The impact of electronic services on e-trust in the Tunisian post

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Abstract
Among the main reasons that lead us to this study is the appearance of new physical and virtual business services similar to the Tunisian post. The objective of this research is to study the impact of the perceived quality of electronic postal services on e-trust of cyber consumer. Data collection was conducted using a questionnaire survey of users who have previous experience with the commercial web site of the Tunisian post. This questionnaire is administered in four post offices in the city of Sfax (second capital of Tunisia), which are post office “Bab Bahar”, Post Office “new Sfax”, Post Office “Sfax Hached” and post office “City El Bahri”. The results show that the perception of the quality of electronic services positively influence the trust of cybershoppers.

Keywords: Perceived quality, electronic services, e-trust, investigation, questionnaire and web site of the Tunisian post.

Introduction
Although the quality has been widely studied and has led to many conceptual debates and the development of multiple tools, they rely on a "classic" theme. However, the increasing role of new information technologies, including Internet, requires changing our ways of thinking because the encounter between a customer and the company can now be seen as a dynamic and interactive the center of which is technology (Parasuraman, 2000). The development of the Internet opens the way for the creation or revision of the core concepts of marketing (Helme-Guizon, 2001) which include the concept of perceived quality.

Also, research on online trust growing exponentially (Jarvenpaa and Tractinsky, 1999, Hoffman and Novak, 1999; Gefen, 2000; Lee and Turban, 2001; Luo, 2002; Yoon, 2002; Stewart, 2003; Pavlov, 2003, Gefen and Straub, 2003; Chouk and Perrien, 2003, 2005). Trust is significantly important on the Internet, not only to transact safely and be issued with the product or service expected in a timely manner (Jarvenpaa and Tractinsky, 1999) but also to browse a portal site, having a guaranteed the accuracy of the information or the opportunistic behavior of managers of the website may use personal information without permission of the user (Jarvenpaa and Todd, 1997; Ratanashingham, 1998). Indeed, confidence in the site usually takes the appearance of
assurance over the Internet payment security, confidentiality of personal data and the credibility of the information provided (Gurvievz, 1998, and Chouk Perrien, 2003, 2005).

We come to recognize that the opening of the Tunisian post to the public and the confidence of visitors becomes a central issue in the commercial sector, that is to say that the introduction of a logic of e-marketing is relevant management of the company. Indeed, very little research focuses on the study and understanding of the determinants of customer confidence in the postal services sector. This lack of academic or professional work may be justified among others by the fact that Tunisia is a monopoly position in the Tunisian market for postal services, but currently it is not the case. Taking into account the specificities of the consumers of this type of service, we ask the question how we can build on the progress gained in the understanding of electronic service quality to explain the e-customer trust? To answer this question, we then propose a model of relationship between the perceived quality of electronic services and e-trust of online consumers, a model that will be tested on samples of customers of the Tunisian post.

I-The perceived quality of electronic service

Therefore, providing quality service on the Internet, as in the traditional world, is considered a key strategy for success and followed by the companies in our competitive environment (Bressolles and Nantel, 2006). This part is to contribute to a better understanding of the assessment of the perceived quality of electronic services. To do so we tend to answer several questions: how to define quality of service? And what are its dimensions?

This research will use a theory among e-commerce including the one developed in order to disseminate and accept technology such as:


Despite its growth, the Internet is nevertheless an innovation for the Tunisian consumer. Even if the Internet has existed for some time, the fact that the consumer has not yet developed in him a favorable or unfavorable attitude or that he did not yet adopted or rejected, in fact governed by a new different models of adoption (Rogers, 1995).

Innovation diffusion is a process through which an innovation is disseminated in a population of potential adopters. The theory of diffusion of innovations (Rogers, 1995) has established a set of theoretical constructs that influence the diffusion and adoption of innovations called "perceived characteristics of an innovation." These are relative advantage, compatibility, complexity, the ability to test and visibility. The relative advantage is the degree to which an innovation is perceived as providing a greater benefit to the practice that it supersedes. It can express an economic benefit, social prestige or other benefits. Compatibility means the degree of consistency of innovation with the values, past experience and objectives of the user. The complexity expresses the extent to which innovation is perceived as difficult to understand or use. Expresses the possibility of testing the possibility to experiment with innovation before committing to use. Visibility refers to the ability to show the results of the innovation to others.

2. **Conceptual definition of perceived quality**

Parasuraman, Zeithaml and Berry (1988) define service quality as an overall traditional, or attitude, when the superiority of the service while the electronic service quality is the
degree to which a website facilitates efficient storage, purchase and delivery of effective and efficient products or services (Parasuraman, Zeithaml and Malhotra, 2002; Parasuraman, Zeithaml and Malhotra, 2005).

The first definitions of perceived quality are based on the paradigm of disconfirmation. The latter states that the quality is the result of a comparison between what is perceived and expected performance. Parasuraman, Zeithaml and Berry (1988) define perceived quality as "the consumer's decision regarding the degree of excellence or superiority assigned to an entity that results from a comparison between expectations and perceptions of performance". Perceived quality is an overall assessment and a high level abstraction and not a specific attribute. Similarly, it is relative in that it depends on the choices available. This design combines the perceived quality in five dimensions, namely tangibles, reliability, responsiveness, assurance and empathy (Parasuraman et al, 1988).

Several researchers have tried to use this paradigm to study this concept and the perceived quality of a site (Barnes and Widgen, 2001, 2003; Swinder et al. 2002; Wolfinbarger and Gilly, 2002, 2003, Yoo and Donthu, 2001; Zeithaml et al., 2000, 2002 and 2003). However, Bressolles (2002) points out that the five dimensions of service quality are not suitable for commercial sites. These are specified by a fundamentally human-machine interaction and not by interpersonal interaction. Bressolles (2002) proposes a theoretical model, multidimensional and hierarchical evaluation of the perceived quality of a shopping experience on the Internet. Thus, it has highlighted five specific dimensions to commercial sites, namely supply, ergonomics and design, interactivity, reliability, and insurance factors.

Similarly, Zeithaml et al. (2002) propose the concept of "e-quality." They define it as "the degree to which a website facilitates storage, purchase and delivery of effective and efficient products." Thus, the assessment depends on the quality of services offered by the site before, during and after the transaction. Seven dimensions of perceived quality have been identified by Zeithaml et al. (2002). Of these, four are identical to those of SERVQUAL, namely efficiency, reliability, compliance and privacy. The other three dimensions reflect the specificity of commercial sites. Indeed, Zeithaml et al. (2002) point out that online expectations are less well trained in classical situation.

We define the quality of the merchant service as "the degree to which a website facilitates storage, purchase and delivery of effective and efficient products." (Zeithaml, et al 2002).Therefore, although it is difficult to objectively assess the quality of the website, you must define a point of view focuses on the consumer.

3 Dimensions of the perceived quality of the website

Some quality dimensions are specific to e-commerce (such as ease of navigation). Furthermore, the cognitive aspect is more important in e-commerce as the emotional aspect. In turn, Gefen (2002) argues that in the online business are an important three-dimensional, namely the existence of tangible device (appearance of the website), a unique dimension involving reliability, responsiveness and assurance and empathy (custom content). Sites and e-qualité.com audi test group define the quality perceived by the user as "resulting from the combination of a good working order, a real potential for seduction and keeping promises displayed" (Sloïm, 2003).

Wolfinbarger and Gilly (2003) showed the quality of services received in the form of four dimensions, namely the design, service, reliability or compliance and safety or protection of privacy. They are interested not only by interaction with the site but also
by the whole experience of buying online. Similarly, they define and measure the perceived quality of the departure at the end of the transaction, including the search for information, site navigation, control, interaction with customer service, delivery and satisfaction with products ordered.

As for Yoo and Donthu (2001), they perceived quality associated with the ease of use, design, speed and security. Barnes and Videgen (2003) characterized the quality of electronic services by the quality of information and site design. It refers to interactivity, trust, empathy, and ease of use. While Swidner, Trocchia and Guinness (2002) indicate that the evaluation of the quality of services of the site is compared to performance criteria, accessibility, security, sensation and information.

Concerning the Tunisian post, actions to improve the quality of service has been strengthened by the development of integrated computer applications at the network of post offices to ensure the implementation of service in an instant way to profit citizens, in addition to the restructuring of the business of mail through the establishment of distribution centers that are specialized and equipped with IPS (International Postal Service) electronic tracking of shipments. All these actions have contributed to the encouraging results such as: Obtaining ISO 9001 certification by the Regional Directorates 5 and 7 post offices.

So in our work we will focus on electronic services of the Tunisian post which are the online payment of student grants, access to savings services remotely, the mandate minute service, the secure messaging, tracking parcels by internet, postal checks via internet / ccp net, the network of ATMs, hybrid mail (payment of invoices remotely, account statements, mailing...), the electronic payment service pensions, electronic payments on the Internet and electronic money transfers from abroad.

In short, Liao et al. (2006) examined measures of the quality of the site as an antecedent of trust and perceived usefulness of the site. In their research they referred to several studies that have addressed this issue and have concluded a number of factors affecting the construction of a trust in the seller online. In addition, Saeed, Hwang and Yi (2003) suggested that the quality system, quality information and service quality are important key consumer perceptions and their subsequent behavior online. In the same time, if consumers perceive that the website is of high quality, they are likely to have strong beliefs of confidence in the competence, integrity and goodwill of the seller, and develop a willingness to depend on this online retailer (McKnight et al, 2002). So our first hypothesis can be formulated as follows: The quality of electronic services of the Tunisian post positively influences on e-confidence cyber clients.
II- Trust electronic
The trust was an unavoidable subject and perfect, on the one hand, it is absolutely essential for social interaction and institutional collective phenomena on the other hand, it is a perfect example of cognitive mediator of sociality and required the integration of mind and of the interaction (Castelfranchi.C and Falcone.R 2010). Our goal is to systematize a general theory of trust and provide a model of this very complex organic and dynamic process on the development of cognitive, emotional and social (interactive and collective). As well, to present the definitions and dimensions of electronic trust.

1 The social cognitive theory of trust

Our attempt is to show by using a specific implementation, the relevance of a trust model that is based on beliefs and their credibility. Trust is important for the whole of social life (sharing, cooperation, communication, etc...), But it is especially crucial for institutions (Searle, 1995).

Trust is a traditional subject of the economy, for obvious reasons. Trust is the presupposition of banks, money, trade, business etc.... Trust is also a "feeling" something that the agent "sent" to another agent, something that "breathes" to others. It may be just the confidence is not a trial. It may not be defensible and based on reasons or experiences explicit, it may simply be a "disposition" or simply an "intuitive" and based on tacit knowledge and implicit learning.

According to the socio-cognitive model of trust, trust means different things, but they are systematically linked with each other. In particular we analyze three key concepts that have been identified and distinguished in the scientific literature. So trust is:

- A single mental attitude (prediction and evaluation) to another agent, a simple (pre) disposition. This mental attitude is in fact an opinion, a trial, a preventive assessment about retail and the virtues needed to rely on appropriate administrator potential (trustworthy), but could remain separate from the actual exercise of trust.

- A decision to rely on each other, i.e. an intention to delegate and trust (Mayer and al 1995). It’s still a mental attitude, but it is the result of a comparison and a match from complex assessments of individual director’s preventive potential regarding the risks and costs, and about the applicability of these assessment context and real environments.

- Conduct i.e. intentional act of trust, and clear and consistent relationship between the practice trusted and the administrator. It is the act of consistent behavior, trusted generally coordinated and consistent with the previous decision and social relationship.

Trust is usually all these things together. To understand this concept and its true meaning we must analyze it, and show the complex relationships between different components. So building trust is a relative of:

- An agent X (the trusted). The agent entity X is necessarily intentional (Dennett, 1989)); say a cognitive agent, that is, an agent with the mental component
(beliefs, goals, intentions, and so on). The trust must also be extended in cognitive terms, specific mental attitudes (such as X ') to other agents and task data.

- A recipient Y (the administrator or trusted) who is an officer in the broader sense (Castelfranchi, 1998, 2000): an entity that can cause a certain effect (results) in the world.

- A causal process (the act or performance and outcome) that is to say, one to an act of Y p probably produces results that is positive or desirable because it includes (or the corresponding content of an object of X (X objective (g) = g X), the specific purpose for which X relies on Y. We call this act: Task s Y ': τ τ τ is the couple (α p ), with g included in p or in some cases p = g.

- g = X order X (g) is in fact a crucial element of the concept and the relationship of trust, often omitted.

- A context (c) or situation or environment in which X considers Y (thereby affecting X's evaluation and selection of Y) and / or where there is supposed to act and perform the task (and affecting the possibility of success).

To better understand the internal and external confidence, the qualitative and quantitative, and the role of purpose ... and so on in the formation of trust, we suggest you see a diagram that shows the complex set of beliefs converges to the decision to trust.

*Figure 1. The complex set of beliefs converging towards the decision of trusting*

![Diagram showing the complex set of beliefs converging towards the decision to trust](image-url)
This scheme is a synthetic way the cognitive model of trust, which shows how the different elements, playing a role in the concept of trust, both for production and for the behavior of a trusted agent.

As we have seen a major role is played by the goal of the trusted that must be performed by the administrator or trusted (without motivation is no confidence). In fact, in addition to the goal, it is also necessary that the trusted believes himself to be (strongly or weakly) the person in charge of the director himself. Based on the purpose of his belief (potential) dependence, creed about the attributes of Administrator (internal trust), its beliefs about the context in which the performance will come from the administrator (worthy of trust), the trusted (potentially) arrives at the decision to trust or not.

All just as the model shows the possible beliefs are not the external databases and supports the confidence of X to Y (reduced to the good will, competence, dependence on faith, and decision confidence), but they are sub-components and possible internal forms of trust, confidence in a recursive structure.

In general, the quantitative dimensions of trust are based on the quantitative dimensions of its cognitive constituents. For us, trust is not just an arbitrary index with an operational importance, without real content, or one statistical result, but it is derived from the quantitative dimensions of belief proper.

As we have seen the trust is not only a social attitude. It can guide the process on an artifact. However, it is true that the most theoretically and practically appropriate and the most typical notion of trust is the social. Social trust means the trust to another autonomous agent received (designed) as such.

Since social trust is directed to another autonomous agent, considered as a stand agent, with his attitudes, motivations (including social), and freedom of choice, it requires an intentional stance towards a social entity (with its own intentional stance toward us). However, it still does not quite capture the notion of the most typical social trust, which many authors (eg Baier, Hardin, Holton, Tuomela) would call the real social trust.

### Trust and Technology

In fact, there are now many studies, models, simulations and experiments in trying to integrate confidence in technology infrastructure: the most advanced disciplines in Human-Computer Interaction (Baecker and al., 1987) (Card and al., 1983) and (Dix and al., 2004), Distributed Artificial Intelligence (Lesser, 1990) (Hewitt and Inman, 1991) (Weiss, 1997), Multi-Agent Systems (Wooldridge, 2002) (Shoham and Leyton-Brown, 2008), and networked computer systems (Foster and Kesselman, 2003) (Antoniou and Van Harmelen, 2008) and (Davies, 2006).

Thus, trust is fundamental to the opening of multi-agent systems where agents can (more or less freely) and out of the system. The changing paradigm of interaction and communication technology to the human style is on the one hand, a task very difficult, but on the other hand, it potentially increases the numbers of people accessing the new technologies. It is now necessary to reshape the concept of trust in new and future scenarios (new channels and communications infrastructure; new artificial entities, new environments). Without establishing trust relationships, the new service infrastructure, these new artificial agents, these new robots, these new technologies everywhere, have no force and effect and are not really fit into the real society.
Regarding the latter, if we use it to assess the confidence of people and information that we have to calculate the trust between people who do not know each other and hoped to reach so that each agent network will often anonymous partners to assess the reliability of its potential, (Golbeck, 2009).

It is now clear that when we use new technology to manage human use, in fact, we are building a new system of socio-technical opinion and even a new acquaintance treating mental disorders by integrating a pragmatic and social extension. This is true is much greater with the cognitive and social technologies: such as computers, Internet, and mediation and support of all human individual and social, study and learning at work, from the friendship communities to political participation of the business market for learning environments.

2 Definitions of electronic trust

They exist several definitions for the concept of trust in the literature. So, trust is conceived as an expectation, a belief and an attitude of willingness (Castaldo, 2002). So, trust is simply a mental attitude and emotional disposition towards Y, involving two types of beliefs: assessment and expectations.

As part of the unidimensional concept of trust, Mayer and al. (1995) define it as "the will of a party to be vulnerable to the actions of another party to complete a transaction beneficial to both parties." In turn, Fournier (1994) defines it as "the hope that the strong partner in the exchange relationship will provide what is expected rather than what is feared."

Couch (1996) has considered a two-dimensional concept. On the one hand, it is conceived as a personality trait. It thus represents a general predisposition to believe in others. Trust is therefore expected that generally rely on the words of others. On the other hand, trust is seen as a belief.

In online transactions, trust comes into its own. The virtual nature of the transaction pushes the consumer to rely heavily on the confidence it gives to the supplier (Ratnasingham, 1999). Some studies have shown that one of the inhibiting factors of online transactions is the lack of confidence in the vendor (Gefen, 2002; Yoon, 2002). With limited cognitive capacity, the consumer will seek to reduce uncertainty and complexity of electronic transactions by conducting "mental shortcuts" (Grabner-Kraeuter, 2002).

With a view to reconciling the psychological and behavioral approach, Chouk and Perrien (2003) define trust vis-à-vis a commercial site as "the expectation of the consumer that the dealer will not carry mail and its vulnerability it will honor its promises made to the site. "This definition of trust in an online shop as a psychologically waiting upstream of the intention to behavior. Similarly, these authors define trust as "a set of positive expectations when the competence and expertise of the dealer, when in compliance with its commitments regarding the offer on the site when the protection of data disclosed by the consumers and when his interest in the problems that may arise during and after the electronic transaction. »

3 The dimensions of online trust

Although some marketing research have confidence built as a one-dimensional (Dwyer, Shurr and Oh, 1987, Anderson and Narus, 1990; Selni, 1998, Nielson, 1998), many others describe it as a multidimensional reality Frisou, 2000; Gurviez and Korchia, 2002). Moreover Bhattacherjee (2002) and Chen and Dhillon (2003) consider the
competence, benevolence and integrity are the salient dimensions of trust in e can be classified in which all the other "dimensions" identified in the literature (predictability, honesty, credibility ...).

On the dimensionality of confidence in the electronic context, some authors agree on the dimensionality of this construct (Jarvenpaa and Tractinsky, 1999 Mcknight and al, 2002), while others advocate a multidimensional approach. Thus, most authors agree that trust is built a three-dimensional (Gurviez and Korchia, 2002; McKnight, Choudury and Kacmar, 2002; Bhattacherjee, 2002, Gefen and Straub, 2003, Chen & Dhillon, 2003). These dimensions mirror those identified in the traditional literature on trust are competence, integrity and benevolence.

In addition to these three dimensions traditionally attributed to the concept of trust, Chouk and Perrien (2005) incorporates a new dimension. This dimension "orientation to solve problems" identified by Sirdeshmukh, Singh and Sabol (2002), refers to the motivation to help the consumer in case of problems during and after the electronic transaction. So trust is composed of four dimensions: credibility (expertise and technical ability), integrity-a facet (its commitments), integrity, facet 2 (exchange security information on the web) and the interest in the problems. This dimension is a mixture of two distinct dimensions they believed: the good (watch out for the interests of the other) and the orientation to solve problems from the work of Sirdeshmukh, Singh and Sabol (2002). Their explanation for this fusion comes from the conceptual similarity between the fact to pay attention to the interests of others and the willingness to address these issues. In addition, the lack of personal contact in web context makes it difficult to assess the good (Chouk and Perrien, 2005). We therefore present in the following dimensions most cited and most recent to the concept of electronic trust.

A / Credibility
First, credibility can be defined as the ability of the vendor to fulfill the terms of trade, ie its ability to accomplish its task. It refers to the technical skills of the merchant and his expertise (Gurviez and Korchia, 2002). Wiedenbeck and al, (2005) assume that credibility has four dimensions identified with recurrence as the most important characteristics of trust on-line and off line: honesty, expertise, predictability and reputation. For this construct the dimension the most general and most important are competence (refers to the belief that the merchant has the electronic knowledge in his field (Wang and Emurian, 2005) and can access the information needed to complete the expected behavior (Bhattacherjee, 2002) and expertise is the ability to perform tasks with varying degrees of fluency (find specific information, make an order, make a purchase, ... (Chouk, 2003)).

B / Integrity
Integrity is the attribution of motives loyal and reliable brand (or brand) in meeting its promises regarding the terms of trade, ie the honesty of his "speech" taken to mean off. Chouk and Perrien (2005) state that the integrity refers to keeping promises, in honoring its commitments. In an electronic transaction, its commitments may relate to the information given by the merchant (matching the description of supply, product quality, service, timeliness of delivery ...) as well as those disclosed by the consumer (private data, contact bank ....).

The author’s distinguished two aspects of integrity dimension generated interviews they conducted. This distinction is intended to simplify the concept of when the statements of individuals interviewed revealed the existence of several forms of commitment and not a general engagement. This is the first aspect and introduced to reduce the
complexity of the concept of trust. Facet "Integrity 1" corresponds to compliance with the information provided by the merchant (correspondence to the description of the offer presented on the site, actual delivery of the product, ...) and the facet "Integrity 2" which refers to compliance commitments when the information disclosed by the consumer (non-disclosure of private information to unauthorized third parties, protection of financial data, ...).

C / Interest in the problems
It is designed by the size Chouk and Perrien (2005) and attributed to the concept of trust. This new aspect is developed by the alliance between the traditional dimension of the concept ie "benevolence" and a new dimension identified by Sirdeshmukh, Singh and Sabol (2002) and adapted by the authors who are based both on literature that Results of the qualitative study they conducted: it is "the direction to solve problems."

1 / Benevolence
Benevolence is the assignment of a policy for sustainable consumption taking into account its interests which allows it to consider a less uncertain future as a "survival conditions of a fair exchange is thus offered" (Gurviez and Korchia, 2002), Bhattacherjee (2002), Chen and Dhillon (2003), Wang and Emurian (2005) consider that the goodwill reflected on her belief that the merchant-mail (commercial site) set aside its determination to achieve the legitimate profit is interested in consumer interests. We can therefore infer that these definitions refer to the good motives and intentions of the seller. It reflects the belief that the seller, other than the search for legitimate profit, wants to say good to the consumer which may be doubtful.

2 / The direction to solve problems
We propose the integration of a new dimension: orientation to solve problems. This dimension is certainly unconventional, but seems relevant in the context of electronic commerce. Sirdeshmukh, Singh and Sabol (2002), authors interested in the marketing of services, were identified as a dimension of trust. It may be of particular interest in the context of our research.

Second, we think it is interesting to integrate another dimension that could be relevant in the context of our research orientation to problem solving. Identified by Sirdeshmukh, Singh and Sabol in 2002, it refers to the motivation to help the consumer in case of problems (for example, find quick and effective solutions). To justify the introduction of this dimension, we rely not only on literature but also on the work of Ines Chouk and al (2005). The problem-solving orientation has also been identified in the literature in marketing services as a determinant of consumer trust (Sirdeshmukh, Singh and Sabol, 2002).

The problem-solving orientation was defined by Sirdeshmukh, Singh and Sabol (2002) as "an evaluation of the motivations of the partner (the staff in contact or company) to anticipate and solve satisfactorily the problems may arise during or after consumption of the service (electronic transactions)."

We have presented the conceptual debate on each of our concepts and the rationale for our hypothesis. Subsequently, we specify the methodology adopted. Finally, we present the results of the audit of the dimensionality and reliability of the measures taken and results to test our hypothesis.
The diagram (1) below shows the conceptual model that we wish to test.

![Diagram of Conceptual Model](image)

**Figure 1: Conceptual model of research**

### III-Research Methodology

In order to test our hypotheses on empirical and obtain reliable and valid measures, we followed the traditional general proposed by Churchill (1979), while ensuring complete the comments and developments made in relation to this procedure and to adapt it to current statistical tools of analysis (Cohen and al, 1990).

After presenting the conceptual framework of our research and based on assumptions from our literature review, the methodology is devoted to the presentation of the method of data collection, the sampling method and then the justification for the choice of scales for measuring concepts of our model.

The data collection method adopted is a questionnaire measuring the perceived quality of electronic postal services and e-confidence of online shoppers. This method consists in administering the questionnaire respondents according to their previous experiences with the services offered by the online shop of the Tunisian Post. We used the method to select non-probability sampling units. Specifically, we chose the sampling method of convenience. This is a choice driven primarily by convenience and time constraints associated with this investigation. He is questioning anyone who might respond and provide information concerning the study. This method includes a set of advantages and disadvantages. The major advantage is the ease of information gathering but the disadvantage is that the sample selection was performed in a subjective way. The study was conducted in August and September 2011.

**Justification for the choice of the method:**

The objectives and nature of our research led us to choose this method. Indeed our research is explanatory and requires a questionnaire survey. Thus, several researchers have used in the context of similar problems this method of data collection. In addition, Parasuraman, and Berry Zeithalm (1988), Bolton and Drew (1991), Bitner (1990), Cronin and Taylor (1992) Tmessek and Allagui (2005) and Gotlieb, Grewal and Brown (1994) have used this method to studied a sample number (banking, pest control service, dry cleaning and fast food ... etc).

Our sample consists of 200 clients at four post offices that are post office "Bab Bahar," post office "new"Sfax, Post Office" Sfax Hached" and "post office City of El Bahri" the city of Sfax (second capital of Tunisia). The sample has the following characteristics: 54% female, 43% are aged 30 to 40, 49.5% are single and 62% have income between 300 and 600 Tunisian dinars per month, 76% have computers and 42% have an Internet connection at home.
 Reasons for choice of sector:
With continuity and increased level of fashion and lifestyle and purchasing power of the
Tunisian consumer, an effort was made from a few years to achieve modernization of
the service sector in general and especially the area the Tunisian post to promote this
type of service and améliorer perceived quality and brand image of the company. This
was brought through the introduction of technologies of information and
communications including the Internet to better serve the customer. In this context the
choice of service was focused on the electronic services of the Tunisian post. Indeed,
these services are consumed by a large number of Tunisian consumers whether their
sexes, ages, and back regions.... Etc.

VI- Measure concepts
The variables will be understood by measurement scales have been used previously in
the literature and whose psychometric properties were satisfactory. All measures used in
this study were estimated on the Likert-type scales. In addition, and in order to facilitate
the work of the respondents generally we will only use 5-point scale with a neutral point
located in the middle.
The scale measuring the perceived quality of service used is that of Chandon and al.
(1997). We adapted this scale for electronic postal services we want measured. While
this scale is one-dimensional 5-point Likert type ranging from completely disagree (1)
to strongly agree (5).
The measure used in the electronic trust is four dimensions (credibility, integrity,
kindness and guidance to solve problems). These four dimensions were operationalized
using sixteen items adapted from the work of Chouk and Perrein (2005). These items
were evaluated based on a Likert scale ranging from 5 points totally disagree (1) to
strongly agree (5).

V-Presentation and discussion of results
We used the SPSS (version 16.0), to purify and test the homogeneity of the scales
adopted and ensure the dimensional structure of the scale, we conducted a factor
analysis for each of our scales (Zeller and Carmines, 1976; Allen, 1974; Nunally,
1978). We used the method of maximum likelihood factor extraction with an orthogonal
rotation (Varimax) (Dillon and Goldstein, 1984).

Dimensionality and reliability of measurement scales
Factor analysis shows that the data matrix of the scale measuring the perceived quality
of service is factorisable. Indeed, the test adequacies sampling indicates a value of .863
and the Bartlett test of sphericity is significant (Chi = 862,213 with two p =.453). Factor analysis shows that the items of the scale of Chandon et al. (1997), Can be
grouped into six factors with an eigen value greater than one. These factors include the
items in the perceived quality of postal services. These factors seized 72.242% of the
initial information. However, we have removed the item because it shows 4 medium
and low correlations. After eliminating the Cronbach's alpha amounted to 0.934. Table 1
below shows the eigen values and the variances captured by these factors.
Table 1: the values of the factors of perceived quality

<table>
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<th>Factors</th>
<th>Eigen values</th>
<th>% of Variance</th>
<th>Cumulative %</th>
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<td>15.056</td>
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<td>72.242</td>
</tr>
</tbody>
</table>

Factor analysis shows that the data matrix of the measurement scale of trust is factorisable. Indeed, the test adequacies sampling indicates a value of .567 and the Bartlett test of sphericity is significant (Chi = 635,722 with two p = .765). Factor analysis shows that the sixteen items of the scale Chouk and Perrein (2005) can be grouped into four factors with eigen values greater than one. These factors include the items of trust to electronic postal services. These factors seized 67.391% of the initial information. Their Cronbach's alpha was 0.926. Table 2 below shows the eigen values and the variances captured by these factors.

Table 2: the values of the factors of trust

<table>
<thead>
<tr>
<th>Facteurs</th>
<th>Valeurs propres</th>
<th>% de variance</th>
<th>%cumulatif</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.698</td>
<td>14.148</td>
<td>28.777</td>
</tr>
<tr>
<td>2</td>
<td>1.649</td>
<td>13.738</td>
<td>42.515</td>
</tr>
<tr>
<td>3</td>
<td>1.522</td>
<td>12.684</td>
<td>55.199</td>
</tr>
<tr>
<td>4</td>
<td>1.463</td>
<td>12.192</td>
<td>67.391</td>
</tr>
</tbody>
</table>

---

Checking hypotheses

✔ Impact of perceived quality on trust

We note from the table of analysis of correlations between the dimensions of perceived quality of electronic services and e-mail trust that trust is strongly and positively correlated with the majority of electronic services offered by the Tunisian post.

Table 3: Table of correlations between service quality and trust

<table>
<thead>
<tr>
<th>Electronic postal services</th>
<th>E-confiance</th>
<th>monitoring problem-solving orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Credibility</td>
<td>integrity</td>
</tr>
<tr>
<td>1. Online payment of scholarships to students</td>
<td>0.543*</td>
<td>0.568*</td>
</tr>
<tr>
<td>2. Access to savings services remotely</td>
<td>0.448**</td>
<td>0.734**</td>
</tr>
<tr>
<td>3. Terms of Service Minute</td>
<td>0.622*</td>
<td>0.755**</td>
</tr>
<tr>
<td>4. Secure Messaging</td>
<td>0.467**</td>
<td>0.743**</td>
</tr>
<tr>
<td>5. Monitoring of mail over the Internet</td>
<td>0.843*</td>
<td>0.529*</td>
</tr>
<tr>
<td>6. The Giro Internet / CCP net</td>
<td>0.476*</td>
<td>0.744*</td>
</tr>
<tr>
<td>7. The network of ATMs</td>
<td>0.533*</td>
<td>0.566**</td>
</tr>
<tr>
<td>Service</td>
<td>Correlation Coefficients</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------------------------</td>
<td></td>
</tr>
<tr>
<td>8. Hybrid mail (invoices, account statements, mailing ...)</td>
<td>0.713* 0.911* 0.613* 0.751*</td>
<td></td>
</tr>
<tr>
<td>9. The electronic payment service pensions</td>
<td>0.721** 0.688* 0.723** 0.748*</td>
<td></td>
</tr>
<tr>
<td>10. Electronic transfers of money from abroad</td>
<td>0.747* 0.507** 0.527** 0.657*</td>
<td></td>
</tr>
<tr>
<td>11. Electronic payments over the Internet</td>
<td>0.843** 0.842* 0.573** 0.632*</td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (bilateral). * Correlation is significant at the 0.05 level (bilateral).

The results show that the electronic services of the postal bank are strongly positive correlated with the four dimensions of e-trust. This implies that the e-confidence cyber customers is explained by the better perception of electronic service quality of the Tunisian post.

Therefore, the hypothesis H1, respectively, relative to the positive impact the quality of electronic services of the Tunisian post on the confidence of online shoppers is confirmed electronically.

Conclusions

Conclusions and managerial implications

In this paper, we showed how the different elements that plays a role in the concept of trust, both for production and for the behavior of a trusted agent. However, it is true that the most theoretically and practically appropriate and the most typical notion of trust is the social. Social trust means the trust to another autonomous agent received (designed) as such. Since social trust is directed to another autonomous agent, considered as a stand agent, with his attitudes, motivations (including social), and freedom of choice, it requires an intentional stance towards a social entity.

We design technology with deep cognitive, interactive and collective. Specifically, we develop technology integrated with these dimensions. But we must have the proper understanding of these dimensions of some theoretical abstraction and some possible models. However, we do just (trials and errors) empirically and random. Therefore we believe that a deep and comprehensive model dimension of trust (cognitive, emotional, including decision-making, social, institutional) is not just useful but necessary.

The primary objective was to assess the impact of the quality of electronic services of the Tunisian post on e-customer confidence in this government entity. We chose the Tunisian post since it was the first to be convinced by improving the quality of services. In addition, this public company was a model for many other public and private. Indeed, it has included among its services the option of paying remote water bills, electricity, fixed and mobile telephony, to enroll in universities, to pay subscription fees to urban transport, ...

Using previous research, we have provided definitions and statement of hypotheses of links between the different variables, such as the link between the perceived quality of electronic services and customer confidence. The research hypothesis was subsequently verified empirically on a sample of four post offices in the city of Sfax (second capital of Tunisia). Following this analysis, we found the results can be concluded that the perception of the quality of electronic services has a positive and significant impact on the level of customer confidence in the service provider who is in our case the Tunisian post. Finally, this research highlights the existence of a causal relationship between the perception of service quality and trust electronic mail. What should be noted that the study of the effect of the quality of services to a dual role, on the one hand, it influences the commercial success of the company, on the other hand, it helps managers companies...
to choose properly the elements of services, the diversity and range of services, speed and reliability of services, the selection of a commercial site, site design, ease of use, respect for life private users, the commitments and related services offered (SAV) ... etc., because the choice of such an element must be justified and should reflect the preferences and perceptions of online shoppers.

Limitations of our work
From a conceptual point of view, we use a compensatory model of electronic trust of customers who explicitly assumes that the contributions of different backgrounds such as the perception of service quality are the same and equal. But in reality, it's all about arbitration, arbitration will be the type of consumer, consumption pattern of service, evaluation service, emphasis on service, as service delivery and how perception of quality. Based on these elements, should be given a greater or lesser weight to each dimension of service in assessing the confidence of the cyber consumer.

From a methodological point of view, we do not resort to the structural equation modeling to explain the relationship between latent variables in our model because the sample size is small. Also, we used the correlation technique to study the relationships between different variables, this technique assumes that the links are linear: a good evaluation of a single dimension of service can automatically lead to a perception of good quality and an increase in quality would automatically lead to an increase in confidence. The reality reminds us every day that it's far from the case. There certainly are limits beyond which even if the assessment of service is good, the perception of the quality no longer changes or not in the same way and if the quality increases further, the trust no longer changes or not the same way.

We cannot therefore speak of the representativeness of the sample and the quality of results emerged, because our sample is limited to the region of Sfax (second capital of Tunisia) only, and this amounts to practical reasons and time. As well, our study focuses on the services offered by the commercial site of the Tunisian post only by neglecting the role of other services offered by agencies of parcels, the agency quickly post and postal distribution centers. Finally, the use of a single type of service of the Tunisian post (e) does not verify the relationship between the total or overall service of this institution and the perception of quality.

Pathways for future research
For this study, we wish to clarify the importance of service quality and to demonstrate its role in the commercial success of the Tunisian post. To generalize our findings, further research must be created on other services such as postal distribution centers, service agencies and parcel post services agencies quick post. Similarly it would be interesting to check our model with a sample more representative and heterogeneous for reliable results and make a probabilistic method for sample selection. Finally, different variables may have influenced the perceived quality of postal service deserve to be included in the model we have considered as the virtual image of the company brand, commitment to electronic service, commitment and perceived value of electronic service and the perceived risk of buying remotely to address a more comprehensive model.
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