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#### RESEARCH ARTICLE

# THE BUS TRANSPORTATION SERVICE WEBSITE'S QUALITY PERCEPTION BY STUDENTS IN GREATER AGADIR: EXPLORATORY STUDY.

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# Abstract

In the era of digital applications and the development of road traffic, the need is becoming more and more urgent for public transport service companies to engage in order to improve their relations with their customers-in purely personalized marketing actions by offering website services while constantly monitoring their service quality. This article offers, through an exploratory study, an investigation on the perception of the passengers with regard to the service quality of the bus transport company's (ALSA) website in Greater Agadir (Morocco). The results show inadequacies in the design of the site, which negatively impacts the ease of its use. In addition, the quality and quantity of the non-personalized information provided to the users are necessary to choose an optimal trip. This puts into question the interaction capacity of the website in its current design.

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#### **Introduction:-**

Faced with the development of the mobility of people and communications in modern societies, the widespread use of the mobile connection for transport services has only increased the importance of information and expanded its diffusion on the Internet. For the last ten years, the number of passengers who inquire on the Internet has steadily increased. The Internet has created an unprecedented opportunity to take advantage of the benefits of mobility services. Indeed, daily searches by users to plan and facilitate their journey such as view traffic information, search maps online, are now conducted via websites on the Internet.

Thereby, the provision of information adapted to the moving environment has become the core activity of the service providers, so that user-centered transportation information services were established and developed. Through this means of contact, and relying on a relational logic, transport companies seek to provide a high-performance information service that meets customers' requirements. In order to achieve this goal, understanding the user's evaluation of a website is crucial.

The challenge of customer satisfaction and quality of service via the Web is significant, especially for young people whose digital practices have increased dramatically, a phenomenon favored by soaring equipment rates. In fact, the success of the service provider requires a website to be properly built (BYEON, 2014) and offer an online quality service. The service quality perceived by the visitors of a website plays a crucial role in the satisfaction recognition of a chain of transport services (CHENG, 2011), and in the public transport's quality- itself considered as a

composition of time and effort factors (GROTENHUIS et al., 2007). All these considerations have led us to focus on the issue of perceived service quality of a website in the case of public transport and to question the effectiveness and key success factors of online transportation service.

This article studies the perception of passengers with regard to the service's quality of the website of the bus service company (ALSA) in Greater Agadir (Morocco). This company provides mobility since 2010, among other services, for more than 29.000 students per day (in 2017). By adopting digital support (website), the company wants to be closer to its young customers' information needs and travel aspirations.

Through an exploratory qualitative study, the goal of this work is to discover how the ALSA website meets the information availability expectations of the students of Ibn Zohr University. In order to accomplish this task, addressing and underlining the importance in the literature of information on the Internet for public transport is a must, to present the conceptual framework relating to the notion of electronic quality of service, its measuring scales as well as its dimensions. Then, the methodology adopted to analyze the students' comments on the quality of service of the website will be exposed to finally discuss the results of our investigation.

#### 1.Literature review:-

# 1.1. The use of Internet to find travel information:

Thanks to the spread of information and communication technologies, many public transport companies have created, in addition to their basic services, websites relating to travel information. In fact, faced with the spatial and temporal constraints governing users' travel choices and information, defined as a service offered to users by GROTENHUIS et al. (2007), imposes today a major challenge/issue. More and more users are expressing expectations for the personalization of information. This can play a role in the modal shift, but this information must be updated to be reliable (ADOUE, 2015). Thus, users take advantage of these effective interfaces to better learn and overcome their constraints related to travel. As a result, activities such as checking information (arrival and departure times, prices and locations of the nearest stops, etc.) and search for routes in online maps for example before departure have become part of the routine activities.

"Travel information is one of the factors that contributes to the quality of public transportation" (GROTENHUIS et al., 2007). Several researches on e-commerce and the adoption of technology have shown that a positive or negative evaluation can affect the nature of travel and affect the perception of the total quality of public transport service on the attitude towards the service provider or satisfaction (REINDERS et al., 2007). A website organized in such a way as to make the richer content easily searchable and the service easily usable, will increase the quality of electronic service (e-service) (ERIKSSON et al. 2007), satisfaction with the quality of the website service (CHENG, 2011), and will encourage not only the use but also return of visitors (e.g. BELL and TANG 1998; Zhang and Von Dran 2001 in ERIKSSON et al., 2007).

Websites are increasingly an essential component of customer-business interactions. ZEITHAML et al. (2002), argue that, among other factors, the low content of information and accessibility issues on some websites, is one of the reasons why companies have paid particular attention to the quality of electronic services. Companies should not be online just to provide information by setting up a website, but rather make sure to focus and to be more competitive on the quality of its electronic service (Zeithaml et al., 2002, Swaid and Wigand, 2009 in ATABURO et al. 2017).

Any company that invests in providing information on the Internet through a website knows that this will retain its current users and push new ones to use the site. It is, therefore, necessary to identify the appropriate level of information and build websites by identifying the underlying dimensions of the most relevant electronic service quality to access a particular type of information (and not to all available information) of public transport on the Internet and which are able to offer the best quality of service for its users.

While research into the quality of electronic service inherent in public transport is only in its infancy with the few works that exist in this area (e.g. CHENG, 2011, BYEON, 2014, ERIKSSON et al., 2007), we are attempting to study the perceptions of passengers regarding the electronic service quality so as to examine the dimensions of the quality of service of the informative website of the public transport company ALSA. But before doing so, it is first necessary to dwell on the concept of electronic service quality.

# 1.2. The service quality of the website: a concept at the heart of customer evaluation:

If research on the quality of the traditional service, dating back more than thirty years, allow to better define the concept of service quality, with the increasing role of information technology in services which remains a field of research that many disciplines going from the system of information to marketing continue to explore (especially with the emergence of the m-service)<sup>1</sup>, this concept difficult to define (in terms of dimensions, antecedents and consequences, etc.) still raises much debate about how to study it, to measure it or to define it.

The service quality has been defined in the literature from two perspectives. The first perspective is where the quality of service is measured only by the perception of the client (CARO and GARCIA, 2006). The second perspective is measuring the service quality as the result of the difference between customer expectations and the evaluation of the actual perceived performance of the experienced service.

In fact, the traditional research resulting from the paradigm of the "disconfirmation" whose works of GRÖNROOS (1982), PARASURAMAN et al. (1985, 1988, 1999) are major contribution, defined the quality of service of interpersonal exchanges, from a relational point of view, as "global judgment or attitude, as to the superiority of the service" (PARASURAMAN et al. 1988). It "is the customer's overall impression of the relative inferiority/superiority of the organization and its services" (BITNER et HUBBERT, 1994). Following a transactional logic, it represents "the current perception by the customer of a good or a service" (NGOBO, 1997). The quality of the electronic service (e-SQ)<sup>2</sup> and the service quality of the website (website SQ), meanwhile, refer to the "the extent to which a website facilitates efficient and effective shopping, purchasing and delivery of products or services "(ZEITHAML et al. (2000))." Based on this definition, the quality of a website is to provide sufficient service to customers to shop comfortably and confidently, and to expect fast delivery and reliable service" (SALAMEH and. HASSAN, 2015)<sup>3</sup>.

Moreover, it should be emphasized that the service qualities, whether traditional or electronic, "are both subjective (they are derived from a judgment), cognitive (they correspond to an evaluation) and relative (they are evaluated in relation to another reference) "(BRESSOLES, 2005).

If one limits oneself to the only question of evaluation of the electronic service quality, the commercial web sites are certainly the sites which made the most flowed ink and mobilized the most of academic researches these last years.

With the exponential development of the Internet, having an online presence for businesses is synonymous with prospecting via a technological remote point of sale: the website. The website is a "mediated interaction tool" (Reix 2003 in BEZES, 2008) aimed at reaching highly targeted customers and selling products directly online.

Also, the rapid adoption by Internet companies can be explained by the fact that they wish to have an alternative to other technological or physical contact channels (face to face, telephone, etc.) especially for very simple operations (search information in particular). By visiting the website, customers do not always want to order or buy, they may just be looking for information. Given their sectors of activity, some companies have designed, as ancillary services, sites exclusively dedicated to the information, the non-commercial sites or informative sites. In fact, in the companies' offer of service, there is a distinction between the basic service that satisfies the customer's main need and the peripheral (or auxiliary) service as contact mediated by an informative website that facilitates access to the main service and adds value to it (EIGLIER and LANGEARD, 1987, GRÖNROOS, 1984, 1993). The use of the Internet service or e-service as ancillary services (all intangible perishable benefits) is not limited to online sales of tangible products but also pure service companies (such as transport services, banking services, insurance services, etc.) can use the electronic service.

The informative website differs from the transactional website as it allows online bank transfers. The Web Portal (IP Web Portal) is an example. The latter "is a site that provides users with online information and information-related

m means mobile.

<sup>&</sup>lt;sup>2</sup> (e-SQ) or IS SERVQUAL have emerged (Parasuraman et al., 2005).

<sup>&</sup>lt;sup>3</sup>Note the indifference of researchers (eg Piccoli et al., 2004, Riel et al., 2001, Zeithaml, 2002, Lee and Lin, 2005) as to how to use the terms "quality of service of the website" (website SQ) and "online quality of service" (online SQ) in their work.

services, such as search functions, community building features, commerce offerings, personal productivity applications, and a channel of communication with the site owner and peer users" (EISENMANN and POTHEN, 2000 in YANG et al., 2005). The web portal can be customized (YANG et al., 2005).

In a website, the user remains a major player in the service experience since he participates and controls his own navigation according to his expectations and his degree of expertise. The informative website thus constitutes a service system (SABADIE and VERNETTE, 2003). According to CINOTTI, (2006), the perceived quality of an informative website can be defined by referring to the definition proposed by ZEITHAML et al. (2002) for the quality of the electronic service as "The degree to which an informative website facilitates efficient and effective information about the products or services offered".

While there are already scales of perceived online quality that most often concern transactional websites, few studies have looked at informative websites, probably because it is a pure and simple service. Although consensus seems to be lacking on the definition of the concept of the perceived service quality of websites because of the very nature of the web and the existence of different types of websites (YANG et al., 2005), researchers agree that its measurement tools are multiple.

#### 1.3. Scale of multiple measures of electronic service quality:

The specificity of a website has led many researchers to develop many scales of measures. These scales have been treated in the literature in two broad categories of studies. On the one hand, behavioral studies whose beginning was characterized by the commercial measurement of the activity in terms of audience. These, centered on the users' response to the ergonomics of the sites, have subsequently seen their indicators multiply and refine: navigation protocol analysis (ERICSSON and SIMON, 1980, 1993), number of pages visited, time spent at the site (e.g., DHOLAKIA and REGO, 1998), or analysis of log files (e.g., JOHNSON et al., 2001), number of unique visitors, number of clicks, rate of conversion of new visitors (TOTTY, 2003), etc. On the other hand, attitudinal measures focused on the results of the research that examined consumer perceptions and the factors influencing the attitude towards the site.

The evaluation approach of the website in terms of information systems (eg., GOUNARIS and DIMITRIADIS, 2003), communication channel (e.g., PALMER and GRIFFITH, 1998; MUYLLE et al., 1999) and that of the distribution channel are based on the attitudinal perspective. The first two identified evaluation streams analyze the website as a conduit through which information flows (PALMER and GRIFFITH, 1998), with an interactivity that makes this media richer, the information is more available than product, and communication more present than distribution (BEZES, 2008). The third stream incorporates a large part of the previous research especially in information systems and considers websites to be a variety of stores "both as a vehicle for communications, marketing and as a transaction generator" (WOLFINBARGER and GILLY, 2001).

Measurement models derived from these marketing, information systems and services streams (HARTWIG and BILLERT, 2018) designed to measure the highest degree of digital transformation, are based on the quality of service perceived by the customer numerically without any influence of human interaction. "Quality depends only on the attributes of the technology used. Thus, they are characterized by a digital interaction between encounter of the service and the client "(HARTWIG and BILLERT, 2018). According to HARTWIG and BILLERT (2018), four categories of electronic service models can be distinguished according to their measurement objective. The first category is based on site quality models focused on site design/conception. Online sales sites (SITEQUAL), online bookstores (WEBQUAL), web portals (YANG et al., 2005) and institutional services (e.g., ATABURO et al, 2017) are the main investigative topics of this type of measurement. The second category does not focus on the design elements of websites but rather on the quality of online services generally focused on e-commerce (GOUNARIS and DIMITRIADIS 2003, ROLLAND and FREEMAN 2010). The third category is the quality of online banking (e.g., WU et al., 2012, YANG et al., 2004). The fourth category aims to research the quality of the mobile service. The MS-Qual (HUANG et al., 2015) and the m-service quality models (LU et al., 2009) were designed to measure mobile commerce (m-commerce) applications related to localization, mobile reading services, e-books, mobile TV and mobile music "(HUANG et al., 2015).

It should also be remembered that little research has been done on the customer's evaluation of his experience with the transport information website.

In fact, few reliable and valid measurement scales and studies have been designed for information sites in general and even less for pure services such as public transport in particular. The main measurement scales that exist include transactional websites. These Measurement scales have been modified from the basic model to fit the context of the transport site as a pure service.

Measurement scales illustrating the case of evaluation of transport web sites in particular can be cited as an example. It is, without any claim of completeness of: WEBQUAL4 and E-S-QUAL<sup>4</sup>. WEBQUAL4, the scale developed by BARNES and VIDGEN (2001a) has been tested by BYEON, (2014) on 185 users, both to measure the quality of traffic information provided by websites run by Korean central and local public institutions and private companies only to check how quality assessment factors are related to user satisfaction and intention to revisit. The ES-QUAL model (PARASURAMAN, et al., 2005), derived from the E-SERVQUAL model proposed by ZEITHAML, et al., (2000, 2002), was empirically tested on 58 respondents in Värmland County in Sweden, by ERIKSSON et al. (2007), not only to examine overall passenger satisfaction with a public transport information site, but also to provide an assessment tool to help public transport companies (local bus, bus and trains) to quantify their level of service quality on the Internet.

Note that the conceptualization of these models mentioned below (WEBQUAL, E-SERVQUAL) shows the existence of differences between the factors influencing the evaluation of clients' perceived quality of technology-mediated sales services and those of traditional services (PARASURAMAN and GREWAL (2000), WOLFINBARGER and GILLY 2003). The dimensions of SERVQUAL, the most recognized and influential classic scale in traditional service quality literature, are the tangible elements, reliability, responsiveness, assurance and empathy of the service experience (PARASURAMAN et al., 1988). However, for the quality of web site services, even if most of the dimensions derive from studies on quality of service in the physical world or literature on the human-machine interface (BRESSOLES, 2005), new dimensions have burst due to the technological nature of the interface of the service encounter (eg., ZEITHAML et al., 2002; WOLFINBARGER and GILLY 2003; SOUSA and VOSS, 2006). Even though the quantity and content of dimensions remain objects of debate among researchers, one thing that is certain is that the quality of the electronic service is multidimensional. In the following paragraph, we explain depending on the literature review, the dimensions that recur in a recurrent and systematic way in the context of public transport websites.

# 1.4. The dimensions of the quality of electronic service:

The literature on the measurement of the electronic services quality of a commercial nature is so rich that it is possible to remember that the dimensions of the measurement tools, compared to those of the classical ones, have undergone legitimate changes inherent to web sites as a particular case of technology.

In fact, new dimensions have emerged. The ease of use, the site design and the information are all factors that make it difficult to assess the quality perceived in the context of a service encounter mediated by a website.

Apart from these dimensions mentioned above, some dimensions of quality of service specific to merchant websites cannot be applicable in the case of informative websites since they do not offer transaction options. Thus, to the extent that we are interested in the website dedicated to a pure service of the informative type, will be excluded from our presentation the supposed dimensions of perceived purely electronic market quality namely online assistance, payment security in line, the quality of the offer. Only the most cited dimensions in the research dedicated to the information sites and to that inherent to transport will therefore be retained, namely: the ease of use of the site, the quantity and quality of information, accessibility, security and respect for privacy and interaction.

# -The use facility of the site

It is one of the major constituents of the online experience highlighted by the information systems approach (FLORES and VOLLE, 2005) and one of the most cited dimensions in studies to measure the quality of electronic service. The ease of use also called "usability" in the Internet context (SWAMINATHAN et al., 1999) reflects the breadth of simplicity and efficiency of the website. BYEON (2014), in his study on traffic information websites shows that ease of use has the highest weight among other factors (information quality and interactivity) by explaining that the traffic information provided by the local government website seems the most likely to be used. For him, the satisfaction is even higher that the site is used effectively. ERIKSSON et al. (2007) identified ease of

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<sup>&</sup>lt;sup>4</sup> E-S-QUAL : Electronic Service QUALity.

use, relative to the effectiveness of the site, as being decisive for users' perceptions of overall satisfaction. REINDERS et al. (2007) also found in their customer assessment study of self-service technologies in public transport that the most important aspects were reliability and ease of use. In their empirical study of online travel services (trust and ease of use), LI et al. (2009) also noted that both dimensions, confidence and ease of use, were the most significant. Indeed, the technical characteristics (download capabilities, hardware and software and the integrity of the system), the degree of abstraction of labels, "the structure of the website, the appearance and visual design of the website, intuitiveness, readability / comprehension / clarity" (YANG et al., 2005) are all elements that facilitate navigation.

# -The quantity and quality of information

Several studies in marketing and information systems validate, because of the lack of interaction with "real" sellers as it is the case in a traditional service, the fact that the quantity and the quality of the information on the offer play a preponderant role for a good perception of the quality of online service. Two key facets of information stand out in the literature; on the one hand, the wealth and the actualization are popular with Internet users (e.g. GALAN and SABADIE, 2001) and on the other hand, clarity, precision (syntactically, semantically and graphically) and comprehensiveness as information needs that arise when consulting the sites (e.g., DONTHU and GARCIA 1999; MUYLLE et al. 1999). The study by BYEON (2014) found that the central government website displays a high level of information quality. Also, the study done by ERIKSSON et al. (2007) pointed out the importance of information (clarity and completeness) in that respondents felt in their suggestions that there was a lack of information about prices and clarity of the website in particular. Moreover, in an online shopping context, web users place importance on websites whose information is precise. Precision in a website is a guarantee of reliability of the electronic service (e.g., BRESSOLES and DURRIEU, 2008; YANG et al., 2005) which increases its reputation and generates confidence in the company providing the service (ROLLAND and WALLED-WONKA, 2003).

# -Accessibility

Accessibility, as described by PARASURAMAN et al. (2005), is the technical functionality of a website. "The benefit of using a website as an information center cannot be achieved without accessibility" (YANG et al., 2005). Two major aspects related to accessibility are availability and responsiveness. Internet users expect that they will have access to the service of the website permanently and everywhere. This assumes that the site is functioning properly at launch, is available all the time to respond to requests, searches and downloads and during use is not blocked or frozen. For YANG et al. (2005), accessibility has been found to be one of the most important factors in the overall perception of users' quality of service (YANG et al., 2005). In the study by ERIKSSON et al. (2007) on a regional public transport site, respondents mentioned the lack of easily accessible price lists. The authors argue that as the availability of the system increases, overall satisfaction also increases. The speed of access and use of the site as efficiency factors is therefore one of the most critical factors for users' perceptions of overall satisfaction (ERIKSSON et al., 2007).

# -Security and respect for privacy

Security covers the protection of personal data as websites often collect varied and sensitive information about users during the service experience. This implies protecting the anonymity of consumers by implementing privacy safeguards that ensure privacy and confidentiality.

In an online shopping context, HOFFMAN and NOVAK (1999) highlight users' interest in providing data about their private life in case the website explains how they would use it.

# -Interaction

To make up for the absence of the staff in contact, companies can make various tools available on their websites for help: advice and customer service online or by phone, FAQ<sup>5</sup> section, messaging, virtual assistant, complaints etc. In fact, the website as a communication and information medium offers the possibility to personalize its services according to three interaction tools. The users can receive their personalized services either through a competent contact person or automatically without any human intervention, or via an email or in the context of social and community interaction in the form of discussion forums. In his research on the central government circulation websites, BYEON (2014) noted that the high-level interaction recorded for the central government site has a positive effect on both user satisfaction and revisits.

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<sup>&</sup>lt;sup>5</sup> FAQ: Frequently Asked Questions.

With that said, we present in the following the methodology adopted, as well as the results obtained following our investigation on the quality of electronic service by the bus transport company ALSA, in Greater Agadir.

# 2.Methodology:-

# 2.1. The context of the study:

The bus transport network in Greater Agadir presents the particularity that it serves the agglomeration and its periurban area (almost 1200000 inhabitants) over a radius of more than 60 km (HNAKA, 2018). After being operated for a long time by several operators RATAG, GAB, ZETRAP, AAB, the bus transport network is, starting from September 2010, served by the monopoly company, ALSA. The urban and peri-urban lines of the ALSA network make it possible to ensure the movement of users at the level of the urban communes (Agadir, Inezgane, Aït Melloul, Dcheira, Lagliaa) and the rural communes (Drarga, Temsia, Taghazoute and Aourir) connecting the North East and the South West of the metropolitan area. While the bus had a modal share of 13.3 according to the EMD<sup>6</sup> (2010) for a number of passengers that exceeded 25 million in 2011, ALSA records more than 45 million passengers (Activity Report ALSA, 2017), per year since 2013, for more than 17 million kilometers traveled each year (Ministry of the Interior, 2016; ALSA Activity Report, 2017). The difference between 2011 and 2017 is due to the fact that the company has increased its fleet to a tariff adapted to the restructuring of its network and the establishment of information devices to facilitate access to its basic public bus service even though it did not even exist before the start of ALSA operations in Greater Agadir. In fact, the results of the first satisfaction survey conducted by ALSA in 2012<sup>7</sup>, revealed that the users expressed clearly their disagreement with all the elements related to the services considered as auxiliary by the company; information and assistance services, the response to complaints, the hotline, the facility of contact with the company and the warnings of service incidences. As a result, and in particular with regard to information, ALSA has engaged in accordance with the stipulations of the delegated management contract in actions specific to the aspects of the service that generate a high degree of dissatisfaction by setting up fixed information devices (bus shelters, traffic signs<sup>8</sup>) and others mediated by Internet for free (website, etc<sup>9</sup>.). The ALSA Customer Satisfaction Survey in 2015<sup>10</sup> showed, with respect to ancillary services, that apart from the company's ease of contact, incident resolution, commercial agency service and telephone service having obtained more positive evaluations, website information and claims processing are attributes that are not appreciated (ALSA Satisfaction Survey, 2015<sup>11</sup>).

Thereby, because of the links maintained between mobility by public transport and the use according to the mentioned survey of the Internet-based mobility assistance information service testifying to a special role of information on the website, associated with the lack of research on the subject, we, therefore, began a survey on the

<sup>&</sup>lt;sup>6</sup> EMD: Household Travel Survey (Enquête Ménages Déplacements).

<sup>&</sup>lt;sup>7</sup>The personal interviews of this satisfaction survey, which took place from June 18 to June 24, 2012 from 7:00 am to 9:00 pm, were carried out on the bus, to the first passenger seated on the right in the seat of the second line, then passing in line 4.6, and so on.

All results presented are examined based on the number of travelers in each line.

The initial sample was 1000 people. However, 20 interviews were previously eliminated due to registration errors. Afterwards, an exhaustive phase of verification of the atypical and extreme values was applied, so 156 interviews were excluded in the satisfaction analysis for this reason (Report of the results of the survey of passenger satisfaction on urban transport, 2012).

<sup>&</sup>lt;sup>8</sup> The bus shelter stations have a plan of the lines network duly detailed on a map (lines, stops, timetables, etc.). Signs erected on a post bear references written in Arabic and French and the logo of the delegate and indicate the name of the stopping point, the number of the line or lines, the Terminus departure and arrival of the line, the sketch of the route of the line showing the remaining stopping points to go (HNAKA, Z. 2018).

<sup>&</sup>lt;sup>9</sup> The website www.alsa.ma was created in 2013 by Nejma Tech while the official facebook page was launched on May 16, 2015.

<sup>&</sup>lt;sup>10</sup> The ALSA Customer Satisfaction Study was conducted from February 13, 2015 to March 4, 2015. It was extended from 16 April 2015 to 19 April 2015. 600 written interviews lasting up to 10 minutes were carried out. They are based on a stratified random model by cluster and subdivided into service lines (The ALSA Customer Satisfaction Study, 2015). It should be noted that 47% of travelers said they had consulted the website (ALSA Satisfaction Survey, 2015).

<sup>&</sup>lt;sup>11</sup>The third survey carried out by the ALSA company in 2016, did not mention travelers' assessments of the information on the website.

quality of the offer of the auxiliary information service mediated by the Internet, the website of ALSA: www.alsa.ma.

In fact, given the size of the ALSA network, the nature of its activity as a pure service that monopolizes the public bus transport market in the Greater Agadir metropolitan area and since it has an informative website, it seemed to us necessary, in the era of digitalization, to cogitate in terms of characteristics and attributes of the subject of the service quality of this site, which has not been the subject of research so far, even by the company itself.

Note that in our study, we chose to interview students as part of an exploratory qualitative survey. The exploratory study is part of a marketing perspective. The purpose of the survey was to highlight the perceptions of student users regarding the quality of ancillary electronic service offered by the bus company. It focuses on analyzing student assessments of the service quality dimensions of ALSA's informational website (www.alsa.ma).

# 2.2. An exploratory qualitative survey:

It is from a sample of convenience of 19 students from Ibn Zohr University of Agadir, that our exploratory qualitative survey was conducted through interviews in order to achieve the objectives of this research. These interviews took place on April 4, 2018, were conducted face-to-face and lasted between 9min to 24min45s. During the interview, students were given a great deal of freedom to express their views on the key dimensions of ALSA's service quality website and their aspirations for improvements or expectations regarding the website.

The choice of students was motivated by the fact that they have already had an experience of visiting the site to obtain any information about their travels as regular users by bus or as subscribers to Ikhlas<sup>12</sup> card or as student subscribers. In order to register and obtain their subscription card, future student subscribers are required to visit the site in order to schedule an appointment in any near agency in the first month of the new school year, September 2017. Every site registration form to obtain the subscription card supposes that the visitor has already made an overview of the components of the site for more details on the numbers of lines near his/her home and must be noted on the form to be completed on the site<sup>13</sup>.

After having fully registered, the interviews were fully transcribed using the NVivo qualitative analysis tool (version 12), the analysis of the stored interviews was carried out. The transcriptions have been subjected to decontextualization to various units of meaning (or coding). These extracts of texts were then associated with the feelings (positive or negative) as well as the themes (or free nodes) already reproduced and corresponding to the five dimensions of the quality of service of the Web site to facilitate their analysis.

In addition, it is requested to complete our analysis insofar as it makes it possible to explore the collected data by carrying out textual searches in order to display them in the form of keywords. The idea is to know if the keywords were used by the students and how they understood the quality of service of the website in particular, and that of the urban transport in a general.

Thus, the analysis will be broken down into two points. We will first analyze the dimensions of the site. Then, it will be a question of studying the frequency of the words appearing on the tree of the words which gives the possibility to better know what was said by the students on this or that keyword.

# 3. Results:-

3.1. Variables analysis:

#### -Ease of use

Our interviews show that the ergonomy of the site, the degree of abstraction of labels, and the ability to download are all key elements of the ease of navigation and were cited by the respondents.

<sup>&</sup>lt;sup>12</sup>ALSA in its activity reports distinguish between three market segments: ordinary travelers, having no card, travelers who have the Ikhlas card and student travelers with a membership card.

<sup>&</sup>lt;sup>13</sup> It should be noted that student subscribers account for 20% of ALSA's annual passenger total in 2017.

Ease of navigation refers to the ease of access to information within a reasonable time. Some students view the site as "clear", others consider it, referring to the site's design, as "normal" or "acceptable". Then come those who found this one, "complicated" "not practical", "difficult", "old". They expressed dissatisfaction with the verbal labels allowing to navigate the site and find the information sought. They stated their dissatisfaction with the way in which the information contained in the site is classified, in other words the site tree (site sections). One respondent said that he "coincidentally" fell on the subject of his research and was "angry" about his quest. This supports the work of MUYLLE et al. (1999) on the importance of information accessibility and HELME-GUIZON (2002), for whom the transfer time and the ergonomics that prevent quick access to the information sought can irritate the public user of the site as part of a utility navigation. We can suppose for this person the fact of not knowing how to manipulate communication tools.

In terms of site design, a finding is almost unanimous respondents: perceived performance does not seem to be in line with the expectations of respondents, which corroborates the work of PARASURAMAN et al. (1985). The survey reveals a gap between users' expectations and their perceptions of the conditions of access to information. They aspire to a new conception of the site, improvements and modifications concerning the design, the classification of the information and the visual distinction between the different sections of the website. According to SABADIE and VERNETTE (2003), the quality of site ergonomics is a decisive attribute of site selection. The arborescence, the attractiveness and the readability are added to this previous attribute as elements of a good organization of the site which favors following SABADIE and VERNETTE (2003) the immersion of the surfer and its interaction with the site (attention, responsiveness, deeper exploration).

In addition, the ease of download was judged positively. The pages on the site and the subscription form are recognized by all respondents as downloadable quickly.

# -The quantity and quality of information

The use of the ALSA website is not an urgent or pressing need for information, but for the most part answers to an obligation to fill out the form to obtain the subscription card. It should be noted that the use of the site for the very first time does not appear to be the fruit of ALSA information or fixed devices (posting of the website on the public notice boards of stops and on bus shelters). Word of mouth arising from the family sphere, friendship or the users themselves, is by far the main vector of knowledge of the ALSA website.

The experience of visiting the site is very revealing as to the quantity and quality of the information so that it appears decisive for a later use of the information tool.

It is true that the website obeys according, to the students to a certain extent, the imperative to provide information on the number of each line, their routes, their prices, stopping stations, frequencies of passage, the information on obtaining the subscription card but the result of the experiment appears disappointing. The ALSA site is not very favored for its informational vocation. The students surveyed claimed to have totally lost confidence in the website because of its content where some information of the online service is found to be incompatible with their needs, away from the expected service.

For them, the site, whose information is "not complete" and "vague", is described as "not useful", without "no importance". Indeed, the information provided by the website is not all useful, only those that interest them and that meet their daily mobility requirements are the most requested, but these remain undiscounted. It is the question of accuracy or credibility of the information, a guarantee of the reliability of the electronic service for users, which arises for the use or non-use of the website as an information service or tool for mobility aid.

It is clear that many expectations have been expressed by student users with regard to the supply of information in particular, in its fundamental aspect. Access to personalized information or a situational approach is very important to them.

Indeed, to achieve the service relationship mediated by the ALSA website is to personalize this relationship by developing the interactive features of the site which assumes that the user can create his own service, formulate his own request for information sought (SABADIE and VERNETTE, 2003).

Any user to make his choice of travel desires through, an informative website or any other media, to overcome the constraints both spatial and temporal. Indeed, a certain number of space-time constraints affect the program of human activities and, consequently, act on the conditions of trip (level of service of the territory, frequency of passage of the public transport, etc.) and on the quality of time lived. The use of a website dedicated to users comes from the desire to facilitate travel on a given network, to plan it upstream, and thus ensure the temporal optimization of travel (ADOUE, 2015). According to WATKINS et al. (2011), in a context of information retrieval via smartphones, thanks to real-time information, the perception of waiting times would be more accurate for public transport users who would no longer be able to adapt to departure times while reducing the waiting time in the station.

For the interviewed students, the time (time cost) is a decisive criterion in terms of the lack of quality of information provided by the site. The appointments fixed on the site for the recovery of the subscription card from the commercial agencies as well as the frequencies of passage of the buses posted on the site are hardly respected, do not correspond to the reality and the times of expected waiting for the passage of buses, they tell us, are thereby, too long for some lines.

In an effort to minimize their travel time, many respondents expressed interest in the real-time use of information and pointed out the advantage of smartphone applications to have more reliable information about the time required. The purely utilitarian value attached to the site leads students to associate the efficiency of the website (Raman and Leckenby in GALAN and SABADIE, 2001) with the cost savings of the information sought on it (Hoque and Lohse in GONZALES, 1999). This cost is related to the cognitive and physical effort related to trip (GROTENHUIS et al., 2007), to a mental burden necessary to obtain the information inherent to the search for waiting time, to a new route, a source of stress and permanent uncertainty that can weigh heavily on daily comfort in terms of travel.

In terms of redefining a new route, students expect more accuracy on the route of the lines (neighborhoods, streets, etc.). Some said they had consulted "Google maps" to get a clearer and more detailed idea of the route taken by the bus. Others wish to have a search engine on the site where they can enter their location to know all the lines that serve them.

The students also emphasized the comprehensiveness of the presentation of all the lines served by ALSA buses, as well as their routes and prices.

#### -Interaction

Exchange of information is quite limited on the website. The interest in the interactive dimension by society appears to fall short of the expectations of users of the ALSA site. The speed of the processing of the requests or the complaints is an aspect raised by the Net surfers and whose importance was underlined by BITNER et al. (1990). Respondents who requested online emphasized the weakness of the interactive dimension of the website. Others declare that they have never been aware of the existence of this dimension and have never asked for it.

#### 3.2. Cluster analysis:

# -Information

The service quality of the website is closely linked to the richness and the updating of the information. The information as requested or searched for on the website remains, as the respondents state, attached to the "site", "lines", "paths", "paperwork for subscription card", "Prices", "fares", the main information necessary for each traveler for a choice of travel and optimal mobility. This highlights the importance that a site in contact with users can play in improving the quality of the online information service rendered and responding to a demand for information, itself derived from travel demand (JOH et al., 2011), which can reduce information asymmetries. The words "no", "never", "none" quoted by the internet users testify, however, of a situation in information that plays to their detriment. They relate a judgment and a negative perception with regard to the information service provided by the site and attest to the lack and limitations presented by the website that reinforce the dissatisfaction of users with the overall service of public transport by bus insured and accentuate the breach of trust with the company whose services according to them leave something to be desired (permanent overload, lack of safety on board buses, frequency of passage not respected, etc.).

#### -Site

What emerges from interviews with students is that "the form" is the main reason for using the site. This shows that the site is far from being able to fulfill its major informational role. The theory of DAFT and LENGEL (1984, 1986) that the choice of media depends on its richness confirms this result. Indeed, expressions like "never used", "never accessed", "no need to consult", "I did not find", "the form in principle", "only once to know", "since September" are all expressions made by students on the site that converge on the idea that it does not present specificities that show that it is better placed compared to other existing fixed information devices. Completeness, relevance, comprehensibility, information-related aspects in the context of a website visit and that the ALSA site is not able to deliver as a service, are preponderant elements in the satisfaction of Internet users (MUYLLE et al., 1999). Given the informational limits of the site in terms of time precision, the visit and even the research done by the students on the site inherent in the rates, the route of the lines to clear the necessary numbers to choose for their movement, is, therefore, limited for most respondents to filling out the form to obtain the subscription card.

#### Conclusion:-

The results we reached in our study allowed us to identify the evaluation criteria of the users of the ALSA website, the transport company, and to understand how these key dimensions influence the quality of the website service.

The results showed that the dimensions so much criticized by users are the ease of use that calls into question the design of the site and the provision by it of information necessary to choose an optimal trip. This confirms that certain elements of electronic quality of service may be a source of discrepancy between the expected service and the service perceived. These results not only highlight the major role of the designer in the construction of an effective site, with content that meets the expectations of users, which attests to the importance of the attributes inherent in the construction of the site (tree structure, ergonomics, readability, etc.) can facilitate navigation but also it highlights the role of personalized information provided as a source of attractiveness of the site. It would seem indeed that the information delivered by the pose a problem of adaptation to the spatio-temporal constraints imposed by the trip which compromises the experience and the meeting of the service. The lack of precision and updating of the information on the site makes access to it more difficult, requires an effort necessary for its acquisition and a time cost that acts on the daily time of mobility, mobility in the light of time.

On the other hand, it must be recognized that the exploratory methodological approach adopted in this study constitutes in itself a major limitation of our work. It would, therefore, be desirable and necessary, since no study has been done in this area, to complete this work by a quantitative study of a representative sample of public transit bus passengers, users of this site and to measure the influence of all dimensions on perceived quality of service. Testing the relationship between perceived electronic quality of service with other concepts such as satisfaction and return visits can provide new insights as to how to improve the public service offered, a prerequisite for establishing a quality service relationship.

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