HOW TO ACHIEVE ACCEPTANCE BY CONSIDERING USER NEEDS IN PUBLIC TRANSPORT

Ralf Risser
FACTUM OHG, Vienna

Abstract

During the last years, the concept of social marketing has become central to part of the research connected to the goal of making public transport, walking, cycling, but also the acceptance of traffic safety measures more attractive. The concept of "marketing" is often used erroneously in the public: the part of the communication with the target groups is taken as pars pro toto by many. However, what is often forgotten by practitioners involved in marketing is that, according to the marketing theories, every measure has to be based soundly on information work: "information work" refers to the efforts made to collect as much information as possible about the target groups. He/she who wants to plan measures does so on basis of what he/she has learned about the users´ characteristics, their situation, their NEEDS and interests. The paper offered here deals with the part of information policy where it is tried to learn about needs and interests. From a psychological point of view the interesting thing is that qualitative methods are needed to learn about needs and interests, and a discussion of different results when using standardised instruments in comparison to qualitative mesures - e.g., narrative interviews - will be lead.

1 Introduction

User needs is a concept often used. It has come to be a slogan and gives evidence of a new awareness towards considering needs of the public in the course of, e.g., transport policy[1]. But when looking into detail, it gets clear that little is known about how to deal with this topic in practice. Especially in the public sector there is not much information available about how to tackle user-needs issues appropriately.

The objective of this paper is to elaborate on ideas and concepts for suitable ways and instruments to get the users more involved and to consider user needs more appropriately, in connection with transport management. In our work we refer, among others, to a TRB-Report about Marketing in the Public transport area (Ellmore-Yalch 1998), where a lot of the problems with respect to our topic are discussed in a convincing manner, based on practice examples.

User needs are often mentioned in literature. However it is rather difficult to draw general conclusions concerning what is really known with respect to this issue. This is among others due

- to the different definitions of "customers" - the users are often not considered as the most relevant customers
- to the different approaches taken with respect to the analysis of user needs
- to the different stages in the process of communication with the users, and also
- to the different problems (e.g., transport modes) dealt with in different studies

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[1] See also "The Citizen's Network. European Commission Green Paper" in which the European Commission wants to ensure that the needs of citizens are put at the centre of decisions about transport provision.

2 Objectives

Considering user need implies two main objectives connected to this contribution which cannot be dealt with separately:

1. Participation
   This means to get the public more involved. This would require the participation of the countries' population, or relevant parts of it, in the decision making process or even in the conceptual phase of the development of new services, or at all initial stages of service-improvement

2. User acceptance
   The precondition that any offered service is accepted by the users is that it considers their needs and interests[2] (depending on different degrees of involvement, on the question what subgroup one belongs to, etc.)

3 Two trends in society

When talking about user needs, and with respect to our objectives, we consider two trends to be of special interest:

   a) a rather new and still increasing awareness of environmental aspects

   b) an increasing demand for participation and involvement in what is offered on the market

ad a) The publication of reports which documented the contamination of air, water, animals and people in the late seventies, and also the suddenly perceivable consequences of technology (private car transport is one of the main issues in this respect) enhanced a broad public and political debate about the environment.

Earlier, the discussion of environmental impacts was left to small "green" groups. But during the 70's citizens in the industrial countries became aware of negative environmental impacts and of risks for themselves and the next generations[3].

ad b) Being more used to take the responsibility for their own decisions (see Beck 1986), the individuals now also claim more right of involvement in public decision taking, especially concerning matters which have influence on their daily way of life or their life quality. However, it cannot be expected that they voluntarily choose travel modes that make their life more difficult, unless they cannot avoid it.

Both trends have to be considered when talking about user needs. Having them in mind it gets clearer that the acceptance of any service does not only have to do with economical, geographical, topographical, topological parameters, but also with the interpretation of these parameters by different groups in society, and what it implies

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[2] Needs and interests are motives for behaving. There is a slight difference between what these two words mean. But of simplicity reasons, and because this procedure does not appear to us to reflect things erroneously, the concepts of needs, interests and motives will be used as synonyms

[3] I want to explicitly leave it up to the representatives of developing countries to discuss how this issue has to be seen in connection with societies in these countries
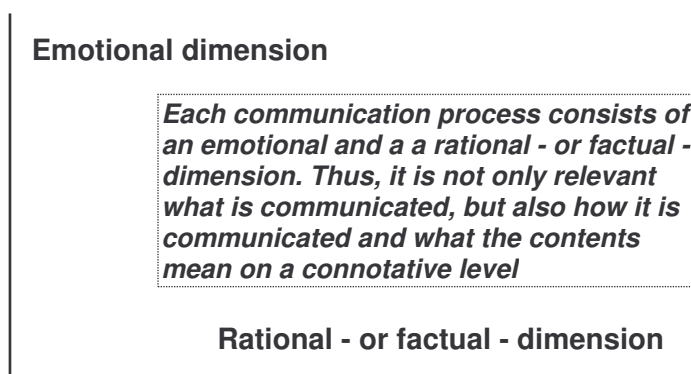
with respect to the population's needs and wishes. Are they considered adequately or not? This last question refers to the topic dealt with in the next chapter:

4 Two dimensions of communication

Any service can be seen as an element in the communication process *between those who offer the service and the public*. One should start there when talking about user needs and acceptance.

Each communication process consists of two dimensions, the rational and the emotional one (referring to Watzlawik et al., 1974). Figure 1 reflects this:

Fig.1: Two dimensions of communication

Emotional dimension

> *Each communication process consists of an emotional and a a rational - or factual - dimension. Thus, it is not only relevant what is communicated, but also how it is communicated and what the contents mean on a connotative level*

Rational - or factual - dimension

The rational dimension is characterised by the exchange of factual information. But not only pure facts are important for a successful communication. The emotional dimension is even more decisive. It includes connotations connected to the factual information, but also the way in which facts are communicated. Several functions are connected with the emotional dimension of communication. The most important ones are the following:
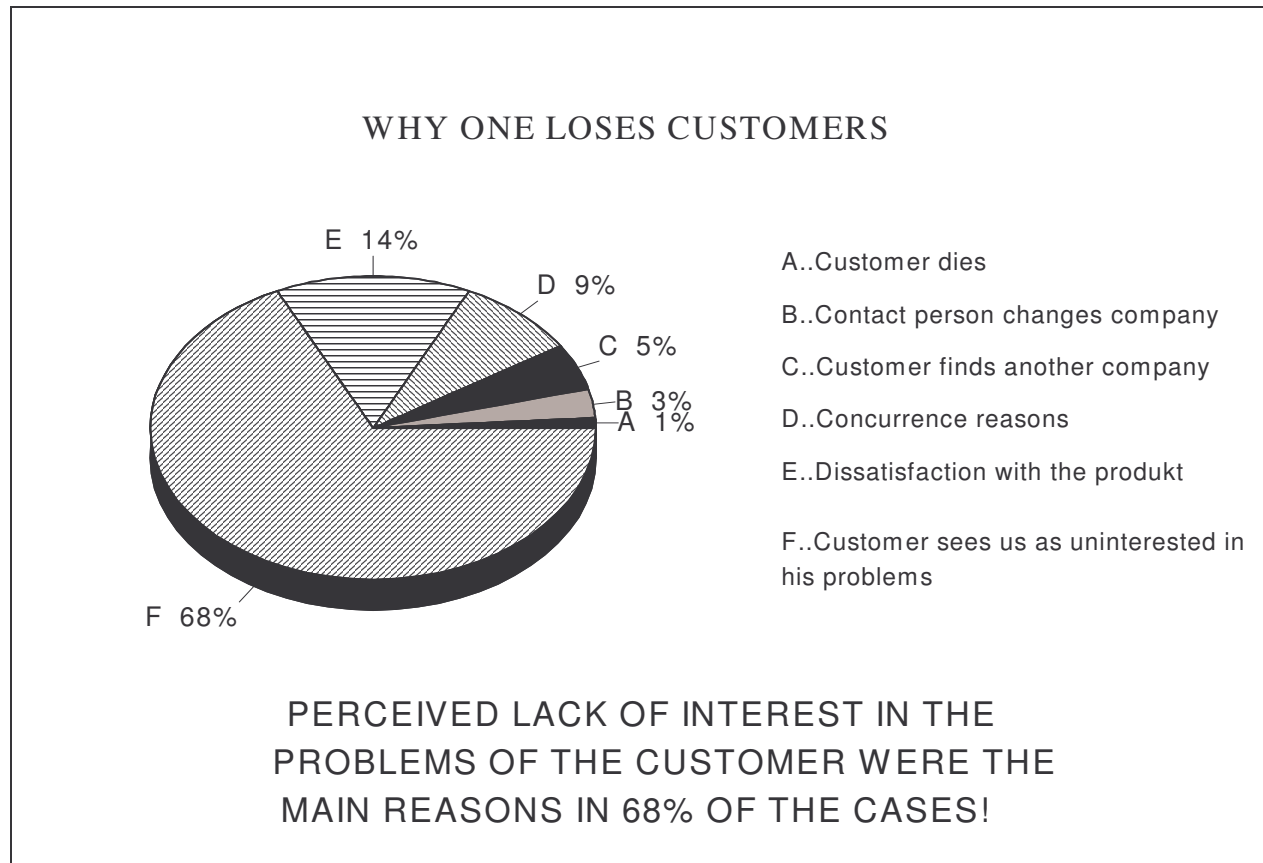
- one wants to be respected and taken seriously
- one wants to be allowed to tell ones own wishes and fears and wants to be sure that they are well considered; one wants to decide for oneself what is a good service
- one also wants to be informed about bad news, as this gives one the chance to react and to avoid damage[4]

If these needs are fulfilled in a communication process, the forwarding of facts and information will more easily proceed on the rational dimension.

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[4] In ancient times, the messenger who brought bad news was often executed. New theories dealing with human communication and system theories take in a radically different position in this respect: According to the *self regulation principles of systems*, it is easier to accept that mistakes, or problems occur, than not to know about them (Vester 1991). Psychologically speaking, not giving information can be interpreted as "wanting to hide something", which causes suspicion per se.

Figure 2 illustrates the necessity of considering relevant citizens´ (in our case: customers´) wishes and needs if one wants a satisfying communication process to develop. This figure was taken from a study by Asea-Brown-Boveri (ABB, 1993). The links raised within the framework of this study clearly indicate that, among other things, the need to be listened to with regard to one's own wishes is a very important need per se, because it reflects the fact that one is considered as important, which represents a central social motive (e.g., see Weiner, 1988). Furthermore, being listened to is a precondition for being able to express one's needs and interests, and to have them fulfilled.

Fig.2: Reasons Why One Loses Customers

WHY ONE LOSES CUSTOMERS

E 14%
D 9%
C 5%
B 3%
A 1%
F 68%

A..Customer dies

B..Contact person changes company

C..Customer finds another company

D..Concurrence reasons

E..Dissatisfaction with the produkt

F..Customer sees us as uninterested in his problems

PERCEIVED LACK OF INTEREST IN THE
PROBLEMS OF THE CUSTOMER WERE THE
MAIN REASONS IN 68% OF THE CASES!

5 Participation

When one looks at public transport as something that is provided by society, or by the state, then the concept of participation becomes very important. Various models of participation are known. There are models that require to give "pure information" about any service to the relevant user groups as a central issue. I would call them the simplified public officials´ perspective. Other models require to consider attitudes and positions of the users. Naturally enough, the latter ones are advocated for in this paper.

Much of what was said above has to do with participation. Participation is one possibility to take user needs into consideration. Lack of participation in processes that

affect oneself means, de facto, that other people discuss and decide things which then influence ones own life. We have indicated that voting in general elections can be felt as being much too general a "participation process" that is not strongly enough connected to more concrete issues that become relevant at irregular periods between general elections.

One consequence of being excluded from decisions that affect one´s own life can, according to social psychology, be reactance. This is of course most relevant with respect to captive riders.

5.1 Reactance

"When things that concern certain persons are decided without involving these persons into the decision making process, this may cause reactance", according to the concept of Brehm (1966), the *Theory of Reactance*. More generally, every event that reduces an individuals' possibilities to decide and to act freely (i.e. that "leads to a loss of options of action") is liable to cause reactance: The consequence may be the following (see also Witte 1989, or Herkner 1975):

* The motivation of the reactant person to set the unwanted behaviour increases (e.g., not to use public transport as soon as he/she no longer depends on it)
* The motivation to set a behaviour similar to the unwanted one increases (driving a car instead of using public transport, or going by taxi instead, etc.)
* The probability that the unwanted behaviour is carried out in spite of threat increases (e.g., even if taxes connected to car use are very high)
* The cognitive orientation is directed further away from the wished-for behaviour (more and new arguments against public transport use are developed)
* The expectation of further impairments of one's freedom of choice increases (car use becomes more difficult, this is caused by the same bunch who spend our money for public transport)
* Hostility and aggressiveness towards the actors responsible for these impairments increase

Reactance can lead to the rejection of a subject on the individual level, but it can also turn into factual *resistance* when people co-ordinate their reactant behaviour:

5.2 Resistance

There is a high risk that individual interests opposing a project like, e.g., to replace private-car transport in inner cities by public transport, can aggregate to become group interests, and in this case they may become a political power.

5.3 A democratic perspective

The principle of Participation can also be discussed from a democratic and an ethic perspective: Those who offer services have to satisfy those who are dependent on their decisions as far as possible. However, very often some arguments - that one

can almost call standard counter-arguments - are used to *discredit* participation. For instance,

$\Rightarrow$ Participation always ends up in increased costs
$\Rightarrow$ The procedures take too long time when too many actors are involved.

These are only two of several possible arguments against participation. But practice has shown that to consider the wishes and needs of the relevant user groups in fact improves the chances of services to be accepted and, thus, to pay. Good arguments *for* supporting user participation, among others, are the following:

1. *It reflects a basic democratic principle* and, thus, leads to better acceptance
2. *It helps to avoid unnecessary losses:* Good acceptance of services due to better and earlier information of the affected parts of the population should help avoiding losses of time and money
3. *It can be seen as a down-to-earth source of practical assistance:* The users are often able to give some additional and practical information as a complement to the more theoretical knowledge of the service providers

5.4 Two-way communication

A lack of communication does not necessarily mean that the users needs are not considered. It only means that, if they are considered, this will be according to what the service providers *assume* to be the users´ needs and interests, and not necessarily according to their real needs and interests.

Only explicit two-way communication with the users allows to learn about the needs and interests of different subgroups, and thus provides preconditions for a fact-based discussion process, that allows for a harmonisation of different types of needs and interests (Petty & Cacioppo 1986).

But of course, theories of social communication know of the pragmatical aspect of *manipulating communication partners*. In our case this would, e.g., be a communication process with the goal to give the other party *the feeling of being considered*, which makes this other party reduce attention and vigilance, and potentially gives service providers the possibility to act "unobservedly".

6 Acceptance

The concept of acceptance[5] has implicitly been discussed at several occasions above. Even in this connection we can differentiate between acceptance assumed by experts, and acceptance „measured" in the frame of a two-way communication process. In many cases when Acceptance is mentioned, statements rather refer to assumptions based on other sources than to data derived from such a communication process. In order to get valuable results concerning user acceptance, it is necessary

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[5]According to Dorsch (1982) Acceptance is reflected by the degree to which persons, activities, objects, or arguments are accepted well by (an) individual(s), having different degrees of preparedness to agree, to comply, to co-operate, etc., as a consequence

to carry out a comprehensive analysis of attitudes of different users. Such *analyses of acceptance are of advantage* in many respects:

a) They help to give a clearer view on where subjective impressions (of transport managers, of decision makers, etc.) with resepct to user acceptance correspond to facts, and where this is not the case; decisions based on erroneous assumptions can be avoided, thus

(However, acceptance of a planned implementation and of the real implementation almost always differ. One has to find ways to consider this appropriately when assessing service concepts before implementation, and some expert judgement is certainly needed)

b) They allow to analyse the interests of those user groups which are affected by any service, in detail

Results derived from such analyses can indicate which characteristics of the service will be accepted, and which ones not. The modification of such characteristics, if possible, or a different communication policy usually help to meet different group's interests better, and to avoid a more long lasting negative labelling

c) They help to avoid the development of *hypotheses* on short-comings that are based on anxieties, prejudices and impressions rather than on facts

Publication of acceptance-study data contribute to produce a more detailed and a more thorough description of any new implementation, and how it is perceived by fellow citizens (if this perception is negative, than see b) above)

6.1 Parameters of acceptance

Many acceptance studies only reflect the actual attitudes of the users towards a certain service. They give an overview about the actual state, but they disregard the reasons for such attitudes and how they have developed within the population, which makes prognoses on the stability of certain degrees of acceptance difficult. Acceptance reflects a present state. But to understand what influences acceptance, it has to be seen as a dynamic process which is affected by various parameters active in the past and/or are at present, and by what is expected for the future. This is why methods to evaluate acceptance should always include questions which ask for *reasons* for attitudes (**=** motives; on this issue of qualitative evaluation see, among others, Patton 1997). From this perspective, parameters for assessment can be summarised into two categories:

1. Parameters which refer to measurable and estimated consequences of the (planned) implementation = *"objective" parameters*, and

2. Parameters which refer to the wishes, needs and anxieties of the users, or to interpretations of facts; *subjective parameters*

6.2 Start acceptance studies at an early stage

An extensive discussion of service characteristics allows users to develop a more fact-based attitude towards the service. This allows the evaluator to anticipate the degrees of acceptance, of reactance phenomena and of resistance to be expected, already in the project planning phase. It is important, however, that the discussion does not just start when all relevant decisions have already been taken. This would end up in a pseudo-communication process which is usually not at all taken up well. Therefore, involvement of users should start rather early in the decision making process.

6.3 Advantages of acceptance studies

Thoroughly carried out acceptance studies in the course of participation processes that already start at the conceptualisation stage of services help to *avoid* that users´ assessments are developing in an unwanted, or unexpected, manner.

1. One consequence of such a development certainly would be that facts and figures are discussed and operationalised systematically, which should reduce the probability of errors and mistakes in public, with respect to measurable aspects

2. As far as interpretations of facts, and conclusions based on them are concerned: the only way to learn about these conclusions' accuracy is to interpret subjective data frequently and to evaluate them systematically and consistently. In this way, service providers will learn to understand acceptance data *usually* mean, in connection with certain types of implementations, at certain sites, under certain conditions, at different stages, etc. Results of such analyses can be summarised, e.g., in best and bad practice catalogues

Consequently, systematically enhancing user participation and evaluating the technical and social outcome of implementations provides the only chance to learn about

- how different services are usually assessed by different evaluators
- how different groups of citizens usually react to them, and
- how users` attitudes tend to change after the implementation under different conditions, compared to assessment at the pre-implementation stage

This would also mean that planning and supporting participation processes thoroughly may mean increased work load for the present time. But this work load is reduced step by step while one learns more about the characteristics of the communication process between users and service providers. The result of this would be that development and implementation of new services could work much more smoothly in the long run, whereas there is a considerable probability that services do *not sell* if acceptance will be low and the operators do not recognise that.
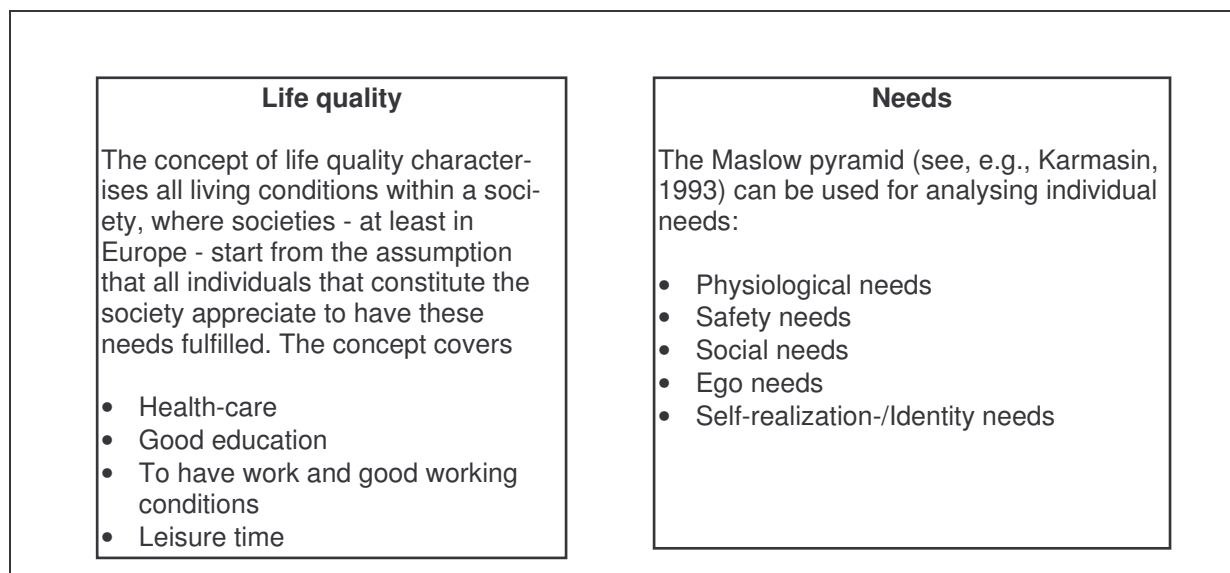
7 Aspects influencing public acceptance

Due to the fact that "the users" are no homogeneous group, it seems to be natural that any service may lead to a range of different reactions among different groups, often having clashes of interests as a consequence.

7.1 Values, Needs, Interests

Values are assumptions and feelings of what is "desirable", constituted and communicated by society or parts of it. In the course of socialisation each individual internalises assumptions of certain values, and connotations that frame that value. Internalisation means that socially established values are taken over by the individual ("feelings are learned", Schachter & Singer) and adapted to the individual's perspective. Values are looked upon as commonly accepted standards for orienting ones behaviour. According to this model, the hierarchy of predominant values should be seen as influenced by the social surrounding the individual is living in and his/her own disposition of needs. With a little bit of salt, two approaches for identifying different categories of needs (interests, motives) can be found within sociological and psychological literature (figure 3):

- Life-quality aspects: they refer to predominant values *referring to societal aspects and to interindividual comparison processes* and
- Individual needs: they are more narrowly connected to *individuals' private motives* (the concept that even they are learned and internalised still being valid)

Fig. 3: Life quality aspects and individual needs

<table>
<tr><td>Life quality

The concept of life quality characterises all living conditions within a society, where societies - at least in Europe - start from the assumption that all individuals that constitute the society appreciate to have these needs fulfilled. The concept covers

• Health-care
• Good education
• To have work and good working conditions
• Leisure time</td><td>Needs

The Maslow pyramid (see, e.g., Karmasin, 1993) can be used for analysing individual needs:

• Physiological needs
• Safety needs
• Social needs
• Ego needs
• Self-realization-/Identity needs</td></tr>
</table>

The following discussion on the topic "Conflicts of interest", where different values relevant for society, for different groups, or for single individuals, are at stake, mainly deals with examples from mode choice in transport. The reason is that there has been done some expert work on the topic in the EU project WALCYNG[6]. There,

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[6] WALKing and CycliNG instead of shorter car trips

strategies for the transfer of short car trips to walking and cycling were to be worked out. The acceptance of alternatives to the car should be increased. Among others, the following needs of target groups were mentioned as having to do with a choice of mode, or with the reluctance to change habits in this respect (Hakamies-Blomqvist & Jutila 1997):

⇒ *"Objective" Safety* (to know facts concerning numbers of accidents connected to a certain mode - which is commonly equated with "safety")
⇒ *Security* ("subjective" safety, lacks of which are often *felt* by older persons, by cyclists, by women at night, by parents, by pedestrians, etc.)
⇒ *Mobility at the micro level* (affected by barriers when crossing the road to get to the bus-stop, by waiting times at traffic lights, by the length of routes, by lacks in security, etc.)
⇒ *Comfort* (sloping or high kerbs, weather protection at bus & tram stops, good service on public transport, short connecting routes etc.)
⇒ *Aesthetic and environmental quality* (attractive lay outs of stops & stations & vehicles, low noise, good air, etc.)
⇒ *Social Communication* (the possibility to be with, or at least amongst, other people)

7.2 Conflicts of interest

7.2.1 Conflicts between individuals, or groups, and society

One can support the viewpoint: that, when it is declared policy to achieve a change from cars to other modes, then people who use cars must accept disadvantages. As in the area of traffic safety, this is also the case in connection with a change in favour of less environmental pollution. The individual car driver has interests which go directly against those of the community, and in the area of traffic safety also, and particularly so, against the law. One can see this conflict as one *between the individual and society*. The individual citizen does not always agree that the official position - "do not use the car, use public transport instead" - is the right one. What is required is detailed explanations as to which values will be protected by doing so. The explanations given are often, in practice, inadequate.

An example of this is the tradition of "one-sided"[7] information. This is in Social psychology seen as disadvantageous for good persuasive work (see, for example, O'Keefe, 1990). It has been shown (by Sammer, 1986, among others) that people are far better able to stand difficult and contradictory information than politicians believe (see also Brög, 1997), provided this information is honest. Disadvantages, e.g. that old, comfortable habits and routines have to be changed when one chooses public transport, instead of going on to use the car, have to be discussed openly and considered in one´s public relation work and advertising.

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[7] In contrast to "two-sided" information, one-sided information focuses only on the advantages of a wanted behaviour, or the disadvantages of an unwanted behaviour, and thereby automatically relieves the information of its credibility as there are hardly any types of behaviour which have only advantages

7.2.2 Conflicts between Groups, or Individuals

Conflicts of interests also manifest themselves as those *between* different groups of citizens or individuals (*inter-individual conflicts of interest*). The overview below (figure 4) illustrates an inter-individual - or inter-group - conflict. In no way does it deal with a particularly important conflict, but it gives a clear and easily-followed example. Pajunen (1993) showed that bus journeys (in Finland) are for the passengers a safe way of getting about. At the same time, she showed that busses are also involved in fewer accidents where others are injured. Simultaneously, in group discussions with pedestrians, bus drivers were described as inconsiderate, ruthless and "intimidating" (Risser et al. 1988). Even though they are objectively safe, buses were seen as a threat by some other road users. In the overview the conflict between bus drivers and pedestrians with regard to the aspects of *objective and subjective safety* are illustrated (Risser 1993, Ballabio & Moran 1998):

Fig 3: A Conflict between Bus Drivers/Passengers and Pedestrians concerning objective and subjective safety

	Busdriver, passenger	Pedestrian (pd)	Busdriver, passenger	Pedestrian (pd)
	Objective	safety	Subjective	safety
Explicit recognition as a value	Recognised by this group	Recognised by this group	Recognised by this group	Recognised by this group
How is the value operationalised?	No accidents	No accidents	Mobility without fear	Mobility without fear
Situation	Iinteraction with pedestrians	Interaction with buses	Iinteraction with pedestrians	Interaction with buses
Evaluation: value protected?	**yes (they probably know)**	**do not know, do not care**	**yes (irrelevant?)**	**no**

Bus drivers do not feel that there are any kinds of safety problems, whereas the pedestrians very strongly experience such problems. Measures which serve the *perceived safety* of the pedestrian, but which at most bring about certain losses of *comfort* for bus drivers have to be accepted by the party whose comfort is disturbed, because this is a lesser value than safety. Improvements for one group (pedestrians) which could mean disadvantages for other groups (bus drivers) must be accompanied by notice that through this improvement, socially relevant interests are being simultaneously protected[8]. However, it has to be added, that one agrees most easily with new solutions if there also is the probability of certain personal advantages. Addressing relevant groups should systematically be combined to this principle: *Find out what **their own** advantage could be, and tell so.*

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[8]We have discovered that disputes generally arise when this principle is being finalised in detail. This is in particular the case when it is not clear that specific values will be protected – those involved must then be reminded – or when the impression is given that oneself must contribute more to this protection than others: the reasons for this are to be comprehensively explained.

7.2.3 Intra-individual Conflicts of Interest

Politicians who support changes in transport in order to reduce environmental pollution can be assured that part of the car drivers will accept measures which reduce their own comfort if, through this, values for which they also stand will be protected. This reflects the existence of different, sometimes opposing, interests within groups of individuals, or within individuals: *intra-individual conflicts*.

Individuals have different and often conflicting interests. Intra-individual conflicts are among others distinguished by their context-dependency. Under certain conditions one agrees to a certain solution whereas one rejects the same solution under different conditions, when other interests are virulent.

8 What influences acceptance?

8.1 Some relevant aspects

It can be assumed that if one wants to enhance the change of a person's acceptance of a service then the following arguments should be considered:

- Accuracy is necessary in the portrayal of the goals of a specific service
- The situation of different user groups must be considered
- It must be emphasised that even those who are not at all interested in any service public transport has to offer have varying interests. The interest situation is never totally clear and one-dimensional, and there is always a potential that one in the long run may find things attractive which one initially rejects (Burwitz et al. 1992)[9].

In psychological terms, one can finish this chapter with the following statement: *The more positive the consequences linked to a service are, or the more positive consequences are promised from it, the better its acceptance will be.* Those who have still not considered to adopt a positive attitude must be offered information which allow them to assess the outcomes of the implementation more reliably than so far, and to balance advantages and disadvantages:

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[9] Burwitz et al. (1992) did a very interesting study with respect to this involving car drivers: Car drivers tried for one month to see how it is to live without a car. The positive aspects that such a life can have were for several of those involved sufficiently noticeable that, despite the well-known advantages of the car, they maintained their new lifestyle for the time being

As a formula, this can be expressed as

$$A_{ha} > A_{la}$$

The weight of the arguments concerning high acceptance aspects should exceed the weight of the arguments concerning low acceptance aspects.

Thereby it should be remembered that „attractiveness" or "acceptance" is hardly ever defined by the presence of one single interest that is satisfied, but it is the outcome of several needs and interests being *more or less* satisfied at the same time. Several factors are influencing acceptance, for instance:

The image of the project proponent

One of them is the image of the service provider[10] is most important. For instance, negligance, or nonchalance at times when this does "not matter" (e.g., because ones services have to be made use of, anyway) will get punished later on, when the provider wants to try to improve the image. One will, for a long time, remain a company that "does not care about the users".

Lack of communication

In connection with implementation processes, at many stages mistakes can happen, or things may not work well. If the providers and or the operators do not communicate, this will lead to the conclusion that providers either are not competent, or that they do not care.

Strange communication

Strange communication is not a scientific term in the narrow sense, although Watzlawik et al. (1976) used it when trying to typologise the behaviour of schizophrenic persons. In the sense in which we want to use it, it is supposed to reflect the situation when pieces of information we get do not correspond to our own interpretation of what is going on. This is relevant in connection with, e.g., disturbances and unplanned waiting times: There is obviously a problem, but operators act as if everything was ok.

"Strange" communication, if not tackled well, may negatively, and very strongly so, affect the credibility of the operator which has detrimental impacts on the image (Kotler et al. 1996).
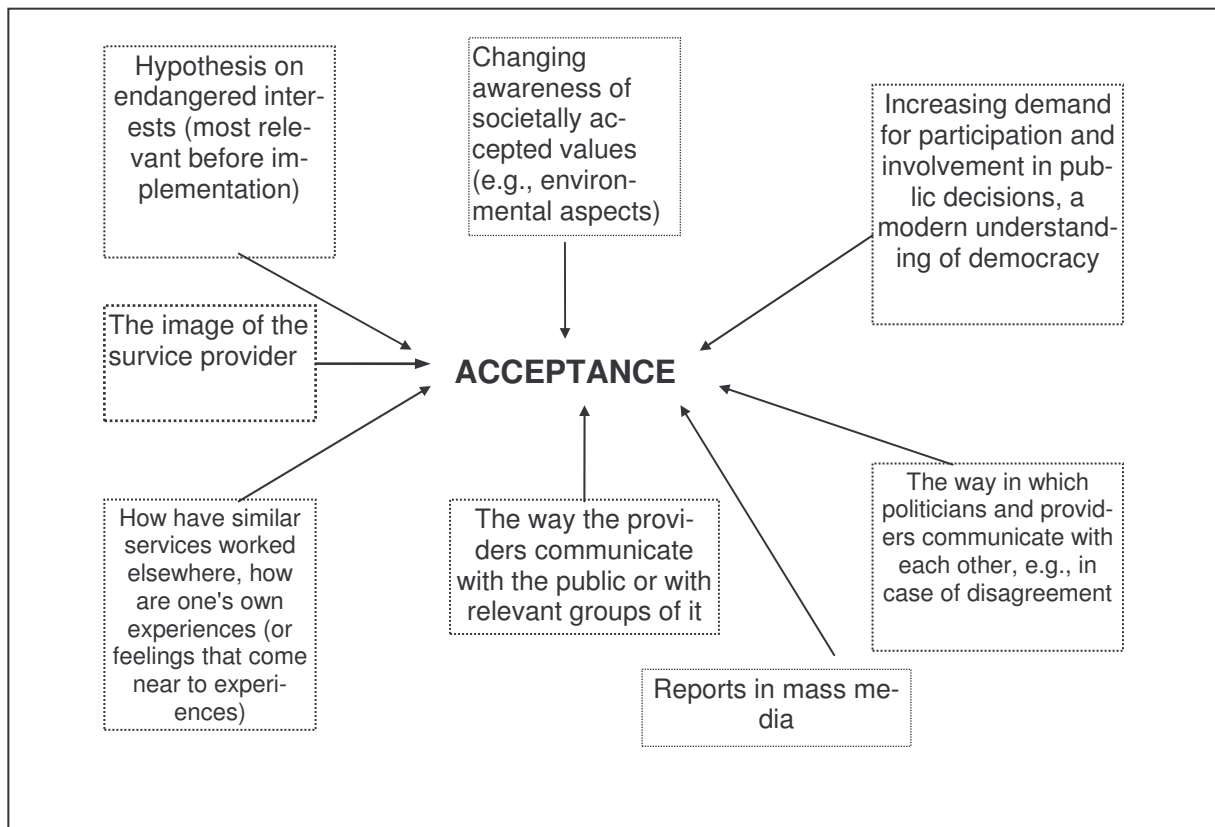
Arrogant communication

Another type of communication that certainly is not well accepted is the one where one is treated without courtesy and in a way that reflects a lack of symmetry between the operator and the user. Such a type of communication will cause unnecessary friction in the communication process (at the emotional dimension of communication) and deteriorate the image of the provider - and thus the attractivity of the services he offers.

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[10]see Praschl & Risser (1996), Akzeptanzstudie "Traidersbergtunnel"

8.2 An overview

In the following, an overview (figure 5) of those factors that influence public acceptance is given. It displays in a comprehensive way those aspects that according to the arguments presented in this text influence acceptance of project plans and implementations:

Fig. 5: Aspects which influence public acceptance

From this overview, and considering all that has been discussed above, the following guidelines can be established:

9 Guidelines for achieving acceptance

Providers should involve the public in the discussion connected with the implementation of services, in order to guarantee due consideration of the needs of different user groops. Thus, on the whole, we talk about a communication problem.

9.1 Some basics

Ideally the public discussion of any service should begin as soon as there is an option that it may be implemented. As we see it, it is not necessary that different user groups share the same opinion with respect to the service. I.e., even controversial

discussion should be led in public. However, the crucial point is in which way this discussion is led - *the style of communication (fact-based, trust-worthy, two-sided, etc.).*

9.2 How to inform

When informing users and potential users about services - whether planned, right before implementation, immediately after implementation, or later on - certain rules of information/communication should be considered well that have been tested in practice (among others see Kienast, 1988). The same is valid in connection with already existing services and with the operation of services: Time tables, prices, connections, ticketing, etc., etc..

9.2.1 Some suggestions concerning contents of communication

The following aspects should be considered when informing users and potential customers:

1. Describe the service thoroughly, when you inform at an early stage (e.g., use computer simulation techniques)

2. Tell in detail for which persons and groups the service will provide special advantages. Describe the groups who will benefit from the project. However, do also tell what disadvantages there could be and for what groups. (and why they should accept these disadvantages, nevertheless)

3. Check if a priority list can be developed that refers to different degrees or intensities of benefits and disadvantages for different user groups

4. Think about what "old" solutions are replaced by the "new" service ("active substitution")

5. Are there *other* "new" services that could replace the one one is trying to promote, in direct and indirect competition ("passive competition")

9.2.2 How to make information become motivation

In order to make information turn to motivation, the following rules can be established (Risser & Clark 1995, Windahl et al., 1992):

9.2.2.1 Time & money

- Everything takes time - so give the citizens enough time to **digest** information (e.g., information campaigns should be on for a sufficient time span)
- If you want long term effects (e.g., that people should remember what you told them) do not think you can achieve that without resources and without longer lasting systematic efforts

9.2.2.2 Timing

- Information should be given at the right time - i.e., when people need it and want it - which is often difficult to decide. Rather generally, if there is some doubt about the right time, information should be given at an early stage and repeated, no matter whether we talk about operation or implementation
- Ideally, information should be available whenever one wants or needs it. Hotlines could help to fulfill this need, *but remember*: Cold "Hotlines" are a paradox, they are a typical boomerang in marketing terminology

9.2.2.3 Consider and help the users

- Consider that perception and acceptance of information is steered by interests and motives (most important for all arguments used in the information process before implementation)
- Information of immediate interest should be given in a different way from general information, and separately
- Information should have a character that it is difficult to be distorted when forwarded from one person to the other (support reliability)
- Nobody wants to be stupid - so if you inform somebody make sure he/she does not feel stupid (see "arrogant information")

9.2.2.4 Credibility and completeness

- Give credible information = the information presented should be true and reliable
- Give two sided information = advantages and disadvantages of any service should be given. If one underlines only the advantages of a service this will not be credible in the end. Furthermore, additional information should be given how to overcome disadvantages
- Avoid contradictory information, unless you can explain contradictions = contradictory information reduces ones credibility
- Give complete information = the information given should as far as possible cover all aspects and consequences of any service
- Information should be problem oriented = it should be included which kind of problems will be dealt with due to the implementation of the service

9.2.2.5 Understandability and perceivability

- Information should be given in an understandable way = information should not consist of technocratic terms, but of terms used in "common language"
- Give redundant information = repeat important information on main issues and aspects
- Eliminate unnecessary information (though difficult to decide) = this provokes boredom
- Information should be made perceivable by using high-tech-information systems = users should be able to estimate the advantages of the project (e.g., what life quality aspects are affected)

10 Conclusion

Ideas and rules discussed above are heuristic constructs, or interpretations of aggregate empiric results in combination with reasoning and the application of psychological laws. It will be difficult to prove whether they are valid or not. But it also seems difficult, with the arguments used in this paper in mind, to come to different conclusions. *Experience will show.*

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