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Kano Model applied to low cost airlines

ABSTRACT:

Some years ago, the phenomenon low cost arrived to the market, indeed, from the airlines market. Nowadays, there are thousands of new low cost companies offering lower prices that cause to the customers to wonder about the quality of the products/services that they expect to receive and also creates a huge competition against that companies with higher prices.

This paper presents how airline passenger service requirements can be analyzed by using Kano's model of quality element classification answering the following research questions:

RESEARCH QUESTIONS:

- *How can affect low cost in the customer satisfaction?*
- *Is the quality in a low cost airline the same as in a non-low cost airline? How can a low cost airline satisfy in the same way as a non-low cost airline?*
- *Is the price the unique factor attracting of the low cost airline?*

1. INTRODUCTION

Customer satisfaction is a growing concern to many leading companies throughout the world. Several consulting firms are now promoting strategies for customer satisfaction instead of some form of market share strategy (Business week, 1990). While firms adopting the cost leadership strategy aim to increase market share based on creating a low-cost position relative to their peers.

At the same time, consumption has actually been growing because of the low-cost phenomenon, so during the financial crisis consumers are buying practically the same quantity of goods, but for less money. However, on the negative side we cannot ignore the confusion surrounding product and service quality; consumers have some serious questions about how much they should be paying for what they are offered: *"Am I paying the right price, or am I spending too much in this transaction for the value obtained?"* they wonder. There is too much confusion about how the value of the goods is shown, and that reflects negatively on companies that are unwilling to be clear about it. (Josep Francesc Valls, 2013). The current trend in the market is to sell low quality therefore harmful products to consumer (Astrup, Dyerberg, Selleck and Stender; 2008) at the lowest price.

Nowadays, the economic world and its borders are changing faster and faster in terms of size and speed. Move through the world is no longer a luxury but an obligation for many people. A few years ago, people with significant financial resources or business could afford to travel.

Now, students as well as people with average incomes are moving much more for professional or private reasons such as programs to study in a foreign country, new business areas for little companies, city-trips or short vacation.

It is for this reason that in recent decades the number of airlines worldwide has been increasing. Within all airlines, a new type emerged in the U.S. in early 70s: the low cost airlines. The first low cost airline was Southwest Airlines which began operations in 1971 and was profitable only in 1973 (Oliveira and Huse, 2008).

Some low-cost airlines as Ryanair (Ireland) and Easy Jet (UK) have emerged and are still now among the most active on the market. In addition, many companies such as Ciao Fly, Goodjet, AirLib or Aeris Express could not be profitable enough to continue their activities on the market in the nineties. In the last recent years, the low cost airline sector in Europe has grown immense and has experienced a large number of failures or take-overs (Mason and Alamdari, 2007).

The airline companies took a radical "no-frills" attitude right from the start. Moreover, the extras they had included before (newspapers and magazines, in-flight meals, complimentary drinks, seat reservation, loading excess baggage, etc.) all became new sources of income. It is clear that travellers will never give up the most basic benefits offered by all airlines (transport and safety), but millions of travellers are willing, if the price is low enough, to travel to airports at some distance from the destination, or to pay for their own food and drink or excess baggage as long as these two key factors of carriage to a specific destination and air safety are retained. (Josep Francesc Valls, 2013).

In a highly competitive environment, where all airlines have comparable fares and matching frequent flyer programs, airline's competitive advantages lie in the service quality perceived by customers (Chang and Yeh, 2002). Perceived quality is a prerequisite for customer satisfaction (Parasuraman et al., 1988). Therefore, the deliver of high quality service become a marketing requirement as competitive pressures increase on air carriers.

(Jou et al. 2008) reported that passengers consider service quality and price when choosing airlines. Low cost companies continue to develop due to passengers needs for low cost air travel. However, according to Holtbrugge et al. (2006), many airlines aim to provide a high level of service quality to enhance customer satisfaction and to increase the efficiency of airline brands. Moreover, Balcombe et al. (2009) show that not only price but also service quality triggers the passengers' behaviors as well.

Delivering high-quality service to passengers is essential for airlines survival. Service quality conditions influences a firm's competitive advantage by retaining

customer patronage, and with this comes market share, and ultimately profitability (Morash and Ozment, 1994).

First, a competitive advantage is a position that a company occupies against its competitors (Porter, 1980). The three methods for creating a sustainable competitive advantage are through:

1. Cost leadership: Cost advantage occurs when a firm delivers the same services as its competitors but at a lower cost.
2. Differentiation: Differentiation advantage occurs when a firm delivers greater services for the same price of its competitors. They are collectively known as positional advantages because they denote the firm's position in its industry as a leader in either superior services or cost.
3. Focus (Economics): A focused approach requires the firm to concentrate on a narrow, exclusive competitive segment (market niche), hoping to achieve a local rather than industry wide competitive advantage. There are cost focus seekers, who aim to obtain a local cost advantage over competition and differentiation focuser, who are looking for a local difference.

A firm possesses a sustainable competitive advantage when its value-creating processes and
position have not been able to be duplicated or imitated by other firms. Sustainable competitive advantage results, according to the resource-based view theory in the creation of above-normal rents in the long run (Porter, 1998). The primary factors of sustainable competitive advantage are innovation, reputation and relationships (Peteraf, 1993).

2. LITERATURE REVIEW

2.1. Customer's behaviour

There are many factors that influence consumer decision making. Every day low cost airlines offer different plane tickets in the market. Consumers have and constantly form assumptions about companies and their services (Solomon et al, 2010). According to Olson et al. (1982), these assumptions and beliefs then become the shortcuts that guide consumer decisions even though these beliefs might not be accurate. One of the most common beliefs according to Edell and Mitchell (1978) is price-quality relationship. Consumers normally assume that high quality products/services will cost more to buy or that high price means that the products/services have considerably high quality.

2.2. Service quality

Service quality can be defined as a consumer's overall impression of the efficiency of the organization and its services (Park et al, 2004) or as a chain of services in which the entire service delivery is divided into a series of processes (Chen & Chang, 2005). Most definitions of service quality depend on the context and therefore focus on meeting the customer needs and requirements and how well the service delivered matches the customer expectations of it. In the airline industry, service quality is composed of various interactions between customers and airlines with employees seeking to influence customers' perceptions and the image of the carriers (Gursoy et al, 2005). Though price is increasingly used as the primary way to attract customers; some airlines are looking more to service quality to get a competitive edge by distinguishing their products because competitors are relatively efficient in responding to price changes (Jones and Sasser, 1995). These airlines competitive advantage lies in their service quality as perceived by customers (Chang and Yeh, 2002).

2.3. Customer satisfaction

Airlines need to understand what passengers expect from their services. To date, the effect of air passenger expectations on service perception and passenger satisfaction has not been fully investigated, even though it is an important commercial consideration.

Customer satisfaction is a psychological concept that involves the feeling of well-being and pleasure that results from obtaining what one hopes for and expects from an appealing product and/or service (World Tourism Organization, 1985). Social psychologists, marketing researchers and students of consumer behavior have studied customer satisfaction and dissatisfaction extensively. The increasing importance of quality in the service and manufacturing industries has also created a proliferation of research, with tens of thousands of academic and trade articles published on this topic within the past three decades (Peterson and Wilson, 1992). Several conferences have been devoted to the subject, and extensive literature reviews have been published (Barsky, 1992; Day, 1977; Oh and Parks, 1997; Ross et al., 1987; Ariffin et al., 2012; Kilic and Bekar, 2012; Cronin et al., 2000; Djekic et al., 2014; Lin and Mattila, 2010; Deng et al., 2013; Szymanski and Henard, 2001). Satisfaction is also related to the fulfillment of implicit and explicit customer needs by the totality of attributes of services or products. So, it becomes important to find out how their performance may impact on customer satisfaction.

The importance of customer satisfaction is derived from the generally accepted philosophy that for a business to be successful and profitable, it must satisfy customers (Shin and Elliott, 2001)

To deliver better service to passengers, airlines needed to understand passengers' need and expectations (Aksoy et al., 2003). Studies in other sectors suggest that

customer satisfaction and service quality judgments involve consumers comparing their prior expectations to actual service performance. Where customer satisfaction and loyalty has been examined in the air transport context, factors such as service value and corporate image are tended to be ignored. Such omission, however could cause problems of model mis-specification and weak predictive power (Bagozzi, 1980; Cronin and Taylor, 1992).

2.4. Kano Model

The Kano model of customer satisfaction (Kano et al, 1984) can identify which requirements of a product or service bring more than proportional satisfaction to customers. Also, it identifies which requirements don't bring satisfaction when present, but bring dissatisfaction when they are not met. The Kano model clarifies product or service attributes based on how they are perceived by customers.(Hyojeong Byun et al. 2014).

The Kano model proposes that the relationship between the existence or performance of attributes and customers' satisfaction is non-linear, classifying them as: "must-be", "one-dimensional", "attractive", "neutral" or "reverse" (Kano, Seraku, Takahashi, & Tsuji, 1984; Berger et al., 1993; Matzler, Hinterhuber, Bailon, & Sauerwein, 1996; Nilson-Witell & Fundin, 2005).

Consumers have different satisfaction levels for the fulfillment levels of quality elements and when any quality element is not fulfilled, the satisfaction level drops greatly. However, when fulfilled, it has elements that do not raise the satisfaction level very much, while also having quality elements with opposite attributes. The constituents can be arranged as shown in (Table 1).

Attributes	Features
Must-be	These elements relate to the basic functions of service. Customers do not recognize the presence of these elements, but the lack of these elements lead to strong dissatisfaction.
One dimensional	These elements result in satisfaction with the present circumstances, higher performance leads to higher satisfaction and vice versa.
Attractive/ Excitement	These elements provide satisfaction if present, but customers still consider it acceptable when attractive quality elements are not present.
Indifferent	Quality attribute that does not affect satisfaction or dissatisfaction of customers
Reverse	These elements result in dissatisfaction when fulfilled and in satisfaction when not fulfilled.

Table 1. Five categories of quality elements (Kano et. al., 1984)

The vertical axis of the Kano model stands for the satisfaction and dissatisfaction users, whereas the horizontal axis stands for conditions being sufficient or insufficient. (Fig 1.)
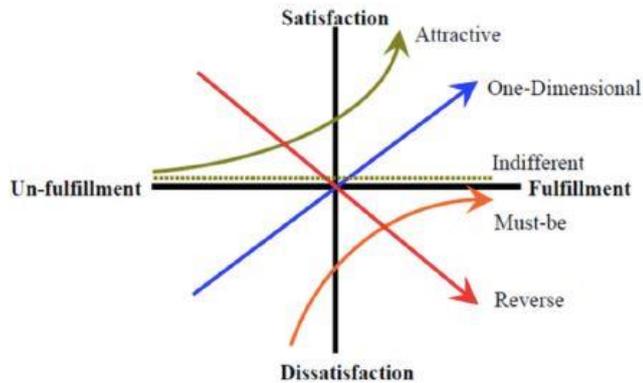

Fig 1. Kano et. al., 1984

In the Kano model, each question on service quality is in the form of a pair of asking both positive and negative questions. Under the assumption of the Kano Model that asks 'How would you feel if something does/does not?', it asks questions in opposite meanings of negative and positive. For answers to it, the positive and negative answer pairs for the five-point scales of "Do not like", "Can't help", "No feeling", "Must-be", "Like"are procured. This is then evaluated as one of the five quality attributes of 'attractive', 'must-be', 'one-dimensional', 'indifferent' and 'reverse'. (A. Shahin and N. Nekuie, The Asian J. Qual, 2007).

3. METHOD

3.1 Research model

The airline industry is service-oriented; however, to date, the effect of air passenger expectation on service perception and passenger satisfaction has not been fully investigated, even though it is an important commercial consideration (Park et al., 2004). As such, in order to better understand airline service quality and strategy planning, Kano model has been used to analyze what drives passenger satisfaction and dissatisfaction in the airline industry.

The research made for this study has the form of a descriptive or ex post facto research. The main characteristics are that the researcher has no control over the variables, just reports what is happening and measures the preferences of the

sample in order to respond to the issues raised through the answers collected from the subjects (Kothari, 2004). In this exploratory qualitative research, a case study is conducted to gain a better understanding of role of the Kano model for low-cost airlines.

The primary data can be gathered through survey, focus groups, in-depth interviews, or through experiment (Curtis 2008). In conducting this research, it has been used a survey method by distributing the questionnaires to gather primary data from the respondent groups. The primary data comes from what the researchers obtained from direct sources. The research has been carried to 140 people. The questionnaire has been sent to respondents via "What's app" and posted in social medias such as Facebook and Twitter.

3.1.1 Kano model
A specific questionnaire that contains pairs of customer requirement questions is used to study
customer satisfaction level towards the degree of requirement fulfillment (Löfgren and Witell,
2008). This specific questionnaire consists of two questions for each customer requirement
(Kano et al. 1984; Berger et al. 1993):

- How do you feel if a given feature is present in the product? (the so-called "functional" form of question)
- How do you feel if that given feature is not present in the product? (the so-called "dysfunctional" form of the question)

In this concrete case will be use to determine the customer satisfaction in the experience of travelling with low cost airlines.
This method is based in seven questions which provide the data to analyse the customer´s satisfaction. As we have said above Kano Model indicates, it has been asked the functional and the dysfunctional form of the question:

- What do you think if low-cost airlines offer a wide variety of services?
- What do you think if low-cost airlines offer plane tickets at lower prices compared to other airlines?
- What do you think if low-cost airlines offer additional services like wifi?
- What do you think if low-cost airlines have employees with good knowledge about the services on board?
- What do you think if low-cost airlines would offer the possibility to check luggage for free?
- What do you think if low-cost airlines increase the price of the tickets as a result of a quality improvement in services?

- What do you think if a low-cost airlines decrease the price of the ticket as a result of lower quality in the services provided?

The seven questions deal with the relationship between the price and the satisfaction so the respondents with the five Kano model's answers.
Both questions for each customer requirement need to be answered by the respondent and each
of the questions consists of five alternatives of responses. There are very specific options that should be answered. These are not open-ended questions. To each "how do you feel if you had / did not have this feature", the possible answers are:

1. I would be very happy about it (like)
2. I would expect this (must-be or expected)
3. I don't really care (neutral)
4. I can live with live (or accept)
5. I would dislike it.

Only one of five alternatives needs to be selected by the respondent.

3.2 Questionnaire design

As stated above the Kano Model is used in this questionnaire. The questionnaire is translated into spanish language version to be able to get more people from our country. It is divided into two parts. The first part collects information on personal data such as gender and age. The second part is the part for analysis by using Kano model that it is explained in 3.1.1 .

The questionnaire was available online, there was no time limit and the respondents answered the questions anonymously. The survey tool "Google Form" has been used in order to distribute and collect primary data from the questionnaire.
The questionnaire was designed in a way to answer the three research questions stated above. The respondents have been answering multiple choice questions to find out the gender and the age and the five Kano Model answers.

All data from this system were collected in terms of statistics which was used in the analysis. It would be discussed in the analysis.

3.3 Spreadsheet design

Bill DuMouchel proposed an excellent continuous analysis methodology, explained over the next few lines.

The results were introduced into the spreadsheet manually. After this, automatically each answer option is translated to a numerical value within a satisfaction potential scale, going from -2 to 4. The bigger the number, the more an answer reflects how much the customer wants the feature.

- Functional: -2 (Dislike), -1 (Live with), 0 (Neutral), 2 (Must-be), 4 (Like)
- Dysfunctional: -2 (Like), -1 (Must be), 0 (Neutral), 2 (Live with), 4(Dislike);

The Dysfunctional scale seems backwards. Higher (positive) scores mean larger satisfaction potential. In the case of Dysfunctional answers, Disliking something means there is strong disagreement with the feature absence. Thus, there would be more satisfaction potential if it were included and that is why it has a bigger score.

The reason for this asymmetrical scale (starting from -2 instead of -4) is that the categories you get from answers on the negative end (Reverse and Questionable) are weaker than what you get on the positive end (Must-be and Performance). Thus, DuMouchel decided to emphasize that side of the scale. These scores will then lead to the categorization of the collected features within a two-dimensional plane.

Another aspect to be highlighted for discrete analysis is the column of "Category". It has been done like the next table:

Functional (Y)		Dysfunctional (X)				
		Like	Expect It	Don't Care	Live With	Dislike
		-2	-1	0	2	4
Like	4	Q	A	A	A	P
Expect It	2	R	Q	I	I	M
Don't Care	0	R	I	I	I	M
Live With	-1	R	I	I	Q	M
Dislike	-2	R	R	R	R	Q

Code	Result
M	Must-Be
P	Perfomance
A	Attractive
I	Indifferent
R	Reverse
Q	Questionable

Table 2. Evaluation table (Pouliot, 1993), (DuMouchel, 1993)

4. ANALYSIS

In this model, the horizontal dimension shows the degree of importance of a quality attribute, and the vertical dimension shows the satisfaction level of the quality attribute.

The order pair (importance scale, satisfaction scale) can then be located on the coordinates. The means of the importance scale and the satisfaction scale can be used to divide the coordinate into four areas, as follows:

:
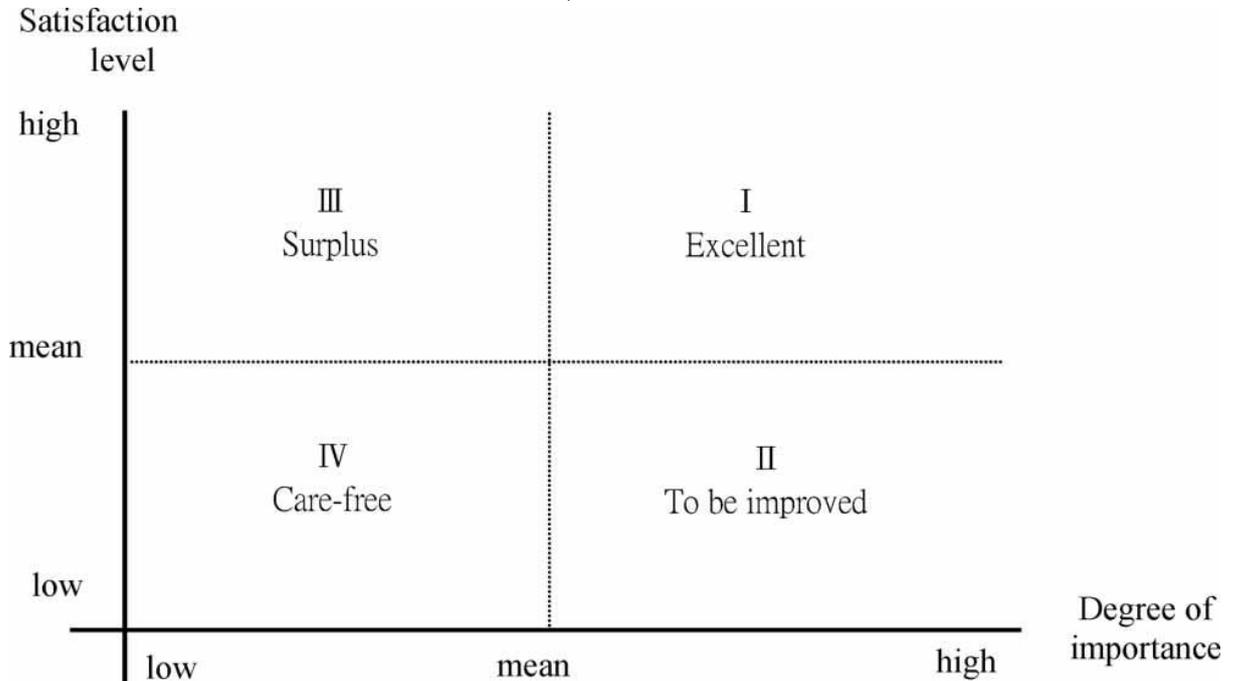
I. Excellent area: The attributes located in this area are those that customers considered to be important, and for which the performance is satisfactory to customers.

II. To be improved area: The quality attributes listed in this area are those considered as important to customers but for which the performances have not met with expectation. The company must focus on these attributes and make improvements immediately.

III. Surplus area: The attributes listed in this area are not very important to customers, but the perceptions of customers are quite satisfactory. The company can put these quality attributes aside. If the company needs to cut costs, these are the attributes that can be eliminated.

IV. Care-free area:These quality attributes are those about which customers have lower satisfaction level, but which they also rank as being less important. The

company does not need to worry about these attributes, because these items have less impact on the whole quality-evaluation process.

Even though this importance–satisfaction model is a simple structure, it can nevertheless
provide much useful information about a company's quality performance. The model
can be applied to the empirical study described above.

4.1 Demographic data

Question 1&2: Demographic data. 33,8% respondents were male and answered and 66,2% of the respondents who answered this survey were female. The second question shows the different respondents range of age. The main range that is represented is from 19-26 with 78 respondents, followed by 41-55 with 36. The third group ranges from 27-40 years with 15 respondents. And the last groups are, from 11-18 years with 7 and 56 + years with 4.

4.2 Introducing to the topic

Question 3: Before starting with the model the respondents have been asked if they have travelled in a low-cost airline before. And the answers show that from 140 respondents, the 87,9% have travelled in a low-cost airline, against 12,1%. So, it can be deduce that a high percentage of the sample has been attracted by this kind of companies.
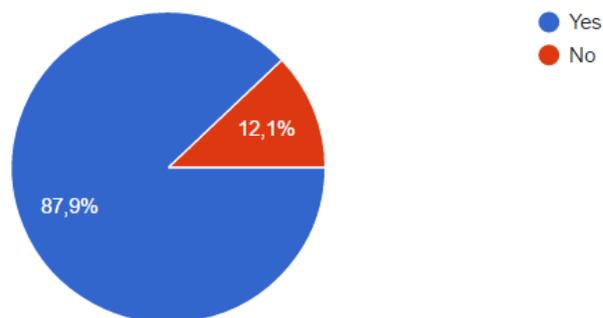

4.3 Analysis of key elements

The questions have been divided into different sections in order to have a better understanding of the answers. These elements are services, price, knowledge and quality.

Section 1: Services provided to the customer

As the satisfaction of customers is the key point of the analysis, the services that are provided by this kind of airlines to them customers is measured through Kano model. For that, two questions have been asked in the questionnaire, the first one in a positive way, while the second one in a negative way.

*-What do you think if low-cost airlines offer a wide variety of services?*
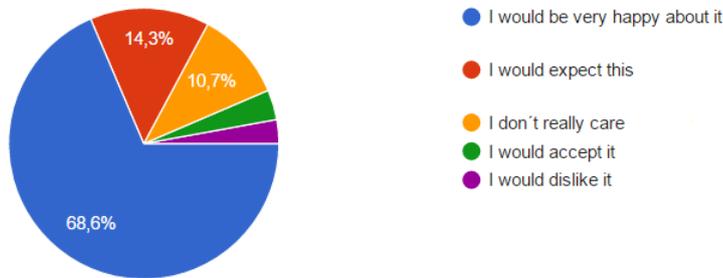
As the graphic shows, the 68,6% of the sample would be very happy if low-cost airlines would offer a wide variety of services. While, 14,3% would expect this and the 10,7% do not care about it. This could mean that the customers of low-cost airlines are not used to have a wide variety of services.

*-What do you think if low-cost airlines do not offer a wide variety of services?*
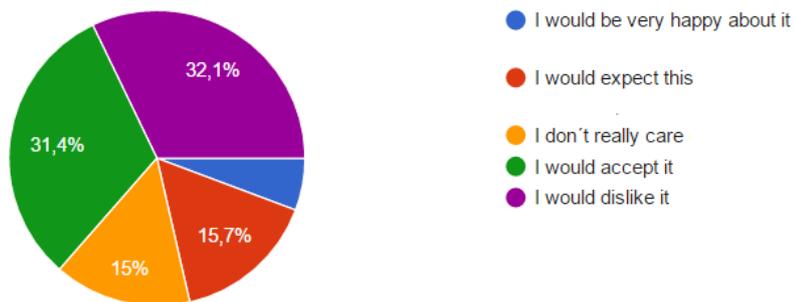
This second graphic shows that the 32,1% would dislike not having a wide variety of services available. However, there is a 31,4% that would accept it and the 15.7% would expect it. This answers show that as the company is low-cost, the customers could accept a reduction in the services because of paying a lower price.

-What do you think if low-cost airlines offer additional services like wifi?
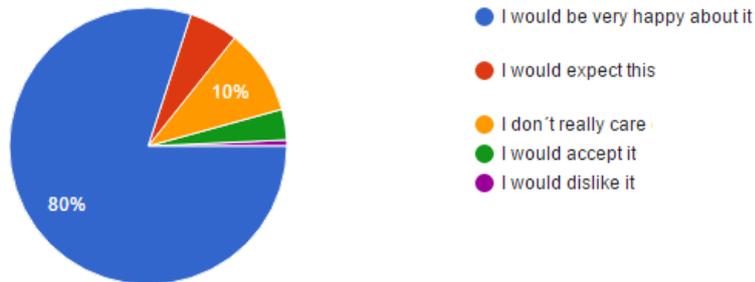

The graphic demonstrates that the majority would be very happy about it (80%). Against 10% that do not care about it. It possible to assume that for the most of the respondents this is not a basic service, but they will enjoy it if it is provided.

-What do you think if low-cost airlines do not offer additional services like wifi?
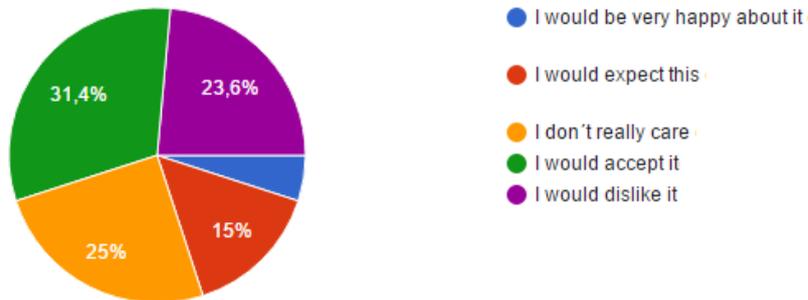

The graphic indicates that not offering this service is not really important, since only the 23,6% of the sample would dislike not having wifi. While the 31,4% would accept not having it and the 25% of them do not care about it. Also, the 15% of the respondents would expect it.

-What do you think if low-cost airlines would offer the possibility to check luggage for free?
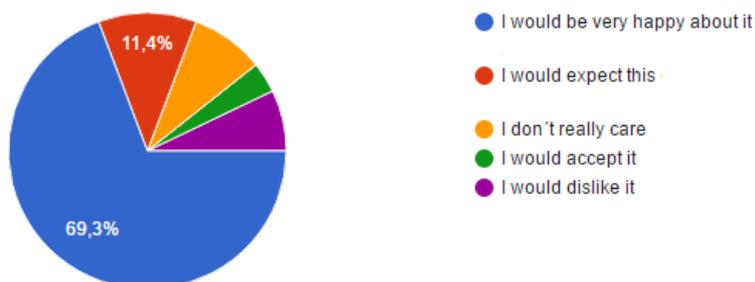
Regarding the graphic above, the 69,3% would be very happy if the low-cost airlines offer the possibility to check luggage for free, whereas the 11,4% would expect this and 8,6% do not care. Therefore, it can be supposed that offering this it is a positive point for the company, due to most of the low-cost airlines do not offer it.

-What do you think if low-cost airlines would not offer the possibility to check luggage for free?
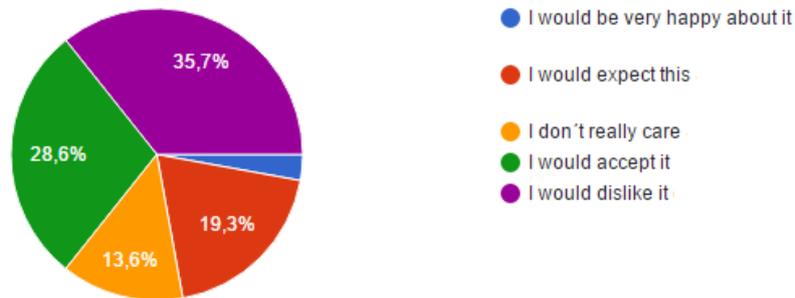
The graphic exhibits that the 35,7% would dislike not having this service for free in opposition to 28,6% would accept not having this service. Moreover, the 19.3% would expect this and 13,6% do not care about it, concluding that having this service is not totally necessary.

CONTINUOUS ANALYSIS				
FEATURE	**DYSFUNCTIONAL (x)**	**FUNCTIONAL (y)**	**IMPORTANCE (z)**	**CATEGORY**
SERVICE	1,94	2,94	4,80	A
WIFI	1,48	3,30	3,70	A
LUGGAGE	1,79	3,09	3,23	A

The table above reflect the results obtained after introducing the data gathered from the questionnaire, concluding with an A, which means that these features are attractive. As these features are situated in the surplus area, means that providing a wide variety of services, wifi or free luggage is not very important to the customers, but the perception of the customer is quite satisfactory. In conclusion, passengers might have accepted that the low service provided by the airlines is related to their low fares but in the future passengers expect the low cost airlines to provide additional service (Barett,1999)

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Section 2: Price comparison
The price in low cost is one of the most relevant points in the customer's purchase. For that reason, the price is measured through Kano Model. As it is said above, the question has been answered in positive and negative style.

-What do you think if low-cost airlines offer plane tickets at lower prices compared to other airlines?
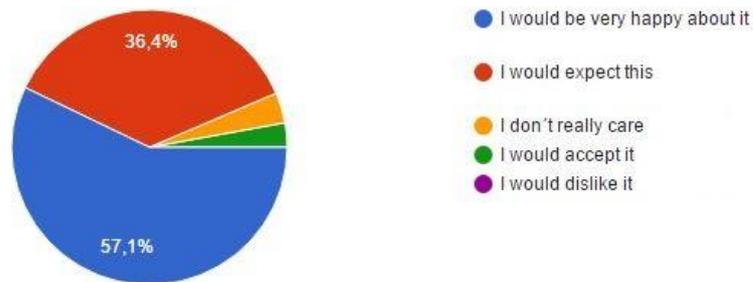
As the graphic shows, the 57,1% of the sample would be very happy if low-cost airlines offer plane tickets at a lower price compared to other airlines. As it is talked about low cost company, people assume the price has to be lower. As long as, 36,4% would expect this.

-What do you think if low-cost airlines do not offer plane tickets at a lower prices compared to other airlines?
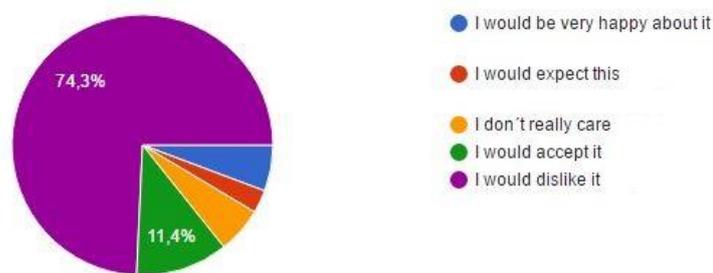

It is very clear that low cost airlines should offer plane tickets at a lower prices compared to the competitors, since they are know as low-cost, if not the 74,3% of our sample would dislike it.
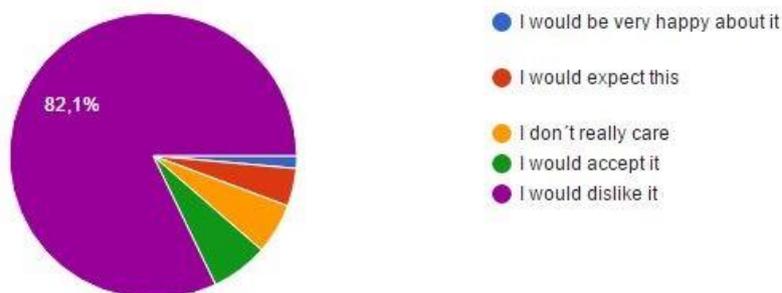
Section 3: Employees knowledge

Cabin crew must have great communication and customer care skills to keep passengers calm and happy. They must also have excellent knowledge of health and safety, and look clean and presentable at all times. That is why it is important to analyse the next question through Kano Model.

-What do you think if low-cost airlines have employees with good knowledge about the services on board?
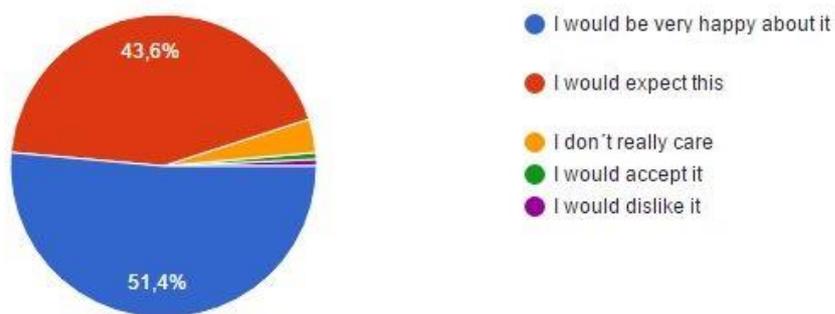
The 51,4% of the sample would be very happy with well-knowledge of the employees. The rest (43,6%) expect that it is a attribute they should offer. Assuming that with these results, this feature is basic when traveling in a plane.

-What do you think if low-cost airlines do not have employees with good knowledge about the services on board?

As it is said in the last question, the respondents consider the employee's' knowledge very influential, so for that reason in the dysfunctional question the result is 82,1% of disliking. Then, it is quite clear that the whole crew of employees in a plane should have a good knowledge of the skills needed.

CONTINUOUS ANALYSIS				
FEATURE	DYSFUNCTIONAL (X)	FUNCTIONAL (Y)	IMPORTANCE (Z)	CATEGORY
PRICE	3,44	2.98	5,77	P
EMPLOYEE'S KNOWLEDGE	3,63	2,95	7,86	P

The results are category P that means performance. These attributes are those for which more is generally better, and will improve customer satisfaction. The price for which customer is willing to pay for a service is closely tied to performance attributes. As this feature is situated in the "To be improved", means that the quality attributes listed in this area are those considered as important to customers but for which the performances have not met with expectation. The company must focus on these attributes and make improvements immediately.

Section 4: Quality/Price

As in most of the services/product offered in the market, there is a connection among quality and price. Because offering a low cost service imply having lower costs, and this usually affect to the quality of the service that is offering. It is important the analysis of the price because it determine if the people will be willing to pay more for better quality and if this would modify their consumption habits.

-*What do you think if low-cost airlines increase the price of the tickets as a result of a quality improvement in services?*

The graphic shows that the 36% could live with the increasing the price as a result of better quality. Moreover, the 29,5% would dislike this measure. However, there is

near the fourth part do not care about it, concluding that doing this is not totally necessary

-What do you think if low-cost airlines do not increase the price of the tickets as a result of a quality improvement in services?
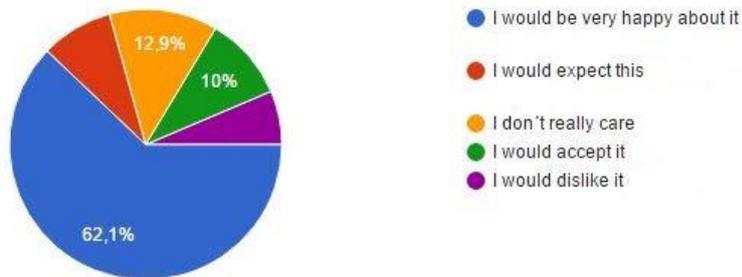

The most representative figure is that the 62,1% of the people are happy if the low-cost airlines do not increase the price and the quality. In the other hand, the 12,9% do not mind about this fact. Therefore, it can be supposed that offering lower quality , it would not be a good strategy for the airline, due to most of the respondents would accept the increasing in quality while other low-cost airlines do not offer it.

-What do you think if a low-cost airlines decrease the price of the ticket as a result of lower quality in the services provided?
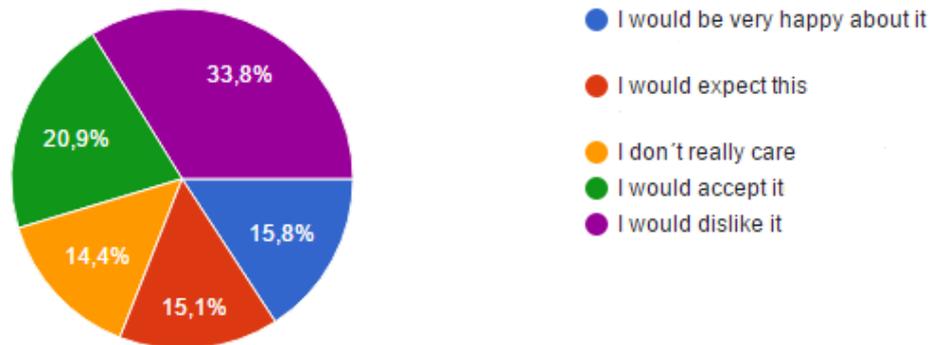
Regarding the graphic, the 33.8% of the respondents would dislike it, maybe because the decrease in quality. They would prefer pay more in order to have better quality. The 20.9% would accept it, the the 15.1% would expect it and the 15.8% would be happy. These results means that if the price is lower, most of the people would not care about the decrease in quality.

-What do you think if low-cost airlines do not decrease the price of the ticket as a result of lower quality in the services provided?
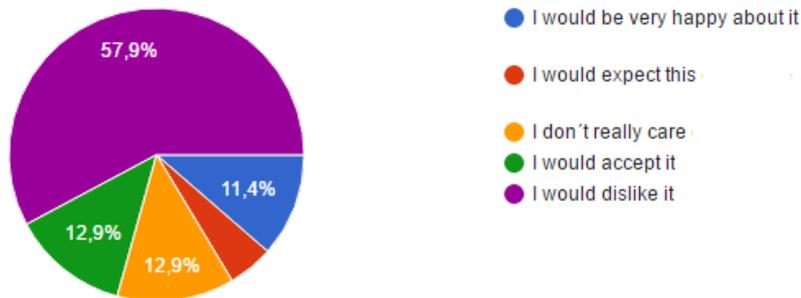
Concerning the graphic above, more than a half (57.9%) would dislike the decrease in quality while the price holds the same. 12.9% do not really care about it, like with the same percentage would accept it.

CONTINUOUS ANALYSIS				
FEATURE	DYSFUNCTIONAL (X)	FUNCTIONAL (Y)	IMPORTANCE (Z)	CATEGORY
HIGH QUALITY / PRICE	-1,10	-0,59	3,15	R
LOW QUALITY/ PRICE	2,00	0,60	4,58	I

The table above reflect the results obtained after introducing the data gathered from the questionnaire. In the first feature conclude with a R when referring to higher price higher quality , which means that this feature is Reverse. In this case, it is not in the positive quadrant.

After observing the results, decreasing quality and price shows the category I, that means Indifferent. This feature is situated between "Care free area" and "To be improved". The "Care free area" means that these quality attributes are those about which customers have lower satisfaction level, but which they also rank as being less important. In addition, the "To be improved area" is considered as important to customers but for which the performances have not met with expectation. As it is in the middle between both, it will be considered in the way of more sense: "To be important" as we have analyse in the points before, price is important.

Fig. 2 Kano model results

Discrete Analysis

The results have been analyzed also in a discrete way. This type of analysis is great to have a first level of understanding of the data collected. Although the results should be quite the same, with the discrete analysis could be a loss in precision in the data.

Discrete Analysis							
Feature	M	P	A	I	R	Q	Category
WIFI	1,43%	22,14%	54,29%	15,00%	1,43%	5,71%	A
SERVICES	7,14%	25,00%	37,86%	18,57%	2,14%	9,29%	A
EMPLOYEES	37,14%	45,00%	4,29%	7,14%	0,00%	6,43%	P
LUGGAGE	3,57%	29,29%	40,00%	13,57%	5,00%	8,57%	A
PRICE	32,14%	42,14%	10,00%	7,86%	0,00%	7,86%	P
HIGH QUALITY/ PRICE	2,86%	1,43%	2,14%	16,43%	67,86%	9,29%	R
LOW QUALITY/ PRICE	30,00%	7,86%	7,14%	10,71%	16,43%	27,86%	M

5. CONCLUSION:

The aim of the study is to understand how low-cost airlines can satisfy its customers, analysing the services that they offer, the price, the quality and the knowledge of the employees.

Nowadays, it is clear that crossing borders around the world is much easier than some decades ago. The main reason is the appearance of low-cost airlines offering competitive prices and provoking the extinction of the companies that can not afford this lower prices. Low-cost companies in order to offer a competitive price, have reduced some frills or extras that before were included in the price like the meal, luggage, newspaper and so on while now they have become a new source of income. Then, the purpose of this study is to verify if this reduction in offered services and focus only in the basic service, that in this case is fly with security, have affected in the customer satisfaction.

Thought the results obtained, it can be assume that the most of the customers that decide to take a plane with a low cost airline, usually know and accept the reduction in offered services and the need to pay for them they are wanted. However, the most of them would like to receive them in the case of free offering. Therefore, if they are not offered they will accept it, but if they are offered, the satisfaction would be higher.

Nevertheless, there are some other features that the customers expect to receive them although they travel in a low-cost airline, such as the knowledge of the employees and paying a lower price than a non-low-cost airline.

But, this study has proved that customers would not like to pay a lower price in order to have a lower quality. In the opposite way, they will accept paying a higher price in the case of offering an increase in quality of the service.

6. LIMITATIONS

This research has a number of limitations which encourages future research. The number of respondents to the survey (140) is not representative enough of the population, although it identifies clear trends. Data should have been collected in the airports or during the flights. The reliability of the Kano Model results is questionable due to a low proportions obtained. Future research should get more respondents, in order to more reliable information. Moreover, the survey was focus on Spanish people, so it would be more reliable had respondents from all over the world.

7. REFERENCES

1. A. Shahin and N. Nekuie, The Asian J. Qual, 12, 2, 176-188 (2007)

2. Aksoy, S., Atilgan, E., Akinci, S., 2003. Airline services marketing by domestic and foreign firms: differences from the customers' viewpoint. Journal of Air Transport Management 9, 343–351.

3. Ariffin, H.F., Bibon, M.F. and Abdullah, R.P.S.R. (2012), "Restaurant's atmospheric elements: what the consumer wants", Social and Behavioral Science, Vol. 38, pp. 380-387.

4. Bagozzi, R.P., 1980. Casual Models in Marketing. Wiley, New York

5. Barsky, J.D. (1992), "Customer satisfaction in the hotel industry meaning and measurement",Journal of Hospitality and Tourism Research, Vol. 16 No. 1, pp. 51-73.

6. Berger, C., Blauth, R., Boger, D., Bolster, C., Burchill, G., DuMouchel, W., Pouliot, F., Richter, R., Rubinoff, A., Shen, A., Timko, M. and Walden, D. (1993). "Kano's methods for understanding customer-defined quality", The Center for Quality Management Journal, 2 (4) 2-36

7. Business week (1990) King customer (12 March) 88-94

8. Chang, Y. H. and Yeh, C. H. (2002) A survey analysis of service quality for domèstic airlines. European Journal of Operational Research, 139, 2002, 166-177.

9. Cronin, J.J., Brady, M.K. and Hule, G.T.M. (2000), "Assessing the effects of quality, value, and Consumer satisfaction on consumer behavioral intentions in service environments",Journal of Retailing, Vol. 76 No. 2, pp. 193-218.

10. Cronin, J.J., Taylor, S.A., 1992. Measuring service quality: a reexamination and extension. Journal of Marketing 56, 55–68.

11. Curtis, K. (2008).Conducting Market Research Using Primary Data. Western Centre for Risk Management Education, 1-7

12. Day, R. (1977), "Consumer satisfaction, dissatisfaction, and complaining behavior", in Day, R. (Ed.), Symposium Proceedings, School of Business, University of Indiana, Bloomington, IN,20-22 April.

13. Deng, J.W., Yeh, L.M., Sung, L.M. (2013), "A customer satisfaction index model for international tourist hotels: integrating consumption emotions into the American customer satisfaction index", International Journal of Hospitality Management Vol. 35, pp. 133-140.

14. Djekic, I., Tomic, N., Smigic, N., Tomasevic, I., Radovanovic, R. and Rajkovic, A. (2014), "Quality management effects in certified Serbian companies producing food of animal origin", Total Quality Management and Business Excellence, Vol. 25 Nos 3/4, pp. 383-396.

15. Edell. Julie A., and Mitchell, Andrew A. (1978). "An Information Processing Approach to Cognitive Response," in Research Frontiers in Marketing: Dialogues and Directions, ed.S. C. Jain, Chicago: American Marketing Association, pp. 178-83

16. Hussain A, Mkpojiogu EOC, Kamal FM (2015) Eliciting user satisfying requirements for an e-health awareness system using kano model. In: Xiaodong Z (ed) Recent advances in computer science. Proceedings of the 14th WSEAS International Conference on Computer and Conputational Science (ACACOS'15), Kuala Lumpur, 23–26 April, 2015, 156–165. WSEAS Press. ISSN: 1790-5109; ISBN: 978-1-61804-297-2.

17. Kano, N., Seraku, N., Takahashi, F. and Tsuji, S. (1984). "Attractive quality and must-be quality", Hinshitsu: The Journal of the Japanese Society For Quality Control, April, pp.39-48.

18. Kano, N., Seraku, N., Takahashi, F., & Tsuji, S. (1984). Attractive Quality vs. Must be Quality. Journal of the Japanese Society for Quality Control, 14 (2), 39–48.

19. Kilic, B. and Bekar, A. (2012), "Ü niversite Kampüsü İçerisinde Yiyecek İçecek Hizmeti Sunanİs̨letmelerin Hizmet Kalitesinin Değerlendirilmesi ve Hizmet Kalitesinin Müs̨teri Memnuniyetine Etkisi. (Turkish)", Journal of Travel and Hospitality /SeyahVe Otel Isletmeciligi Dergisi, Vol. 9 No. 3, pp. 38-51.

20. Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International. 1st ed., Darya Ganj, New Delhi.

21. Lin, I.Y. and Mattila, A.S. (2010), "Restaurant servicescape, service encounter, and perceived congruency on customers' and satisfaction", Journal of Hospitality Marketing and Management. Vol. 19 No. 8, pp. 819-841.

22. Löfgren, M. and Witell, L. (2008). Two Decades of Using Kano's Theory of Attractive Quality: A Literature Review.

23. Morash, E.A., Ozment, J., 1994. Toward management of transportation service quality. Logistics and Transportation Review 30, 115–140.

24. Oh, H. and Parks, S.C. (1997), "Customer satisfaction and service quality: a critical review of the literature and research implications for the hospitality industry", Hospitality Research Journal, Vol. 20 No. 3, pp. 36-64.

25. Oliveira, A.V.M., Huse, C., "Localized competitive advantage and price reactions to entry: Full-service vs. low-cost airlines in recently liberalized emergint markets", Transport. Res. Part E (2008),

26. Olson, J.C., Toy, D.R. & Dover, P.A. (1982). Do Cognitive Responses Mediate the Effects of Advertising Content on Cognitive Structure?. Journal of Consumer Research, 9 (3), 245-262.

27. Parasuraman, A., Zeithaml, V., and Berry, L. L. (1988) Servqual: A multiple-item scale for measuring customer perception of service quality. Journal of Retailing, Vol. 64. No. 1,12-40.

28. Park, J. W., Robertson, R. and Wu, C. J. (2004) The effect of airline service quality on passengers' behavioral intentions: a Korean study. Journal of Air Transpor tManagement, 10, 435-439.

29. Peterson, R.A. and Wilson, W.R. (1992), "Measuring customer satisfaction: fact and artifact",Journal of the Academy of Marketing Science, Vol. 20 No. 1, pp. 61-71.

30. Pouliot, Fred, "Theoretical Issues of Kano's Methods" on "Kano's Methods for Understanding Customer-defined Quality", Center for Quality of Management Journal, Fall 1993

31. Shin, Dooyoung and Elliott, K.M. (2001), "Measuring Customers' Overall Satisfaction: A Multi-Attributes Assessment", Services Marketing Quarterly, Vol. 22 (1), pp. 3-19.

32. Shostack, Lynn G. (1977), "Breaking Free form Product Marketing", Journal of Marketing, Vol. 41 (April), pp. 73-80.

33. Solomon, M.R., Bamossy, G., Askegaard, S. & Hogg, M.K. (2010). How consumers see the world and themselves. In How consumers see the world

and themselves.Consumer Behaviour: A European Perspective. (4. ed. edn.). New York: Prentice Hall/Financial Times. 117-228.

34. Szymanski, D.M. and Henard, D.D. (2001), "Customer satisfaction: a meta-analysis of the empirical evidence", Journal of the Academy of Marketing Science Vol. 29 No. 1, pp. 16-35.

35. World Tourism Organization (1985), Identification and Evaluation of Those Components of Tourism Services Which Have a Bearing on Tourist Satisfaction and Which can be Regulated, and State Measures to Ensure Adequate Quality of Tourism Services, World Tourism Organization, Madrid.