Marketing in public transport is an investment, not a cost

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Abstract:

Research into factors affecting public transport patronage shows that subjective factors (perception of supply available) are as important as "objective" (actual supply) factors. However good or bad a given public transport system might be, potential users perceive it in their "subjective world" as worse than it really is. But here are possibilities for improving public transport without really changing it, by correcting the "subjective world".

In order to reach this, a marketing approach had been developed by the consultancy SOCIALDATA: "Individualized Marketing". Its starting point is the recognition that in opposition to the use of public transport is a lack of experience and motivation to use it. Potential users of public transport therefore have to be directly contacted in order to motivate them to think about their behaviour. After this they are informed about the availability of public transport. Possibly, selected test candidates are given a ticket to use public transport free of charge for a limited period of time.

An international demonstration project has been carried out in co-operation between SOCIALDATA and UITP (International Association of Public Transport) to prove this approach. About 50 projects in 13 European nations were conducted. In almost all cases the use of public transport increased significantly. Moreover, people's attitudes on public transport improved - proof that Individualized Marketing is successful both in terms of improving the "subjective worlds" and of increasing public transport patronage.

In the meanwhile, Individualized Marketing has been applied in scales of several thousands of households. All projects had been extremely successful. In all cases the surplus revenues have always been above the amount needed to finance such a measure. It is therefore a proven method to increase public transport patronage - without costs!

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Introduction

The users of public transport are likely to be called transport subjects, but in fact they are customers. Customers have to be paid attention to as well as one has to respond to their real needs and wants. This has been realized in the case of public transport in the providing of systems and system improvements. However, it has only too often been ignored that these systems do not only have to function, but that they also have to be recognized by the (potential) customers as a real alternative to their behaviour.

In fact there are sufficient research results which show that information about alternatives in using public transport is quite insufficient and the perception of these alternatives - even if they are recognized - is worse than they really are. Public transport in actuality is better than in the subjective world of its potential customers. Because this subjective world - no matter how distorted it may be - is the basis for behaviour decisions, there are possibilities for improving public transport without really changing it. By correcting the (incomplete and too negative) subjective perception (so-called "soft policies") such a correction - this has been demonstrated in respective studies over and over - could mobilize potentials in the same scale as system measures.

In order to reach this, a marketing approach had been developed by the consultancy SOCIALDATA: "Individualised Marketing" (Indimark). Its starting point is the recognition that in opposition to the use of public transport is a lack of experience and motivation to use it; potential users of public transport therefore have to be directly contacted in order to motivate them to think about their behaviour. After this they are informed about the availability of public transport. Possibly, selected test candidates are given a ticket to use public transport free of charge for a limited period of time.

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In the meanwhile, Indimark has been applied in scales of several thousands households. All projects had been extremely successful: In all cases the surplus revenues have always been above the amount needed to finance such a measure. Indimark has also been applied successfully in projects that aim at reducing the share of motorised private transport (MPT) by increasing the use of the so-called environment-friendly modes (walking, bicycle, public transport).

This paper shows background, concept, applications and perspectives of this innovative marketing approach.
In German cities the percentage of public transport is currently 16%; that means that 84% of all trips are made with other modes. About a quarter (24%) of these trips are bound by matter of constraints (e.g., use of cars for business reasons). For a further 26%, public transport currently does not offer good connection.

For the remaining third, there are only subjective reasons for not using public transport. That means, using public transport would be - without any system improvements - possible at any time, if suitable means of information, communication and motivation were brought forth. This potential is the largest sector, and more than twice as high as the current percentage of public transport in German cities.

Measures to activate this potential certainly have to be very professionally adapted to the specific needs of public transport as well as to its potential customers, where priority has to be given to better information. If the concept of customer orientation is taken at all seriously, information has to be "brought" to the customer instead of expecting him to "catch" it from the provider. Considering that the extent of the information deficit prevents using an already existing alternative in public transport, the importance of such "information-bringing concepts" cannot be overestimated.
In 1976 nearly half of all citizens in (West) Germany had not been informed about public transport alternatives (trips without constraints and with adequate connections). Barely 20 years later this share has risen to 54% - proof, that the amount of information available concerning public transport, today in the so-called information age, is growing worse.

Next to an insufficient level of information there are primarily negative perceptions that prevent public transport usage. Respective studies show that travel time and travel costs for public transport are clearly overestimated.

Now, one may suggest that all necessary information about public transport is available somewhere. But all empirical surveys show, that this information does not reach these target groups. Because this problem can only be lessened and not solved by more sophisticated designs which still require the (potential) customer to inquire for information (e.g. customer/mobility centres), other approaches bring greater success: The individual motivation in direct contact (Individualised Marketing).

With this concept, a further problem is resolved at the same time, which causes more and more tension in the discussion about possible changes in mode choice: Because every person takes on average about 1000 trips in the course of a year, different modes, depending on the situation, have to be used. The "classic" distinction into "public transport users", "cyclists" and "car drivers" is in this case less helpful. At the same time nearly everyone will have in these 1000 trips such trips where public transport offers a good, a bad or even no alternative. Sadly, the last one - "the impossible trips" - seem to dominate peoples' thinking and too often these impossible trips are being used as explanations or excuses why people don't use public transport, even for the "possible trips". However, through individualising there is a chance to get to the case of the "possible trips" and to inspire behavioural changes.
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These changes in behaviour may seem small, but corresponding model calculations show that it takes just a little change in behaviour to cause a considerable increase in public transport patronage.

### POTENTIALS FOR CHANGE - GERMAN CITIES (1995) -

<table>
<thead>
<tr>
<th>Mode choice</th>
<th>Trips per person/year</th>
<th>Increase by 15%</th>
<th>In 3 years (each year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walk</td>
<td>23</td>
<td>24</td>
<td>8</td>
</tr>
<tr>
<td>Bicycle</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor-bike</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Car as driver</td>
<td>39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Car as passenger</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public transport</td>
<td>16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1995, on average, every German city dweller took 160 trips with public transport. If, for example, we wanted to increase this share by 15%, a change in the mode choice for 24 trips would be necessary. That means, two trips per month (there and back). In case we would want to reach this goal over a period of three years, there would have to be a change per person and per year of just 8 trips, i.e. two trips per quarter year - changes of behaviour which surely can be called moderate and in no way require "the total change", which is proclaimed by some critics.

In the beginning of the 90s SOCIALDATA undertook a series of projects with experimental character, in order to prove the effectiveness of so-called "soft policies". The starting point of these experiments was the recognition that in opposition to the use of public transport is a lack of experience and motivation to use it; potential users of public transport were directly contacted with intent to motivate them to think about their behaviour. After this they were thoroughly informed about the availability of public transport. As an additional incentive to use the public transport, selected test candidates were given a (transferable) ticket to use public transport free of charge for one full month. Behind this measure was the idea that by using the public transport the distorted perception, which can be found in peoples “thinking”, would be "corrected" and insofar, the public transport really could be established as a serious alternative in the subjective world of the test candidates.
A fundamental result of this experiment has been that direct contact to the customer is of decisive importance. For this direct contact, a three-stage procedure has been developed; measures should therefore be based upon the following standard:

- Motivation
- Information
- Experience of the system (e.g., by supplying a ticket free of charge for a limited period of time)

The first experiment was carried out in 1991 in the city of Kassel, which was extremely successful: The use of public transport for the test group nearly doubled - with constant mobility indicators. These effects remained nearly constant for four years (without further measures). A similarly encouraging result has been brought by a second experiment, which was carried out in 1993 in Nuremberg. Both experiments showed that the biggest percentage of new trips has been won in off-peak traffic (the field with the biggest potential).

Concept

The success of these experiments has been repeated in similar projects in other cities. The result has been that in the meantime a number of companies have taken and applied the idea of Individualised Marketing, usually with the aim of broad application. In scales of several thousands of households, it is nevertheless becoming clear that not every household - as in the first experiments - can be visited and perhaps receive a test ticket. Furthermore, a method must be developed that allows "suitable" households to be selected, (that means households in which an increased use of public transport is generally conceivable and where intensive contacting, motivating, and informing lead to the desired result) and to separate them from those households which already use public transport and where an increased use of public transport is not conceivable.

For this a phase concept has been developed, employing a step-by-step procedure:
First, all households will be contacted by mail and / or telephone ("contact phase") and (internally) classified ("selection phase"). Here three main groups are formed:

- Group "I" (interested / interesting households) will be further looked after;
- Group "R" (regular users of public transport) will be "confirmed" in their behaviour (possibly rewarded with a little gift) and distinguished into "R with" and "R without" (additional) requests for information.
- Group "N" (not-interested / -interesting households) will no longer be looked after.

In the following "motivation phase" problems and requests of the group "I" and "R with" are pointed out in detail and immediately fulfilled in the "information phase" (by mail). In the "convincing phase" which follows, consultation phone calls and - upon request - home visits are being made. Finally, specially selected households of group "I" receive a "test ticket" (by mail or personal visit) to use the public transport for a limited period of time. Here it is important to note that for group "R", which is already using the public transport intensively, no test tickets are supplied. This would prevent the buying of ordinary tickets (the so-called "cannibalism effect")
Application

About this positive experience, a unique European Demonstration Project on Individualised Marketing took place in co-operation with the International Association of Public Transport (UITP). This task consisted of about 50 single projects in 13 European countries with (smaller) experiments as well as large-scale applications. Most of these projects have been completed, the positive conclusions introduced in this paper have been confirmed in nearly all of these projects.

Because of this success, a lot of public transport companies now have incorporated Indimark as a regular marketing measure and apply it in large scale.

An overview on all large-scale applications conducted by SOCIALDATA (size of target group several (ten-)thousand persons) show a significant increase in public transport patronage:

<table>
<thead>
<tr>
<th>Target group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>After</td>
</tr>
<tr>
<td>37</td>
<td>36</td>
</tr>
<tr>
<td>47</td>
<td>45</td>
</tr>
<tr>
<td>16</td>
<td>19</td>
</tr>
</tbody>
</table>

The public transport share in the (contacted) target group rose from 16 % before to 19 % after - a relative increase by about one-fifth! The increases of public transport patronage in the control group are much lesser and mainly due to system improvements.
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A closer look at the use of public transport reveals that the increases took place predominantly with activities which are executed in off-peak times, those times where increases in public transport patronage are most welcome:

<table>
<thead>
<tr>
<th>Target group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before (100)</td>
<td>After (123)</td>
</tr>
<tr>
<td>Work</td>
<td>31</td>
</tr>
<tr>
<td>Education</td>
<td>38</td>
</tr>
<tr>
<td>Shopping and services</td>
<td>20</td>
</tr>
<tr>
<td>Leisure</td>
<td>32</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
</tr>
<tr>
<td>After (108)</td>
<td>Before (100)</td>
</tr>
<tr>
<td>Work</td>
<td>30</td>
</tr>
<tr>
<td>Education</td>
<td>19</td>
</tr>
<tr>
<td>Shopping and services</td>
<td>28</td>
</tr>
<tr>
<td>Leisure</td>
<td>25</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
</tr>
</tbody>
</table>

There is an increase in public transport of 23 % in the target group. The before / after comparison shows for the target group that the highest increases in the use of public transport took place in "shopping and services" and "leisure"
These findings are proven in an examination of the times of the day when public transport is used:

**TIMES OF THE DAY**

- Large-scale applications -

<table>
<thead>
<tr>
<th>Target group</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Before (100)</td>
<td>After (108)</td>
</tr>
<tr>
<td>After (123)</td>
<td>Before (100)</td>
</tr>
<tr>
<td>5 a.m. - 9 a.m.</td>
<td>9 a.m. - 3 p.m.</td>
</tr>
<tr>
<td>9 a.m. - 3 p.m.</td>
<td>3 p.m. - 7 p.m.</td>
</tr>
<tr>
<td>3 p.m. - 7 p.m.</td>
<td>After 7 p.m.</td>
</tr>
<tr>
<td>9 a.m. - 3 p.m.</td>
<td>3 p.m. - 7 p.m.</td>
</tr>
<tr>
<td>3 p.m. - 7 p.m.</td>
<td>After 7 p.m.</td>
</tr>
</tbody>
</table>

The main increases are between 9 a.m. and 3 p.m. and between 3 p.m. and 7 p.m.
Concerning the absolute number of trips made by public transport per person / year a rise of 35 trips (from 154 before to 189 after) can be stated for the target group. The control group shows an increase of 12 trips per person / year; this increase is mostly caused by system improvements.

Therefore, a plus of 23 (35 - 12) public transport per person and year are the effects caused by Indimark. Because new customers will buy tickets, there are revenues to offset expenditures. These revenues can - in contrast to system measures - nearly always balance the expenditures, oftentimes even exceed them. To verify this statement, it is definitely necessary to evaluate corresponding measures by precise follow-up studies. That's why SOCIALDATA accomplished cost / benefit analyses, bringing about the conclusion that measures of this kind pay off in every case.
The average of all large-scale applications shows a plus of 23 public transport trips per person/year. Multiplied by DM 1.30 revenue per trip this amounts to DM 29 revenue per person/year. Multiplied by the number of persons in the target group there has been a total revenue in every project that pays back the costs for it in the course of the first year. As this revenue is increased in the following years by at least threefold because the new customers stay in the system for a longer period of time (moder assumption: 1. year: 100 %; 2. year: 80 %; 3. year: 60 % etc.), Indimark leads to a remarkable surplus return.

Besides, Indimark brings a considerable image improvement to public transport and company:
The satisfaction with public transport increased considerably in the (contacted) target group (positive perception of public transport increased from 57% before to 74% after; negative perception dropped from 18% before to 10% after), whereas these perceptions remained almost constant in the control group.

With this, an "additional" benefit has been achieved and the importance thereof should not be underestimated as a positive subjective perception of public transport is the basis of an increased patronage. A number of positive letters and phone calls during the projects indicate that the reputation of the public transport company increased significantly.

In the meanwhile, Indimark has also successfully been applied in projects aimed at reducing private car traffic. A pilot project in South Perth, initiated by the local Transport Department, has been carried out in 1997. Again, the Indimark-concept of SOCIALDATA was applied, this time focusing a stimulation of use of alternative modes (walking, bicycle, public transport). In all phases, the Indimark campaign in South Perth received high response rates and a lively interest of the contacted inhabitants - proof of the efficiency of the concept. Moreover, the project's aim of reducing private car traffic by increasing the use to alternative modes was reached: The share of car drivers in the group which received no Indimark was significantly higher than in the target group. Consequently, the target group has a higher share in walking, use of bicycles and public transport.

This positive result is just another one in the story of success of Indimark.
Conclusions

- Through Individualised Marketing, the use of public transport can be increased quickly and over a whole area without system improvement. The biggest increases are where the greatest potential lies: in off-peak traffic.
- Through Individualised Marketing, the effects of system measures can at least be doubled.
- The transfer to public transport initiated through system measures is noticeably accelerated by Individualised Marketing.
- Individualised Marketing is not just covering its costs; it's even lead to a noticeable surplus in revenues - though its "costs" are supposedly high.
- Individualised Marketing is running "free of problems"; the "worries" with the population or with the decision makers which are associated with other campaigns do come about. The opposite does: The expressed willingness for customer orientation at a service is generally seen positively.
- Individualised Marketing leads to a measurable and rapid image improvement for public transport and its companies.
- Individualised Marketing is a very helpful means for so-called "internal marketing" to crack and change the "thinking in transport cases" (that still exists in many companies).
- Individualised Marketing prevents the "cannibalism effect" - which happens when free tickets and similar preferential treatment are provided (because these advantages are being used on a large scale by users, which otherwise would buy a ticket, this results - even if seldom calculated - in heavy losses of revenue).
- Individualised Marketing allows for the application of available (yet limited) financial means aimed directly at these points, where we can count on a reaction and prevent a low-level "flood of material" (mailings to all households, advertisements, posters), which is seemingly blowing in the wind at many respondents and can even create anti-reaction.

In other words: Individualised Marketing is the answer to the question how to increase the use of public transport - and to increase the revenues of its companies. Moreover, Indimark has proven to be successful also in terms of increasing the use of alternative modes in general (public transport, walking, bicycle).

It's application possibilities therefore are going far beyond the "conventional" marketing basis and offer an important marketing tool for the coming century.
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References:

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Switching to Public Transport
Brussels, July 1998