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NEXUS BETWEEN SOCIAL CONSTRUCTION OF THE RELATIONSHIP TO TECHNOLOGY AND CONSUMERS' ONLINE SHOPPING BEHAVIOUR IN DEVELOPING COUNTRIES

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ABSTRACT

This paper examines the link between the social construction of the relationship to technology and consumers' online shopping behaviour in a developing country, namely Tunisia. A qualitative model with a hermeneutic phenomenological approach was chosen to conduct the research. In-depth semi-structured interviews were conducted with 20 Tunisian consumers. By exploring and interpreting the consumers' online shopping experiences, our results show that Tunisian consumers' online shopping behaviour is often conditioned by the set of representations they co-construct around technologies in a socio-cultural environment. Five themes emerged from the consumers' experiences (1) New relationship to technology, (2) New form of trust, (3) Culture, (4) Government action and (5) Consumer behaviour. This research is unique in that it moves away from behavioural psychological approaches and uses a socio-constructivist approach, while drawing on Giddens' structuration theory, to investigate the link between the social construction of the relationship to technology and consumers' online shopping behaviour.

Keywords: Relationship to technology, social construction, lived experience, hermeneutic phenomenology, consumer behaviour.

INTRODUCTION

Digital technologies are the major innovation of recent decades and the main driver of the new industrial revolution in developed countries. Developing countries are not left behind. Tunisia, in particular, has itself experienced an increased dynamism in the adoption of these technologies in recent years. Ill-tempered and hesitant at first, but still uneven, the progress of their adoption exceeds all expectations and arouses both disbelief and hope for evolution. These technologies have progressively imposed themselves to the point where it is no longer possible to envisage forms of work, shopping or leisure that can do without them. They have radically transformed lifestyles, ways of communicating, relationships to time and space, and the cultural environment. The ease and speed of communications have contributed to the reduction of technological illiteracy, the growth of national and international trade and, above all, the growth of online sales, particularly after the Covid-19 crisis. In Tunisia, as in all countries of the world, this pandemic has been a boon for e-commerce which, paradoxically, has not experienced the crisis at a time when all sectors are suffering from a stifling recession. While the impact of the relationship with technology on online shopping behaviour has been widely studied in developed countries, it remains largely unexplored in developing countries. However, in developing countries, technological tools have a systemic character, since their adoption is conditioned by a different environmental context than in developed countries. These differences are, among others, the available infrastructure, the quality and availability of qualified personnel, the size of the national market as well as the profile of the users and their usage habits. In Tunisia, for example, it is clear that the use of Internet technology, smartphones and computers is still associated with social networks and video games. According to a recent statistic 72.73% of Tunisians actively use social networks every month[1]. In addition, the most popular platforms to Tunisians are Facebook and Instagram. Thus, a strong observation can be made: Tunisian users are hyper-connected but their use of technology is rather fun and playful and far from being creative and of high added value. Within this framework, Yousefikhah (2017) points out that in developing societies; the interpretation of technology is compressed by technological frameworks. Moreover, concrete social norms do not allow for alternative designs and appropriate use of technology. Thus, any innovation can flourish in a society if technological frameworks change the fixed meaning of technology and create a path for alternative conceptions and interpretations. Previous studies have suggested that technology is inextricably linked to social conditions and social institution (Tsai *et al.,* 202; Baalen *et al.,* 2016; Surry *et al.,* 2016; Burns *et al.,* 2015), and that the relationship between people and technology is often tied to a complex web of concepts, definitions, and explanations of relationships. In this vein, Orlikowski and Gash (1994) suggest that social dynamics reinforce the production of similar meanings, rather than to create opportunity towards the exchange of the different meanings. So, individuals make their social meaning of technologies based on a collective shared frame. In this context, we decide to conduct a study that highlights the relationship of users to technology and how this relationship, socially constructed, impacts their online shopping behavior in a developing country, namely Tunisia. Based on a socio-constructivist approach and especially the Structuration theory of Giddens (1984), we will show how consumers co-construct meanings around technology and how these meanings impact their online purchasing behavior. We begin by presenting the theoretical background that explores our theoretical framework and its main concepts. Next, we will describe the methodology used. Finally, we present and discuss the results of our study.

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[1]https://www.digital-discovery.tn/chiffres-reseaux-sociaux-tunisie-2023/

THEORETICAL BACKGROUND

Understanding the effect of information technology on social life is complex, regardless of the target adopted for the study. In management sciences and particularly in information systems, several studies have adopted different behavioural theories to better understand the interaction between information technologies (design, adoption, execution and use) and people (individual, group, and organization). They used Technology Acceptance Model TAM (Davis *et al.,* 1989), Theory of Planned Behaviour TPB (Ajzen, 1991) and Theory of Reasoned Action TRA (Fishbein and Ajzen, 1975). These theoretical frameworks are part of a deterministic research perspective that aims to understand how the human behaviour is always associated with the success or failure of information technology use. They deal, in fact, with the intentions of individuals to use information technologies and obviously look for determinants of intentions, such as attitude, satisfaction, social influences and conditions facilitating their use (Davis *et al.,* 1989). In addition, the dominant explanation is sought in the intrinsic properties of the technology. These properties are assumed to be stable over time and independent of individuals and society. Indeed, technology is considered as something that is accepted or rejected. It is external to the individual; these evaluations suggest a technological determinism. Despite their contributions, existing research remains incomplete as it has paid little attention to social theories and social constructivist approaches. In this paper, we want to study, first, how consumers construct meanings around the relationship to technology and especially the online shopping. Second, we want to interpret these constructed meanings and their impact on the online shopping behaviour. We will deal with the relationship with technology as a social construct while drawing on the Structuration theory of Anthony Giddens (1984).

Structuration theory of Giddens (1984)

Giddens (1984) aims to overcome the duality between approaches that promote the domination of individual subject over social structures or the determination of social structures over human action. Indeed, he proposes to approach a dialectical perspective between structure and action. For the author, neither predominates, they are two sides of same societal whole. The originality of Giddens' theory is to combine two levels of analysis, traditionally separated: Micro-social level through the contextualized practices of action and Macro-social level through study of institutions, specific to the structure. Structuration theory is based on several key concepts such as social structure, duality of structure, reflexivity, time-space distancing.

Actor-Action: Recursion and reflexivity

For Giddens (1984), action provides an understanding of both actor and social institutions. An action characteristic is that at any time junction an agent might have acted otherwise. Giddens's sociology of action sees actors as competent and possessing high-level knowledge of conditions and consequences of their actions. Reflexivity is also manifested in the concept of reflective control of action which is one of three basic components of Giddens' (1984) Stratification model of the agent. Reflective control of action expresses the idea that actors routinely control their actions. They also control the conduct of other actors as well as, routinely, the social and physical dimensions of the contexts in which that action takes place. Rational action consists of actors regularly ensuring that they understand the theoretical basis for their actions. Motivation for action refers to the often-unconscious needs and desires that drive us to act. Giddens (1984) notes that actions take place under unknown conditions. Indeed, our intentional actions are often motivated by the unconscious, while these same actions often have unintended consequences to create unrecognized conditions for action.

Structuration and duality of structure

The concept of structure is central in Structuration theory. It is a set of rules and resources organized recursively, is out of time and space, except for its actualization in the form of memory traces. Structure is characterized by the absence of subject. Moreover, it does not exist outside of its actualization in practices that constitute the systems, and in the form of memory traces thanks to which competent agents orient their behaviour. Indeed, structure exists only as a virtual reality, as a structuring property that reproduces itself in the reproduction of social systems: we perceive it as an absent totality.

In addition, agents and structures are not marked by a dualism but by a duality and are therefore co-constitutive. Structure is both medium and outcome of reproduction of practices. Structure enters simultaneously into the constitution of the agent and social practices, and 'exists' in the generating moments of this constitution as evoked by Giddens (1979). It is the process of "double hermeneutics" according to the Giddensian perspective noting that we create society at the same time as we are created by it. However, duality of structure refers also to the structural properties that are always both enabling and constraining. As such, it refers directly to the concepts of constraint and competence. Structure has three dimensions: Meaning, Domination and Legitimation. Meaning dimension designates that individuals rely on structures of meaning in order to communicate with others and disseminate their ideas and views. Domination focuses on the production and exercise of power, arising from the control of allocative resources and authority. Legitimation involves the moral constitution of the interaction. This structure is mediated by moral norms and codes that sanction actors' actions and behaviour. The mode of interaction in the legitimation dimension is sanction, which reflects the adequacy of actions to codes of conduct. Human interactions mobilize three key dimensions which are communication, power and values. The ways in which structures and actors interact can be broken down into relationships between each of these sets of dimensions.

Time-space distancing

In pre-modern cultures, time is measured locally; it is always associated with a place. But in modern cultures, time has become universal, allowing the planet to be considered as one space. Space and time are no longer confused. Co-presence in the same place is not compulsory for relationships with others since space and place are no longer linked as in pre-modern cultures. In this context, Giddens (1984) argues that space and time tend to separate by becoming hollowed out, so that they appear as 'empty forms'.

Culture: Structure and life world

According to Scott (2007), Giddens rarely uses the word of "culture" in his many publications. But despite this apparent contempt for culture word, the concept is central in his theoretical concerns. Culture, from the Giddensian perspective, has two main understandings. Culture as structure and culture as lived world. The first is the central idea of Giddens' sociology. Indeed, Giddens sees structure concept as a set of rules and resources that allow interaction between actors. Culture as a life world also occupies a central place in Giddens' work. In fact, Giddens (2002) refers culture to the way of life of members of a society. Culture includes the way they dress, their marital and family customs, their work habits, their religious ceremonies and their leisure activities.

The social construction of the relationship to technology

According to Weick's (1995) sense making model, individuals' understanding of a situation, the context and its resolution is influenced by their knowledge, beliefs and experiences. Communication between organizational actors is perceived as a process of interactions and constructed and shared meanings. The decisions taken, then, are based on this construction of their reality. As a result, they "enact" their environment through the interpretations they give it. As noted by Beck (2000), "*technology is equivocal*" and our relationship with it can be a source of equivocality. Technology is something that admits of several possible or plausible interpretations. This equivocality will lead individuals to hesitate, to encounter difficulties in coordinating their actions. They will, then, seek to construct, create, together and individually a meaning to manage the situation. In order to reduce the equivocality of the technology, DeSanctis and Poole (1994) propose that the actor begins by isolating the contextual elements of his environment. Then, using his preconceptions, he will orient these contextual elements in the direction of his preconceptions. Of course, his relationship with technology and his behaviour will confirm his prejudices. It is therefore necessary to think of the individual's relationship to technology as a social construction. In this vein, Swanson and Ramiller (1997), by introducing the concept of "Organizing vision", explain how the great ideas conveyed, through discourse, by different communities around information technology can influence organizations. Consequently, the choice and development of a technology in an organization is not an isolated phenomenon, but includes institutional forces that go far beyond the organization's boundaries (Swanson and Ramiller, 1997). In other words, the choices and implementations of all technologies are in fact socially influenced by the 'Organizing vision' that gives them a well-defined meaning. Therefore, we can admit that our relationship to technology can be understood as a social construction. The foundations of this relationship can be found in Giddens' (1984) Structuration theory and its derivatives such as Orlikowski's (1992) Structurational model of technology according to which the technology is created and modified by human action, but it is also used by humans to perform certain actions. This recursive notion of technology is called “the duality of technology”. This also confirms the approach of the social construction of technology of Pinch and Bijker (1987) admitting that technology is not accepted but shaped by individuals according to the uses it enables.

METHODOLOGY

Hermeneutic phenomenology

The hermeneutical turn in phenomenology was heralded by Martin Heidegger, a student of Edmund Husserl, who emphasized the need for interpretive methods, but has been fully enriched and realized - epistemologically and methodologically - by scholars such as Hans George Gadamar, Paul Ricoeur and Max Van Manen. Moreover, this approach is considered existential given the attention paid to "life world" or "lived experience". According to Van Manen (1997), phenomenology becomes hermeneutic in its methodology. Indeed, experience cannot be revealed without an interpretative process, which consists in applying symbols and meanings to a lived phenomenon. In this study, we want to study the nature of the lived experience of Tunisian consumers in terms of online shopping. Then, we try to interpret the meanings they attribute to this experience and their impact on their online shopping behaviour. Thus, we adopt an interpretive understanding with back and forth between theoretical framework and field. This act allows us to discover the meaning, interpret and validate it with interview participants. The phenomenological approach of Van Manen (1984, 1997, 2002) was retained for this study.

Van Manen (1990) described six research activities for performing hermeneutical phenomenological study. (1) Turning to the nature of lived experience; (2) Investigating experience as we live it; (3) Reflecting on essential themes; (4) Hermeneutic phenomenological writing; (5) Maintaining a strong and oriented nursing in relation to phenomenon; (6) Balancing the research context by considering parts and the whole.

Study design

Data sources

The hermeneutic phenomenology leads to the description and interpretation of the essence of lived experiences. Then, it is important to select participants who have had experience with the phenomenon under study, who can communicate it reflectively and tell their story as recommended by Morse (2007).

For the interview sample size, Creswell (2013) points out that in a phenomenological study, the sample size can vary from five to 25 participants. However, he adds that what is most important is not the number, but lived experience of the phenomenon and the richness of the discourse to communicate it. Thus, our sample is composed of 20 participants (9 men and 11 women) aged between 20 and 67 years. All participants are Tunisian consumers living in Tunisia who have purchased at least once online. The profiles of the interviewees are presented in detail in Table I.

Table I: Interview participants’ profiles

Ref	Date	M/F	Job
I1	11/09/2020	M	English teatcher
I2	28/09/2020	M	Law student
I3	13/10/2020	F	Doctor
I4	18/10/2020	M	Nurse
I5	28/11/2020	F	Hairdresser
I6	02/12/2020	F	Doctoral student
I7	18/12/2020	M	Taxi driver
I8	24/12/2020	F	Judge
I9	01/02/2021	F	Accountant (Bank)
I10	12/02/2021	F	Doctor
I11	22/03/2021	F	Lawyer
I12	28/03/2021	M	Supervisor (High school)
I13	02/04/2021	F	Doctoral student
I14	14/04/2021	M	Housewife
I15	03/05/2021	M	Anesthetist
I16	13/05/2021	F	Mathematics teacher
I17	08/06/2021	M	Retired nurse
I18	11/06/2021	F	Pharmacist
I19	19/06/2021	F	Lawyer
I20	22/06/2021	M	Management student

The semantic saturation criterion was used to determine our sample size. Each participant was interviewed twice. The first interview was guided by an initial set of general questions. The major feature of the phenomenological study is the collaboration researcher-participant. Thus, once preliminary themes were identified, a second, unrecorded interview was conducted with each of them to validate analysis and interpretation data as indicated by Van Manen (1984).

Data analysis

As noted by Oerther (2021), *"Analysis for hermeneutic phenomenology involves a circular process since a researcher's understanding of the data becomes enriched from the numerous readings of the study data".* Researcher and participant work together to bring the explored experience to life through the use of imagination, hermeneutical circle and attention paid to language and writing. The process of data analysis is inspired by the fourth and fifth research activity of Van Manen (1984,1997,2002), namely hermeneutical phenomenological reflection and hermeneutical phenomenological writing. Hermeneutical phenomenological reflection includes thematic analysis and determination of the essential themes. Thematic analysis is a creative process which results in the identification of essential themes and sub-themes at the heart of the phenomenon studied as shown by Van Manen (2002).

To investigate the text, Van Manen (1997) suggests three approaches: Global, selective and detailed. Global approach attempts to identify a sentence that reflects the fundamental meaning of text and which is considered as a whole. An illustrative quote in Table II gives an example of the global approach.

Table II: An example of global approach

Citation of I3	Description
"*I've gotten into the habit of touching to get an idea of the quality, size or color. For clothes, I have to try them: Maybe the size 44 fits me much better than 42"*	Consumers show a willingness to preserve their old buying habits. They want to look, touch and try products before buying them.

Subsequently, after a few readings of the text, essential themes of the experience were identified through selective approach. An illustrative quote in Table III gives an example of the selective approach.

Table III: An example of selective approach

Citation of I1	Codes
"Everyone has their own smartphone; they are always connected: Facebook, Instagram, Messenger, TikTok...they have their own friends and their own world ".	Loneliness Lack of physical contact Change in social relationships

The text of each participant was then reread several times and the sentences that seemed essential to describe the experience were underlined. Finally, we used the detailed approach of reading each participant's verbatim sentence by sentence. An illustrative quote in Table IV gives an example of the detailed approach.

Table IV: An example of detailed approach

Citation of I20	Emerging Codes 1st read-write	Grouped codes 2nd reread-rewrite	Categories 3th reread-rewrite
"I have become techno-dependent, or maybe we have all become techno dependent. Today, can we reach an unknown destination without GPS? Can we still do without our smartphone and Internet?"	Daily use and excessive dependence on digital devices	IT addiction	IT addiction

Once the themes were identified, we then began the process of writing themes and describing the correlation between them. The rewrite continued until we felt the themes and the relationship between them reflected as closely as possible how these attendees experienced the online shopping experience. To determine the essential themes, we use the method of "Free imaginative variation". It consists of modifying, with our imagination, the preliminary themes of the phenomenon to check whether each of them is essential.

Hermeneutical phenomenology: Researcher's position

The phenomenological approach is constructivist. It aims to observe and describe the meaning attributed to an experience, from the awareness of it by the subject who lives it. From the Heidegger an perspective, there is recognition of the historical dimension of understanding because what happens in the past, present or future influences the nature of our understanding at any time. According to this approach, the researcher's personal experience is not seen as an obstacle to his ability to understand. The latter must situate the reader by specifying his opinions, values, prejudices and experience in relation to the subject of research. Thus, the researcher is included at all stages of research. Likewise, to make the meaning of experiences studied understandable, the researcher's task is to interpret signs and symbols included in expressions of life. A search for the hidden meaning then takes place between what was said explicitly and what wanted to be said when describing what one feels.

RESULTS AND DISCUSSION

This paper aims to understand the meaning that consumers have constructed from their online shopping experiences and how they have constructed it. Based on the research method described by Van Manen (1984, 1997, 2002), we identified four major themes. Then, taking inspiration from the sixth research activity recommended by him "Balancing the research context by considering the parts and whole", we will, firstly, discuss each topic in turn (Thematic approach) and, then, we illustrate it with the textual content of participants (Analytical approach).

New relationship to technology

IT addiction- IT skills

The development of Internet and diffusion of digital tools affect all sectors and generations. Their ease of use, interactivity, accessibility are appreciated. In fact, Internet has replaced dictionaries, newspapers, handwritten letters, Telephone, or board games. Consequently, new habits and addictions appear. And, above all, they have seriously affected people's emotional, family, social and professional lives. Moreover, most of our interviewees and, especially, young people recognize their excessive use and addiction to IT.

> I12: "*If I don't connect, I feel uncomfortable and sad but as soon as I connect, I feel relaxed"*;
>
> I16: "I *play video games a lot. I can no longer control myself which often leads me to neglect my family responsibilities"*.

Our results are in line with those of Neverkovich *et al.,* (2018) describing the addictive behaviour as "*one of the forms of deviant behaviour, characterized by a constant desire for a pleasant subjective emotional state, which is expressed in an active change in their mental state*". Likewise, Giddens (1984) speaks of structures of domination characterized by "the dialectic of control", which refers to the coexistence in any situation of a relationship of dependence and autonomy. Indeed, although structures of domination constrain the needs and desires of agents, they also promote cooperation and enable work to be done within organizations. Giddens (2007) adds that addictive behaviour always begins with pleasure. Then, it is

transformed, thereafter, into dependence and becomes more and more a necessity. In fact, the most of our respondents use these digital tools, at the beginning, to escape, forget their daily problems and have fun. But this use quickly becomes an addiction. This consolidates the findings of Bubnova and Tereshchenko (2016) noting that problematic Internet use includes psychological consequences negative consequences, such as symptoms of depression or anxiety, and negative social consequences, such as social isolation, loneliness, neglect of personal responsibilities.

Similarly, the notion of IT skills is central as it ensures successful communication between technology and people.

> I17: *"I'm afraid to buy online and I don't trust it very much, maybe because I have a problem handling IT. I am more of a paper culture. I think it depends on the generation too. Young people are much more comfortable with online shopping because they have a better command of IT".*

This is in line with Weick (1990) adding that new technologies are difficult to diagnose because of the high mental demands they place on operators and the many ways in which surprises can occur. They are also difficult to control because of their interactive complexity. Thus, in order to master them and communicate well with them, "a broad repertoire of skills must be maintained".

New relationship to time / space

Internet has reduced the distances between people around the world. Anyone can communicate at any time and from anywhere in the world through Internet. This convenience of time and place has led to its growth and increase in usage. According to Meiller (2018), information technologies are disrupting our relationship to time and distance today. The dissemination and processing of information is accelerated. Internet allows you to be permanently connected to the whole world unlike the pre-modern society where space and place coincided, and the society was known as a society of presence.

> I14: "*In a few quick clicks, you can navigate from page to page, site to site, city to city via Google Earth in 3D and in most major cities in the world*".
>
> I2: "*Face-to-face conversations are dwindling and unfortunately family members, in the same house, chat over the internet*".

This point therefore tends to confirm the work of Giddens (1991) on the distancing of time-space. In pre-modern societies, relationships of presence and local face-to-face interactions dominate social life. This clearly stems, in large part, from limitations imposed on social coordination at a distance by the computation of pre-modern time. However, modernity simultaneously frees time and space from the peculiarities of the place, allowing "distanced" interaction between absent people. Likewise, Lazzeri (2006) adds that modernity breaks the link which seemed indissoluble between social activity and its location. In this sense, our respondents have shown that virtual relationships take an important part in their communications with family, friends or colleagues.

New form of trust

Digital trust

With the rapid development of Internet and the excessive use of smartphones and computers, individuals can now easily interact with their family, friends and work colleagues. Trust, as the fundamental basis of all social and economic exchange, has taken on a new meaning. It has become one of the most critical issues that plays a central role in the growth or failure of online transactions and in the development of online customer retention. Several interviewees said that, despite the store closures during the pandemic, they are afraid to buy online and do not trust online merchants.

> I8: "*I no longer trust online sellers or the information that present. I'm waiting for the shops to reopen and I'll buy my needs there as usual* ";

Hong and Cha (2013) define trust as "*as the willingness of one party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, regardless of the ability to monitor or control that other party*". In this context, our respondents ask several questions about online shopping such as compliance with the delivery time, product conformity, seller's honesty and loyalty.

> I18: "*The delivered item may not conform to the images displayed, who guarantees me that my purchased item will be delivered?*"

New relationship: Brand-Customer

Searching for information on the Internet before making online or in-store purchases has become a practical and almost daily exercise for the most of our interlocutors. Consumers have become accustomed to seeing what other consumers say and write about the items they have purchased. So, they often consult these testimonials posted on Facebook pages, Instagram profiles, reviews and comparison sites to better target their needs before buying. These reviews provide them with a guarantee of quality and confidence in a product, service or brand.

> I10: " B*efore you buy online, it will be very useful to take the opinions of others and see their experiences to only come across responsible and honest sellers* ".

In this vein, Swanson and Ramiller (1997), through the "organizing vision", explain how the big ideas conveyed by the discourse of different communities around an information technology can greatly influence the members of an organization.

Culture

Technological frames

The concept of technology frame analysis was first suggested by Orlikowski and Gash (1994) to study the assumptions, interpretations, and expectations that people have about technology. According to these authors, the use of technology depends on how people, in a given socio-cultural context, interpret it. As noted by Basdogan (2022), previous literature on technology frameworks highlights a strong link between technology frameworks (implicit and explicit) and interpretations of technology in several contexts. As digital technologies fuel technological change that generates considerable uncertainty and complexity, users rely on their technological frameworks to cope with these challenges. These frameworks determine how stakeholders will interpret, evaluate and shape the development and use of technology (Speith *et al.,* 2021). One of the premises of Weick's (1995) sensemaking model is that actors have a "cognitive map", in other words, meanings in mind that allow them to better interpret their organization. These causal maps guide, in the first place, the construction of meaning and then they are produced by meaning, and exert an important influence on the way actors perceive their environment. This is confirmed with the following statements.

> I1: "*I am not very modern, that is to say I was used to buying from the market or directly from the farm with my father. Today, I do the same thing*". I16: "*I always try to pass on good shopping*

practices to my two daughters so that they are never ripped off one day".

Our results are consistent with Giddens' postulates that culture is inherited and that it encompasses intangible aspects of life such as beliefs, ideas and values and tangible aspects such as symbols and objects including technology. Furthermore, our findings are consistent with those of Orlikowski *et al.,* (1995), who suggest that users' knowledge of a technology is often influenced by images, descriptions, and demonstrations presented by intermediaries such as salespeople, journalists, consultants, champions, trainers, and "power" users.

Relations and social belongingness

In Tunisian society, the active networks of solidarity that are woven between individuals of same family, region or even entourage denote an attraction of social belonging as a landmark in ambiguous environment. Zghal (1994) wrote "*facing the insufficiency and the ambiguity of rules, social belongingness becomes the only guarantee of confidence and of predictability of others' reactions*". Indeed, consumers can refuse online purchase if their entourage does not encourage them or if they have heard about bad experiences of online shopping.

I6: "*My sister had a bad online shopping experience. She received a sofa with catastrophic fabric and delivered after a month* ".

I19: "*I often share with my sisters and brothers the items purchased and the good opportunities found*".

Our results are consistent with those of Sebei (2018) showing that the Tunisian society is collectivist in nature, which proves that Tunisians are strongly influenced by the opinions of their entourage or influencers. Similarly, our results are similar to those of Le Guel *et al.,* (2005) proving that an individual having a large part of his entourage connected to Internet will in turn be encouraged to communicate by e-mail or exchange information. This individual will also be able to benefit from the advice and expertise of his entourage to learn this practice more quickly.

Government action

Legislative reforms

As noted by Alyoubi (2015), government, as a state policy, plays an important role in the adoption and growth of e-commerce in developing countries. One of the most important steps that can be taken is the development of a strong and supportive regulatory and legal environment. For online consumers to feel confident, a strong regulatory framework must include enabling laws related to e-commerce, regulations on consumer protection, electronic transactions, and cybercrime, as well as carefully defined processes for redress in the event of abuse. Many countries have adopted legislation and procedures to protect the privacy of their citizens' and businesses' information. However, many developing countries, such as Tunisia, have yet to adopt strong and rigorous procedures to protect their citizens from identity theft and online fraud.

I13: *"It is very necessary to develop rules and strict laws to e-commerce. It is also necessary to apply them properly so that the consumer feels reassured, but unfortunately, this is not the case for us in Tunisia!*".

As such, our results are consistent with those of the study by Nuruddeen *et al.,* (2018) conducted in a developing country namely Nigeria. These authors recommend systematic legislative reform that will address online data protection and unfair business practices in their country. They also recommend holistic reforms of the institutional infrastructure for e-commerce and consumer protection in their country.

Infrastructure reforms

The technology infrastructure is the backbone of the development of e-commerce and its lack hinders the pace of its growth. As noted by Lawrence and Tar (2010), infrastructure in developing countries is not as developed as it is in developed countries. As pointed out by Alyoubi (2015), the infrastructure remains a major missing condition in developing countries. These infrastructural limitations are major obstacles to the adoption and growth of e-commerce in these countries. According to the respondents, its improvement can be manifested through the generalization of broadband access to information for isolated populations who do not have access to the Internet, the reduction of Internet subscription fees which are still very expensive in Tunisia, the reduction of prices of computer equipment (smartphones, computers, tablets) and facilitate the purchase of foreign sites often offering good opportunities.

I5: "*I always find good opportunities on Aliexpress, Amazon or eBay but unfortunately our Tunisian bank card does not allow us to buy from foreign sites. This also bothers me!*". Our results confirm those of Alyoubi (2015).

The latter mentioned that the most common barriers faced by developing countries include a severe shortage of managerial skills required to formulate and implement an e-commerce strategy for businesses. In addition, E-payment and banking systems, Internet connectivity, in terms of cost, quality and speed of service provided are another stumbling block, while lack of effective branding and trust issues are another significant barrier to e-commerce growth in these countries.

Consumers' behaviour

Getting information online

The most of consumers use different digital media (Internet, Smartphone, social networks) either to interact with brands online or to get information about the price and quality of a product or to find the nearest store. Moreover, regarding their purchasing practices, our respondents prove that they do not hesitate to navigate between the virtual and in store of several brands in order to compare offers or qualities and to consult consumer reviews.

I1: "*I look on Internet for all the necessary information on the product or service desired. This will help me to consult the right address and the right specialists*".

This new behaviour reduces in-store exploration activities as well as unnecessary stops in addition to researching and checking products in-store since consumers have already prepared their purchases in advance.

I8: "*By consulting the prices of plane tickets by line, I can calmly prepare my budget in advance*".

Our results confirm those of Vanheems (2012) who shows that the customer's behaviour, searching for information on the net, becomes more planned and rational. This customer spends less time in the store to choose his product and is less receptive to the stimuli and experiences proposed in store. Similarly, Collin-Lachaud and Vanheems (2016) add that one of the motivations of the search for information before purchase is the financial gain, in particular thanks to price comparators. This is also related to Orlikowski's (1992)

concept of "interpretative flexibility of technology", which offers users a range of possibilities in their use, like comparing prices, consulting reviews, finding the nearest shop and paying online.

In-store shopping is still the most favored solution

The most of our interviewees use technology to improve their practices while maintaining their previous practices. They prepare their purchases online while looking for information on prices, availability, reviews from other customers. Then, they are shopping in-store and paying face to face, especially in the clothing and appliance industries. This practice recalls the Orlikowski' (2000) concept of "Application" which designates the process of redefining or improving practices through uses.

I18: "*I always fear online payment. I think the system is recording my personal card data* ".

Our respondents also claimed their desire to see the product, touch or try it. In addition, the store allows them to pay in cash or in installments which is not allowed by online shopping.

I14: "*I always prefer to pay in cash […]. I would always like to stay calm and quiet* ";

In Giddens' (1984) words, these consumers are competent and rational actors. They are knowledgeable, socially competent, and having the capacity to understand what they do while they do it. The discursive justification that consumers can give for their choice of in-store purchase is the fact of touching and trying the product, negotiating the price, the cash payment. This recalls the "Stratification model of the agent" of Giddens (1984). The reflexive control that characterizes the human actor's action concerns both the conduct of the one exercising this control (consumers) and that of other actors, including the social and physical contexts in which they operate (online stores, vendors, banks). Tunisian consumers are well aware of the conditions and consequences of their online purchase.

CONCLUSION

In this paper, we have highlighted the relationship to technology among users in a developing country, namely Tunisia. We then studied the link between the meanings built around online shopping and consumer behavior. We treated the relationship to technology as a socially constructed object by referring to the theory of structuring of Giddens (1984). The results showed that the meaning built around the relationship to technology plays an important role in consumer behavior. Consumers, through ongoing interaction, construct meanings that are shared through discourse. These meanings will guide their future behavior. This refers to the duality of structure mentioned by Giddens (1984). Our methodological contribution lies in the use of hermeneutic phenomenology as a research tool, inspired by the work of Van Manen (1990). Many authors have pointed out the lack of orientation of this methodology in addition to its abstract and conceptual nature. Certainly, this paper is not without limits. Like all phenomenological and hermeneutical research, the main limitation is that the results only present an interpretation of the data and are therefore not generalized beyond our specific sample given the convenience sampling procedure we used. Future research conducted on other samples and in other socio-cultural contexts could provide us with a general understanding of this phenomenon. In particular, the limitations of our work lead us to pose a number of future directions for our research. To do so, we would like to combine individual interviews with focus groups. In this way, we can better explore and stimulate their experiences and points of view through discussion.

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