

Customer Satisfaction Surveys for Public Transport Companies – Greater Efficiency through more Demand-Orientated Methods –

Workshop 1d: Public transport: How can public transport meet the increased mobility demand?

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1 Introduction

Growing competition, tighter financial margins and increased quality awareness have led to customer orientation in public transport companies in recent years. Like all other market-oriented service organisations, transport companies have to tailor their service supply to the wants and needs of their customers. Customer satisfaction surveys are an increasingly popular instrument for identifying the expectations of both existing and potential customers.

The results of these surveys are an important source of information for quality assurance and provide starting points for strengthening customer loyalty and for acquiring new customers. Taking these findings as a basis, companies can then target investment where it can make the best possible contribution to acquiring or increasing the transport market share.

It should be remembered that customer satisfaction analyses in the public transport sector are subject to different conditions than those that apply for example to the consumer goods sector. Satisfaction is not the only factor that influences behaviour when it comes to choosing a means of transportation. On the one hand, there are those who rely on public transport as a means of getting from A to B, while on the other there are those who have a choice between different means of transportation. Moreover, the freedom of the individual to decide can vary from one situation to another.

Traditional survey methods are not sufficient for this objective. They do not take into account that the personal choice of a transport mode is not only a result of the customer's satisfaction but also of a range of other factors, such as the accessibility to a certain mode in a certain situation.

The method for customer satisfaction surveys applied here therefore pays particular attention to the relationship between customer satisfaction and actual travel behaviour when it comes to choosing a means of transportation.

2 Requirements for a customer satisfaction survey in the public transport sector

The specific conditions that prevail in the transport market must be taken into account in customer satisfaction surveys for the public transport sector in order to achieve meaningful results that transport companies can work with.

In February 1999, the *Socialdata* institute, together with a number of transport companies, founded the working group 'Customer Orientation'. The aim was to combine expert knowledge of the transport market with methodical know-how on to the implementation of customer satisfaction surveys. Today, this working group is made up of transport companies from Austria, Germany and Switzerland, for example Wiener Linien GmbH & Co. KG, Hallesche Verkehrs-AG, Verkehrs-Aktiengesellschaft Nürnberg, Stuttgarter Straßenbahnen AG, BVB Basel and the *Socialdata* institute. The transport companies have given the *Socialdata* institute the task of carrying out mobility surveys and have shown great interest in the development of a method for customer satisfaction surveys for the public transport sector that provides clear indicators for a sound investment policy. The participation of the transport companies has helped to provide a practical orientation in the development of the method.

WORKING GROUP "CUSTOMER ORIENTATION"



- Objectives -

- To combine expert knowledge of the transport market with methodical know-how
- To analyse current customer satisfaction examination methods
- To further develop the method for customer satisfaction surveys
- To deduce specific recommendations for the participating transport companies for increasing customer loyalty and for acquiring new customers
- To promote an exchange of experiences among the participating companies

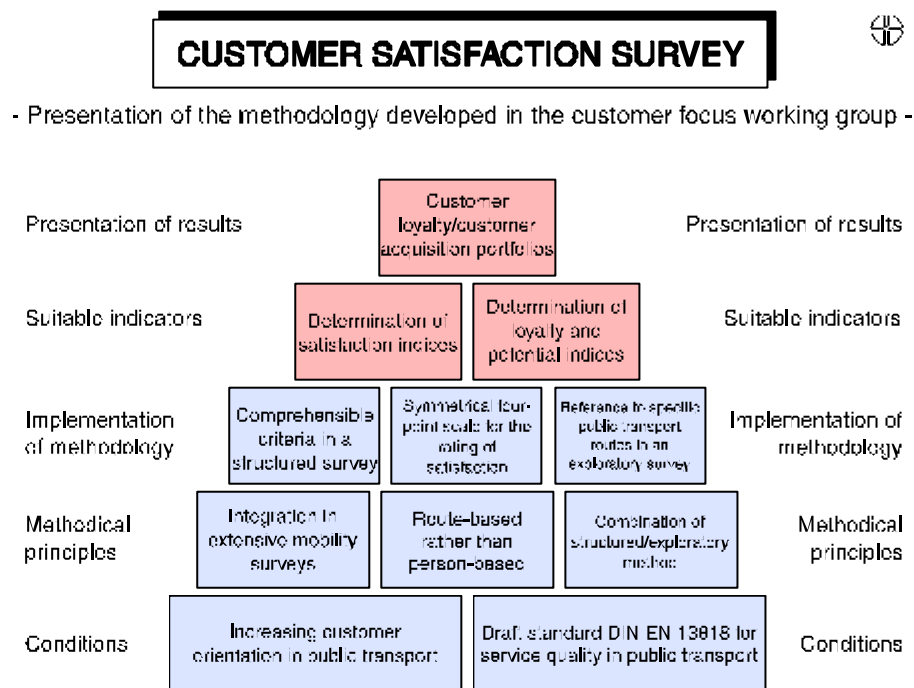
The working group 'Customer Orientation' looked at the specific conditions that prevail in the transport market, as well as the resulting consequences for the methodology of a customer satisfaction survey in the public transport sector. The methodology used in other customer satisfaction surveys in the public transport sector was also analysed.

A number of problem areas emerged in the course of the discussion. These covered issues such as the definition of a public transport customer, the methodical approach to be adopted, and the presentation and interpretation of the results. The results of this discussion are presented in the chapters below.

3 Methodical Principles and implementation of the method

The development of this method is based in principle on the assumption that peoples' choices of transport are influenced by a number of different components, and that there is no linear relationship between (dis)satisfaction and (non-)use of public transport. The decision for or against public transport is influenced by a combination of perceptions, opinions and experiences. However, the specific circumstances of a trip and the level of dependency on public transport also have an influence on peoples' choices when it comes to means of transportation. This has to be taken into account when issuing recommendations based on customer satisfaction surveys to public transport companies. Investment towards improving performance criteria that have been assessed negatively should ideally be made in situations where additional customers can be won or customer loyalty can be increased.

Apart from these basic considerations, specific conditions have been taken into account for the development of the method currently used by the public transport companies of the working group 'Customer Orientation'. The method is also based on carefully selected methodical principles, which are explained below.



The needs and requirements of (potential) customers have become the centre of attention when structuring the service supply.

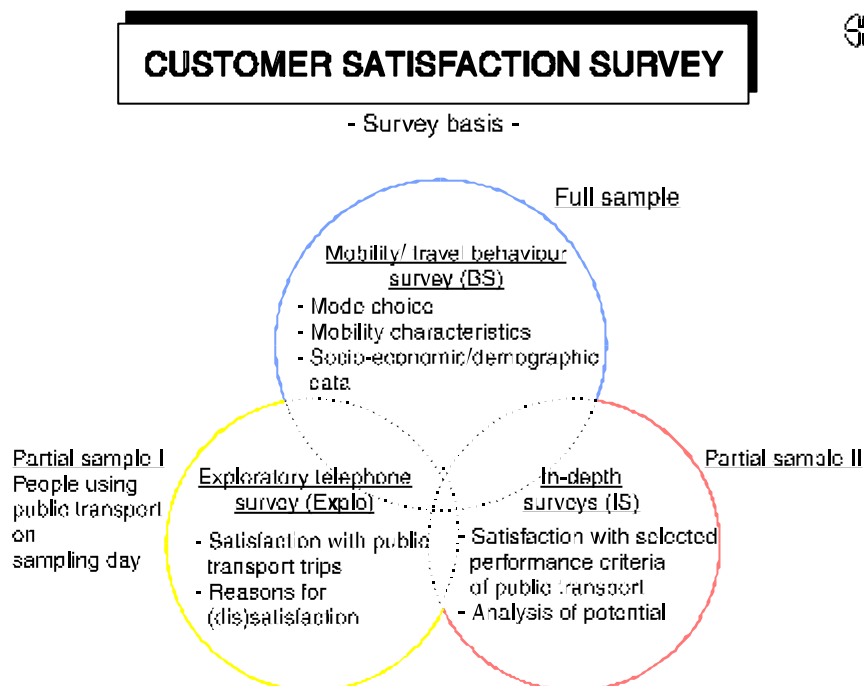
Customer orientation must also be the main priority when conducting customer satisfaction surveys for public transport companies so that communication for the customer is as comfortable as possible. For this reason, (potential) public transport customers were included at an early stage in the development of the current method. This was done, for example, by analysing the public transport criteria that are frequently the subject of questions in customer satisfaction surveys. Furthermore, the use of open questions in the event-based, exploratory survey shows the client that she/he is not only supposed to react to a predefined format, but that her/his actual experiences with public transport are of great interest for the companies.

The proposed method for a customer satisfaction survey was developed in compliance with the standard **DIN EN 13816** "Public Passenger Transport – Service Quality Definition,

Targeting and Measurement". This standard contains specific requirements and recommendations for conducting "Customer Satisfaction Surveys" in the public transport sector.

The new approach combines several methods to one efficient tool. The integration of the customer satisfaction survey in a comprehensive self-administered postal mobility survey, which used the **New KONTIV² Design** including intensive face-to-face follow-up interviews, produced data that indicates whether a change of behaviour of the respondents regarding a switch to public transport or other means of transport is actually possible. By this the potentials of public transport and the risk of losing a customer can be evaluated. It is also possible to determine the precise conditions under which the respondents made their journey (purpose of journey, duration of journey, starting point and destination, etc.). This information is extremely valuable for public transport companies, as investment can be targeted towards areas where increased satisfaction can lead to increased customer loyalty and use of public transport. A further part is a telephone survey, where the satisfaction is surveyed on the basis of actual conducted trips. This makes it possible to directly link the interviewed person's views and attitudes with her actual travel behaviour and her possibilities of using public transport or other modes. The whole approach is very customer-minded as many of the questions are developed together with customers. The use of open questions gives the customers the freedom to tell personal experiences instead of responding to a ready-made scheme.

The following diagram illustrates the points of intersection between the extensive mobility survey and the customer satisfaction analysis.



This will be expanded to include the application of a **micro-simulation model**, which illustrates the relationship between satisfaction, behaviour, risk of migration, and potential.

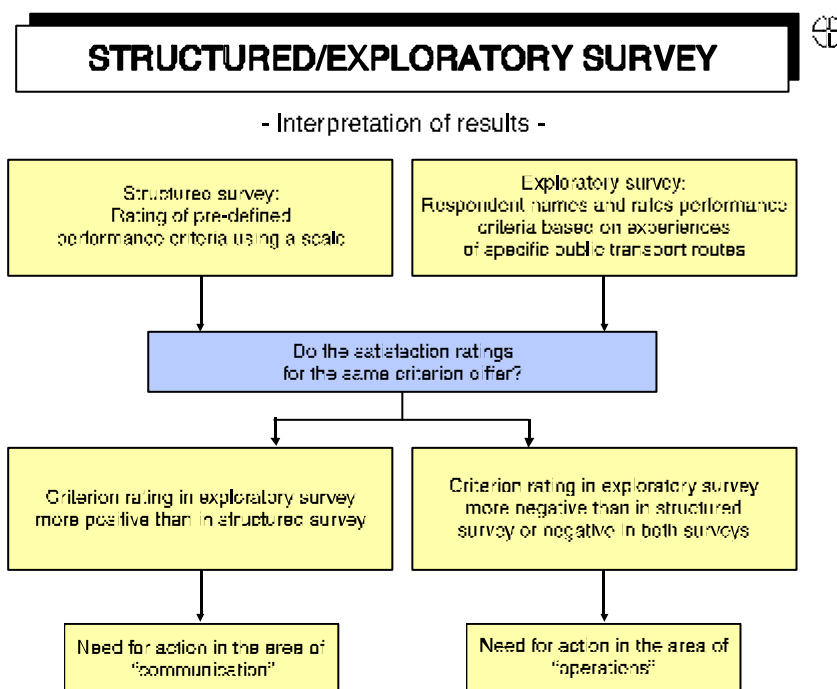
Given that both, structured and exploratory customer satisfaction surveys, have their strengths as well as their weaknesses, the survey method presented here is not restricted to the application of one of these principles, but instead offers a combination of both.

With the structured method, the respondent is presented with a list of public transport criteria (e.g. “punctuality”, “friendliness of staff”) and is asked to rate these criteria using a predefined scale of satisfaction levels. This survey is not based on specific public transport trips and therefore reflects the “overall impression” of the respondent, including any bias she/he may have.

The event-based exploratory survey, on the other hand, makes reference to specific public transport trips travelled. The benchmark data for these public transport trips is already known to the interviewer from the preceding extensive mobility survey. The exploratory survey is conducted by telephone once the data from the mobility survey is made available. The respondents are asked to express their satisfaction with the public transport trips travelled and to name the factors that influence their satisfaction rating. The problem of receiving strongly emotional responses in surveys conducted either during or directly after a public transport trip is avoided by employing the method of the exploratory telephone survey. At the same time, the important link to specific trips is maintained.

The combination of structured and exploratory methodologies means that both, existing customers and potential customers, are included in the customer satisfaction survey. Furthermore, the exploratory survey draws on the “expert opinion” of public transport customers. This also helps to put the criteria ratings from the structured survey into perspective. If, for example, the criterion “friendliness of staff” receives a much lower rating in the structured survey than in the event-based exploratory survey, this may in fact be a classic case of bias that doesn’t reflect the actual experiences of people travelling on public transport. In such cases, an advertising campaign depicting staff as friendly and competent might be a good investment.

A comparison of the satisfaction ratings for a specific criterion from the structured and exploratory surveys gives transport companies a good indication as to whether it is better to invest in information and communication with (potential) customers, or in operations (investment in infrastructure, technology, fitting out vehicles, etc.).



The interaction between satisfaction and the potential data from the intensive surveys can be used as a basis for conducting a potential analysis (customer acquisition), as well as for determining the risk of migration by customers (customer loyalty), which is related with the determined satisfaction ratings. The relevance of individual performance criteria with respect to actual public transport use can be examined accordingly.

To illustrate how interaction between satisfaction indices, and potential and risk of migration indices in the current method is a useful indicator of the actions that contribute to customer loyalty and customer acquisition, let us take the fictitious public transport company “Danube Lines” as an example:

According to the data obtained in the mobility survey based on the new KONTIV² design, around 30 % of the customers of “Danube Lines” are ‘Captives’, i.e. persons who only use buses and trains for the lack of a better alternative. 20 % of the customers use public transport as “choice riders”, which means that they may switch to another means of transportation at any time.

The greatest risk of migration lies with the choice riders who make up 20 % of the customer base. Their satisfaction is therefore very important for “Danube Lines”. The index for the “risk of migration” or, at the other end of the scale, “customer loyalty”, is calculated from the percentage of choice riders who are dissatisfied with a particular feature. The risk of migration is expressed as a percentage in relation to current public transport use.

When examining potential for new customer acquisition, the reasons for a specific trip not being travelled by public transport is significant. The more frequently a specific performance criterion prevents the public transport provided by “Danube Lines” from being used, the more important it becomes in terms of new customer acquisition. The results are expressed as percentage values here as well. They indicate the maximum value, by which the existing customer base can be increased.

The results of the determined satisfaction, loyalty and potential indices are presented in the form of two portfolios in order to illustrate the need for action by the public transport company in relation to performance criteria. The first is the portfolio ‘**customer acquisition**’ with the axes ‘**satisfaction and potential**’, while the second is the portfolio ‘**customer loyalty**’ with the axes ‘**satisfaction and risk of migration**’. The satisfaction axis is intersected by the mean value of all satisfaction indices. Similarly, the potential and risk of migration axes are intersected by the mean value of the potential and risk of migration indices respectively. The satisfaction indices that were determined for the individual performance criteria are entered on the satisfaction axis, while the potential that can be developed/risk of migration is entered on the potential axis/risk of migration axis with regard to public transport use for the respective city.

The “customer acquisition” and “customer loyalty” portfolios are each made up of four action areas/quadrants, which establish the different priorities with regard to the need for action:

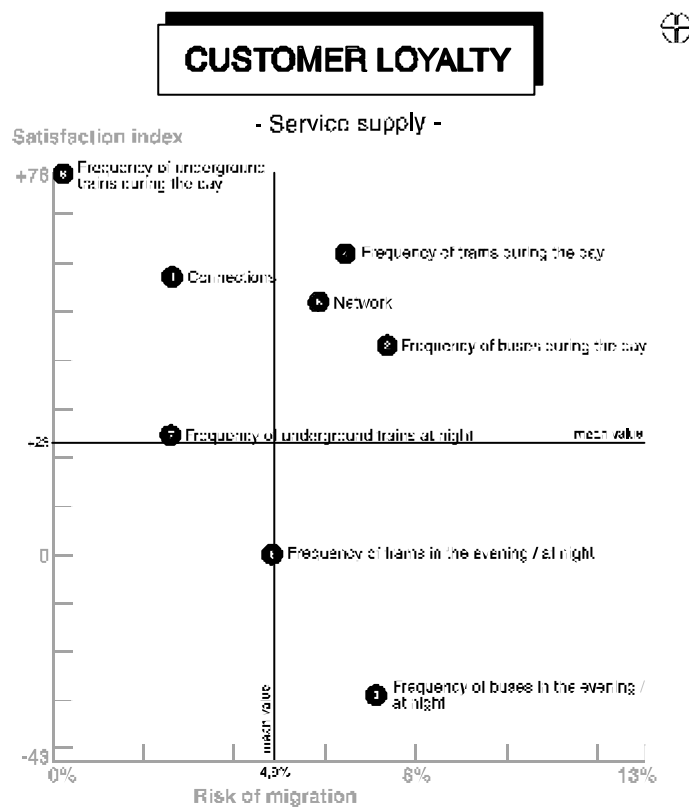
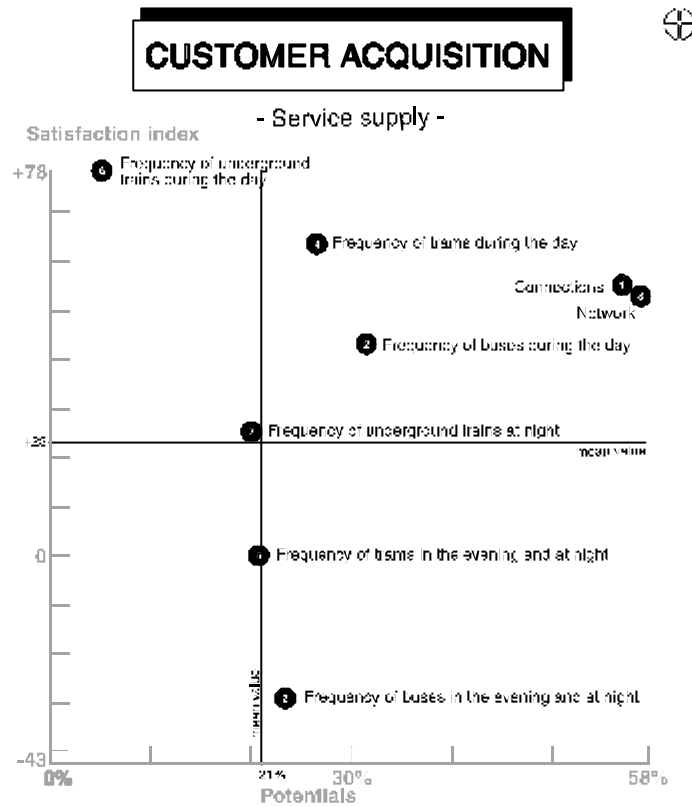
The greatest need for action lies in the bottom-right quadrant, as this area combines low satisfaction indices with high potential acquisition options or a high risk of migration.

The top-right quadrants contain criteria whose satisfaction rating lies above the average rating for all criteria, while at the same time demonstrating high potential acquisition options or a high risk of migration. Investing in communication with potential customers could help acquire new customers in this case.

The bottom-left quadrants contain criteria whose satisfaction rating lies below the average. However, given that there is also a low risk of migration or low potential acquisition options here, the need for action should be assessed in each case.

The top-left quadrant contains criteria for which there is no acute need for action.

The customer loyalty and customer acquisition portfolios below illustrate how the criteria relating to the topic of “service supply”, which were queried among the companies participating in the working group ‘Customer Orientation’, are classified.



This can be better explained by means of an example dealing with the interpretation of the previous portfolios. According to the “customer loyalty” portfolio, a maximum of 7.7 % of existing customers could be lost if the criterion “frequency of buses during the day” is not improved. On the other hand, according to the “customer acquisition” portfolio, the existing customer base could grow by up to 23 % if the criterion “frequency of buses during the evening/at night” is improved. Investment in this area would therefore be worthwhile.

4 Outlook

The transportation companies participating in the working group ‘Customer Orientation’ see the method for customer satisfaction surveys presented here as a demand-orientated approach, which provides a base for well-aimed and successful investment, which in turn contributes to customer loyalty and new customer acquisition. It offers a base for improving economic effectiveness.

Possible bad investments in areas that neither contribute to new customer acquisition nor to increasing loyalty among existing customers, and that are made simply because the majority of respondents in a customer satisfaction survey gave a performance criterion a negative rating, can be avoided by taking account of the probable future means of transport choices made by (potential) customers.

The method for customer satisfaction analysis presented here cannot, of course, remain static. It must undergo continuous optimisation. To presenting the results of customer satisfaction surveys at future meetings of the working group, the participants also plan to continuously monitor the surveys to determine whether they are suitable for fulfilling the needs of the service provider and the priorities of customers in their present form. Changed requirements of transport companies and of customers will then be incorporated in the method for customer satisfaction surveys.

5 Literature

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