the Stacja Benzynowa & Convenience Store magazine and author of scientific publications on the petrol sector As a result, the proposed typology of service stations is unrelated to ownership form and instead focuses on factors directly related to the petrol station's offering and its location.

3. Methods

The article is mainly based on the results of a survey of petrol station customers; in addition, reference is also made to the questionnaires conducted during the "PetroTrend 2017" forum (with a view to developing a typology of petrol stations) and "PetroTrend 2018" (with the purpose of identifying reasons for making purchases at petrol stations).

The aim of the survey of petrol station customers, which was carried out in June 2018, was to determine purchasing preferences of people who stop at petrol stations, in general terms and broken down by type of petrol station. Data in the survey were collected during computer-assisted web interviews (CAWI), which, in addition to providing results quickly, make it possible to determine the representa-

tive composition of the sample, ensure good quality of answers and minimizes the risk of affecting the neutrality of respondents). The sample consisted of 603 adult Poles. Care was taken to ensure the sample was representative in terms of sex, age, size of the town of residence and province. (Representativeness is understood as a continuum approaching the best possible representation, i.e. a representative mapping of the distribution of selected key features of the population in the sample). Table 3 presents the structure of the sample population (by age, sex and place of residence), while the latter part of this section provides information on the use of petrol station offering in the last month, the use of a given type of petrol station and reasons for visiting petrol stations (broken down by station type). The sample is almost evenly distributed in terms of sex (52% women to 48% men) and age, except for the age groups: 18-24 and 45-54, where the percentage share was slightly lower than the average value of 19%. In terms of the place of residence, the provinces with the largest share of respondents include Śląskie (13%), Mazowieckie (13%) and Małopolskie (10%); the most numerously represented types of localities are villages (38%), towns up to 19,000 inhabitants (13%) and cities with 500,000 or more inhabitants (12%).

Table 3. Sample structure in the survey of petrol station customers (%)

Sex		Province of residence		
Female	52	Dolnośląskie		
Male	48	Kujawsko-pomorskie	5	
Age		Lubelskie	6	
18-24 years old	10	Lubuskie	4	
25-34 years old	19	Łódzkie	7	
35-44 years old	19	Małopolskie	10	
45-54 years old	15	Mazowieckie	13	
55-64 years old	18	Opolskie	3	
65 years old and above	19	Podkarpackie	6	
Size of the place of residenc	e	Podlaskie	3	
Village	38	Pomorskie	4	
Town with up to 19,000 inhabitants	13	Śląskie	13	
Town with 20-49,000 inhabitants	10	Świętokrzyskie	3	
Town with 50-99,000 inhabitants	9	Warmińsko-mazurskie	3	
City with 100-199,000 inhabitants	8	Wielkopolskie	9	
City with 200-499,000 inhabitants	9	Zachodniopomorskie	4	
City with 500,000 and more inhabitants	12			

Source: own study.

4. Results

Bearing in mind the trend towards increasing convenience (#convenience walutą naszych czasów, 2016), i.e. the fact that modern consumers expect more (e.g. faster and better service) with less effort (e.g. shopping in a convenient location), service stations perfectly fit this trend for a large group of communities. More and more often, they are used for buying basic grocery products, over-the-counter medicines, high-quality coffee or for dining. In the context of the above, in the first part of the survey, respondents were asked about their history of purchases at petrol stations. The survey questionnaire consisted of 11 main questions and 8 demographic questions. Respondents were instructed to provide answers regarding their previous visit to a service station. At this point it should be emphasized that the question was intentionally directed to the general population rather than only to drivers (which is the case with most studies conducted in the sector). This approach made it possible to obtain a more reliable representation of customers' interests in the offering of petrol stations.

89% of the respondents reported having used the offering of a petrol station in the previous month, which could mean the fact of refuelling and/or the purchase of other products.

It is interesting to consider which types of petrol stations identified in the above typology are visited by the respondents. The most frequently chosen category are petrol stations located in urban areas (73% of responses), followed by petrol stations located along motorways and expressways (11%), transit petrol stations (8%) and petrol stations located at shopping malls (6%). These results are not surprising in the light of data on the number of petrol stations by category, which indicate that facilities in urban areas are by far the most numerous, while fully automated stations are the least common. According to by POPiHN, on December 31, 2018, there were 192 supermarket stations and 83 stations located along motorways (POPiHN, 2020, p. 3). From the perspective of a person traveling across Poland, the number of petrol stations located along motorways and expressways is insufficient. According to a report of the Supreme Audit Office (carried out in the summer of 2018), there are over 150 kilometres of sections without the possibility of refuelling (Information Market, 2018).

From the perspective of our research, the type of petrol station chosen by customers is more interesting than the petrol station brand. In this survey, however, we also decided to ask respondents about their most frequently chosen brand. The resulting ranking is as follows: PKN ORLEN (40%), followed by BP (14%) and Lotos (10%). Circle K, Shell and supermarket petrol stations (for example, those owned by Intermarche, Auchan) were mentioned by 7% of respondents.

The distribution of answers naturally reflects the structure of the petrol station market in Poland. According to POPiHN (2020, p. 1), the three major petrol retailers with the largest number of stations (as at December 31, 2018) are PKN ORLEN (1,787 stations), BP (552) and Lotos (495), which corresponds to the top three choices indicated by the respondents. It is worth noting the significance of supermarket petrol stations (for example Tesco, Auchan, Intermarche): despite the relatively small number of facilities in Poland (192 as at December 31, 2018), they account for a relatively large percentage of fuel sales and are chosen as often as stations operated by the well-known brand Circle K (former Statoil), which had 349 petrol stations (POPiHN, 2020, p. 1-4).

As regards the most common reasons for visiting petrol stations, despite the observable trend of petrol stations becoming a kind of convenience-type facilities, the main reason for visiting petrol stations was the purchase of petrol (91% of responses), followed by the need to use the lavatory (35% of responses), use the catering services and buy other goods in the store (32% and 28% respectively). In other words, every third respondent reported using the lavatory and shopping in the station store during the last visit.

Interesting conclusions can be drawn from the analysis of the respondents' answers in relation to the identified types of petrol stations. In this case, the analysis is based on results of significance tests between specific groups in relation to the total sample (Table 4). Statistically significant differences are marked in blue (the result for a given station type is higher than the average result for all types) or yellow (the result for a given station type is lower than the average result for all types). The table shows results of a two-tailed Z-test for a proportion, which was used to test the statistical significance of differences between the percentages of responses associated with particular types of petrol stations. Welch's t-test was used to compare the means for each type. The significance level was set at $\alpha = 0.05$.

Regardless of station type, the purchase of petrol was invariably the most important reason for stopping at a petrol station. Nevertheless, it should be noted that in the case of petrol stations located in cities this reason was statistically more common than the average for all station types (95% of respondents), and in the case of petrol stations located along motorways – much less common (75% of respondents). Of all stations types, respondents' answers concerning stations located along motorways deviated the most from the average. This difference was particularly evident with regard to the purchase of catering services and the use of the lavatory. As many as 70% of respondents reported that the reason for stopping at a motorway petrol station was to take advantage of its gastronomic offering (e.g. to buy a hot dog), compared to the average of 32% (a statistically significant difference can also be observed for supermarket stations (20%) and

Table 4. Reasons for visiting a petrol station by station type (%)

		Petrol station type				
Reason for visiting	Average for all stations	Petrol sta- tions in cities	Petrol stations along motorways	Transit petrol station	Supermar- ket petrol stations	Other (incl. automatic)
To buy petrol	91	95	75	83	85	92
To buy other products (e.g. beer)	28	29	34	13	24	23
To use catering services (e.g. buy a hot-dog)	32	29	70	43	20	0
To check the technical condition of the vehicle (compressor, etc.)	6	6	2	13	7	8
To wash the car	18	19	18	7	17	15
To socialize	2	1	5	3	3	0
To use the lavatory	35	33	57	33	34	15
Others (please specify)	1	1	0	0	2	0

Notes: blue - the result for a given station type is higher than the average for the all stations (statistically significant difference); yellow - the result for a given station type is lower than the average for the all stations (statistically significant difference).

Source: own study.

petrol stations located in cities – 29%). Similarly, the need to use the lavatory was much more commonly mentioned with respect to motorway service stations on motorways (57%) than the average for all stations (35%). Motorway petrol stations are often referred to as motorway rest areas. The results of the survey show that this is an apt description: the gastronomic offering was almost as important a reason for stopping at a petrol station as the purchase of petrol (70% and 75% of responses respectively). The need to eat a warm meal or drink coffee is undoubtedly a more important reason for visiting a petrol station in the case of customers who are on the road and stop at motorway and transit petrol stations. The significantly lower share of respondents mentioning this reason with regard to supermarket petrol stations is often justified by their relatively poor infrastructure (if there is a store at all, it is relatively small).

The survey shows that only 2% of respondents use the other (including automatic) types of petrol stations. The sample size for this type is therefore definitely too small to justify conclusions about significant differences. In addition, automatic petrol stations (the predominant sub-group in this category) only sell petrol and are self-service facilities.

5. Motives for choosing a specific petrol station

When analysing reports (Raport On Board PR ECCO Network, 2008; Qualifact, 2013) concerning customers of petrol stations, one of the most common questions asked concerns their motivation for choosing a specific petrol station. During the survey, the respondents were also asked the following question: "What made you choose this particular petrol station?" The respondents were given 11 reasons to choose from. The set of options was created on the basis of previous analyses of reports concerning purchasing preferences of petrol station customers and interviews conducted during the "PetroTrend 2018" forum. Respondents in the main survey considered a convenient location to be the most important reason for choosing a particular petrol station (76% of respondents). In practice, this means that a petrol station is visible from the road and has an appropriate entry and exit system. In Poland, quite a number of petrol stations are located near a roundabout, where one might expect petrol sales to be very high; however, in reality, customers prefer to use other petrol stations precisely because of the inconvenience of entering or exiting the station, which requires them to go around the roundabout or get stuck in a traffic jam. The second most important reason for stopping at a specific station is the station's brand (38% of responses), while the price of petrol and other products in the store ranks third (33% of responses). This order of the most frequent answers (i.e. location, petrol retailer brand, which is identified with the quality of petrol and other products and services offered, reasonable price) can be observed in many surveys conducted over the last few years (Raport On Board PR ECCO Network, 2008; Qualifact, 2013), also in the survey "Polak w drodze" (Poles on the road) carried out in 2016 by the Institute of Market and Social Research (IBRIS) commissioned by Santander Consumer Bank (Santander, 2017, p. 6). Percentages of responses for the remaining motives are as follows: loyalty program (22%), convenient facility infrastructure (12%), gastronomy offering (7%), no other petrol station nearby (7%), fleet cards (5%), special offers in the store (3%) and request from a traveling companion (3%). Interestingly, only 4% of respondents claim that they don't care where they buy petrol.

Despite the similarities mentioned above, one can observe significant differences when the responses are related to individual types of service stations (Table 5). As can be seen, there are several statistically significant differences between the responses. For customers stopping at a petrol station in the city, location was more commonly mentioned (79%) as a reason for stopping than the average for all stations (76%). When choosing a petrol station located in the city respondents are more frequently motivated by the brand (42%) or the possibility of benefiting from a loyalty program (25%). In most cases, loyalty programs function according

Table 5. Reasons for choosing a specific petrol station by station type (%)

		Petrol station type				
Reason for stopping at a given petrol station	Average for all stations	Petrol stations in cities	Petrol stations along motorways	Transit petrol station	Supermar- ket petrol stations	Other (incl. automatic)
Convenient location	76	79	55	70	76	69
Convenient infrastructure and station signage	12	10	27	17	12	15
Station brand	38	42	36	47	15	31
The price of petrol and other products in the store	33	29	30	40	53	69
Gastronomic offering	7	6	23	10	7	0
Loyalty program	22	25	14	20	12	23
Store promotions	3	4	5	0	3	0
Fleet card	5	6	2	7	2	0
Request from a travelling companion	3	2	9	7	3	0
No other alternative	7	6	7	13	5	8
I don't care where I buy petrol or other products	4	3	9	7	3	0
Other (please specify)	1	1	2	7	0	0

Notes: blue - the result for a given station type is higher than the average for the all stations (statistically significant difference); yellow – the result for a given station type is lower than the average for the all stations (statistically significant difference).

Source: own study.

to the same principle: drivers collect points, which they can redeem after reaching a certain limit for credit toward their next purchase, discounted services, or giveaways. Only a few petrol retail chains (e.g. Moya, which has been growing dynamically recent years) offer their loyal customers a 'here and now' discount on the price of petrol. Only a few customers declare using loyalty programs offered by petrol retailers. In the case of petrol stations located in cities, the price of petrol and other products was less commonly mentioned as the reason for the choice (29%), compared to other types of service stations, but it still should be regarded as a relatively important motive compared to other motives listed for this type. However, this reason was significantly more important for respondents choosing supermarket petrol stations (53% of respondents compared to the average of 33%). On the other hand, this group was significantly less concerned about station brand (15%) or the possibility of benefiting from loyalty programs (12%). With respect to motorway service stations, the infrastructure (properly designed parking lots, rest zones, the possibility of comfortable eating, etc.) was significantly more commonly mentioned as the reason for the choice (27%). This can be explained by the fact that stations along motorways and expressways have to meet certain conditions and the site location has to be approved by the General Directorate for National Roads and Motorways (GDDKiA). As already mentioned, for customers of motorway service stations, the gastronomic offering is significantly more important (23% of respondents chose this motive compared to the average of 7%). Another aspect that matters to customers of these stations is the signage, which is natural given the fact that often travellers stop there to rest (and have a coffee or lunch). This is used as an opportunity for innovative promotional campaigns that help to sell FMCG products.

6. Non-petrol purchases of petrol station customers in Poland

It has been repeatedly emphasized that petrol stations are increasingly used as convenience stores, which is reflected in the range of products bought by the survey respondents at petrol stations. Obviously, petrol, their main commodity on sale, was by far the most popular item listed by the respondents (90% of responses for all station types). As regards other products, the most frequently chosen items include: basic gastronomic/catering offering (31% of responses), alcoholic beverages (20% of responses), basic groceries (19% of responses) and services (13% responses). Based on the collected data, observations and the authors' own experience, these results are typical for this sector.

Additional insights can be obtained by analysing responses for different types of petrol stations (Table 6). Frequencies of specific categories of purchases made at petrol stations located in the city, transit stations and supermarket stations were not significantly different from the average for all stations. However, statistically significant differences were found with respect to station motorway service stations, where a much larger share of basic (36% compared with the average of 19%) and non-standard food products (11% vs. 5%) was reported. There are also significant differences regarding the frequency of buying car chemicals, oils and lubricants (23% vs. 12%). In contrast to higher than average frequencies of non-petrol purchases at motorway service stations, the percentage of respondents who reported buying petrol was the lowest share of all types (73% compared to the average of 90%). To sum up, the three most frequently bought non-petrol products (in terms of the percentage of respondents who listed them) at motorway petrol stations are foodstuffs, basic groceries and car accessories. In the case of petrol stations located in cities, these include foodstuffs, basic groceries and services.

Table 6. Purchases by station type (%)

Petrol station type						
Products	Average for all stations	Petrol stations in cities	Petrol stations along motorways	Transit petrol station	Supermar- ket petrol stations	Other (incl. automatic)
Petrol	90	93	73	83	86	100
Basic groceries	19	18	36	23	17	8
Other food products (e.g. healthy food, fresh fruit and vegetables, meat and cold cuts)	5	4	11	7	3	0
Car chemicals, oils and greases	12	12	23	7	8	8
Personal cosmetics and hygiene products	5	4	7	7	5	0
Alcoholic beverages (beer, wine, strong alcohols)	20	20	23	23	17	0
Services (e.g. vacuum cleaner, compressor, car wash)	13	15	11	10	10	8
Basic gastronomic of- fering (hot dogs, grilled cheese baguettes, coffee)	31	31	48	37	20	8
Additional gastronomic offering (e.g. lunch dishes, pizza, other hot drinks)	4	4	14	3	0	0
Mobile phone top-ups	5	5	5	0	3	8
Additional services of- fered by external provid- ers (e.g. sending and col- lecting parcels, car rental)	2	2	9	0	0	0
Accessories and tools (bulbs, batteries, towing cables, etc.)	6	7	7	3	2	8
Other (please specify)	3	4	2	7	0	0

Notes: blue - the result for a given station type is higher than the average for the all stations (statistically significant difference); yellow – the result for a given station type is lower than the average for the all stations (statistically significant difference).

Source: own study.

7. Conclusions

Traveling by car involves the necessity of stopping at petrol stations. The survey described in the article has shown that 89% of the respondents regularly use the offering of petrol stations. The presented analysis is based on the following typology of service stations: 1) petrol stations located in cities, 2) petrol stations along motorways and expressways, 3) transit petrol stations, 4) supermarket petrol stations, 5) Other stations (including automatic ones). The new typology was developed in an effort to avoid the problem of having to use different classifications that appear in industry reports, which could not be easily applied for the purpose of the study.

When one considers all station types, invariably the main reason for stopping at a petrol station is the need to refuel (91% of responses), followed by the need to use the lavatory (35% of responses) and buy some other products (32% of responses). The most common reasons for choosing a particular petrol station include its convenient location, station brand, price of petrol and other products, the possibility to benefit from a loyalty program, convenient infrastructure and signage.

As regards non-petrol purchases, the most commonly mentioned are basic gastronomic offering (e.g. hot dogs, casseroles, coffee) – 31%; alcoholic beverage (mainly beer) –20%; and basic food products – 19%. Such results are consistent with those found in reports published by professional marketing agencies, for example *Monitor satysfakcji klientów sieci stacji paliw* (ARC Rynek i Opinia, 2017, p. 66).

From a statistical point of view, patterns of customer behaviour at motorway petrol stations was found to be significant different from the rest. These differences can be observed as regards the reasons for stopping at a petrol station facility as well as the structure of non-petrol purchases. Undoubtedly, this information should be taken into account by those responsible for the planning the range of products on sale at petrol stations, especially when it comes to the catering offering.

The study has revealed the need for further research on the petrol station sector, for example concerning the importance of specific product categories in the offering of a given type of petrol station. There is little literature on this topic, so more research is needed, given the popularity of this sector. The authors are aware that the presented study has not exhausted the topic and further studies should be conducted in the future. Possible directions for future research in this area include an attempt to determine to what extent petrol stations have become another type of convenience stores and identify changes in the range of product categories available at petrol stations, e.g. to investigate whether regional and healthy food can become an attractive addition to the existing product range.

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W trakcie podróży: motywy wyboru obiektu oraz transakcje pozapaliwowe klientów stacji paliw w Polsce

Streszczenie. Zgodnie z danymi raportów Polacy bardzo często podróżują po kraju, co niewątpliwie stwarza liczne możliwości biznesowe. Stacje benzynowe postrzegane jako przedstawiciele sektora handlu detalicznego są jednymi z wielu podmiotów, które próbują wykorzystać tę sytuację. Głównym celem artykułu jest identyfikacja i ocena zachowań klientów stacji paliw w Polsce pod kątem: 1) oceny motywów wyboru danego obiektu, 2) określenia, jakie transakcje pozapaliwowe są przez nich dokonywane. W artykule zastosowano metodę badawczą CAWI. Całkowita wielkość próby wynosiła 603 osoby. W celu zapewnienia reprezentatywności próby w trakcie badania udziały kontrolowano pod kątem następujących cech respondentów: płci, wieku, wielkości miejsca zamieszkania oraz województwa. Na zachowania konsumentów może wpływać bardzo wiele czynników, uwzględnienie każdego z nich jest w praktyce niemożliwe i dlatego stanowiło to podstawowe ograniczenie badawcze. Niemniej jednak przedstawione w artykule wyniki powinny zdecydowanie wzbogacić dotychczasową wiedzę w badanym obszarze. Podstawową wartość artykułu stanowi: stworzenie autorskiej typologii stacji paliw, identyfikacja i ocena motywów konsumenckich przy wyborze danego obiektu oraz dostarczenie informacji o transakcjach pozapaliwowych dokonywanych przez konsumentów. W przypadku motywów wyboru danego obiektu do najważniejszych zaliczono: 1) dogodną lokalizację obiektu, 2) markę stacji benzynowej oraz 3) cenę benzyny i towarów sklepowych. W przypadku transakcji pozapaliwowych dokonywanych przez konsumentów najczęściej wybierane były: podstawowa oferta cateringowa/gastronomiczna, napoje alkoholowe oraz podstawowe artykuły spożywcze. Dodatkowo omówiono istotne statystycznie różnice między zidentyfikowanymi typami stacji paliw w ramach wymienionych obszarów. Wyniki przeprowadzonych badań mogą być wykorzystane przez właścicieli stacji paliw w celu dostosowania strategii marketingowych, zwłaszcza w zakresie tworzenia oferty dla konsumentów.

Słowa kluczowe: stacje paliw, zachowania konsumenckie, zachowania nabywców, motywy, struktura zakupowa, proces decyzyjny



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Suggested citation: Lewicki, M. Zawadzki, T. (2020). On the road: customer motivation and non-petrol purchases of petrol station customers in Poland. Studia Periegetica, 3(31), 93-109. https://doi.org/10.5604/01.3001.0014.5964