# SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 169

2023

# SCORES AND OPINIONS ABOUT CAR MAINTENANCE AND REPAIR SHOPS AS AN EXAMPLE OF WORD-OF-MOUTH MARKETING IN DIGITAL SOCIAL NETWORKS

### Aleksander LOTKO

Kazimierz Pułaski University of Technology and Humanities in Radom; aleksander.lotko@uthrad.pl, ORCID: 0000-0003-4420-7495

**Purpose:** Identification of scores and opinions about licensed car maintenance and repair shops in Radom on the basis of the word-of-mouth message in digital social networks.

**Design/methodology/approach**: Licensed car maintenance and repair shops located in Radom were selected for the research. There are 20 of them. In order to identify a word-of-mouth message about them, data available in Google Maps were used – both numerical scores and opinions. Total amount of 3561 entries was considered. A mixed quantitative-qualitative approach was assumed: the statistics of scores were analysed quantitatively, while the content of the posted opinions was analysed qualitatively.

**Findings:** Average scores for all car maintenance and repair shops are included in the interval <4,0; 4,6>. The total weighted average score is 4,3. A sharp polarization among opinions was stated, resulting in dividing them into two groups: clearly positive and clearly negative ones. On one hand, opinions encompassing substantive marks of overall high service level, professionalism, competence and quickness in delivering services, contact and information, as well as friendly atmosphere and staff friendliness dominate among the positive ones. They are often posted by loyal customers, who repeatedly take advantage of the services. On the other hand, clearly emotional opinions, expressed as a result of a single incident of not fulfilling customer expectations in a blatant way or neglecting them dominate among negative ones.

**Research limitations/implications**: Research concerning a limited geographical region. Research should be treated as a pilotage.

**Practical implications:** Information concerning scores and opinions about car maintenance and repair shops can make a starting point for identifying the areas of service quality which demand improvement.

**Originality/value:** An innovative assessment of service quality in car maintenance and repair shops performed with the use of word-of-mouth data available in a digital social network.

Keywords: service quality, car maintenance and repair shop, word-of-mouth, social network.

Category of the paper: research paper.

# 1. Introduction

Exploitation of cars involves the necessity of performing a number of maintenance and repair activities. The average period of possessing a car by one owner is extended, what increases the demand for spare parts as well as technical and repair services (Auto Expo, 2014). It is particularly important in the reality of the Polish market in which the majority of the vehicles is old, with large mileage and very often in unsatisfactory technical condition. We are facing a problem of appropriate quality of services consisting in technical maintenance and repair of the said cars (Lotko, Lotko, 2016; Lotko, Lotko, Korneta, 2018). Delivery of the high quality of services is an important matter and at the same time a challenge posed to the service industry, including the automotive industry (Huang, Huang, Chen, 2003; Elistina, Naemah, 2011; Kankam-Kwarteng, Acheampong, Amoateng, 2016).

In the information society, the access to the high quality information is crucial for the functioning (McLuhan, Zingrone, 2001). The Internet has become an important tool which supports the management of an enterprise, a factor of creating the image of an organization and the element of the realization of economic processes supported by the Web 2.0 solutions (Zieliński, 2008). Web 2.0 is the kind of an approach towards communication in the Internet considering the change of the recipient's position, who becomes a rightful participant of the dialogue – there is a transition from a passive observer to an active co-author or author (Kaczmarek-Śliwińska, 2011). Therefore a contents consumer becomes also their producer (Chandler, Munday, 2011). Web 2.0 covers the Internet services allowing the users to cooperate and exchange information online via the Internet societies websites (Austin, Doust, 2008; Jakubowicz, 2011).

The possibility of expressing in the Internet the opinions about a company, offered products or services or of reading the opinions of other persons in this matter is today obvious. The fact that it becomes a basis for numerous consumer decisions is emphasised by a number of marketing practitioners as well as researchers (Borbis, 2020; Sadowski, 2020; Engler-Jasieczek, 2012; Radziszewska, 2013; Sanak-Kosmowska, 2020). The fact that the consumers are heard has changed the global economy. Democratization of the Internet has forced the enterprises to start an open and direct dialogue with consumers and the consumers themselves have been changed into prosumers. The active consumers by way of public presentation of their own opinions and experience with products or services affect other clients. In the information societies the users have begun to exchange information, and in particular recommend or to the contrary advise against certain goods and services (Ślęzak, 2019).

Being inspired by the above observations, in this study the author identified the scores and opinions concerning the authorised car maintenance and repair shops in Radom based on the word-of-mouth marketing in digital social networks, in particular among the Google Maps users. The research question was Q1: What are scores and opinions about car repair and

maintenance shops present in the Google Maps service? In the paper, it was answered with the use of a mixed quantitative-qualitative approach.

# 2. Word-of-mouth marketing as the tool of informal communication in social networks

A special kind of power of the consumer in the market is the power of reference which consists in recommendations made by the consumer to other persons of a given manufacturer and his offer. The term (*word-of-mouth marketing* – WoM) introduced by E. Rosen, called also as a virus marketing and defined as the use of interpersonal contacts network in the marketing strategies, should be considered. The word-of-mouth marketing is in other words the sum of all comments concerning a given product or service announced with the use of any communication channels in a specific period of time (Rosen, 2003). A. Budzanowska-Drzewiecka (2015) defines WoM as an informal interpersonal communication of consumers about their experiences with the market offer. Information about new products and services is very often spread among potential consumers with the use of the networks of interpersonal contacts, the majority of which remains at first sight invisible and in fact beyond recognition. It suffices to consider how big role in the making of the purchase decisions is played by the opinion of the environment – the family, experts, leaders in order to come to the conclusion that the interaction and contact has always been at the first place in marketing.

A huge role of the word-of-mouth marketing stems from three fundamental causes. They may be shortly characterized as (Kelly, 1998):

- information overload (,,clients do not hear you"),
- scepticism (distrust of customers, particularly important by the use of electronic channels),
- vicinity (customers live close to each other and they have introduced new tools used to transmit information such as e-mail, discussion letters, etc.).

The overload means an excess of information, which may deprive even the best marketing message from its power among many other. Scepticism is a learned realism of the customers who less frequently believe in advertisements, personal sale or any other way of recommending the product. Vicinity is the interaction and mutual contact between the customers. They often make purchase decisions very unwittingly and base on the well-known, mutual opinions. As one of the causes of interpersonal communication, the decrease of the risk is mentioned. Consulting with others significantly reduces the risk of making an improper decision (Sanak-Kosmowska, 2020; Lotko, 2008).

To sum up, the word-of-mouth marketing consists in the use of the net of customers' contacts, their social position and access to the media in a way allowing for the spread of information with the use of the net of interpersonal contacts (Lotko, 2008). Therefore the customers begin to perform marketing functions for the organization. In particular it is possible thanks to the network communication technologies, mainly thanks to the Internet services. The existence of social networks, creation of contents by the users, data repositories, collective intelligence and openness are the characteristic features of the modern Internet (O'Reilly, 2005).

The development of the Internet and social media has changed not only the way of communication between the enterprises and the market, but it has also revolutionized the customers' behaviours and their mutual relations. The customers dispose of a huge resource of marketing information and they knowingly and actively use it. They also are the creators of the contents, opinions and recommendations placed in the network. Thanks to this, their role as the participants of the process of market communication has changed drastically. The customers are no longer merely passive recipients of the contents, but they are active co-authors of the marketing message (Radziszewska, 2013). The role of the recipients in the communication process changes. We are dealing with the transition from the passive observer to the active co-author or author (Kaczmarek-Śliwińska, 2011). The Internet marketing gives the special possibility of orienting the actions towards the recipients connected with other elements of the social structure (Jankowski, 2007). This fact has also been used in this study.

# 3. Specificity of cars technical maintenance and repair

The services of cars technical maintenance and repair are rendered by the service stations and car repair shops. There are around 19,5 thousand independent car repair shops registered in Poland, as well as over 1.5 thousand authorized service stations, i.e. ASO (SDCM, 2017). Therefore ASO constitute around 8% of all considered units. A considerable majority of authorized car repair shops performs all kinds of repairs (over 62%), and the range of their services is constantly extended. However some of them specialize in the narrow field, for example in electricity and electronics or in the engine main repairs. Since 2004 the number of the independent car repair shops has been slowly but systematically decreasing. Nevertheless the number of the car repair shops associated in the independent car repair shops network increases and the existing car repair shops increase the employment (SDCM, 2017).

In order to provide proper technical conditions of the vehicles, a specialist services connected with their technical service and repair are required. In the opinion of the authors the following factors influence the particular rank of the quality of these services (Lotko, Lotko and Korneta, 2018):

- 1. Universality and massive character (almost everybody takes advantage of their services, for example in Poland there are almost 39 million visits annually, i.e. on average more than 1 visit per every citizen).
- 2. Complexity of the serviced product (a car is composed of a several thousand of parts).
- 3. Technological advancement of the product (in the automotive industry the newest solutions are applied within the scope of mechanics, electronics, robotics, IT, telematics) that require from the car repair shop the access to appropriate information and possessing of the advanced specialist knowledge by the employees that reach far beyond purely mechanical problems.
- 4. Poor technical condition and advanced age of the number of used vehicles in Poland where the average age of a car is 15 years, whereas 75% of the vehicles has over 10 years of age and more (Newsweek, 2016).
- 5. Faint awareness of the users of the vehicles within the scope of technical matters and their influence on the comfort of the use of a vehicle, its durability and safety in the road traffic.
- 6. Explicit distinction between customer service and performance of the service and repair works during the completion of the service process.
- 7. Requirement of a fast and accurate diagnosis of a defect before starting the repair procedure (Włodarczyk, Janczewski, 2011).
- 8. Necessity of the performance of the maintenance and repair works according to the procedures of the vehicle manufacturers.
- 9. Significant impact of a proper performance of services on the safety of the road traffic.

Due to the above reasons the considered matter has been deemed crucial for the economic practice and it deserves scientific elaboration.

# 4. The state of the art in the literature

In the recent years the matter related to the one discussed in this paper has been the subject of rather small number of publications. The carried out bibliography query revealed publications concerning the quality of services provided by the car repair shops, and in particular the definitions of its dimensionality (for example Elistina, Naemah, 2011; Berndt, 2009; Berndt, Herbst, 2006; Izogo, Ogba, 2015, Stavanović, Stanojević, Nedić, 2013; Kankam-Kwarteng, Acheampong, Amoateng, 2016; Schneider, 2012). Their authors attempted to explore the essence and multidimensionality of the quality of the above mentioned services. Publications mainly include the proposals of individually established and tested measurement instruments. However in these papers no measurement of the level of quality has been carried out, much less no data stemming from the word-of-mouth marketing has been applied in the electronic social networks.

The researchers noticed that the automotive industry and services connected with it develop dynamically and competitively. They emphasise the particular weigh of performing marketing activities which could increase the loyalty towards the brand and could create among the customers the intent of repeated purchase. The word-of-mouth marketing plays a very important role as it significantly influences the loyalty of the customers (Wijaya et al., 2022).

In the dynamic business environment the participants of the market must adapt their actions in order to attract, keep and care for the customers. In literature the key role of the post-purchase service and support of the buyers is emphasised. The authors proved the existence of the relation between the quality of the post-purchase services, satisfaction of the customers, their loyalty and the informal marketing message created by them (Nasir, Adil, Dhamija, 2021).

The word-of-mouth marketing is particularly effective in case of negative message which very often substitutes the submitting of formal complaints (Halstead, 2020).

Other authors claim that the increase of the meaning of the word-of-mouth marketing is connected with the development of the digital social networks. Due to this reason developing relations between the customer and the brand, creating the attachment and loyalty towards the brand should be the priority challenge, also in the automotive market. This is confirmed by the integrated model of relations between the brand and the customer (Consumer-Brand Relationship – CBR), dedicated to this market (Kaufmann et al., 2019).

In the next researches the authors proved that communication in the social media significantly influences the values of the brand (*Consumer-Based Brand Equity* – CBBE). It has been discovered that the promotion of the automotive brands in social media and the positive message of the word-of-mouth marketing positively influence the value of these brands (Adetunji, Rashid, Ishak, 2018).

The next researchers proved that in the automotive industry, the consumers driven by the striving to satisfy the information needs, are motivated to create an informal marketing message. This is observable above all in the electronic environment (Kwan, 2018).

Other authors analysed the quality of the services within the scope of maintenance and repair of the cars. In the elaborated model, they presented the influence of the quality of the maintenance services, perceived integrity and convenience on the consumers' satisfaction. What is more the authors also discovered the impact of the satisfaction and trust for the brand on the informal marketing message as well as the mediation effect of the satisfaction from the provided service exerted on the relation between the quality of the services and word-of-mouth marketing (Jain, Singh, Kaushik, 2019).

It has been also discovered that the selected brand attributes, above all recognisability, emotionality, proficiency and quality influence the creation of recommendations. A number of brands associated with a considerably positive informal marketing message, have significantly increased its value in time (Luo, Baker, Donthu, 2019).

The literature review presented above shows that the issue of the word-of-mouth marketing for the services provided by the car maintenance and repair shops is slightly popular among the researchers and it has been hitherto elaborated only in fragments. Three basic research streams have been identified, in which the authors mainly concentrate on:

- 1. The essence and dimensionality of the quality of services provided by the car maintenance and repair shops.
- 2. Structural models which identify factors influencing the creation of the informal marketing message by the customers of the car maintenance and repair shops.
- 3. Attributes of the brand of the car maintenance and repair shop which initiate the wordof-mouth message and influence its value.

In the view of the above, the author of this paper assumed that this particular field of study should be developed in the direction of quantitative and qualitative analysis of scores and opinions concerning car maintenance and repair shops, which create informal marketing message in the Internet.

## 5. Methodology of the study

In order to identify the scores and opinions, the author selected the authorized car maintenance and repair shops located in Radom or nearby. The study covers 20 car maintenance and repair shops listed in table 1. Most frequently the car maintenance and repair shops operate as one of the dealer activity area, but not always. The opinions concerning the car maintenance and repair shops were taken into consideration.

#### Table 1.

No.	Name	Remarks
1	A.S.R Bińkowski	Suzuki authorized car maintenance and repair shop
2	AC Cortes Mazda	Mazda authorized car maintenance and repair shop
3	AMD Auto Centrum	Skoda authorized car maintenance and repair shop
4	Dacia Radom – Karasiewicz i Syn	Dacia authorized car maintenance and repair shop
5	Dixi-Car S.A.	Mitsubishi authorized car maintenance and repair shop
6	Dixi-Car S.A.	Opel authorized car maintenance and repair shop
7	Honda Strzałkowski Radom	Honda authorized car maintenance and repair shop
8	M i R Prasek	Peugeot authorized car maintenance and repair shop
9	M i R Prasek	Hyundai authorized car maintenance and repair shop
10	MB Radom Sp. z o.o.	Mercedes-Benz authorized car maintenance and repair shop
11	Nissan Ster Radom	Nissan authorized car maintenance and repair shop
12	Optimal	Citroen authorized car maintenance and repair shop
13	Plejada	KIA authorized car maintenance and repair shop
14	Rad Motors	Ford authorized car maintenance and repair shop
15	Renault Radom – Karasiewicz i Syn	Renault authorized car maintenance and repair shop

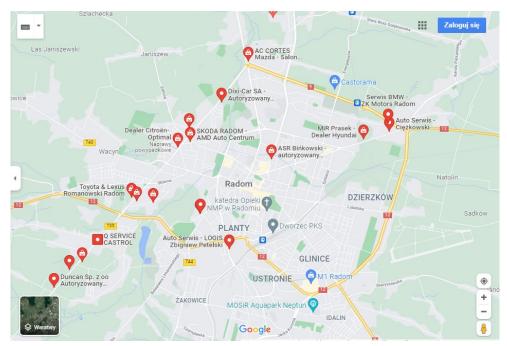
List of the car maintenance and repair shops covered by the study

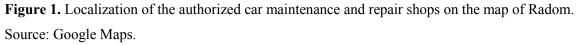
16	Ster Sp. z o.o.	Volkswagen, Audi and Seat authorized car maintenance and
	Ĩ	repair shop
17	Subaru ITS Michalczewski Sp. z o.o.	Subaru authorized car maintenance and repair shop
18	Toyota & Lexus Romanowski Radom	Toyota and Lexus authorized car maintenance and repair
		shop
19	Yorgo Jerzy Piotrowski	Ssang Yong and Isuzu authorized car maintenance and
		repair shop
20	ZK Motors	BMW authorized car maintenance and repair shop

#### Cont. table 1.

Source: author's own study.

Localization of the studied car maintenance and repair shops on the map of Radom is presented in figure 1.





In order to identify the opinions on the above mentioned car maintenance and repair shops available in the Google Maps service – both the numerical opinions and the wording of the opinions. The study covers data as of 3rd November 2022.

Google Maps is the Internet service which enables the users to search for objects, see the maps, air photos, Earth surface, 360° panoramic street views in the real time, planning of the routes of the travels. It was created and launched on the 8<sup>th</sup> February 2005. It is equipped in a free of charge service called Google My Company which gives the owners of the companies the possibility to display the name and the address of an enterprise in Google Maps and in the search engine. Presence of a company in Google Maps is proceeded by the setting up of the profile on the Google My Company platform and then the company owner must fill in the business activity category, physical localization of the company, contact data and additional information. Registered users of Google services may evaluate particular companies by giving them scores (number from 1 to 5), as well as opinions – short descriptive and qualitative comments. The example is presented in figure 2.

← Wszystkie opinie		
5 4 3 2 1	<b>4,6</b>	r
🛛 Napisz opinię		
Wyszukaj opinie Najtrafniejsze		-
Sebastian Pańtak Lokalny przewodnik · 6 opinii		:
★★★★★ 2 tygodnie temu NowA Bardzo profesjonalne podejście do klienta przyjazna atmoswera Wszystkie prośby, uwagi zostały załatwione bez problemu. Polecam.		
🖒 To mi się podoba 🛛 < Udostępn	ij	

**Figure 2.** Exemplary sum up of an opinion on the car maintenance and repair shop. Source: Google Maps.

Gathered data underwent a quantitative analysis – scores (average score in the 1-5 scale), as well as the qualitative analysis – wording of comments (50 lately added inscriptions for each car maintenance and repair shop: if there were less than 50, all of them were analysed). All the data used in the research is publicly available at the Google Maps service.

# 6. Analysis and discussion of the results

At first a quantitative analysis concerning the scores was carried out. In table 2 average scores and numbers of scores for the analysed car maintenance and repair shops are presented. The average scores of the particular car maintenance and repair shops are also presented in figure 3.

## Table 2.

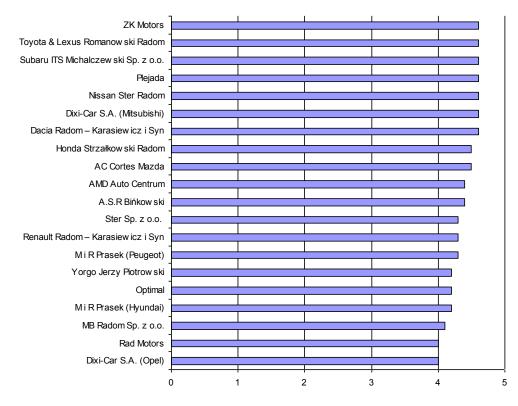
No.	Name	Average score	Number of scores
1	A.S.R Bińkowski	4,4	107
2	AC Cortes Mazda	4,5	140
3	AMD Auto Centrum	4,4	272
4	Dacia Radom – Karasiewicz i Syn	4,6	52
5	Dixi-Car S.A. (Opel)	4,0	280
6	Dixi-Car S.A. (Mitsubishi)	4,6	22
7	Honda Strzałkowski Radom	4,5	115
8	M i R Prasek (Peugeot)	4,3	220
9	M i R Prasek (Hyundai)	4,2	161
10	MB Radom Sp. z o.o.	4,1	271
11	Nissan Ster Radom	4,6	29

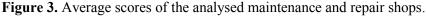
Average scores and number of scores for analysed car maintenance and repair shops

Cont.	table 2	2.

Com. u			
12	Optimal	4,2	144
13	Plejada	4,6	172
14	Rad Motors	4,0	200
15	Renault Radom – Karasiewicz i Syn	4,3	225
16	Ster Sp. z o.o.	4,3	380
17	Subaru ITS Michalczewski Sp. z o.o.	4,6	69
18	Toyota & Lexus Romanowski Radom	4,6	526
19	Yorgo Jerzy Piotrowski	4,2	67
20	ZK Motors	4,6	110
	Tota	d 4,3	3561

Source: author's own study.





Source: author's own study.

On the basis of analysis of data included in table 2 it was stated that Toyota & Lexus Romanowski Radom (526), Ster Sp. z o.o. (380), and then Dixi-Car S.A. (Opel), AMD Auto Centrum and MB Radom Sp. z o. o. are the car maintenance and repair shops with the greatest number of scores (in the range 271-280 of grades). Whereas the entities with the smallest number of scores are Dixi-Car S.A. (Mitsubishi) (22 grades), Nissan Ster Radom (29), Dacia Radom – Karasiewicz i Syn (52 scores). The average number of scores is 178 of scores for one car maintenance and repair shop.

The analysis of data presented in table 2 and in figure 3 shows that the empirical area of variability i.e. the scope in which all scores, the range <4,0; 4,6>, is included. The weighted average on the basis of all scores is 4,3. Eleven car maintenance and repair shops obtained the score above average and six below the average. Whereas for three car maintenance and repair

shops the average score is equal to the average calculated for all studied entities. Seven analysed car maintenance and repair shops is included in the group with the highest average score (4,6), whereas two car maintenance and repair shops obtained the lowest score (4,0).

Subsequently the qualitative analysis concerning the opinions was carried out. In particular, table 3 includes the selected repeated phrases or phrases characteristic for the analysed car maintenance and repair shops. They were grouped into the positive (+) and negative (-) ones.

## Table 3.

No.	Name	Selected phrases from the opinions
1	A.S.R Bińkowski	<ul> <li>+ Professionalism, professional service, reliability, timeliness, communicativeness, friendly atmosphere, proficiency, friendly approach towards the customer, high level of customer service.</li> <li>- Lack of spare parts, failure to remove the defect, differences in the set and realized prices, failure to keep the promises.</li> </ul>
2	AC Cortes Mazda	<ul> <li>+ fast and efficient service, friendly customer service, professionalism, professional approach towards the customer, competent customer service, engagement far beyond the standard, professional care, accuracy, accessible process, good job, reliability, hassle-free attitude.</li> <li>- High prices.</li> </ul>
3	AMD Auto Centrum	<ul> <li>+ Great service, the highest level of service, service of high level, professionalism, sobriety, nice and pleasant customer service, proficiency and timeliness customer service, cool service, super service, great advisory and super positive guys, reliable and fast service, fair advisory.</li> <li>- Poor service, not ordered spare parts, inaccurate assembly of tinner elements, the employee does not perform the works according to the arrangements.</li> </ul>
4	Dacia Radom – Karasiewicz i Syn	+ Professional and nice service, specifically and positively, super service, reasonable prices, 100% satisfaction, nice service, good mechanic.
5	Dixi-Car S.A. (Opel)	<ul> <li>+ Professional service, very nice staff, very nice service, fine service, professional approach, kindness and support.</li> <li>- Poor service, the worst service I have ever met, the staff does not provide the services reliably, they ignore the customer, rather unpleasant service, averagely, I don't recommend,, a bit incompetent.</li> </ul>
6	Dixi-Car S.A. (Mitsubishi)	+ Very professional approach to the customer, favours, suggestions and remarks are served without any problem, reliable provision of services, professionalism, fast, efficiently, I recommend, nice and professional service.
7	Honda Strzałkowski Radom	<ul> <li>+ Right direction towards satisfied customers, fast and pleasant service, fast and professional, great in every aspect, accuracy, reliable information, high level of service, problem-free, neat service, professional and pleasant customer service, thanks to them I didn't step on the mine.</li> <li>- Wrongly completed repair, I don't recommend, does not deserve any star, defect fixed many times without positive effect.</li> </ul>
8	M i R Prasek (Peugeot)	<ul> <li>+ Perfectly completed repair, fast and efficient repair, honest attitude to the customer, professional customer service, punctuality, current informing, the service did a god job, high personal culture of employees, nice waiting conditions, professionalism, express pace, care for costs, customer service and quality of the repair at the global level, fast, efficiently, punctually.</li> <li>- Lack of competences, shame, no solution was offered, give it a wide berth, horrible quality, long time of repair, poor communication, long deadlines, I don't recommend, relatively high prices.</li> </ul>

Cont.	table	3
Com.	uuuu	5

9	M i R Prasek (Hyundai)	<ul> <li>+ Informing, sobriety, unreliable service, problem-free contact, patience and explanations from the employees, fine service, big plus, worth recommending, fast repair, pleasant customer service, professional service, fast and soundly.</li> <li>- Exorbitant prices, unpleasant customer service, I don't recommend, no contact, disrespect, putting off the customer, lack of competences, expensive.</li> </ul>
10	MB Radom Sp. z o.o.	<ul> <li>+ Maintenance works performed properly, great service, I recommend, works performed proficiently and on time, high culture of work, very nice customer service, perfect provision of service, efficiently and fast, pleasant and professional customer service, proficient service, good service.</li> <li>- Terrible services, price different than in the original offer, it could be much better, lack of competences, knowledge, approach to the customer, I definitely advise against the visit, give it a wide berth, disaster, there could be no lower grade given, lack of competences in service and car repair, repair deadline not kept.</li> </ul>
11	Nissan Ster Radom	+ Very proficient service, high level of the customer service, efficient and professional service, substantial and proficient service.
12	Optimal	<ul> <li>+ Good, nice service, fast deadlines, super service, very pleasant service, good contact, professional service, all according to the arrangements, very good service, helpful, give advice, solve difficult cases, express, professional repair, pleasant customer service, one of the best car maintenance and repair shops, very good, reliable car maintenance and repair shop.</li> <li>The employees unwilling to serve the customer, long time of waiting, breaking of the promises, farce, they treat the customer as a potential enemy, they effectively advice against taking advantage of the services, prices from the outer space, lack of knowledge and experience, they condescend to do anything, unpleasant and showy customer service, I didn't like the customer service, failure.</li> </ul>
13	Plejada	<ul> <li>+ Everything great, great service, generally I'm satisfied, kindness, proficiency, fantastic service, very good and professional service, I definitely recommend, every time professional service, very satisfying service, cheap and friendly service, reliable service, worth recommending, excellent service.</li> <li>- I don't recommend, lack of competences, tragedy, long time of waiting for spare parts, definitely no, I definitely don't recommend, horrible quality.</li> </ul>
14	Rad Motors	<ul> <li>+ Super professional attitude to customer, professionals, nice and substantial contact, professional and reliable repair, nice and professional, fast and efficient, good service, fast and efficient service, accessible prices, professional service, fast and problem-free repair.</li> <li>- Absolute disaster, I definitely don't recommend, I don't recommend, the estimated time of repair is extended, the worst service, no contact, expensive, I don't recommend the service, ignoring and cheating the customer, no respect for customer, disappointment concerning the attitude towards the customer, ignoring the customer, disaster, ignoring, the worst service I have ever seen.</li> </ul>

Cont.	tahl	<u> </u>
Cont.	laur	eэ.

15	Renault Radom – Karasiewicz i Syn	<ul> <li>+ Nice and professional service, reasonable price, service at the highest level, fast and efficient service, very good service, efficiently, on time, very nice customer service, the service was provided in a flash, high personal culture, proficiency, great customer service, problem-free contact, short time of waiting for the repair, professional and kind customer service, car fixed fast and without reservations, repair completed fast and professionally, I definitely recommend, super customer service, they show and explain everything, efficiently and problem-free, I am very glad, I recommend in 100%, highest level of advisory, service provided reliably.</li> <li>Disaster, level below zero, give it a wide berth, too long time of repair, the service cannot fix the car, unprofessional attitude towards customer, the style and culture leave a lot to be desired, ignoring the customer, they don't care about the customer, they cannot diagnose the defect, the customer service discourage to take advantage of the services.</li> </ul>
16	Ster Sp. z o.o.	<ul> <li>+ In my opinion the service is great, the atmosphere and customer service very nice, I can honestly recommend the service, the service provided fast and solidly, wonderful and kind customer service, solid people, solid service, I am very pleased, the customer service know what's what, professionalism and advisory, the best service, I have ever visited, revelation, rapid service, attractive prices and great customer service, I recommend the service, good service, they repair cars at the highest level, professional attitude, kind customer service.</li> <li>- It could be a little bit faster, I don't recommend, no contact, give it a wide berth, I won't visit them again, definitely big minus, I don't recommend, disaster, they don't keep the promises, they don't stick to the arrangements, horror, lack of competences, huge minus, unsatisfactory level of customer service, lack of competences, I don't recommend, terrible customer service, they wait till the end of the warranty.</li> </ul>
17	Subaru ITS Michalczewski Sp. z o.o.	<ul> <li>+ First class service and customer service, fine prices, great contact, full professionalism, proficient customer service, they stick to the arrangements, I recommend with clear conscience, efficiently and substantially, very competent employee and advisory, great surprise, very good service, accessible prices, positive impression about the provided service, I recommend, proficiency worth recommending, good mechanics, nice atmosphere, good service with reasonable prices.</li> <li>I don't recommend, lack of professionalism, no availability of spare parts.</li> </ul>
18	Toyota & Lexus Romanowski Radom	+ I heartily recommend, professional service, high level of the quality of services, car service is a pure delight, my favourite service, I wish that the customer in every service could feel as comfortable as here, very nice and solid customer service very good contact, high standard in every aspect, I have no reservations concerning the service, high level of service, help, engagement and they respond the expectations of the customer, service worth recommending, nice and professional customer service, always kind and professional customer services, all employees engaged and helpful, high level of provided services, high personal culture, readiness to help, and advise, flexible prices, I am very satisfied, professional approach toward the customer, without delays and unexpected costs Wasted time, the service could be provided better in a garage, the car repaired disorderly, unreasonable prices, no contact, customer service a bit better than in the former political system, money extortion, parody of a service.

19	Yorgo Jerzy Piotrowski	<ul> <li>+ Professional and nice customer service, solidly and cheap, engagement of the team, super company, I recommend, every customer is treated individually, I heartily recommend the service, proficient customer service, competent customer service, professional customer service.</li> <li>- Mockery, embarrassing attitude to customer.</li> </ul>
20	ZK Motors	<ul> <li>+ Great service, great customer service, I recommend with clear conscience, professional customer service and attitude to customer, very kind customer service, professional attitude to customer, everything explained and completed on time, professional service, modern technologies, comprehensive and professional customer service, service worth recommending, professional help, contact and advisory at the highest level, normal prices, full professionalism, kind customer service, I recommend this service, I recommend in 100%, the best service in Poland, sobriety, customer service at the highest level, fast and professional.</li> <li>- I don't recommend the service.</li> </ul>
Source: outbor's our study		

Cont. table 3.

Source: author's own study.

As a result of the analysis of table 3 the following conclusions have been drawn. A distinct polarisation of opinions towards very positive (delight resulting in the engaged recommendation of a given service, e.g. *a service worth recommending, I definitely recommend, I heartily recommend, I recommend in 100%*) as well as negative (disgust resulting in the engaged advising or warning against taking advantage of the services provided by a given car maintenance and repair shop, e.g. *give a wide berth, I definitely don't recommend, I definitely advise against*) is observed. Intermediary opinions reflecting ambivalent feelings of the customers occurred very rarely (there were only several). This conclusion also clearly results from the analysis of histograms of scoring in the Google Maps service. Therefore a distinct use of the possibility to publish scores and opinions given by specific services as the tool of recommending or not, what is typical of the word-of-mouth marketing, is observed.

In the published opinions among positive definitions, substantive grades prevail, above all the ones concerning in general the high level of service, professionalism, proficiency and the speed of the provision of a given service, contact and informing as well as nice atmosphere and friendliness of the staff. They are very often published by the loyal customers who take advantage of the services regularly. Whereas among the negative opinions emotional opinions prevail expressed as a result of one incident – striking non-fulfilment by the service of the customer's expectations or ignoring the customer. Very emotional and even insulting noun definitions (*mockery, shame, parody*) are also characteristic for these opinions. In many cases the unsatisfied customers also placed a detailed description, essential description of a given case together with photo documentation.

# 7. Conclusions

In consequence of the carried out study and then as a result of the analysis of gathered data conducted with the use of the mixed quantitative and qualitative approach, the author of this paper came to the following conclusions:

- 1. Scores concerning all services are included in the range <4,0; 4,6>.
- 2. The weighted average from all scores is 4,3.
- 3. Eleven services obtained the score above the average and six below the average. For three services the average score is equal to the average for all entities.
- 4. There is a distinct polarisation of opinion into positive and definitely negative opinions. The intermediate opinions are lacking.
- 5. Among definitions included in positive opinions substantive scores prevail, above all concerning the general high level of service, professionalism, proficiency and speed of the provided service, contact and passing of the information, as well as nice atmosphere and friendliness of the staff. Positive opinions are often published under the influence of the experience of the repeated use of the services.
- Positive opinions are often published by loyal customers who regularly take advantage of the services. Negative opinions are often published under the influence of an impulse – single striking non-fulfilment of customers' expectations.
- 7. Among negative opinions, the ones expressed as a result of a single incident prevail a striking non-fulfilment of the expectations of the customer or ignoring the customer.

The conducted quantitative and qualitative analysis of data placed in the Internet by the customers of car services allowed to prove the usefulness of these scores and opinions for the elaboration of the direction of marketing activities taken up by the marketing services. The obtained results may constitute the basis for establishment of directions and methods applied in order to improve the quality of the provided services.

# References

- Adetunji, R., Rashid, S., Ishak, M. (2018). Social Media Marketing Communication and Consumer-Based Brand Equity: An Account of Automotive Brands in Malaysia. *Malaysian Journal of Communication, Vol. 34, No. 1*, pp. 1-19, doi: 10.17576/JKMJC-2018-3401-01.
- 2. Austin, T., Dopust, R. (2008). Projektowanie dla nowych mediów. Warszawa: PWN.
- Auto Expo (2014). Charakterystyka rynku w Polsce. Warszawa: Auto Expo Parts, Tires & Service.

- 4. Berndt, A. (2009). Investigating service quality dimensions in South African motor vehicle servicing. *African Journal of Marketing Management, Vol. 1, No. 1*, pp. 1-9, doi: 10.5897/AJMM.9000050.
- 5. Berndt, A., Herbst, F. (2006). Service quality in the motor vehicle industry in South Africa: An exploratory study. *South African Business Review*, *Vol. 10*, *No. 2*, pp. 97-110.
- 6. Borbis (2020). *Opinie w internecie i ich wpływ na decyzje zakupowe*. Retrieved from: http://borbis.pl, 01.12.2022.
- Budzanowska-Drzewięcka, M. (2015). Oddziaływanie rekomendacji blogerów na zamiar dokonania zakupów w internecie u młodych dorosłych. *Zeszyty Naukowe Uniwersytetu Szczecińskiego - Problemy Zarządzania, Finansów i Marketingu, No. 39*, pp. 109-120, doi: 10.18276/pzfm.2015.39-09.
- 8. Chandler, D., Munday, R. (2011). *Oxford Dictionary of Media and Communication*. New York: Oxford.
- Elistina, A., Naemah, A. (2011). Customers' Perceptions on the Service Quality in the Motor Vehicle Repair and Service Industry: An Exploratory Study in Klang Valley, Malaysia. *Petranika Journal of Social Sciences and Humanities*, Vol. 19, No. 2.
- 10. Engler-Jasieczek, A. (2012). *Decyzje zakupowe podejmujemy online*. Retrieved from: http://tylkofmcg.pl, 1.12.2022.
- 11. Halstead, D. (2020). Negative word of mouth: Substitute for or supplement to consumer complaints? *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, *Vol. 15*, pp. 1-12.
- Huang, Y., Huang, M., Chen, K. (2003). Service quality evaluation by service quality performance matrix. *Total Quality Management & Business Excellence*, Vol. 14, No. 1, pp. 79-89, doi: 10.1080/14783360309706.
- Izogo, E., Ogba, I. (2015). Service quality, customer satisfaction and loyalty in automobile repair services sector. *International Journal of Quality and Reliability Management*, *Vol. 32, Iss. 3*, pp. 250-269, doi: 10.1108/IJQRM-05-2013-0075.
- 14. Jain, N., Singh, A., Kaushik, K. (2019). Evaluating service quality in automobile maintenance and repair industry. *Asia Pacific Journal of Marketing and Logistics*, Vol. 32, pp. 117-134, doi: 10.1108/APJML-07-2018-0277.
- 15. Jakubowicz, K. (2011). *Nowa ekologia mediów. Konwergencja a metamorfoza*. Warszawa: Poltext.
- 16. Jankowski, J. (2007). Komunikacja marketingowa w aplikacjach Web 2.0. Zeszyty Naukowe Uniwersytetu Szczecińskiego, No. 12, pp. 101-119.
- 17. Kaczmarek-Śliwińska, M. (2011). Social media w działaniach Internet PR przedsiębiorstw polskiego rynku. In: J. Olędzki (Ed.), *Public relations we współczesnym świecie: między służbą organizacji i społeczeństwu*. Warszawa: Aspra.

- Kankam-Kwarteng, C., Acheampong, S., Amoateng, F. (2016). Service Quality and Customers' Willingness to Pay for Vehicle Repairs and Maintenance Services. *Journal of Scientific Reports and Research, Vol. 10, No. 5*, pp. 1-11, doi: 10.14738/abr.69.5142.
- 19. Kaufmann, H. et al. (2019). Consumer-brand relationship development in the automotive market: an integrative model. *International Journal of Automotive Technology and Management, Vol. 19, No. 3-4, pp. 321-340, doi: 10.1504/IJATM.2019.10022009.*
- 20. Kelly, K. (1998). *New Rules for the New Economy: 10 Radical Strategies for a Connected World.* New York: Fourth Estate.
- 21. Kwan, Y. (2018). Motivations to engage in word of mouth from non-market participants: A study using automotive business as the field of investigation. Singapore: Singapore Management University.
- 22. Lotko, A. (2008). Efektywność marketingu szeptanego a modele komunikacji. Zeszyty Naukowe Uniwersytetu Szczecińskiego Ekonomiczne Problemy Usług, No. 25, pp. 89-96.
- 23. Lotko, M., Lotko, A. (2016). *Jakościowe kryteria doboru części zamiennych do samochodów osobowych*. Radom: INW Spatium.
- 24. Lotko, M., Lotko, A., Korneta, P. (2018). *Jakość usług obsługi technicznej i naprawy samochodów osobowych*. Radom: INW Spatium.
- 25. Luo, A., Baker, A., Donthu, N. (2019). Capturing dynamics in the value for brand recommendations from word-of-mouth conversations. *Journal of Business Research*, *Vol. 104*, pp. 247-260, doi: 10.1016/j.jbusres.2019.07.015.
- 26. McLuhan, E., Zingrone, F. (2001). Marshall McLuhan Wybór tekstów. Poznań: Zysk i S-ka.
- 27. Nasir, M., Adil, M., Dhamija A. (2021). The synergetic effect of after sales service, customer satisfaction, loyalty and repurchase intention on word of mouth. *International Journal of Quality and Service Sciences*, Vol. 13, pp. 2549-2560, doi: 10.55927/eajmr.v1i11.1989.
- 28. Newsweek (2016). *Ile samochodów jeździ po świecie?* Retrieved from: http://www.newsweek.pl, 21.11.2022.
- 29. O'Reilly, T. (2005). What Is Web 2.0. Design Patterns and Business Models for the Next Generation of Software. San Francisco: O'Reilly Media Inc.
- 30. Radziszewska, A. (2013). Perspektywy rozwoju internetowych rekomendacji konsumenckich. *Zarządzanie i Finanse, No. 1*.
- 31. Rosen, E. (2003). Fama. Anatomia marketingu szeptanego. Poznań: Media Rodzina.
- 32. Sadowski, R. (2020). Lokalne biznesy muszą dbać o opinie konsumentów. *Prowly Magazine*. Retrieved from: http://prowly.com, 1.12.2022.
- 33. Sanak-Kosmowska, K. (2020). Wpływ rekomendacji online na decyzje zakupowe młodych konsumentów. In: L. Bohdanowicz, P. Dziurski (Eds.), *Innowacje i marketing we współczesnych przedsiębiorstwach. Wybrane zagadnienia*. Warszawa: SGH.

- 34. Schneider, H. (2012). Agency Problems and Reputation in Expert Services: Evidence from Auto Repair. *The Journal of Industrial Economics, Vol. 60, Iss. 3*, pp. 406-433.
- 35. SDCM (2017). *Motoryzacja w Polsce i Europie 2016*. Warszawa: Stowarzyszenie Dystrybutorów i Producentów Części Motoryzacyjnych.
- 36. Ślązak, E. (2019). *Web 2.0 jako nowy wymiar Internetu*. Retrieved from: http://viem.viennalife.pl/pl/artykuly/Web-2-0, 2.12.2022.
- 37. Stavanović, I., Stanojević, D., Nedić, A. (2011). Setting the after sale process and quality control at car dealerships to the purpose of increasing clients satisfaction. *Journal of Applied Engineering Science, Vol. 11, No. 2*, pp. 81-88, doi: 10.5937/jaes11-3821.
- 38. Wijaya, P. et al. (2022). The Effect of Brand Experience on Brand Loyalty in Indonesian automotive Industry: The Mediating Role of Customer Satisfaction and Brand Trust. *Journal of Business and Management Review, Vol. 3, No. 2,* pp. 106-118, doi: 10.47153/jbmr32.3002022.
- Włodarczyk, M., Janczewski, J. (2011). Warsztaty samochodowe w warunkach globalizacji. In: Z. Zioło, T. Rachwał (Eds.), *Przedsiębiorczość w warunkach globalizacji*. Warszawa-Kraków: Uniwersytet Pedagogiczny w Krakowie.
- 40. Zieliński, Z. (2008). Rola i znaczenie Web 2.0 w funkcjonowaniu przedsiębiorstwa. *E-mentor*, *No. 2*, pp. 83-87.