

# A Model of Service Classification Based on Consumer Needs

Service Operations Management Track

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## *Abstract*

Most of the literature and research on services focus on the characteristics that distinguish products from service. One of the topics to be improved is the service classification . Most service classifications do not consider the client's needs as a crucial parameter either to the quality of the service or to the success of the strategy. This study presents a service classification outline and proposes a framework that takes the consumer needs into account. The dimensions considered in the classification model were defined through the analysis of the management literature and questionnaires answered by Brazilian marketing and operations specialists.

## *1-Introduction*

The main aim of establishing service typologies is to offer insights for the development of strategies (Lovelock, 1983). However, most classification models do not consider the clients' needs, which is a crucial parameter considering the delivery of a quality service and the success of any strategy. The first models were defined based on operational aspects, under the service provider's perspective (Cook et al, 1999; Mills and Margulies, 1980). Nowadays, as the diversity of kinds of services has increased, a comprehensive and detailed classification can be very useful to the service management. This study presents a summary of the main service classification families existing in the specialized literature and proposes a model whose parameter is the clients' needs.

## *2-Concept and Service Typology : Revision of Literature*

In a recent study about the use of the word "service" in the business literature, Johns (1999) concludes that the extensive use of that word demonstrates its importance and suggests a high evolution level and development of its meaning. Nevertheless the great diversity of meanings leads to ambiguity as the term is used. The term "service" can be used to designate a sector/industry, an offer/output or a process. In addition to that, each one of these meanings can be defined through two different perspectives: the service provider's one and the service client's one.

Some authors consider that the service characteristic as a process is the most relevant as well as being the one which best explains its nature (Cattini, 1999; Gronroos, 1998; Shostack, 1987 and Levitt 1976). For these authors, services are produced through processes in which the clients interact with the productive resources.

The concern about establishing a service typology is highlighted by various authors (Gianesi and Corrêa 1996, Gronroos 1993, Lovelock 1983). The greatest justification for

developing service classification schemes is the search for understanding its nature and singular aspects so that we can provide hints for the development of marketing strategies for the operations project (Cattini, 1999 ; Lovelock, 1983) .

Following the evolution of the research on service classification, one can easily notice the operational focus, usually justified by the classification objective: the operations project of backroom or of front-office Lovelock, 1983). Another relevant aspect is that the majority of the classifications focus on the result of the service process (product/service) to the detriment of the providing organization (Cook et al , 1999).

Some studies ( Johns, 1999 e Gianesi e Corrêa , 1996) present an approach which allows us to identify a parallel between the development of the research about the the service characterization and the amplification of the considered dimensions for the classification. Considering these approaches, an attempt to summarize the research on service classification could divide it into four phases:

- First one: characterized by the concern on determining the characteristics which differentiate the service companies from the manufacturing ones, or services from products. (Cook et al, 1999 and Lovelock, 1983).
- Second one: the classification was done under the operations management perspective. The approaches varied as far as their objectives were concerned: examining the service strategic attributes, defining the sector productivity and efficiency; subsidiating the organizational project and the management topics; and tackle issues about the product project and service quality (Cook et al, 1999 ).
- Third one: characterized by classifications of service processes in which the various dimensions of a process are analyzed (Lovelock and Yip, 1996).
- Fourth one: strong market orientation. Development of new parameters of classification originated from the evolution of the research on the service characteristics and concepts added to a greater concern about the client – resulting from the studies about quality (Deming , 1990; Juran , 1990; Garvin, 1992 ) and service quality (Albrecht 1998; Berry and Parasuraman, 1995; Calrzon, 1990).

### *3-Dimensions of the Proposed Model Service classification – The Client's Perspective*

#### *3.1 Methodology*

Recognizing the complexity of the task of defining services and their classifications, the model proposed in this study considered the dimensions which are accepted and widespread by the service literature and the opinion of (theoretical or practical) specialists in the marketing and operations areas. Some exploratory research was developed in two stages. The first one consisted of the analysis of the literature on services so as to identify and analyze the main existing classifications, as well as the used classification criteria. In the second stage of the research we sent questionnaires to 31 specialists – 20 of whom in the marketing area and 11 in the operations area - with academic and/or practical experience, who work in two Brazilian cities, São Paulo, SP and Campo Grande, MS .

The questionnaires were sent through the internet/ e-mail and in some cases there was further communication in order to confirm the reception of the material and to ensure the specialist's

participation. The response rate was 38,71 % (12 questionnaires), five of which from the operations area and seven from the marketing area.

The choice of the specialists was made through suggestions given by undergraduates and professionals of those areas. We assumed that due to their experience and qualifications – all of them were either taking or had already taken post-graduation courses – the selected specialists themselves were clients of various services including international ones .

### *3.2 Dimensions defined through literature revision*

In this section we determine the two dimensions which will be used in the proposed classification model. These dimensions were selected from literature research bearing in mind the fundamental presupposition to this work's objective which is : the clients' needs must gear the service classification.

Cook et al (1999) trace a concise historical line of the evolution of the research on service and service typology in the marketing and operation areas. The various dimensions presented in the former models are identified and used to elaborate a schematic representation which allows us to identify the similarities between the classifications presented in the literature. The author still discusses the implications and utility of each researched classification scheme and proposes a model which serves as basis for analysis of any classification .

The idea that the two participants of a service process perceive and see it from different perspectives added to the operational emphasis of the existing classifications, reinforce the necessity of developing classification schemes which consider the client's needs. According to Cattini (1999), a strategic service classification should consider variables related to the perception the clients have of the service and their needs. Two dimensions identified in the specialized literature, which aim to characterize the services through the client's views are the degree of customization and the client's responsibility/involvement in the service's final result. Considering these two dimensions, the same service could be classified in a different way depending on the clients' perception and needs. As a consequence, it would be possible to elaborate strategies and processes which are differentiated and suitable to the clients' demands.

Customization : the terms “standardized “ and “customized” are used by authors of the service area to define the extremes of a service process (Shostack , 1987). ”Standardized processes” are usually the ones which are sequential and don't have variations, such as mass production. The term “customized ” usually refers to level of process adaptation or adjustment to the client's specific needs. In this article, the term “high degree of customization “ will be used to designate services which are tailored to each client, whereas “low degree of customization“ will be used to designate services which are offered on large scale, in pre-defined packages and therefore don't offer possibilities of adjustments to specific needs.

Involvement /Client's Responsibility in the service final result: the consumption of a service is a consumption process and the consumer perceives the service delivery process as part of the service consumption and not only as a result of the process(Gronroos, 1998). The author claims that in order to assure the service quality, it is necessary to manage the delivery process as well as the resources used in the process. The clients are important resources in the service processes

and have part of the responsibility for their final result. The model proposed in this article recognizes the importance of considering the client as a necessary and indispensable resource to a service delivery. Thus the client's responsibility in the service final result is included, but through the client's view and not through the service provider.

### *3.3 Dimensions defined through exploratory research with specialists*

In order to validate the selected dimensions through literature to compose a model of service classification based on the consumer's needs, we developed exploratory research with specialists from the operations and marketing areas.

Besides stimulating and making the suggestion of variables to classify services possible, the elaborated questions permitted the evaluation of the dimensions proposed in the literature as far as their importance to classify services is concerned. The dimensions were also evaluated based on their use to classify services considering the client's needs. The degree of importance was evaluated through a scale which varied from 1 (least important) to 7 (most important). In order to simplify the interpretation, we divided the answer into three groups: little importance, sum of the evaluation results whose given degree of importance ranged from 1 to 3; average importance, sum of the evaluation results whose given degree of importance was 4; and much importance, sum of the evaluation results whose given degree of importance ranged from 5 to 7.

*See Tables 1 a and 1 b*

If we consider the dimensions which present the highest evaluation percentages, that is, the one to which was given the highest degree of importance, we could notice the predominance of the following dimensions: contact with the consumer, customization, consumer's involvement and commitment. The criterium "tangibility" presents the highest frequency of evaluation with average importance. The criteria "employees discernment", "consumer's involvement", "kinds of clients" and "transformed objects" have also presented high percentage of evaluations as being of average importance. Analyzing the relative frequency of the degree of importance attributed to each dimension, we can verify that the criteria which present the highest percentages of evaluation as being little importance are: organization purpose, employees discernment, production process and differentiation.

Based on the results presented on Table 1 b, it is possible to observe that the dimensions that contemplate the clients' need are in the specialists opinions: customization, consumer's involvement, contact with the consumer and differentiation.

### *4. Model of Service Classification based on the Clients' needs*

The results of the exploratory research show evidences that the dimensions "customization" and "client's involvement" are important for service classification. Some other dimensions were also highlighted, but not in all the variables measured. However, these other dimensions are related to the chosen ones.

Therefore we propose that the service classification model, which is based on the client's needs, is constructed from the continuum of two dimensions: customizing and client's involvement/responsibility in the service delivery. The crossing of these two dimensions results in four general service categories:

- Quadrant I – Services with high degree of customization with high client's responsibility: these services have very complex processes and therefore they should be devised case by

case, considering the client's learning; the clients need to have a good knowledge of the process; they are normally services which give the client's help or support. A good example of this kind of service is buying through the internet.

- Quadrant II – Services with high degree of customization and clients' low perception of their responsibility: the processes are complex, developed case by case and depend on a great expertise from the provider; the client has little knowledge of the process, taking part of a few of its stages and having a rather passive role. An illustrative example of this kind of service is a plastic surgery .
- Quadrant III – Services with low degree of customization and and low perception of client's responsibility: these are efficient and highly standardized processes, which do not take the client's individual needs into consideration. Some examples are the mass transport services (bus, subway etc.)
- Quadrant IV – Services with low degree of customization and clients' high perception of their participation: these are efficient, highly standardized processes, which in spite of considering the clients' individual needs, depend on their participation and knowledge of the process. Fast food restaurants and buffet restaurants could be classified under this category.

*See Figure 1*

### *5. Conclusions and Suggestions for Further Research*

Considering the literature review included in the study, the results obtained in the studied exploratory sample, and respecting the inherent restrictions in an exploratory study such as the one which was conducted, it is possible to conclude that :

- I. many of the service classifications presented in the literature consider the services operational problems more than their consumers' needs;
- II. the service classification needs to evolve so that it can provide support to the various requests of segmentation and competitiveness;
- III. specialists of the operations and marketing areas think the most important dimensions to classify services and the ones which take the clients' needs into consideration are customization and client's involvement.
- IV. a possible classification – which considers the needs to provide support to segmentation and competitiveness ( II ) the most important dimensions, and the ones which take the clients' needs into consideration ( III ) – would be one which related the degree of customization and the client's perception of his/her responsibility concerning the results of a service.

It is relevant to remember that this study does not intend to make a statistic, but instead an analytic generalization of the subject researched, that is, it is an analytic study. Thus the proposed model does not intend to be conclusive, but to contribute to the debate about the definition of service typologies based on the consumers' needs. The resultant classifications may bring new ways of developing strategies and improvements in the service delivery process. The main objective of the proposed model is to classify services into categories which can facilitate the understanding of the clients' needs and generate support for the development of strategies. Nevertheless the proposed classifications as well as the dimensions used in the classification do not mean to be tiring . Efforts should be made in order to verify the model's usefulness and

examine the relations among the proposed dimensions based on the research developed with clients of different services.

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Table 1 a : Question 1 a – Rank from 1 (least important) to 7 (most important) the degree of importance of each dimension based on its usefulness to classify services (percentage of answers)

Proposals by literature Frequency	Little importance		Average Importance		Much Importance	
	Total	% Tot	Total	%Tot	Total	%Tot
1-Tangibility	3	9.38	3	21.42	6	6.12
2-Differentiation	4	12.5	1	7.14	7	7.14
3-Transformed objects: people or things	3	9.38	2	14.29	7	7.14
4-Kinds of clients: individuals or institutions	3	9.38	2	14.29	7	7.14
5-Commitment	2	6.25	-	-	10	10.22
6-Contact with the consumer	-	-	-	-	12	12.24
7-Intensity of capital application: people or equipment	3	9.38	1	7.14	8	8.16
8-Consumer's involvement	-	-	2	14.29	6	6.12
9-Production Process	4	12.5	-	-	8	8.16
10-Employee discernment	4	12.5	2	14.29	6	6.12
11-Customization	1	3.10	-	-	11	11.22
12-Organization purpose	5	15.63	1	7.14	6	6.12
Total	32	100	14	100	98	100

Table 1 b : Question 1 b - Tick the dimensions which in your opinion consider the clients' needs

Dimensions Proposed by literature	Consider clients' needs ?			
	Yes	%Tot	No	%Tot
1-Tangibility	5	6.02	7	11.47
2-Differentiation	10	12.05	2	3.28
3-Transformed objects: people or things	4	4.82	8	13.12
4-Kinds of clients: individuals or institutions	7	8.44	5	8.20
5-Commitment	5	6.02	7	11.47
6-Contact with the consumer	10	12.05	2	3.28
7-Intensity of capital application: people or equipment	3	3.61	9	14.75
8-Consumer's involvement	11	13.25	1	1.64
9-Production Process	3	3.61	9	14.75
10-Employees discernment	7	8.44	5	8.20
11-Customization	11	13.25	1	1.64
12-Organization purpose	7	8.44	5	8.20
Total	83	100	61	

Figure 1 – Proposed model for Service classification – The client’s perspective

