

Photo 1. Warszawa Zachodnia Station. Photo PKP S.A.

The authors discuss the problem of customer service at the rail station buildings and its influence on the customer satisfaction. The authors define the idea and role of customer service. They indicate the necessity to innovatively approach the construction of modern station buildings and the need to implement innovative solutions directed at functionality and economy in order to improve the customer service. To support their theses, the authors present customer satisfaction survey results. They also present the customer service policy and the role of quality standards of services provided at station buildings. The conclusions indicate trends in macro-environment and the role of relations in developing customer satisfaction.

Key words: railway station building, customer service, customer service policy, standard of services, railway station building categories.

Railway stations, with their significant social and economic influence, have always been the window to the world. Railway transport continuously plays the key role in ensuring mobility to societies despite changes in the mode of their moving from place to place, in the era of individual motorisation. Urząd Transportu Kolejowego (Office of Rail Transport - UTK) informs that the number of railroad passengers has been growing again in the last few years and that long-distance trains have gained importance.

Passengers' stay at the train station is a significant element of the travel experience. According to the research of 2014 entitled "Qualitative exploratory research on the railway station customer" [15] one of the most important factors influencing customer satisfaction with station buildings and, consequently, the travel are safety, cleanliness and comfort.

According to the research [13], over 80% of people come to the railway station within 30 minutes before their train departure. Passengers are not willing to prolong their stay at the railway lounge nor gastronomic facilities. Therefore, it is necessary to diversify the function of the station building and add some complementary functions to it such as commercial or cultural. The role of the station building is becoming important as the hub between different modes of local and long-distance transport or between any two parts of the city. There is necessity for integration of the station building with the surrounding area as well as for the cooperation with the local self-government in designing and constructing transit hubs. The aim of this article is to present the modern vision of railway station buildings with a view to the customer service and customer expectations and needs as well as positive experience of their stay at the train station.

A note on railway stations

The railway station building is a building or a set of buildings located on a railway area designed to serve the passengers or provide complementary services. It may have the facilities to perform activities connected with the management of the flow of trains.

For the majority of passengers, the station building is a part of the transit hub between the train and another means of transport. Therefore, a big railway station building becomes the integration point for the network of municipal and regional transport and it has a role to play within the city transportation system [11, p. 60]. Railway stations in Poland function within the legal framework set up by the law on rail transport [10]. Amendments of 2016 introduced to the statute the notion of service facility and the obligation of their accessibility by the public. The passenger station, comprising the railway station building or platforms together with the infrastructure enabling the passengers

to access the platforms (on foot or by a vehicle) from the public road or the railway station, is a particular example of a service facility. There is one important conclusion arising from the new regulations, namely that the building of the railway station constitutes one entity, as the passenger station, together with the platform and the access passage. In order to realize this idea it is necessary to pay particular attention to the coordinated management of all the constituent elements of the passenger station. which, at the moment are held by different businesses. Polskie Koleje Państwowe S.A. (PKP S.A.) manages the buildings and access passages. PKP Polskie Linie Kolejowe S.A. (PKP PLK S.A.) manages the platforms and access passages. Local government units manage selected elements of the passenger station. The biggest manager of railway stations in Poland is PKP S.A. According to the data of 2016, PKP S.A. managed 2 136 railway station buildings around Poland, out of which 574 buildings were active. i.e. those which offered free public access to the passengers. Over 40 per cent of railway station buildings are under heritage monuments protection. Structures managed by PKP S.A. are typically of great diversity as regards their architecture, the standard of provided services and the technical condition. A possible way of developing railway stations is by starting closer cooperation between PKP S.A and self-governments. As a result, self-government units take over the management of railway stations which, adapted to the needs of local population, apart from offering effective transportation services hold public utility facilities such as theatres, museums, libraries, healthcare centres and police stations. Another form of developing railway station buildings is to offer them to self-government units for long-term rent.

A note on customer service [3, 5, 8, 16]

Customer service problems are handled by marketing and logistics. Marketing, with its tools and analyses, makes it possible to measure the demand, creates new products and new demand. It makes promises to customers. The promises become the actual demand which is further satisfied by logistics through adequate management of transportation and logistics processes [4]. Customer service is nothing else but good relations with customers. This is a lasting and satisfying contract between two economic entities: the business and the customer. Customer service is currently becoming one of the elements of competitive advantage, on condition that this idea is not only observed by the staff who have direct contact with the customer but by everyone employed in transportation and transport-related services provided along the transportation process. As such, customer service means the process of ensuring competitive advantage and creating extra benefits for the customer through transportation process in order to maximize the value expected by the customer. Customer service may be perceived in the following aspects:

- As a philosophy, the mission of a given business. Customer service is understood as the obligation towards the customer for which the whole business is responsible. It consists in providing the customer with satisfaction through the best possible service. It is of pre-contractual character and has formal, written form. It requires from the managers to come out with the clear offer of service to the customers of rail transportation service.
- As specific action. The business must identify particular tasks to perform in order to satisfy the customer. As such, the customer service is perceived as the ability to satisfy the customer's needs as regards time, reliability, communication and



Photo 2. Cash hall Warsaw East Station. Photo PKP S.A.



Photo 3. Wrocław Główny station. Photo PKP S.A.



Photo 4. Ticket office and waiting room for travelers at the railway station in Jarosław. Photo PKP S.A.

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comfort. From this point of view, what matters is first of all, the time within which given obligations towards the customer are fulfilled, second of all, reliability of provided services and the communication understood as interrelation between the customer and the seller with the use of modern mobile technology (phones and computers) and finally ease and comfort of the service for the customer. Basically, what matters is the ease of doing business, facility and multitude of possibilities to enter into relations and contacts (e.g. a variety of ways to buy tickets).

As the assessment of the realized tasks. Customer service is understood as keeping up standards, especially those stated in the policy of customer service. Specifically, they are either the elements rigorously demanded by the customer or they are a tempting offer and declaration from a competing business. Standards should be adjusted to the requirements and conditions at particular segments of the rail transport services market.

In the broadest sense, customer service may be analysed as all activities which are necessary to accept, prepare, realize and financially prepare the customers' orders and to exclude any malpractice: customer service is a set of complex activities which involve all spheres of business which interact in order to manage transportation and the company services in the way which satisfies the customer and adds to the progress in achieving the goals of the railway business; customer service is the overall process of accepting orders, the overall process of communication with the customer including all the processes of dealing with the passenger at the train station building and during their journey; customer service means the control of the transportation process and service and the control of the quality of handling complaints; customer service means reliable provision of services to the client at the station building in agreed time and place, according the customer expectations [9]. In practice, customer service consists in understanding who the customer is, what he or she thinks and feels, what irritates them, what satisfies them, what their expectations and needs are and, finally, in finding the best way to meet them. This means that contemporary idea of customer service includes the whole process of establishing relations with the customer which should end in lasting and posi-



Photo 5. The historic ticket office hall at the railway station in Opole. Photo PKP S.A.



Fig. 1. The pyramid of customers wishes [17].

tive relationship as well as experiencing by the customer satisfaction from the contact with a railway business [1]. Professional customer service is, in brief, the policy of putting the customer in the first place. This consists, primarily, in perfect communication with the customer through such tools as: the language of benefits, non-verbal communication, clarifying the customer's doubts or the reaction to their emotions and stress. The most important task for the railway station personnel is to supply to the customer what they actually expect. With this taken into account, a professional entrepreneur will tend to maximize their customers' satisfaction because such entrepreneur knows that the customer loyalty comes from customer satisfaction. The customer satisfaction is subject to the quality of contact in the following three spheres:

- 1. Psychological, which refers to relations that the customer experiences with the service. Psychological needs may be satisfied through: understanding of the needs, positive attitude and individual treatment of each person;
- 2. Substantive, which refers to the personnel knowledge of the procedures, regulations, ways of action and the possibilities to gain true, reliable and doubtless information;
- 3. Procedural, which refers to time and quality of handling issues. Customer satisfaction in this area is connected with the care for clarity of procedures. What matters here is keeping the customer informed about the progress of their issue as well as ease of contact.

All the spheres discussed above must be taken into account in strategic planning of a railway business and the following customer needs must be adopted as values: respect for the client. genuine interest in the client's issues, the client's right to reliable and substantive information as well as the client's satisfaction that their issue has been successfully handled. This is presented in Fig. 1

The policy of customer service at railway stations

The policy of customer service means the overall set of intentions and objectives of a customer-oriented business. PKP S.A.'s strategic objective is to ensure the best possible customer service quality. To this end, an array of investment and redecoration processes are conducted at railway stations. However, it must be remembered that a modernized railway station which is not properly furnished and maintained, tends to lose its primary attractiveness for the user which leads to the actual waste of organizational and financial effort engaged in the investment. In order to properly maintain the effects of investment at railway stations, it is necessary to define the standards of the provided services, the standards of the maintenance as well as of the control tools after the investment is completed. These two elements (i.e. the standard and the control mechanisms) are the key issue of the policy of the PKP S.A.'s customer service. Following the conclusions arising from the public opinion survey [15], PKP S.A. is implementing a new categorization of railway stations inclusive of the related standard of services. The new categorization disposes of railway definitions and adopts the terms which the passenger understands and identifies with a particular phenomenon. A typology of railway stations has been adopted which enables intuitive differentiation of the standards of services. The users' opinion survey has revealed that they distinguish between the railway stations according to their size (associated with the rank of the place, e.g. central, regional, city), type of journey (long-distance, agglomeration, seasonal), place of the train station building in relation to other infrastructure and its technical condition (old, new). The map of railway stations on Fig. 2 presents the main assessment areas by respondents. With regard to services, the expectations of the railway stations users are found within the basic needs as reflected in Maslow's Pyramid. The most important element of the passenger's comfort at the train station building is their access to passenger information. Safety and cleanliness have been indicated as significant. The following other services have been indicated as essential by the respondents; ticket offices, toilets, bistro bars, convenience stores for handy shopping of press, soft drinks, snacks. Railway stations located in city centres may have commercial section but, according to the respondents, this should not adversely influence the standard and range of railway services. Some services, such as hygiene or beauty, are not associated with railway stations. Nonetheless, this opinion may change after the passengers' basic needs have been met and satisfied. The key component of the standard (arising from the law regulations) is full and complete implementation of TSI PRM norms as regards persons with disabilities and persons with reduced mobility.

The current categorization of the train stations and the meaning of particular category of structures is presented in table 1. To each category of the station building a particular standard of minimum services is matched as regards the needs and architecture solutions.

Apart from the standard, another principle of the PKP S.A. customer service policy are control mechanisms. The quality control comprises especially those elements which are related

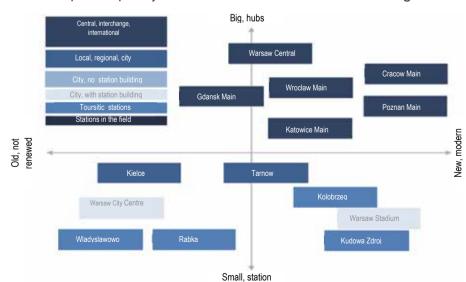


Fig. 2. The map of railway stations [15]

Tab. 1. Categories of railway stations of PKP S.A.

Entity name	Capital structure		
Premium	railway station building in a big city, important domestic hub, providing service to different carriers – long-distance, regional and agglomeration, significant international traffic		
Voivodship	railway station in a big city, important interregional and voivodship hub, significant international traffic, possible local traffic		
Regional	railway station in a medium – size city or small town, important transportation hub at regional / county level, providing service mainly to regional and local traffic, possible inter-voivodship traffic		
Local	railway station with few stopovers and small potential of rail traffic, provides services mainly to regional and local carriers		
Agglomeration	railway station located in agglomeration, important hub at the agglomeration level, agglomeration and local traffic		
Touristic	railway station in a province with a touristic potential, important hub in touristic season, provides service to different carriers – long-distance and regional		

Source: Authors' own, based on the internal materials of PKP S.A. Warsaw 2017.

to the general condition of the train station (the interior and exterior, maintenance level, cleanliness of public areas, lighting, protection against adverse weather conditions) and the services rendered (security, safety level, dynamic and static information, ease of movement around the station, possibility to buy the ticket, commercial services). What also needs control is the proper fulfilment of customer service procedures at the train station in non-standard situations, such as in the case of significant mass delays of trains, necessity to ensure assistance to the disabled or particularly intense traffic of passengers during rush hours.

It is worth adding that to the effect of the most effective management of critical situations, the subsidiaries of PKP (PKP S.A., PKP PLK S.A. and PKP Intercity Sp. z o.o. set up The Customer Support Centre (Centrum Wsparcia Klienta, "CWK"). CWK plays a positive role in alleviating the effects of events through the coordination of giving away free meals, providing proper information to the passengers who are waiting for a train or are stranded in a delayed train, coordination of the substitution transport or reaction to the passengers of special needs (pregnant women, disabled people). CWK deals with the coordination of assistance in moving around the train station to persons with disabilities

and persons with reduced mobility. Help in the form of personal assistance is ensured at 61railway stations in Poland. They are the biggest passenger stations and train stations where the need for assistance to persons with disabilities and persons with reduced mobility. Such service is provided by security agencies during the hours of train traffic and consists in ensuring all kinds of service to passengers with physical disability, especially with transfer through passages and to and from platforms.

Moreover, eleven strategic railway stations have been equipped with "Info-Dworzec" ("InfoStation") which are information stands providing information to passengers about the functioning of the station and available services. InfoStation staff offer help to passengers who

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are not familiar with the city and need advice about the best form of transport to a particular address. Finally, InfoStations have the online service of simultaneous sign-language translator for the passengers with impaired listening skill to give them access to information about the services offered at the train station.

The PKP S.A. model of standards control and service quality operates at several levels of control which ensure the most adequate managerial information for corrective measures, if any. The following levels can be distinguished within the model:

- Auto-check conducted individually by the employee who is in charge of a particular area of customer service
- Internal audit at the head office level conducted directly by the direct supervisor, the head of a branch or representatives of the respective office in the PKP S.A. headquarters;
- ◆ External audit "Customer Satisfaction Patrol" quantitative and qualitative control, auxiliary to the internal control, conducted through "mystery shopper" as a form of engaged observation. Customer Satisfaction Patrols carry out both planned and random control at station buildings and train stations. A Patrol has a team of independent controllers who have been trained and are equipped with indispensable knowledge to conduct verification of standards and make quality assessment as regards cleanliness, technical condition, static and dynamic information, the level of security and the quality of passenger service. This type of control refers to the experience of the passenger and his or her expectations, being, at the same time, the individual evaluation of the set standards in practice. This also constitutes support for internal audit. The effects of these audits are additional source of information for member businesses of PKP S.A. group and make it possible to decide on joined corrective measures as regards services to passengers.

The participants of the process, after they have processed the results of the foregoing audits based on the collected information and having in mind post-audit conclusions, formulate recommendations aiming at improving the services / standards of the train station maintenance. Moreover, they work out additional procedures as regards auto-check. In the further stage, corrective steps are taken: operative – implementation of recommendations and improvements both individually for particular structures and systemically – transfer of individual recommendations to all structures, as regards a particular solution.

Raising standard of station buildings

In 2007–2015 PKP S.A. conducted investment works at 121 station buildings. The investments financed the projects covering the whole station area, where, in cooperation with PKP PLK S.A., works were conducted over the whole passenger area



Photo 6. Innovative systemic railway station building in Ciechanów. Photo PKP S.A.

of the station building together with the platforms. Apart from the cooperation with the national administrator of the railway infrastructure, a part of station building investment was also conducted in collaboration with the local self-government units. Currently, PKP S.A. is conducting a wide-ranging program of station building investments which will effect in further reconstruction of the existing station structures as well as raising new station buildings. The ultimate effect of this investment programme will be standardized, high quality station buildings adjusted to the contemporary flow of passengers as well as the needs of the transportation system. Station buildings will become integrated with the surrounding area and will ensure the functions related to the change of the transportation means by the passengers where the rail will have the primary role. This investment program will also allow for the implementation of energy-saving solutions which will lower the maintenance costs, raising the overall standard of the station buildings at the same time. Investment works will be based on architectural solutions which will eliminate the current maintenance problems (e.g. the use of hard-wearing materials, vandalism-proof solutions, collisionfree access to media) or reduce exploitation costs (energy-saving lighting, renewable energy sources). It must be remembered that the technical condition of the station buildings has direct impact on the possibility of making them commercially utilized. Public interest in hiring commercial areas and the rent rates, apart from local conditions, are determined to a large extend by the technical condition of the station building. Assurance of high technical standard and aesthetic value of the structures translates into commercial potential of the station buildings. In the light of the investments conducted at the station buildings, it is particularly important to continually improve and actively seek new solutions for the management, maintenance and exploitation as well as customer service. Only pro-innovative attitude will ensure sustainable development of the railway sector, which, through the influx of customers will positively affect the profitability of the railway station structures. In order to achieve the adopted parameters for the station buildings it is necessary to take action as regards innovativeness, quality and accessibility of services as well as cooperation with external business entities. Innovative solutions are the key condition to achieve the improved quality of the station buildings. The process of the station buildings designing is related to the continuous survey and search for innovations as regards materials, energy, information technology, architecture, as well as service to passengers. The catalogue of updated innovative solutions is applied to consecutive station building projects. An example of such solutions implemented by PKP S.A. are Innowacyjne Dworce Systemowe (Innovative Systemic Railway Stations, IDS). IDSs offer high quality passenger service which meets international standards and TSI PRM requirements. This solution is in line with the trends of structure designing with the use of sustainable development principles, minimizing exploitation costs and maximising the effectiveness of the structure. IDS project realization is based on the multiplied structures of uniform standard and optimum use of the area. So far the following structures have been created in IDS format: Nasielsk, Mława, Ciechanów (photo 6), Strzelce Krajeńskie Wschodnie. IDS project as well as preceding conceptual work have given rise to the so called "micro station buildings". This term signifies the idea of smaller type of structures (smaller than IDS) which ensure the basic functions to satisfy the passenger needs. In comparison to IDS, microstations are equipped with

the minimum necessary installations. Microstations will become attractive area for the passenger service at lower investment in construction in locations of lesser traffic. The ultimate scheme includes four options of the so called "typical station buildings" which are tentatively called microstation, microstation+, micro IDS, IDS. A typical station building will be composed of especially designed elements (modules). The main assumption for the project of a typical station building is adaptation of a suitable option to a particular station, allowing for minute modifications arising from local conditions.

In the course of work conducted by PKP S.A. certain innovations are developed which aim at increasing the exploitation effectiveness of the station buildings. One of such innovations is represented by the Building Management System (BMS) which integrates installations of the station building such as ventilation, air-conditioning, heating, electric power, lighting, photovoltaics, media (energy, water and heating meters) or escalators. Building management system consolidates all installations at the station building in one place and allows for effective and economical management. BMS controls the parameters of all appliances, informs about problems and malfunction, enables to settle the accounts for the use of media with the station building tenants. The use of hi-tech lowers the exploitation costs and limits the negative impact of the building on the environment. As regards the heating and ventilation of the station building units. heating pumps (aerial or land) as well as highly efficient gas heaters and mechanical ventilation, with the return of 85% heating power, are planned to be applied. Additionally, the plans include systemic implementation of other solutions such as the use of rainwater to flush the toilets, the use of electricity-saving lighting LED with movement detectors, the installation of photovoltaics batteries on the building roofs to generate electricity for the external lamps and the creation of green roofs. The ways to gain innovative solutions include the possibility to cooperate with the entities whose areas of operation are within scientific, technical and innovative policy. In liaison with the key project of innovative station buildings, PKP S.A. has joined the activity of the European initiative Shift2Rail. The initiative is financed by the program "Horyzont 2020" ("Horizon 2020") and conducted as public-private partnership in the form of joint venture, organized by the European Commission. Subsequently, PKP S.A. will conduct research concerning "Facilitation of designing station buildings and their components" as well as "Management of crowds at large train stations". A significant benefit arising from this cooperation is the possibility to take advantage, on preferred terms, of the research results conducted by other Shift2Rail member organizations. As regards safety, comfort, ergonomics and IT, innovative activity is directed at gaining ready solutions offered by innovative businesses. One of the effects has been the implementation of "InfoDworzec" ("InfoStation"), the simultaneous online sign language translator which enables direct contact of the station building employee with a person with hearing impairment. Solutions as for the adjustment of the station structures to the needs of people with limited physical ability will be assured in compliance with the current norms, including TSI PRM and universal designing. Due to the binding law regulations as well as the image of the passenger infrastructure managers, there are joined efforts of PKP S.A. and PKP PLK S.A. to determine a uniform standard of adjusting the structures (e.g. the principle of ensuring obstacle-free passage) regardless of the ownership issues. The requirements for the station building surrounding ar-



Photo 7. Passage from the Kraków station to the shopping center. Photo PKP S.A.

eas will also be determined within the framework of solutions. One of the most important issues related to the future of station buildings is the best possible cooperation with external entities which have both direct and indirect impact on their realization and are their beneficiaries. Self-government units cooperate in the operations which aim at the construction of integrated hubs (including park&ride) and the adaptation of the "urban fabric" in direct neighbourhood of the station building to new standards and the passenger needs. Regarding the location of the station building in the centre of a given place, living area or industrial area, its new design will increase the attractiveness of the close vicinity. As the inseparable part of the city tissue, a modern and accessible station building will create the impulse to develop the neighbourhood and may become the main element of the social and economic centre. Apart from transportation, station buildings should also meet the needs of local populations. It will be possible to use some areas of the station building for social and cultural functions as designed in the project of "Stacja Kultura" (Culture Station) at the train station in Rumia in Pomeranian Voivodship.

Summary

Traditionally, the essential function of the station building is to ensure the service to train passengers. Nonetheless, the range of functions of a station building is subject to changes resulting from changing mobility patterns and macroeconomic trends. In the strategic analysis of the role played by the rail and the rail station buildings in the sector of passenger transport, the following five key macroeconomic trends affecting the future role of station buildings need to be indicated (see table 2).

The trends discussed above enforce the adjustment of station buildings to new requirements and indicate the direction for further research which undoubtedly are social innovations in the context of new station building investments as well as directions and models of financing new station buildings which meet the standards arising from the needs and preferences of customers. Listening to the needs and preferences of customers at station buildings is the straightforward way to the optimization of costs and raising the quality of service to the passenger at the station building [6]. The aim of increasing the quality of customer

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Tab. 2. Macroeconomic trends affecting railway stations

TREND	SCALE	ACTIONS
Metropoles and megametropoles, cities covering tens of square km	By 2030 their number will increase by 45% on 2014	Apart from significant increase in the role played by agglomeration transport, there is a need to develop the idea of the future station which will satisfy the biggest number of needs in one place and will be designed as circulation areas incorporating all integrated means of transport.
Increasing urbanisation index	In 2020 8 out of 10 Europe's inhabitants will live in cities	Urbanisation, as the increase in the potential flow of passengers, will enforce adjustment of station structures to the increased number of passengers and their needs. Consequently, station buildings should be armed with new technologically efficient security and ticket sale systems in order to facilitate service and comfort of passengers.
Demographic changes – ageing society	In 2050 people over 60 will make up for 20% of the population, age- ing rate of the Polish population is more than double of the European average	Demographic changes enforce system changes. From adjusting the network of connections, through timetables to proper infrastructure, i.e. station buildings. Aging society will lead to the need of adjusting more and more station structures to persons with disabilities and persons with reduced mobility. Infrastructure and the rolling stock should conduct evaluation of its current assets and seek functional solutions.
Changing climate – much more violent and afflicting weather	In 2030 the now low risk of flood, violent storms, extreme temperatures will increase to medium	Violent climate poses challenge for the whole railway system which, in any way, is subject to weather conditions. Much like demographic changes, climate changes carry total redefinition of solutions for the infrastructure and the rolling stock. They must ensure unobstructed flow of traffic, safety and maximum efficiency.
Increasing mobility of mass transport passengers	By 2030 passenger mobility will increase by roughly 200–300%	Mobility is a good sign for the whole sector of passenger transport. It is essential to ensure competitiveness of the rail sector, through introduction of solutions aiming at establishing the station building as the centre where different means of transport connect and complement one another.

Source: Authors' own following internal analytical materials of PKP S.A.

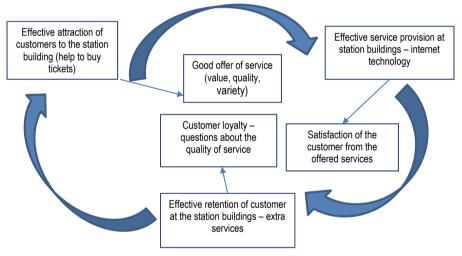


Fig. 3. Cycle relations with customer at the railway station [7]

service is customer satisfaction leading to customer trust and lovalty [2] through the formation and management of relations with the customer in accordance with the fig. 3.

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