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## MODERN TECHNOLOGIES VS THE GROWTH OF PASSENGER TRANSPORT

### Introduction

In recent years there has been a positive trend in Poland in the return of passengers to the railways. Rail operators have recorded a systematic increase in interest in this mode of transport, especially in long-distance transport.

Participants of the railway market make every effort to attract passengers to the railways. Consistent safety policy, improving the quality and attractiveness of the offer, investments in modern rolling stock and increasing the speed of trains are reflected in the growing number of passengers.

### The research problem and the research method

The poster presents the results of research carried out in 2018 relating to the reasons why rail passengers choose rail transport. Two groups of factors were identified:

1. factors encouraging to rail travel
2. factors discouraging to train travel

On the basis of these factors, the needs of passengers were identified, which were then reflected in their choice of this mode of transport. At the same time, areas which are railways weak points were identified and whose improvement could attract more passengers.

Finally, the actions taken by railway operators to attract more passengers were presented.

### Results

800 people were interviewed. The following factors influencing the choice of train travel were identified during the study:

- ✓ comfort of travelling - here passengers mentioned above all modern rolling stock, comfort in the carriage (air-conditioning, possibility of connecting a laptop or mobile phone to a socket, cleanliness, nice service), speed of travel,
- ✓ safety of rail transport - the second most important factor for passengers, awareness of the fact that rail is the safest mode of transport is increasing,
- ✓ travel time - no traffic jams, high-speed trains,
- ✓ price offer - affordability of tickets, holiday and weekend offers, family discounts,
- ✓ punctuality of trains,
- ✓ accessibility of connections - as a result of European policies, national and local authorities, especially in large cities where distances are long, ensure good access to railway stations.

The results of the research are presented in the chart below:

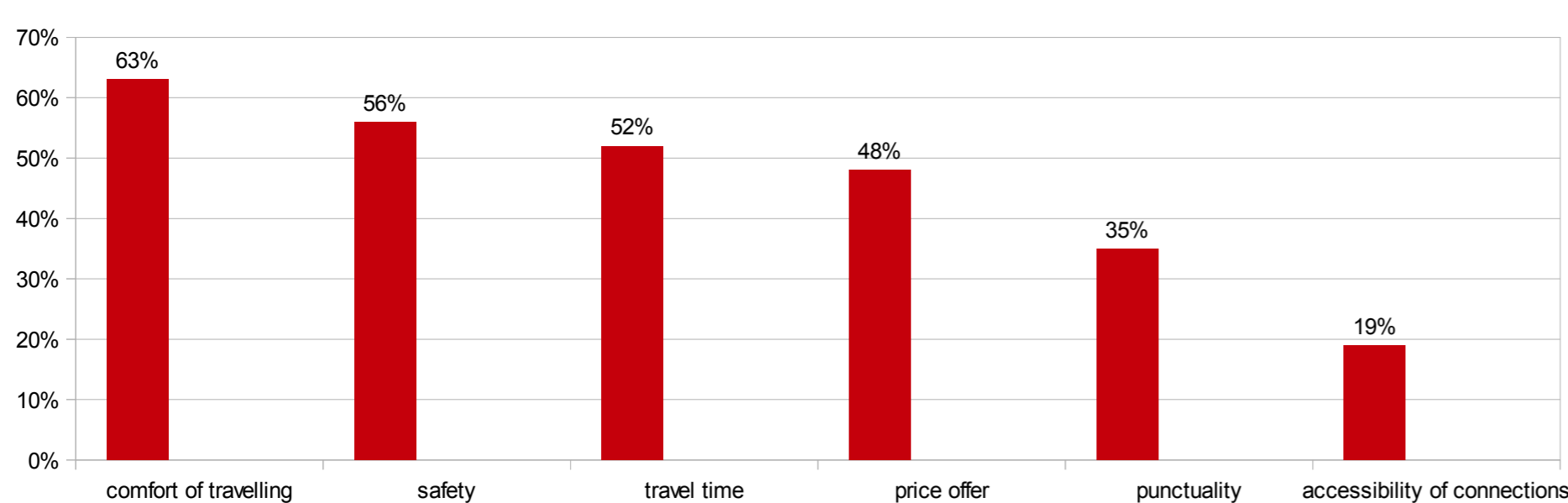


Fig. 1 Factors encouraging to rail travel

Subsequently, the factors which constitute or have the potential to determine whether rail transport should not be selected during the journey were identified. These are:

- ✓ condition of rolling stock - the most frequently pointed out issue was the possible poor condition of rolling stock; at the same time, passengers pointed out that improvements in this area in recent years have been visible and are satisfied with it,
- ✓ punctuality of trains - a high percentage of respondents indicated a discouragement to the railways due to frequent and significant delays of trains, which are largely due to the nationwide modernisation of railway lines,
- ✓ lack of train communication - sometimes lack of train communication between towns and cities leads to the choice of another mode of transport; passengers are not satisfied that they have to wait a long time for the next train when arriving at the intermediate station, because the previous train left 5 minutes ago,
- ✓ unsatisfactory price offer - some passengers are not satisfied with the price offer, consider rail to be an expensive means of transport and criticise the lack of combined tickets of different carriers,
- ✓ accessibility of connections - passengers give up railways, especially when travelling to work, if they do not have convenient access to a station or railway station.

The results of the research are presented in the chart below:

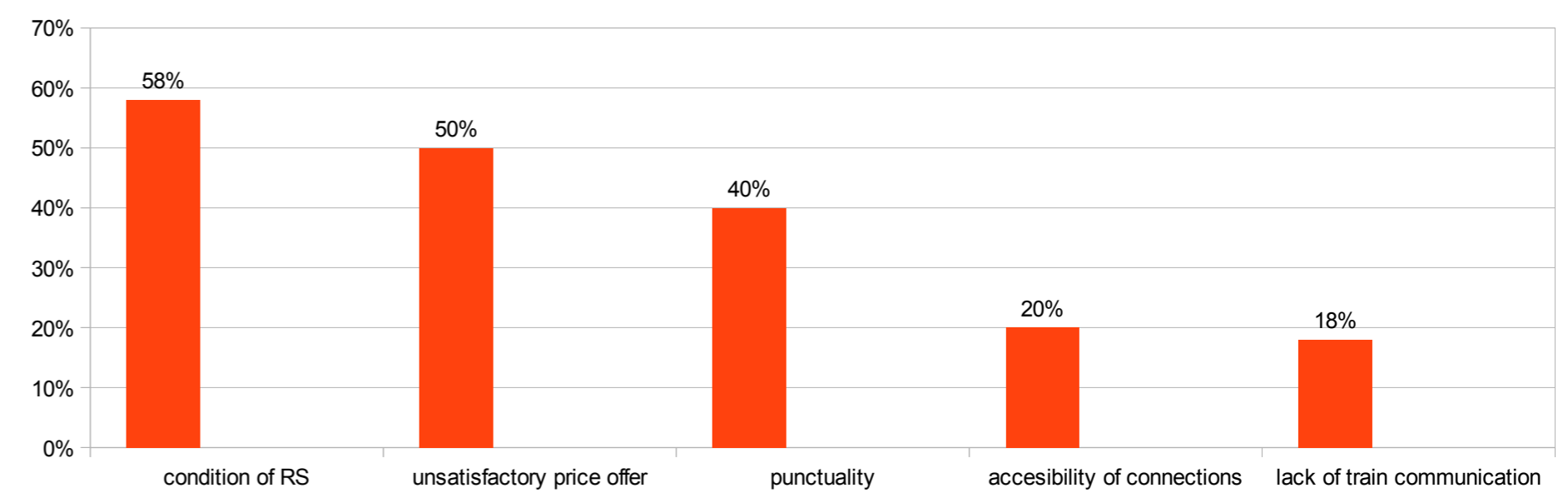


Fig. 2 Factors discouraging to train travel

### Activities promoting the growth of rail passenger transport

In order to attract passengers to rail, many measures are being taken, both at national and local level. They are as follows:

- ✓ major investment in rolling stock - purchase of modern trains and modernisation of old ones,
- ✓ improving the quality and attractiveness of the offer so that it will be well designed, have a properly dimensioned sales and service systems, and be accessible to all, including the disabled,
- ✓ integration of ticketing systems for railways - urban transport or the issue of a common ticket for different operators,
- ✓ a well-planned timetable,
- ✓ loyalty programmes,
- ✓ continuous improvement of safety,
- ✓ increasing travel speed - shortening travel time over long distances,
- ✓ modernisation and proper management of infrastructure,

It is important that all these elements happen at the same time. Most of the funds are spent on upgrading rolling stock and infrastructure, as this is the key to achieving the growth in passenger transport assumed in the country's policy.

### Conclusions

The results indicate that passengers put modern, comfortable rolling stock first. This is related to safety, which is ranked second. Modern rolling stock and modernised infrastructure are important safety elements. Therefore, there is a need for further projects in this area with the use of modern technologies, which have been developing dynamically in recent years.

It is also necessary to work on the consolidation of various services related to travel and cooperation of carriers in order to achieve customer satisfaction. The transport market needs to be constantly monitored, but there is no single reliable way to ensure that all needs and requirements are met.

### Summary

The return of passengers to rail is becoming an increasingly real prospect in transport policy. However, there is a need for cooperation between operators and infrastructure managers. Passengers will choose rail if it pays off. The supreme aim of all measures should be to increase the comfort of travel and to reduce travel time. Road connections will not solve this problem.

The success factor in this area is the correct characterisation of the market - recipients and their needs. Achieving transport growth requires funds, but also a good image of the railways. It is the passenger who shapes the transport market, so it is worth fighting for it, e.g. through an attractive offer.



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