ABSTRACT

In the service marketing literature services are distinguished from goods according to determinant characteristics. A critical investigation of these service characteristics is made from a pragmatic perspective. An alternative product classification of goods and services is presented, transcending the traditional boundaries of goods and services. A classification with eight product types and four dimensions of product use is constructed. The eight main product types are: Goods for transfer, temporarily provided goods, treatment of client’s property, treatment of client, transportation of client’s property, transportation of client, exhibition of goods, presentation of producer. The four dimensions of product use are: Material use, informative use, experiential use and financial use. These product types and use dimensions are used as a base for an elaborate product classification. 27 different product classes are distinguished in the product classification.
1 INTRODUCTION

The demands for service quality are discussed in society and academia. Discussions and investigations concerning service quality must rely on an understanding of the nature of services. Criteria for service quality are dependent on how a service is apprehended. The character of services is widely discussed in the literature on service marketing and management. A service can be defined differently as an activity, a benefit or a customer satisfaction (e.g. Grönroos, 1990). Despite these differences there seems to be an agreement among several scholars on the determinant properties of services, especially when contrasting them to the properties of goods. The main characteristics of services are often mentioned: Services are considered to be intangible (immaterial), inseparable (in production and consumption), heterogenous (i.e. instanial variance) and perishable (i.e. having no separate and lasting evidence); ibid.

These determinant characteristics, however, seem to be questionable. In this paper we want to challenge some of the prevailing conceptions of service characteristics. We agree with the conclusion made by Wright (1995:52) that "The traditional division between goods and services is outdated and may lead to myopic behaviour in both the manufacturing and service sectors". Our critique is carried out from a pragmatic perspective. This means that the notion of action is central to our reasoning.

2 A PRAGMATIC GROUND

An action is performed by an actor (fig 1). An action is a doing - the performance of something - with one or several purposes (von Wright, 1963). Actions are intentional behavior. An action will give rise to a result. We call such a result an action object. Different types of actions give rise to different types of action objects. Material actions give rise to material results, i.e. material objects which are produced or changed. We also view communication (speaking, writing) as one kind of action (Searle, 1969). The action objects of communicative actions are utterances, messages or other symbols. Many actions are social, i.e. directed towards other people (Weber, 1978). In such cases relationships between the actors play a crucial role (Habermas, 1984). Such relationships are both prerequisites for action and a result from action (ibid and Goldkuhl & Röstlinger, 1999). We distinguish between action objects (the direct results of action that are within the range and control of the performer) and the effects of the action and action objects upon other people and the environment (Goldkuhl, 1998). Usually actions give rise to both intended and unintended effects. Actions have a reflexive character (Giddens, 1984). They act back on the actor, since he monitors his actions and the results and effects of the actions.
3 PRODUCT CHARACTERISTICS IN THE SERVICE THEORY

In order to be an acknowledged discipline, scholars in the area of service marketing have devoted much work to elaborate on the service notion and contrast it from goods characteristics (Wright, 1995). Important contributions have been made by e.g. Zeithaml et al (1985), Grönroos (1990), Normann (1991) and Edvardsson & Gustafsson (1999). In the eagerness to contrast services vis-à-vis goods some exaggerations seem to have arised. Wright (1995) is critical towards the famous service characteristics mentioned above (section 1). "The determination of service marketing pioneers to demonstrate that services are significantly different from goods may have led researchers deliberately to ignore both variance within the service sector and similarities across the goods and service sectors." (Ibid, p 35). Similar critique is raised by Castells (1996:205): "To understand the new type of economy and social structure, we must start by characterizing different types of ‘services’, in order to establish clear distinctions between them. In understanding the informational economy, each one of the specific categories of services becomes as important a distinction as was the old borderline between manufacturing and services in the preceding type of economy.” We will follow this line of critique when below discussing the service characteristics and their relationships vis-à-vis goods. The main purpose of our work is to create a new product classification, transcending the traditional division between goods and services, in accordance with stated desiderata.

3.1 Services are intangible

This is an important property distinguishing services from goods according to many service researchers. A service is considered to be intangible while goods are tangible and material. This is true for many services, e.g. law counseling. Other so called services do have tangible and material character. E.g. car rental means that the customer aquire a car for a temporary use. The car is very tangible for the customer otherwise he can not use it. Another example is a car repair. In this case the broken car is transformed into a repaired and functional car. The mechanic performs tangible changes in the customer’s car. Our conclusion is that there exist intangible as well as tangible services.

On the other side, not all goods can be considered to be tangible or material in their primary character. When you purchase a car you get a tangible product. How about purchasing a book on cars or a racing video game? Of course books and video games do have material form, but
it is not the generic purpose of such goods to be used in a material way. When consuming (i.e. reading) a book on cars you become informed. When consuming (i.e. playing) the video game you will be entertained. Our argumentation is that goods can be classified as material or immaterial. The further conclusion is that we have two descriptive dimensions (figure 2). Later on (section 4.1) we will further elaborate on the nature of immaterial products.

<table>
<thead>
<tr>
<th>Goods</th>
<th>Material character</th>
<th>Immaterial character</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material goods</td>
<td>Immaterial goods</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>Material services</td>
<td>Immaterial services</td>
</tr>
</tbody>
</table>

Figure 2 Two dimensions for describing products

Not all services are intangible and not all goods are tangible. We must thus reject the claims that intangibility is a determinant characteristic of services.

3.2 Services are perishable

Since services are claimed to be intangible, they are also considered perishable. Edvardsson & Gustafsson (1999:192) claim that ”when services have been delivered, the customer has seldom acquired any physical evidence of the delivered service”. This might be the case, but there are counter examples. When leaving the hairdresser’s the customer has got a new hair style. This hair style will be changed due to time and is of course perishable like almost all other matter. The hair style will, however, not change immediately after customer leaves the hair dresser’s. The new hair style is an important physical evidence for the customer. If there is no such evidence there will be no customer satisfaction.

The notion of perishability means that services can not be produced in advance and stored for later delivery (ibid). This might be the case for many services. But there are inventories in several service companies. Rental companies (e.g. video rental) must store their products which are to be rented. On the other hand there are also many goods that have restricted durability and they can not be stored for a long period of time (e.g. fresh food). We do not consider perishability to be a determinant characteristic for services.

3.3 A service is produced, delivered and consumed simultaneously

This is an important claim in the service literature (e.g. Grönroos, 1990; Normann, 1991). The production and consumption of a service is considered to be inseparable. The production (performance) of a theatre play and the consumption of it coincides in time. But there are counter examples here as well. Grönroos (1990:29) writes: “A hair stylist’s service is almost totally produced when the customer is present and receives the service, that is, consumes it.” We think that this is a complete misunderstanding. The main consumption of the new hair style starts when the customer leaves the hair dresser’s. The point of going to the hair dresser’s is to get a new hair style that can be “used” not only during its production, but mainly afterwards. This is the case for many services. There is also some kind of subsequent consumption of ”simultaneity” services that are mainly consumed with production. The theatre play is consumed through reflection afterwards (in memory) and also through discussions with others.

We conclude that many services are appreciated and consumed after the production and delivery of them and this can thus not be a determinant characteristic of services.
3.4 The customer is a co-producer of the service

One part of the notion of inseparability is the conception that the customer is a co-producer of the service. Many services require the presence of the customer. We think however that it is important to distinguish between the presence of the customer and his active co-production of a service. Just being present does not make the customer into a co-producer. It also depends on in what respects a customer is active. Just providing demands on the service does not make the customer a co-producer of the service. Different demands and desires are parts of the customer’s assignment for the service. Customers do state demands on goods as well as on services.

We acknowledge that the customer is present during the production of many services, but this is not the case for all kinds of services. E.g. during a car repair the customer is seldom at the place. The presence of a customer does not make him a co-producer. We must thus reject this claim of the customer as a co-producer of services as a determinant characteristic.

3.5 Services are heterogeneous

One instance of a service is seldom identical to other instances of the same service type. Grönroos (1990:30) claims that “A service to one customer is not exactly as the ‘same’ service to the next customer”. This may be true for many services, but there are standardised services (often highly automated), which can be said to be identical to different customers. On the other hand not all goods are standardised. There are tailored goods which differ according to given preferences of customers. We think what Grönroos and other service scholars mean by ”heterogeneous” is customer adaptation. Products, services as well as goods, can be variant and adapted to customer profiles in different degrees. We must thus reject the claims that heterogeneity is a determinat characteristic vis-à-vis goods.

3.6 Intermediate conclusions: Services as products

We think that many of the characterization problems described above are related to the fluidity of the service notion. Grönroos (1990) examines several definitions of the service notion. A service can be considered to be an activity, a benefit or a customer satisfaction. Grönroos (ibid) avoids this fluidity by explicitly defining a service to be an activity. We can use our action model (fig 1) to underline our discussion. We think that it is improper that a categorised phenomenon (such as a service) sometimes can be considered to be something performed (an action) and sometimes something effected (a satisfaction). Following our action model we distinguish between a service action (what the service provider does), a service result (what is done to the customer) and a service effect (what a customer experiences from the service, e.g. a satisfaction). There is a need for all these notions when discussing service issues, but they must be kept conceptually apart although they are of course related to each others. If we only use the term ”service” what meaning should we designate to it? As mentioned above, influential definitions, as one by Grönroos (ibid), delineates services to be action (activity). We think, however, that this is an improper terminology. If we want to establish a comparable basis between goods and services (and find characteristics for them) then they must be of some ontological equivalence. Saying that a service is action must mean that we should compare it with the actions of producing goods (i.e. what can be manufacturing). To enable comparison between services and goods and thus properly discuss different characteristics, services must
be considered as service result. This is what is done for the customer. We think it is important to distinguish between the doing (performance) and what is done (the result). When talking about goods it is easy to see the difference between doing (manufacturing) and done (goods). It is not as easy to see this difference when talking about services, but we do claim the importance of it. Some examples may be given as illustrations: The repair of the car is a service act and the repaired car is the service (the result). The cutting of hair is the service act and the new hair cut is the service (the result). As said above, for some services it is hard to distinguish between the doing and the done. The performance of a theatre play means action and it this action that is perceived by the audience. The actors on stage make gestures and utterances. The totality of these gestures and utterances (together with the stage properties) form the theatre play as something performed (the result) and thus perceived as the service for the audience. The important conceptual difference does not hinder us to use result names as well as process names of services (which can be seen from fig 3).

We compare the service as a product with the good as a product. Both categories are results (action objects). They are results of action and aimed for customers. The service as something done means the service as a fact (confer the original meaning of fact = something done). It is important to add that the product should be seen as a value potential. The value can arise during the customer’s use of the product.

4 AN ALTERNATIVE PRODUCT CLASSIFICATION

We have above (in sec 3.1-5) rejected that the service characteristics (vindicated in much of the service literature) really are proper conceptual borders vis-à-vis goods. The characteristics are not valid for all kinds of services and to some extent they can be valid for goods. Different counter examples are put forth. Our conclusion is that what is considered to be services is so heterogenous that it is perhaps not meaningful to find uniting properties for all of them (cf also similar arguments by Castells, 1996). We must search for a more fine-grained classification for our understanding of goods and services. Even if we reject the characteristics as determinants of services we do acknowledge the importance of these for the classification of products.

There are different attempts made for service classification. Proposals and overviews can be found in Lovelock (1983) and Grönroos (1990). The different classifications contribute with different characteristics which can be used as classification criteria. None of these classification schemes seem to be exhaustive (Röstlinger & Goldkuhl, 1999). We need a classification model including both services and goods. Our classification model presented below rests on pragmatic grounds. Our basic notions are two actor roles (producer and customer), the actions of the producer (i.e. producing the product), the product (as a result of producer’s action and aimed for the customer) and actions performed by the customer (i.e. consumption consisting of receiving and using the product). There will be customer effects of the product and its use (e.g. satisfaction). There can also be producer effects when the acts, the results and the customer reactions retroact on the producer (i.e. the reflexive and learning aspect of action).

4.1 Use situations

When classifying products we think that it is very important to take into account the anticipated customer use and potential satisfaction. Different products will give rise to different use situations. We distinguish between four types of use situations, which are
delimited based on different human needs. There are 1) bodily-motory needs, which are satisfied with material means, 2) cognitive needs, which are satisfied with informative means, 3) emotional, social and spiritual needs, which are satisfied with experiential means, and 4) needs for exchange and preservation of value, which are satisfied with financial means. The first three needs are genuine human needs and the fourth is a derived need which are dependent on social organisation and work division. The fourth need is a means to satisfy the other three needs which are more basic. This means that we distinguish between the four following use situations concerning products:

- material use
- informative use
- experiential use
- financial use

These four use situations are ideal-typical constructs (Weber, 1978). In many situations products can satisfy several needs of humans at the same time. We will apply the use situations as one basic classification dimension in our model. This division is also to be seen as a refinement of the the two classes material and immaterial use presented in fig 2 above.

4.2 Product classes

The other classification dimension is related to basic differences concerning products. We distinguish between four main product classes: 1) Provided goods, 2) treatment, 3) transportation and 4) presentation.

A provided good means that the producer creates a good (of separate character) to be used by a customer. The product is the provided good. We distinguish between two subclasses: Goods for (permanent) transfer and temporarily provided goods. Transfer of goods means that not only the good is transferred from producer to customer, but also the ownership of it. Temporarily provided goods means borrowing or renting goods. The customer can use the goods for some restricted time and must then return them to the producer.

Treatment means that the producer accomplishes some treatment for the customer. We distinguish between treatment of the customer himself and treatment of something belonging to the customer. The treatment is closely related to the notion of change. Something existing is supposed to be changed. Treatment of the customer means that some intended effects (changes) are supposed to arise. Treatment of customer’s properties means that these properties will be changed (improved) and can later on be used by the customer. The product of treatment is the result of the treatment. In many treatment situations the results are created as instantaneous results from the actions (and having no separate character of their own) and this can make it different to apprehend the distinction between process (action) and result.

Transportation means that something changes its place by the producer’s action. We distinguish between transportation of the customer himself and transportation of something belonging to the customer. The primary product is the changed place for the customer or his belongings. In some situations the product is for the customer to be in a transportation state. Transportation could be seen as a special case of the treatment class. We think however that the features of transportation (change of place) are so special that it deserves to be a class of its own. This can be seen from our classification scheme below (fig 3) where important differences occur between the different subclasses of treatment and transportation.
Presentation means that something is presented to the customer. We distinguish between the presentation of the producer himself and the presentation (exhibition) of goods. The product is what is presented. Presentation means that the customer only gets a perception of something. He retains only his memories of the presentation.

This makes four main product classes in our classification model and eight sub classes:

- **Provided good**
  - goods for transfer
  - temporarily provided goods
- **Treatment**
  - treatment of client’s property
  - treatment of client
- **Transportation**
  - transportation of client’s property
  - transportation of client
- **Presentation**
  - exhibition of goods
  - presentation of producer

The producer performs different acts towards the customer when creating different products. The producer can provide goods for the customer (permanently or temporarily). The producer can make changes to the customer or to belongings of the customer. The producer can move the customer or some of his belongings. The producer can show himself or some goods to the customer. We claim these to be *generic* producing acts and products.

### 4.3 An elaborate product classification scheme

In figure 2 above we presented a simple product classification scheme with two classes in two dimensions giving four detail classes. This simple product classification has been much elaborated below (fig 3). We have a table with the eight product classes and the four use situations. This gives us a table with 8x4 classes. Not all 32 detail classes are relevant, some of them are ”empty classes”, but we get as many as 27 detail classes. In the product scheme (fig 3) there is a short characterization of each class together with some example(s), made in italics. Our presentation of the product classification model will be very brief here. A much more exhaustive presentation is made in Röstlinger & Goldkuhl (1999).

We will here use some simple examples to illustrate the construction of the classification table. We focus the product class ”goods for transfer” in order to distinguish between different products divided according to different use situations. We use books as an example. A textbook is used for informative purposes and a novel is read for entertainment purposes, i.e. experiential use. We can also buy an expensive antiquarian book, with no interest of reading it, but for the sake of a financial investment, i.e., goods for financial use. A book can in some odd situations be used for its material properties, e.g. as a pressure on something or a means to heighten something. In this case it is a good for material use.
<table>
<thead>
<tr>
<th>Goods for transfer</th>
<th>Material</th>
<th>Informative</th>
<th>Experiential</th>
<th>Financial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods for transfer</td>
<td>Goods purchased for material use</td>
<td>Goods purchased for informative use</td>
<td>Goods purchased for experiential use</td>
<td>Goods/financial means purchased in purpose of exchange/returns</td>
</tr>
<tr>
<td></td>
<td>Purchased car</td>
<td>Purchased textbook</td>
<td>Purchased video film (action)</td>
<td>Bond</td>
</tr>
<tr>
<td>Temporarily provided goods</td>
<td>Goods rented/ borrowed for material use</td>
<td>Goods rented/ borrowed for informative use</td>
<td>Goods rented/ borrowed for experiential use</td>
<td>Goods/financial means borrowed in purpose of exchange/returns</td>
</tr>
<tr>
<td></td>
<td>Rented car, rental of washing facilities for car</td>
<td>Book (non-fiction) borrowed from library</td>
<td>Rented videofilm, game session in squash hall</td>
<td>Loan of money</td>
</tr>
<tr>
<td>Treatment of client’s property</td>
<td>Client’s property treated with material aim</td>
<td>Client’s property treated with informative aim</td>
<td>Client’s property treated with experiential aim</td>
<td>Client’s property treated with financial aim</td>
</tr>
<tr>
<td></td>
<td>Car repair service, car wash</td>
<td>Auditing, vehicle test</td>
<td>Copying of photos or film</td>
<td>Stock administration, car insurance</td>
</tr>
<tr>
<td>Treatment of client</td>
<td>Client treated for physical effect</td>
<td>Client treated for increase in knowledge</td>
<td>Client treated for experiential enhancement</td>
<td>Client treated for economic influence</td>
</tr>
<tr>
<td></td>
<td>Eye operation</td>
<td>Eye-examination, training, supervision</td>
<td>Psychotherapy, relaxation massage</td>
<td>Personal insurance</td>
</tr>
<tr>
<td>Transportation of client’s property</td>
<td>Client’s property/ material transported with material purpose</td>
<td>Client’s property/ information transported with informative purpose</td>
<td>Client’s property/ information transported with experiential purpose</td>
<td>Client’s property/ financial means transported with economic purpose</td>
</tr>
<tr>
<td></td>
<td>Transportation of furniture</td>
<td>Telephony, mail, e-mail, telefax</td>
<td>Telephony, mail, e-mail, telefax</td>
<td>Order for payment, withdrawal from account</td>
</tr>
<tr>
<td>Transportation of client</td>
<td>Client transported with the purpose to change location</td>
<td>Client transported with informative purpose</td>
<td>Client transported with experiential purpose</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bus journey</td>
<td>Driving lesson</td>
<td>Cruise</td>
<td></td>
</tr>
<tr>
<td>Exhibition of goods</td>
<td>Goods exhibited with informative purpose</td>
<td>Goods exhibited with experiential purpose</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Television broadcast documentary</td>
<td>Art exhibition, entertainment film for cinema or TV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presentation of producer</td>
<td>Producer presentation with informative purpose</td>
<td>Producer presentation with experiential purpose</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lecture given by public lecturer</td>
<td>Theatre performance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2 Use oriented product classification scheme
We use another example to distinguish between different product types. We focus on the “experiential column”. A theatre play is live performance where the producers are actors on stage appearing in front of the audience, i.e. presentation of producer. If this play is recorded as a film and presented on cinema or television this product becomes a “good for exhibition”. If it is produced as a video film, it can be rented (temporarily provided goods) or sold (goods for transfer). This example shows also one important aspect of product development: A move from more human-intensive services towards self-service goods, which we claim is one dominant contemporary trend in the society contrary to opposite claims of services replacing manufacturing (e.g. expressed by Grönroos, 1990 and Normann, 1991).

One important comment must be made. The product classes are to be seen as ideal types. Many products are multifunctional, i.e. they fulfil several purposes. A veteran car can be purchased for several purposes: A vehicle for transportation (material use), as an instrument for learning how old cars were constructed (informative use), as a means for cultivating an “old car interest” (experiential use) and as an investment for the future (financial use).

4.4 Criteria for classification

We have based our product classification model on several characteristics. The different use situations (sec 4.1) are important criteria. The differences between the various product classes are of course dependent on characteristics of the result created from the producer’s actions. But there are other properties that are important like the presence and participation of the customer in the production process, the presence and participation of producer in the consumption process, prerequisites for production, prerequisites for consumption, relationships between production and delivery and consumption, ownership and holding of products, independence vs. embeddedness of products during consumption, reusability and permanence of products. These criteria are more thoroughly described in Röstlinger & Goldkuhl (1999). We have also characterized the different product classes according to these criteria (ibid).

5 CONCLUSIONS

The contributions of this paper are

- a rejection of the classical determinants of services in relations to goods
- a better conceptualisation of service and service related phenomena
- an improved product classification

Our effort has been to go beyond goods and services; i.e. beyond the traditional division between goods and services. In our classification, it is only one class out of eight that can be seen as goods according to a traditional division (goods for transfer). There is, however, a goods element in some of the other product classes. This means that what is conceived as services can include a comprehensive treatment of goods: Temporarily provided goods, treatment of customer’s goods/properties, transportation of customer’s goods/properties and exhibition of goods.

We think that a shift of perspective on products is of great importance. It is not the unclear division between goods and services that should guide future research. We claim that other
product demarcations, as the product types and use dimensions presented in this paper, are more adequate conceptualisations. We believe that in many situations it is more important to distinguish between material products, informational products, experiential products and financial products than between goods and services. Future theorizing should instead be made along these lines than based on a fluid and abstract service concept.

It is also important to view service quality in relation to the presented pragmatic product notions (producer, producing acts, product, customer, customer’s use). We claim that the main quality aspect for the customer is the quality of the product in use and all other quality aspects are subordinated to this dominant property. Many service quality criteria (e.g. Parasuraman, 1995) seem to be oriented towards other aspects than quality in product use.

REFERENCES

Lovelock CH (1983) Classifying services to gain strategic marketing insights, Journal of Marketing, summer