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THE IMPACT OF ONLINE SOCIAL NETWORK' USAGE ON THE PURCHASE DECISION PROCESS: QUANTITATIVE AND QUALITATIVE STUD

Abstract:

The main goal of this research has to show how online social networks (ONS) influence the consumers' purchase decisions. Our efforts to study empirically the online social network' usage and its impact on the purchase decision process might account for the important frequency of the access of this tool led to the employ of both qualitative and quantitative data collection techniques. We present a quantitative research including descriptive method on the use of ONS by 187 students from Sidi Bel Abbas University (Algeria). Data analysis has been done by using Sphinx V5 computer software. Results indicate that Facebook is the most popular site. The results also demonstrate that the students engage with social media platform daily and they spend between one to four hours. The other method of the research has been qualitative which 13 students have been interviewed as users of online social network for mainly identifying the stage where social media has interfered in the consumer decision making process. The results of this research highlight that the OSN is an important tool for information search stage, in which is influenced by the level and direction of purchase decision. The findings offer insight into consumers' behavior in brand communities and into the prospects of social media being a viable sales and communication channel to companies. As a future research direction, authors suggest studying the OSN post-experience.

Keywords:

Online social networks, Purchase decision, Qualitative research, Students, Algeria.

JEL Classification: M31

1. Introduction

In the last years, Online Social Networks (OSN) such as Facebook, MySpace, LinkedIn, Hi5, and Twitter, have become popular.

The role of social media in decision-making is an important one, because and via these sites, the consumer shares all thoughts, concerns, and problems on a public forum for all to see, and feeling rewarded for it. So companies must believe to this truth and they will be more tending to listen to what their customers are saying online and then engage with specific marketing strategies.

Social Media seem therefore to play a powerful role at the different stages of the consumer's decision-making process. However the exact role of SONs at the different stages of the process seems to be still unclear.

The purpose of this paper is to explore the concept of online social networks and its impact on the purchase decision making of Algerian students.

2. Literature review

With the emergence of the World Wide Web (WWW) and the development of information technologies, however, social networks reached a new dimension. Thanks to numerous types of social software, including blogs, user-generated content sites, and countless virtual communities across the WWW, people started connecting and communicating online with one another (Heidemann et al., 2012, p. 3867). Online social networks, where individuals as members, construct public profiles to share their knowledge and their experiences, to post information about themselves and have contact with others who exchange and share similar interests (Wei Li, 2012, p. 9)

2.1 Definition of online social networks

According to the researchers Yang et al., the term 'Social Network' existed far before the internet came into picture. However, it got popular due to the advent of software programs that resulted in launching of the very popular social networking websites such as Facebook, MySpace and LinkedIn. (Ghania et al., 2014, p. 2)

Regarding to the Oxford Online Dictionary, social networks are all the social network interaction as well as the personal relationships of the individual. Traditional social network study can date back about half a century, focusing on interpersonal interactions in small groups due to the difficulty in obtaining large data sets (Stanley, and Faust, 2009, p. 5).

There rather exist numerous similar terms such as social networking service, social networking site, or social network site (Heidemann et al., 2012, p. 3867). Table 1 provides some selected terms and corresponding definitions.

Table 1: Selected terms and definitions with respect to online social networks.

Term	Author	Definition
Online social network	Schneider et al.	"OSNs form online communities among people with common interests, activities, backgrounds, and/or friendships. Most OSNs are Web-based and allow users to upload profiles (text, images, and videos) and interact with others in numerous ways"
Social networking service	Adamic and Adar	"Social networking services gather information on users' social contacts, construct a large interconnected social

		network, and reveal to users how they are connected to others in the network”
Social network site	Boyd and Ellison	“We define social network sites as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system”

Source: Heidemann et al., 2012, p. 3867

Social networking sites are tools that provide people with the ability to collaborate and communicate with one another online. They facilitate the creation and sharing of knowledge, information, media, ideas, opinions and insights, and allow people to actively participate in the media itself.

There are dozens of OSN sites, each present something different or same to its members. There are many classifications for distinguishing the online social communities. The main criteria for classification are taken from human interaction with each other in an offline environment.

Following table (table 2) displays the comparison of the four most commonly used social networks.

Table 2: Comparison of Four Most Commonly Used Social Networks

	Main Audience	End User Feature	General Features
MySpace	Teens, young people	Blogs, video, photo, address, bulletin calendar, email	Browse profiles, search & invite new people, film/comedy/music forum, favorites, videos, classifieds & events
Orkut	Teens, Young people	Photo, video, bookmarks, scrapbook, profile, testimonials	Friends (rank, best, good, acquaintances), search, communities, Orkut media, news
LinkedIn	Business Professional	Connections, network data, email list, recommendations	People search, jobs, hiring, categorized service providers, ask a question from professionals.
Facebook	Students	Profile, friend finder, photos, my shares, notes, events, inbox	Browse profiles, search and invite new people

Source: Ghania et al., 2014, p. 2

2.2 Importance of Social Media for Businesses

The increasing importance of OSNs also has an impact on companies. Industry experts believe that OSNs will create a significant change in consumer behavior and have a substantial impact on traditional industries (Heidemann et al., 2012, p. 3871).

To create an image of being up to date and continuous in development it is getting really very important to be socially active for companies as well as for professional people alike. This latest trend in turn is helping the companies to compete better in the market. It helps also in retaining relations with customers as customers mostly visit or discuss such brands that they have a loyalty (Baird and Parasnis, 2011, p. 34). So, sharing content (easier and faster) with thousands of followers at once gives instant access to positive or negative feedback, which provides companies with valuable insights on the customer perspective.

According to Qualman (1994), Social media plays an important role in intensifying the relationship between the company and its customers. Effective and efficient communication channels facilitate this relationship ultimately leading to positive perceptions towards the company and hence positive purchase intentions.

The social interaction enables companies to get data which can be relied upon and considered as worthy of trust.

One of the best benefits of social media for business is using it to increase the website traffic. Not only do social media help companies direct people to their website, but the more -by social media shares- enterprises receive, the higher search ranking will be.

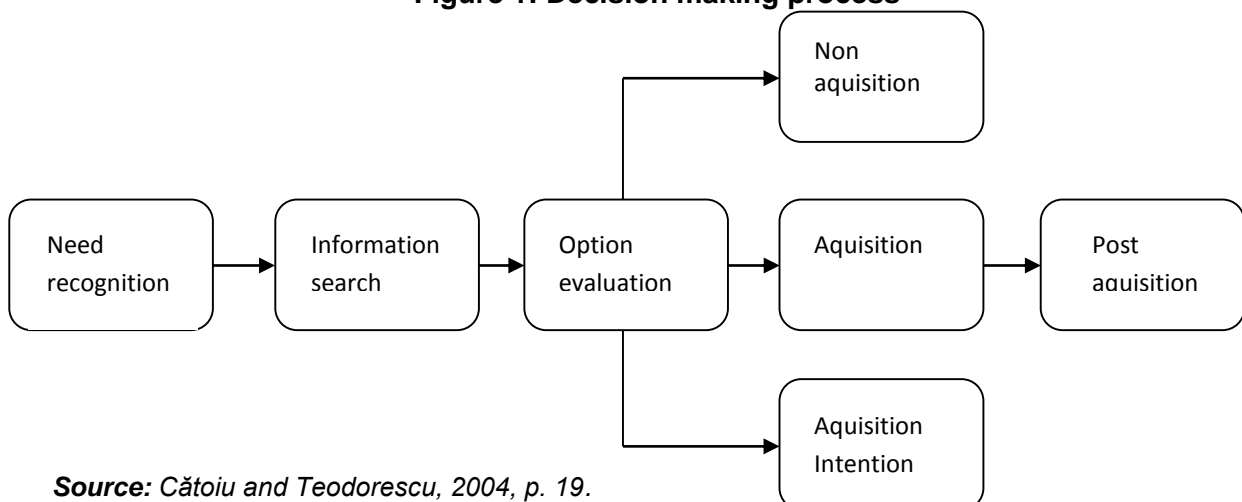
2.3 The influence of OSN on the decision making process

Many E-commerce websites have changed their interface from websites who merely sell a product to websites offering a place where people can communicate, discuss and share their concerns regarding the product and its purchase. They facilitate interactions among consumers. These websites then capture this data and use it to influence the buying decisions of customers.

It has been observed that about 45% of people seek friends' advice before they consider making any purchase decision and most of the discussion on these subjects is done online on social networking sites (Ghania et al., 2014, p. 4). OSN are capable of many things that can positively and negatively influence the decision makers. OSN are information portals, and consequently they influence human information processing, where cognitive biases introduce barriers to adequate decisions. (Sadovykh et al., 2015, p. 16).

In consumption, consumers pass through different stages that put together form the consumer's purchasing decision-making process (figure 1)

Figure 1: Decision making process



Source: Cătoiu and Teodorescu, 2004, p. 19.

Consumers utilize OSN to hold up various stages of the decision making process. OSN can attenuate or amplify the strengths and weaknesses of human information biases related to DM. This in turn can improve or disregard the decision-making process. (Sadovykh et al., 2015, p. 16)

These are useful as when a large number of online users provide the same opinion about a brand, the credibility of the brand is increased

According to Kim (2007) several E-companies are promoting online social communities that enabled and encouraged customers to write reviews, rate the reviews given by others and talk about products with people they trust, thus sharing their experiences regarding product use and purchase over the internet. This facilitated a positive perception towards companies' products and lead to an increase of confidence in purchasing them.

3. Quantitative research

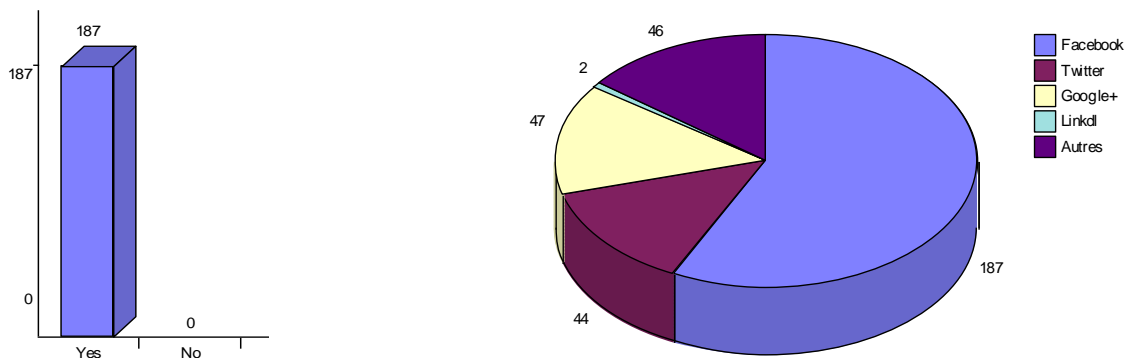
3.1 Method: Students compose the research population and sample. The respondents provided data by responding to a survey questionnaire. The research has been done between December 2014 and January 2015. The target region for study is Sidi Bel Abbes (Algeria west). After careful analysis of the scientific literature found on this subject (Fuciu and Gorski: 2013, p. 484), we have established 15 Questions varied between free, Dichotomous and multiple choice response strategies and that for increase the participant's motivation level to share information. We have chosen the face to face survey as a data collection method to Djillali Liabes university students, which yield the sample size to be 187 individuals. Participation was voluntary and the questions were designed in two languages French and Arabic. The demographic characteristics of the sample appear in Table3.

Table 3: Sample demographics (n=187)

Demographic	Category	Frequency	Percentage
Gender	Male	114	61
	Female	73	39
Age	Less than 18 years	31	16.57
	18 - 22 years	135	72.19
	23- 25 years	20	10.71
	More than 26 years	01	0.53
Education level	bachelor's degree	166	88.66
	Master's degrees	21	11.34

3.2 Results & Discussion: After the analysis of the data with the Sphinx V5, the result of our research has shown that all the sample (100%) know and use online social networks (Figure1).

Figure1: Online social networks' usage



From the analysis of the data presented in figure 1 we can conclude that Facebook.com is used by all the respondents (100%), followed by Google+ with 25.1%, on the third place we have Twitter with 23.5 % of the responses. The less used online social networks by students are Linkln with 1.4%.

In the following questions (4, 5 & 6), respondents were asked connecting frequency, how much time and at which moment in the day they spend on social media platforms. The reason is to examine whether the time of exposure to information via online social networks.

Figure2 Usage frequency

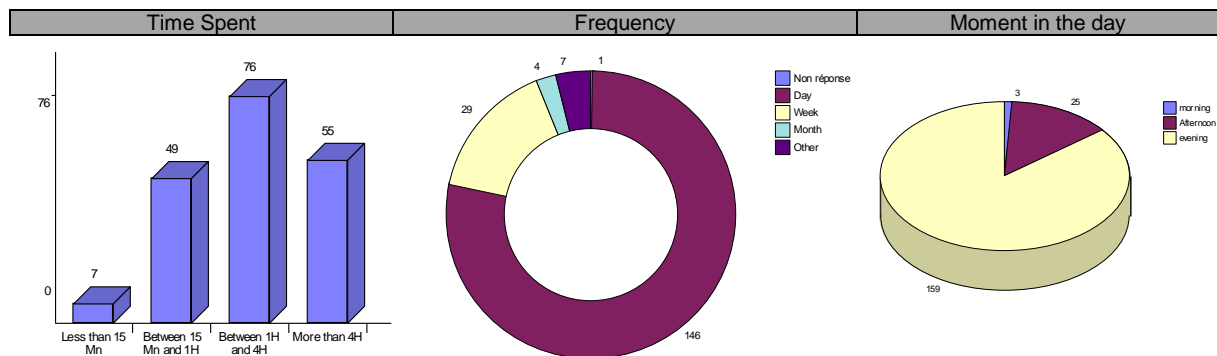
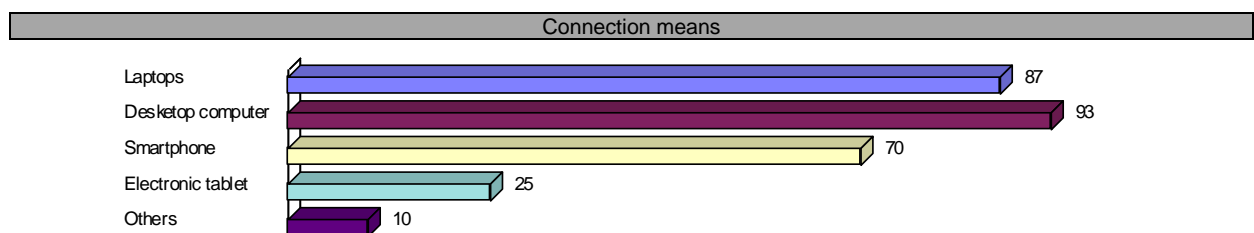


Figure 2, above, have demonstrated that 146 of 187 (78.07%) respondents connect to the OSN daily whereas 15.51% of respondents connect weekly. As it is seen, there is a sudden drop in between 1-4 hours (30%) and more than 4 hours (15%) usage in social networks sites per day while few the students (3.74%) spend less than 15mn. For the most of the research sample (85.03%), the evening is the best daily moment for the OSN connection.

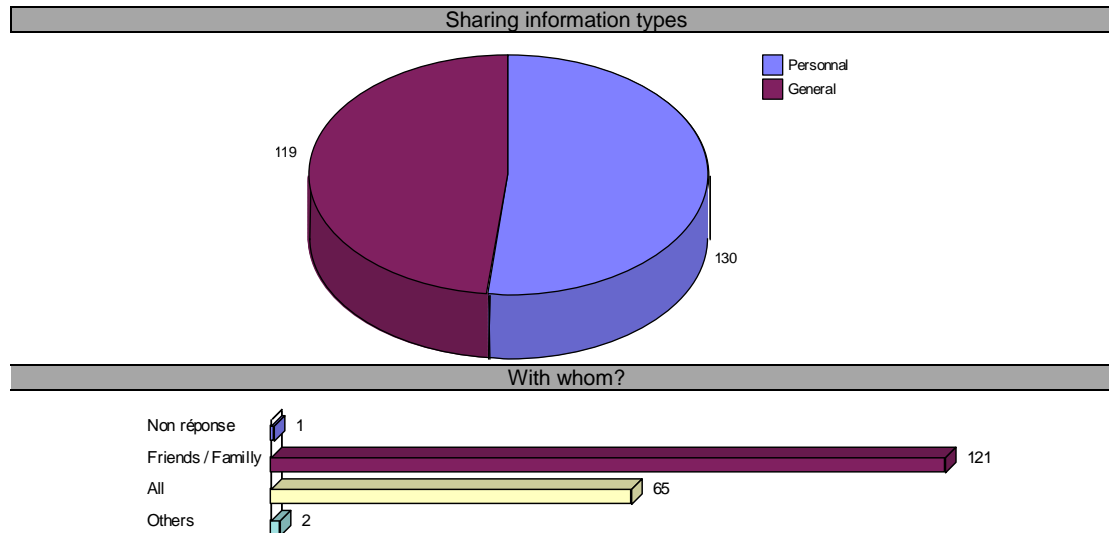
Figure 3: Connection means



Concerning the main means / technology of accessing their account (its results can be seen in figure 3), 49.7% of the students use desktop computers, 46.5% and 37.4% of the respondents respectively use laptops and smart phone. Finally, 13.4% of them use electronic tablets.

Another question in the questionnaire refers to kind of data allotment in the OSN sites like Facebook.

Figure 4: Information sharing



By connecting to the OSN, some students contribute in their accounts with personal information, another with general data and others with both (figure 4). About general information, they share business, religious and/or news. Concerning personal information, they posts photos, communicate with the family members and/or interact with friends.

As we can see also in figure 4, 64.70% of the sample shared information with persons whose know (friends or family, etc.) whereas 34.76% participate with any account or person (strange).

4. Qualitative research

4.1 Data collection: To analyze the impact of online social media on the purchase decision, and as a complement to quantitative research, we proceeded to conduct an in-depth investigation by semi-structured interviews. The semi-structured method was appropriate because it allowed the flexibility for new topics to emerge (Kvale, 1996, p. 64). The interviews utilized a purposive sample, including 13 students of Djillali Liabes university. Interviews ranged from 25–45 minutes and were on a one-to-one basis with the interviewer and respondent. Content reliability was approved using expert opinion of faculty members, department of commercial sciences. The survey was carried out in the form of interview guide with 14 open questions. All data was transcribed and recorded by a digital recorder.

4.2 Analysis method: grounded theory technique was used to analyze the transcribed interviews. It is a particular qualitative for exploratory studies (Strauss and Corbin, 1994, p. 279). Grounded theory was appropriate because there was little background information about the topic, and the data collected had the potential to produce unexpected results. Transcribed data were read and reread by the authors in

order to examine deeply the data. To analyze the data, we first generated categories through open coding and then further divided data into additional categories through axial coding. Finally, using selective coding, we finalized the categories, finding dominant themes and creating a storyline of related concepts. Themes were then reviewed and refined.

4.3 Results & discussion: After analyzing the results, 9 main topics were identified. Then, these themes were condensed into 3 themes where they captured the essence of the responses were explored:

- a. Information search stage:** The results indicated that, most of respondents declared that before decide to purchase anything, they connect to the OSN and read or interrogate the community about his request (brand or product category), others affirmed that they connect to make a choice among other alternatives. Some of the respondents declared that they influenced by the messages send from their friends. Also, 5 respondents from the sample had shown agreement that they are able to seek out information initially; others confirmed that the information is delivered by their networks.
- b. Information Accessibility:** The results also revealed that, almost all the respondents were argue with the facility of searching information among OSN and internet in general. The accessibility and transparency of information that social media has offered to consumers have been indicated throughout the interviews.
- c. Post purchase stage:** The students stated that they refuse to post comments after purchasing or product acquisition. For Some respondents, there is no reason for this behavior but for others they claimed the insufficient time.

5. Conclusion

This research provides an opportunity to study the decision making process influence by online social networks, thus providing valuable information to increase the understanding of the subject.

From the quantitative research, we have found that Facebook is the most popular network among Algerian students. On the frequency of use, students use OSN daily between 1 to 4 hours.

The objective of the qualitative research was to explain how social media has impacted on consumer decision making process. We can conclude that, information exposure is highly selective in the initial stage of information, because consumers have the selections of information source, in which determinates the type of information that consumer will be exposed to. In this field, the findings are consistent with previous studies. As a result also, consumers are inactive in sharing their word of mouth to others they refuse post comments after purchasing and we can explain this behavior to culture.

Regarding the importance of the subject, the companies have to have Media specialists whose expertise lie in this area. They must ensure a strong presence on the worldwide web (www) along with guaranteeing that they are positively followed by their customers from all over the world.

Considering the limited time and scope of this research, many theories related to the subject were covered but in a rather general perspective so as to provide a big picture for the readers. Therefore, if further research could be conducted, then an in-depth survey should be carried out among a large sample not only students.

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