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Customer Service Management in a Local Transport Company

Robert Sałek

Czestochowa University of Technology, 69 Dąbrowskiego Str., 42-201 Częstochowa, Poland

E-mail address: robertsalek203@gmail.com

ABSTRACT

The problem of customer service management in transport companies, due to diversity of operating entities, is a multidimensional concept. The activity of public transport companies is based on building relationships with passengers that constitute a particular case of customers. It is a really difficult task, especially due to acquiring information concerning the level of satisfaction with the provided services. In the paper, the author discusses the issue of customer service management in the municipal public transportation company. The issue distinguishing the analyzed entity is the fact that it is the only public transport company in the Silesian Voivodeship conducting its business activity in a rural area. There was carried out the survey aimed at the analysis of the level of customer/passenger satisfaction with the services provided by this company. There was also conducted the analysis of the sources of financing in order to determine the principles of public transport organization in the surveyed area.

Keywords: public transport; management; customer service

1. INTRODUCTION

The demand for communication services is an obvious fact, particularly in urbanized areas. City transport also known as public transport is one of the major elements of the city transport systems. In Polish legislation, this issue is not clearly defined due to the specificity which city transport is characterized by. The definitions used to specify this type of activity define it as: public transport, municipal transport, communal public transport, local public

transport or city transport. The reasons for such different definitions originate from historical realities in which specific legal acts concerning the principles of the functioning of transport in rural or urban areas were introduced. While referring to the applicable standards used in the economy and appropriate legal acts, city transport is defined as public and regular mass transport, which is carried out at the request of local government units or other units being the transport organizer. The Law on the public transport defines it as “(...) *widely available regular passenger transport, performed at specific intervals and at a specific line of communication, communication lines or communication network*” [The Act on Public Mass transport 2011]. In this approach, administrative and geographical determinants are significant as the functioning of public transport may refer to the area of one or more municipalities upon prior agreement. [Wyszomirski, 20008]

The implementation of transport processes in the city transport system is dependent on the basic transport needs. They should be defined to determine future modernization and development activities of the local transport system. The planning of the activity of transport companies often refers to forecasting in the context of the future movements of the population in a specific area. There can be identified a few exemplary types of travelling (displacement) depending on its nature and destination:

- business trips or commuting,
- travelling associated with social services (science, public administration and local government, health service),
- travelling for consumption and leisure,
- travelling for the purpose of building relationships and social ties.

The above four types additionally can be classified with reference to transport needs:

- work and functioning of the household,
- leisure,
- social functioning of an individual,
- other occasional transport needs. [Sierpiński, 2012]

Transport needs in the context of the area of displacement are characterized by specific features. One of them is the links inside a particular space, in which there is taken into account a small average displacement distance. Another one can be defined as availability, unevenly distributed in the area, characterized by common and mass nature of displacement. [Wyszomirski, 2008]

2. ORGANIZATION OF PUBLIC TRANSPORT

Transport needs of the population staying in or inhabiting a specific area are determined by transportation mobility indicators (TMI). They are defined on the basis of the calculations of daily displacement of passengers in a specific urban or rural area. The size of TMI of the population of a particular area is determined by many factors. The rate is, most of all, dependent on: the size of the area with reference to the number of inhabitants and the characteristics of the area in the context of the use (industry, services, tourism, housing estates). It is also important to analyze and characterize the local population in terms of

demographic characteristics and social and occupational status. Additionally, there should be defined the spatial range of operation for public transport. [Wyszomirski, 2008] Unfortunately, transport needs are not uniform in their nature and their basic determinant is the destination in relation to a particular individual or larger community the displacement refers to. By specifying the destination of the journey, determining its distance and frequency, it is possible to narrow the classification of transport needs to: occupational, living, leisure and others. However, one should remember about detailed classifications which are taken into account when conducting the studies on the phenomena of traffic formation. In such a case, there should be emphasized the nature in which the place of residence of a particular individual is often considered. It constitutes both the departure point of the journey and also its destination. [Rydzkowski, 2008]

Traffic organization in public transport is supported with a range of modern solutions which include automated traffic control systems. They allow to recognize disruptions in traffic caused by unexpected events which may bring about delays. The systems enable fast scheduling and correcting, in real time, subsequent situations in the transport system. [Bruglieri et al., 2015] Their main objective is to eliminate or reduce the impact of the occurring unfavorable phenomena. Such solutions are used in both road and rail city transport and are still developed, particularly in the operational area, for gathering and processing data. [Szołtysek, 2009a] IT systems support the functioning of public transport but do not solve all the problems. The implementation of such a solution is associated with additional costs connected with its service, however the opportunity for an increase in the effectiveness of the processes taking place in enterprises is the main aspect of their application. [Griffin, 2011]

The tasks performed in the framework of the organization of public transport concern many areas of the activity of transport companies, from the analysis and satisfaction of transport needs to the process of ticket distribution. The most important organizational activities are defined as: [Sipa, 2014]

- research on transport needs,
- implementation of a new or upgrade of an existing transport plan,
- providing the conditions for the functioning of transport,
- establishing stops and stations,
- determining rates and fares for using stops and stations by operators and carriers,
- determining the way to label the means of transportation,
- determining carriage charges and other charges referred to in the transport law,
- preparing and conducting the procedures in order to conclude the contract,
- concluding the agreement on providing services in the field of public transport,
- establishing the rules in the process of ticket distribution.

It is important to provide specific conditions for the functioning of public transport in the areas: standardization and principles of using point infrastructure, functioning of transport hubs, the tariff and fare system and information system [Hörold et al., 2015] for passengers.

The diversification of the share of mass transport in public transport is most of all conditioned by a high level of wealth of the society, which translates into the possibility of purchasing individual means of transportation. The availability of infrastructure, its quality and ensuring the safety of travelers is also important as well as education and information through the system of stimuli encouraging to the use of public transport. [Nunes et al., 2014]

The spatial conditions of the areas included in the transport network constitute the last of the factors conditioning the use of public transport. It is particularly taken into account in densely urbanized areas, where the space open to traffic is small or displacement is made over short distances. [Szołtysek, 2009b]

3. CUSTOMER RELATIONSHIP MANAGEMENT IN PUBLIC TRANSPORT

The issues of customer service, although widely discussed in the literature, has not been defined clearly. With reference to the concept formulated by F. G. Tucker, customer service can be understood as all the activities binding the seller or service-provider with their customers. [Tucker, 1983] M. Christopher, A. Payne and D. Ballantyne specified customer service in their work as the activities consisting in building relationships with customers and other market participants to establish advantageous and long-term cooperation. High quality services provided to the customer can be formulated as the process which begins with recognizing their needs and ends with providing high quality products or services. This process also includes all the activities leading to carrying out the transaction with the customer. [Witek, 1999]

The widely approached issue of customer service can be considered as an important carrier of values through: [Dembińska-Cyran et al., 2004]

- relationship development concept,
- indirect and direct contact system,
- group of functions and activities in the company,
- a set of decisions determining the place and time for a product/service,
- systems of material, information and cash flows to the customer,
- distribution system,
- integrated logistics and marketing processes.

Taking into account a broad view of the issue of customer service, it can be considered as a set of actions essential for customer order service (accepting, preparing and fulfilling) and elimination of adverse actions. Additionally, it should be emphasized that a comprehensive action, which involves all the areas of the enterprise, is very important. They must cooperate with each other to provide delivery service to satisfy the customer as well as to contribute to the progress in achieving the objectives.

A great emphasis is also placed on the logistics activity of the company which includes: accepting orders, contacts with customers, load transport and service, invoicing and complaints. Ultimately, all these activities are verified through the examination of the level of customer satisfaction on which the greatest impact is exerted by the reliability of deliveries of the offered goods and services. It is determined by delivering an order to the place and at the time most appropriate for customer requirements. [Payne, 1997]

This clearly indicates that building the relationship with the customer cannot be identified only with the marketing activity of the company. [Jelonek, Stępnia, 2014] An important role is also played by logistics and management of logistics processes by which the level of customer satisfaction is indirectly developed. The company policy concerning customer service should be developed with the participation of customers who are the only reliable source of information in the field of the quality of their servicing.

The preferences and needs of customers should set the path to cost optimization and an increase in the quality of service. [Mesjasz-Lech, 2014]

A special case of customer service is observed in local transport companies, where the target end group for the provided transport services are passengers. Therefore, an important task is to improve the quality and efficiency of public transport in a specific way in order to gain new passengers by a change in social habits and encouragement to the use of public transport.

Due to a steadily growing number of motor vehicles in the world, whose number in 2005 was 15.6 million whereas in 2015 as many as 25.7 million of the registered units in Poland, there is also an increase in the environmental threat. It is one of the major reasons for the implementation of the policy of sustainable transport by the central and local authorities. These regulations require more individual approach to satisfying transport demands of passengers in order to determine the factors affecting mostly the decisions concerning the use of public transport. The quality of public transport systems is influenced by many factors, such as: comfort and safety in means of transportation, travelling time and the condition of additional infrastructure. [Crisci et al., 2014]

4. THE CHARACTERISTICS OF THE RESEARCH AREA

The municipality of Rędziny, in the area of which the research was conducted, as one of few in Poland, has its own public transport system. It allows to provide service to passengers travelling to all the locations of the municipality and the district city of Częstochowa. The entity responsible for public transport in the municipality is Gminny Zakład Komunikacyjny (GZK) *Municipal Transport Operator*. Rędziny municipality is located in the district of Częstochowa, its area amounts to 41.36 km², whereas the population amounts to 9776. The immediate vicinity of the municipality and the district city and the geographical conditions ensure good location and communication with neighboring municipalities. Important traffic routes cross Rędziny: DK-91 and DK-1. Additionally, the municipality has access to two railway lines: Warsaw-Vienna and Chorzew Siemkowice-Wyczerpy.¹ In the area of the municipality, there is situated Częstochowa-Rudniki airport.

Satisfying the demands in the field of the local public transport of the population of the municipality is the main objective of the activity of Gminny Zakład Komunikacyjny. It mostly refers to the carriage of passengers and luggage in the area of the municipality and the city of Częstochowa. GZK is a budgetary unit and covers its expenses from the budget of the municipality whereas its incomes are paid for the account of the local government unit of Rędziny municipality. The transport company owns 10 low platform buses of the SOLARIS brand. The activity of the transport company is carried out on the basis of the annual financial plan which includes the value of the grant established by the Municipal Council.

In Figure 1, there is presented the percentage distribution of the company's income per year.

¹http://katowice.stat.gov.pl/vademecum/vademecum_slaskie/portrety_gmin/powiat_czestochowski/gmina_redziny.pdf

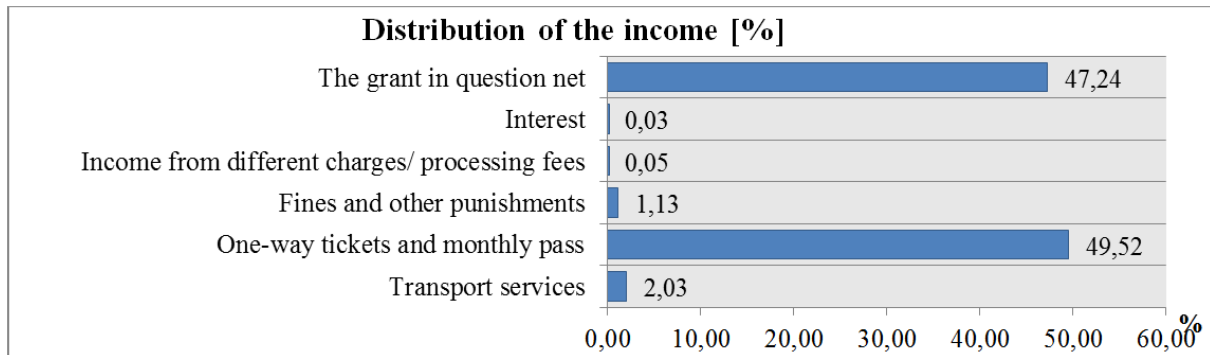


Figure 1. Percentage distribution of the sources of the company's income.
Source: Authors own study.

In Figure 1, there is presented the detailed distribution of the income of Gminny Zakład Komunikacyjny. There were taken into account six sources of income, although two of them constitute the basic sources of the operation of the company. They are: the grant established by the Municipal Council, which covers more than 47% of the demand and the income from ticket sales amounting to nearly 50% of all the available annual budget.² Figure 2 shows the percentage distribution of the operating costs the company is burdened with annually.

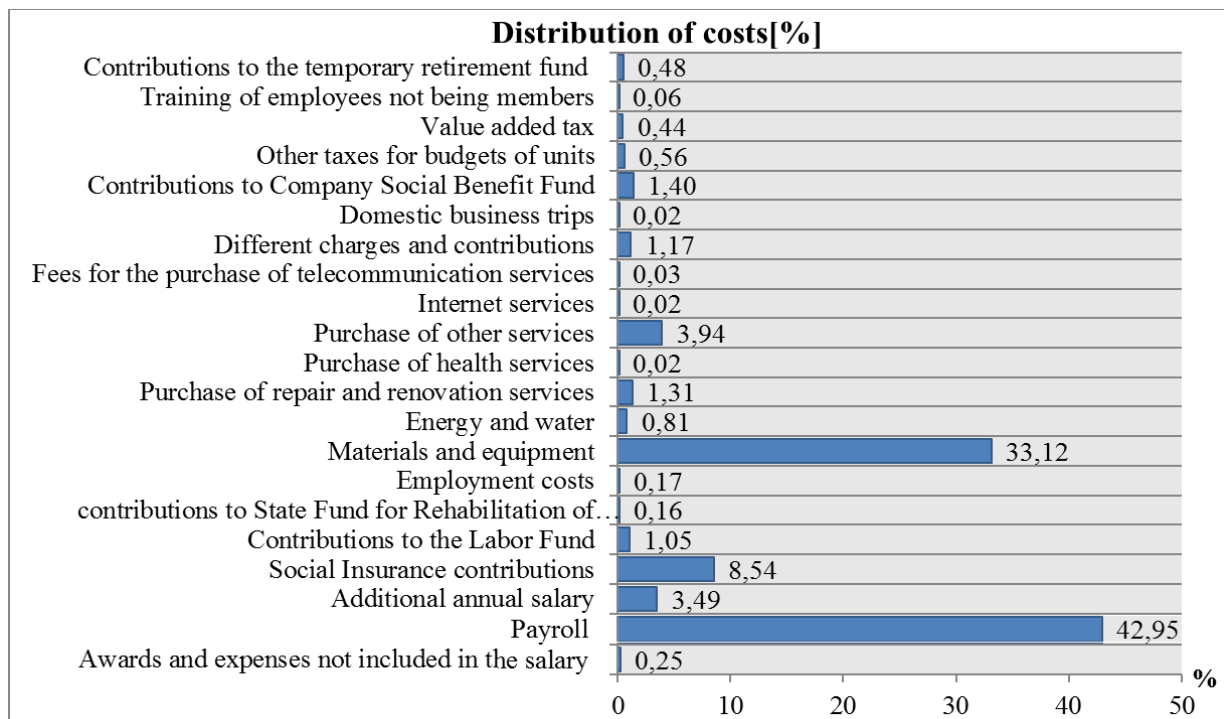


Figure 2. Percentage distribution of the category of costs incurred by the company.
Source: Author's own study.

² The total income for 2014 amounted to PLN 2.79 million

The percentage structure of the costs of the company per year, presented in Figure 2, allows to clearly observe two largest decisive factors. Among 21 categories the highest costs are generated by: expenses for the company's materials and equipment (fuel, spare parts, office supplies and chemicals, heating oil, office and warehouse equipment, software licenses) and personal remuneration of employees. More than half of the categories taken into account in the summary did not exceed 1% of the total expenditure, only 6 items are in the range of 1-4% and only 1 category, concerning the payment of Social Insurance contributions, was in the range of 4-10%.

5. THE APPLIED RESEARCH METHOD

The analysis of the level of passenger satisfaction of the transport company is based on the survey whose respondents were the passengers of the municipal transport company. The time range of the research included the period of April-May 2016. In the research, there was applied the method of direct questionnaire interviews. The open questionnaire was handed in the respondents (passengers) in person at bus stops or on buses and it was also sent electronically.

The survey was conducted on a group of 121 respondents using the proper questionnaires. There were also carried out 51 direct interviews. The structure of the survey:

- 90 auditorium surveys,
- 31 computer-assisted surveys.

The structure of return of the questionnaires:

- auditorium surveys - 87%, including 51 questionnaires filled in and received personally,
- computer-assisted survey - 52%,

In total, 121 respondents were subjected to the research, 99 questionnaires were received back, which amounted to 92% of efficiency.

There was a random selection of the sample, the returned questionnaires were tested for their statistical significance. The obtained results allow to conclude that, when analyzing the obtained 99 responses to the questions of the survey, they constitute the minimum amount of the sample and are credible in 95%; this means that there can be formulated the recommendations resulting from the survey, which are burdened with a 5% error with reference to the whole population of the respondents.

6. THE ANALYSIS OF THE RESULTS OF THE SURVEY

The survey included nine questions concerning the functioning of public transport in the specific area. The survey was constructed in the form of closed-ended, semi-open and alternative questions. The survey also included the demographics, characterized by 5 questions concerning the basic demographic information and the respondents' education. The selected way of responding aimed at verification of the responses with reference to the quality of passenger service in public transport. The obtained results will be used for conducting the analysis of the level of satisfaction of the transport company customers.

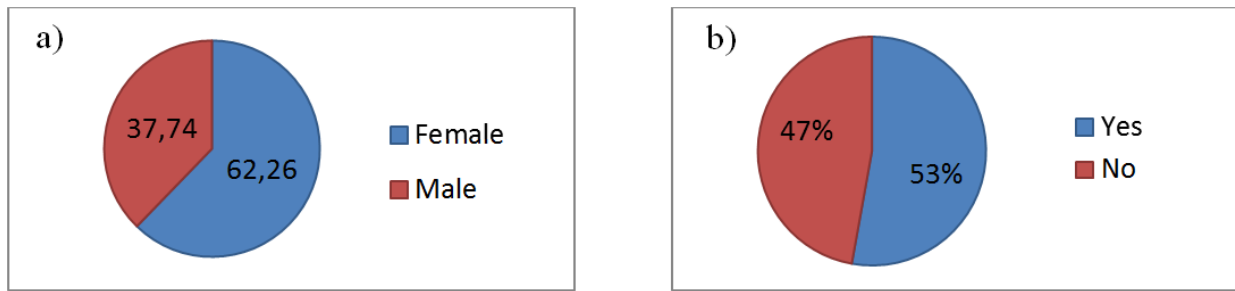


Figure 3. a) Gender of the respondents, b) Possessed driving license for category B
Source: Author's own study.

The above figure shows the percentage distribution of the respondents by gender. The prevailing number among those questioned were women whose share in the survey amounted to 62. Since the study refers to the quality of customer service of the public transport company, it was important to determine the population of the respondents possessing a driving license granting the right to drive passenger cars. The results indicate relatively uniform distribution with slight predominance of people with driving licenses.

Table 1. The summary of the data concerning the age, education and occupation of the respondents.

Age of the respondents			Education of the respondents			Occupational status of the respondents		
	number	%		number	%		number	%
6 -16	7	7.55	primary	13	13.21	student	13	13,21
17-20	13	13.21	vocational	17	16.98	university student	11	11,32
21-30	34	33.96	secondary	45	45.28	blue-collar worker	32	32,08
31 and up	45	45.28	university	24	24.53	white-collar worker	11	11,32
Total	99	100	others	0	0.00	own business	6	5,66
			Total	99	100	managerial position	13	13,21
						unemployed	0	0,00
						pensioner	13	13,21
						Total	99	100

Source: Author's own study.

Among 99 respondents the majority were people aged more than 31, who amounted to more than 45% of the surveyed population. The second largest age group was the respondents aged 21-30, amounting to 34% of all those questioned. The smallest percentage of the respondents amounted to young learners. The largest number of the respondents had secondary education whereas 24.5% declared university education. The question concerning the occupational status allowed to identify individual group sizes of which the most numerous was blue-collar workers - 32% and white-collar workers and the ones holding managerial positions – less than 27%.

The survey conducted on the representative group consisted of 9 questions. They allowed to obtain the information on the passengers’ perception of the operation of the analyzed company and they referred to the data in the field of the load of the fleet as well as the circumstances and destination of the journey.

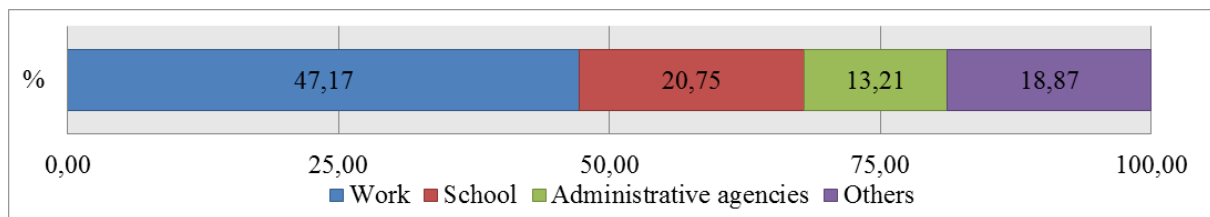


Figure 4. The destination

Source: Author’s own study.

The above question allowed to determine the percentage share of passengers with reference to the destination. Among the respondents, the majority travelled to work or school, which amounts to nearly 68% of the whole surveyed population. Administrative agencies amount only to 13%, whereas other vague destinations - nearly 19%, which may indicate the recreational nature of passenger traffic.

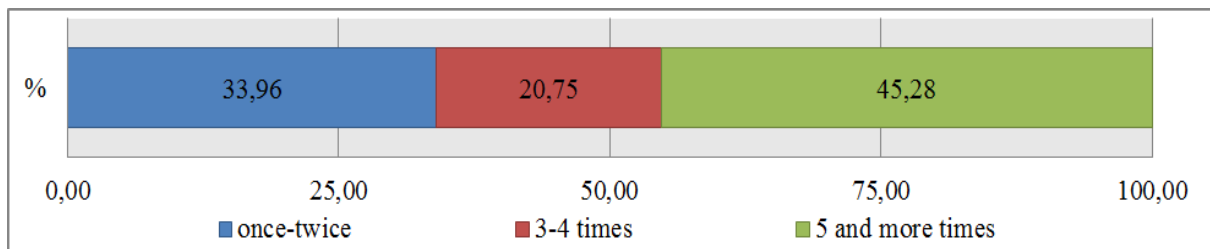


Figure 5. The frequency of travel weekly

Source: Author’s own study

The question concerning the frequency of travelling allowed to determine if passengers consider public transport as one of the main reasons for displacement. More than 45% of the respondents use the services of the municipality transport operator 5 and more times a week. This indicates a certain regularity of travelling, which is mostly associated with the destination of work or school.

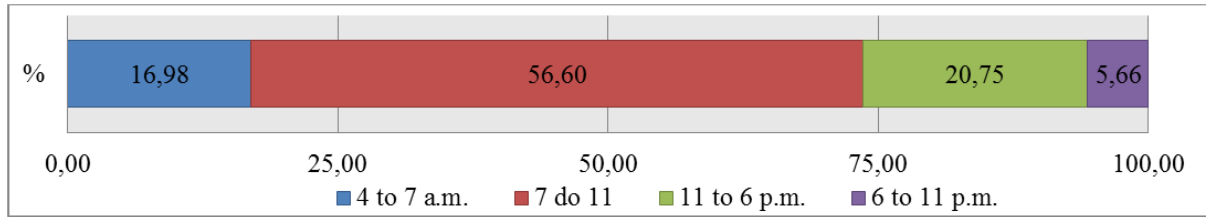


Figure 6. Time of the day of travelling.

Source: Author's own study.

Daily load of the fleet is reflected by the data concerning the individual time zones. There can be observed the highest demand for the services in the morning – 72.5%. It is reflected with reference to the destination as, at that time, the most frequent destination is work and school.

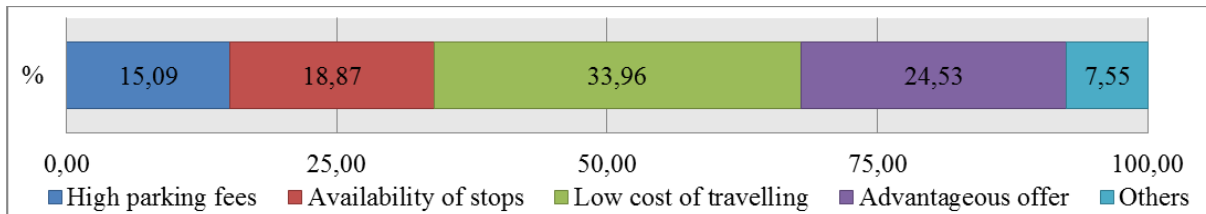


Figure 7. The main reasons for using public transport.

Source: Author's own study.

The decisions taken in the field of the selection of public transport instead of individual transport are most of all associated with lower costs and accessibility and comfort of travelling. A small amount – only 15% of the respondents supported these decisions with high parking fees at their destinations, which may mean a different destination than work.

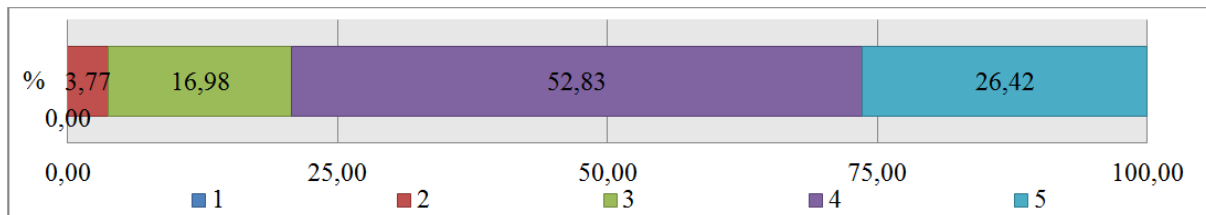


Figure 8. The assessment of punctuality on the scale 1-5

Source: Author's own study.

The study concerning the assessment of the punctuality of buses with reference to the timetable indicates a high level of passenger satisfaction. It is confirmed by as much as 79.3% of the respondents who assessed punctuality as good and very good. The specificity of moving on public roads, particularly for requiring bus vehicles, brings about the occurrence of

many unexpected situations. It is particularly associated with traffic congestion at particular times of the day.

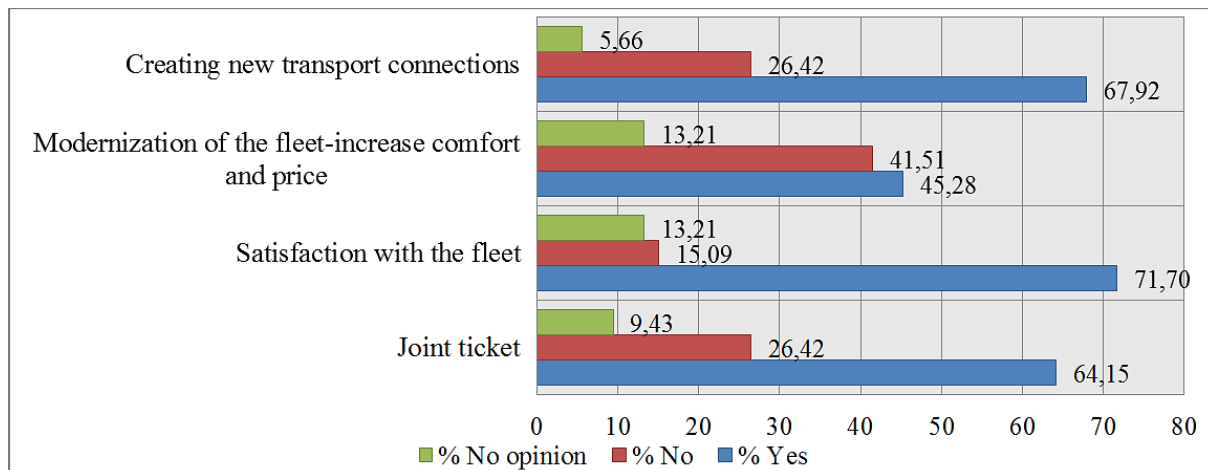


Figure 9. The summary of the responses of the four alternative questions.

Source: Author's own study.

The responses obtained for the four subsequent questions allowed passengers to express their opinions on their satisfaction with the available fleet and specify their expectations with reference to further development of the provided transport services. The respondents expressed a high level of satisfaction - nearly 72% in relation to the available buses. This indicates that the company attaches great importance to the improvement in the quality of transport services and, at the same time, makes an effort to satisfy the requirements of customers. When analyzing the structure of the responses to the question about the modernization of the fleet, it can be noticed that they are at a similar level. In spite of the fact that the company owns modern vehicles, more than 45% of the respondents were in favor of further modernization for the benefit of increasing the comfort of travelling in spite of the suggested increase in ticket prices. For less than 42% the present conditions are sufficient although the suggestion for an increase in travel cost seems to be decisive in this case.

The transport company has its own tickets, which are valid only at the specific route sections. The initiative to introduce a joint ticket for GZK and MZK Częstochowa is one of the most difficult tasks to perform. The main destination of the vehicles of the municipal transport operator is the specific final destination in the city of Częstochowa. Passengers wishing to continue the journey must purchase tickets which are valid in the vehicles of the city transport operator. For this purpose, there was made an attempt to learn the opinion of passengers on the implementation of a joint ticket for both transport companies. The results presented in the above figure indicate that more than 64% of the surveyed population were in favor for the introduction of such an initiative, which would significantly improve the comfort for travelling to further destinations. On the other hand, 26.5% of those questioned replied in the negative, which would indicate some fears concerning an increase in the prices of joint tickets. It seems to be justified at least due to the possibility of bearing cost of administrative and legal operations which would regulate the processes of the implementation of such a solution.

7. CONCLUSIONS

The analyzed company has been operating on the market of public transport 1991. Over the last few years, its fleet has been modernized and the transport network has been developed. When studying the level of satisfaction of the specific type of the customer which the passenger is, it is necessary to take into account the fact that building business relationships takes place in a slightly different form than in the case of traditional manufacturing or service companies. An important issue is to maintain the contact with customers to learn their requirements and satisfy their expectations. Building the base of information on passengers is a very difficult task, requiring from public transport companies the application of appropriate methods of its acquisition. The amount specified by the ticket sales brings about only basic information supporting the selection of means of transport in relation to their load. The survey method, as one of few, allows to extend the area of acquiring information on passengers as well as it enables taking decisions to satisfy their needs.

The conducted research allowed to identify a few most important aspects due to which customer (passenger) relationship management may significantly affect the quality of customer service and the level of satisfaction with the provided services. The issue raised during the research was to create new transport connections. A large group of the respondents is in favor of such an initiative however, there should be taken into account current resources of the company. Due to a limited number of buses, extending the activity would be possible only with additional funding. Highly assessed punctuality and satisfaction with the fleet indicate a good concept directed to increasing customer satisfaction. The most important issue, in terms of the assessment of the provided transport services, is maintaining appropriate balance between price and quality.

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