

ONLINE DECISION PURCHASE PROCESS OF MEDICINES

ALEXANDRU VIRGIL TASCU¹, ANDRA VICTORIA RADU^{2*}, IVONA STOICA³, ANDRA DOBRESCU¹

¹Bucharest University of Economic Studies, Faculty of Marketing, 6 Romană Square, District 1, 010374, Bucharest, Romania

²“Carol Davila” University of Medicine and Pharmacy, 8 Eroii Sanitari Boulevard, 050474, Bucharest, Romania

³“Dimitrie Cantemir” Christian University, Faculty of Marketing, 176 Splaiul Unirii, 030134, Bucharest, Romania

*corresponding author: andra352002@yahoo.com

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Abstract

The internet has developed and continues to develop through the contribution of information and communications technologies (multimedia, communications technology), which led in the last years to great performances in medicine, especially for pharmacy, this being the aim of the present study. Consumers' and doctors' behaviour experienced major changes because of the wide information, as a result of the internet development, all changes being gathered under what we call “digital society”. This paper presents an analysis of the online decision-purchase process of medicines (prescription not required) by patients.

Rezumat

Internetul s-a dezvoltat și continuă să se dezvolte prin aportul tehnologiilor informației și comunicațiilor IT&C (multimedia, tehnologii de comunicație) care în ultimii ani, au condus la performanțe în sfera sănătății, în speță domeniul farmaceutic. Comportamentul pacienților și al medicilor deopotrivă a cunoscut schimbări majore datorită exploziei informaționale ca urmare a expansiunii internetului, toate schimbările fiind reunite sub ceea ce numim „societate digitală”. Această lucrare prezintă o analiză a procesului decizional de cumpărare *online* a medicamentelor (fără rețetă) de către pacienți.

Keywords: online environment, online decision purchase process, online medicines

Introduction

The use of the internet and the development of online environment in all fields of activity have become part of people's habits, bringing major behaviour changes. People's behaviour following the internet usage has led to adapting and finding new solutions for the market players. Economy, education, medicine are only few fields significantly impacted by the internet, leading to evolution, technological progress regarding the use of information and communications technologies.

The online environment is particularly a “*modus vivendi*” (lat. “manner of living”) to people, as utility, but also as a superfluous environment. From utility, it appears more like an addiction.

Indeed, the internet has reached the developed countries and it has a great influence on consumer's buying behaviour. In Romania, internet is accessed at high quality regarding infrastructure, but particularly in the big cities of the country, while in the rural area it is almost non-existent, because the low level of culture and low incomes do not allow the locals to tend towards the online environment.

Nevertheless, the internet has developed and it continues to do so by the contribution of information and communications technologies which, in recent

years, have led to performances in the pharmaceutical industry. Online marketing is different from traditional marketing and, due to several advantages, it ensures both the vendor and the requesting party, from saving waiting time to financial savings for both sides, tracking the product on its way to the end user, the possibility to return the product, online consultancy, eliminating geographical barriers, 24 hours per day, developing and maintaining the relationships with the customers regarding their suggestions and complaints. These are just a part of the benefits of online environment.

Also, regarding the online environment, one may refer to the fact that “The globalization of economic activities has led to the need for a long-term or very long-term (perpetual) approach of the method, degree and structure in which any economic resources are created, consumed and recirculated.” [4]. The power of “digital society” involves the economic and social evolution and progress, by leading to a development of information society, context in which the information can be accessed by anyone from anywhere and at any time, with the possibility of being shared with other people.

Internet has emerged as military technology in the field of communications, being called the Advanced Research Projects Agency Network (ARPANET),

further on being used in other environments and fields, and since 2001 the online environment has been creating jobs, being a favourable entrepreneur-

ship environment due to the new developed services and utilities.

Table I
Global Internet Usage

Continents	Population (2015 Est.)	% from global population	Internet users 30.11.2015	% of population	Degree of increase (%) 2000-2015	Users (%) of total
Africa	1,158,355,663	16.0	330,965,359	28.6	7,231.3	9.8
Asia	4,032,466,882	55.5	1,622,084,293	40.2	1,319.1	48.2
Europe of which:	821,555,904	11.3	604,147,280	73.5	474.9	18.0
Romania	19,861,408	2.73	11,178,477	56.3	-	0.54
Middle East	236,137,235	3.3	123,172,132	52.2	3,649.8	3.7
North America	357,178,284	4.9	313,867,363	87.9	190.4	9.3
Latin America/Caribbean Islands	617,049,712	8.5	344,824,199	55.9	1,808.4	10.2
Oceania/Australia	37,158,563	0.5	27,200,530	73.2	256.9	0.8
TOTAL WORLDWIDE	7,259,902,243	100.0	3,366,261,156	46.4	832.5	100.0

Source: www.internetworldstats.com, Internet Usage and World Population Statistics updated as of November 30, 2015. Demographic (Population) numbers are based on data from the US Census Bureau, Eurostat and from local census agencies. Internet usage information comes from data published by Nielsen Online, by the International Telecommunications Union, by GfK, by local ICT Regulators and other reliable sources. Copyright © 2001 - 2016, Miniwatts Marketing Group.

Internet development has evolved from an American military experiment to widespread usage popularity among 7,259,902,243 users, according to Internet World Stats [6]. According to the same source, on November 30th, 2015, Europe estimated a decrease in population in 2015 as compared to 2014, 821,555,904 inhabitants, registering 604,147,280 internet users, an increasing number compared to 2014 meaning an increasing of 18% as compared to 2000. Regardless of the type of activity, field or environment, online marketing remains fundamental [5], and its merits are recognized for flexibility, adaptability and accessibility by friendly interface and usage of new tools which are attractive and useful to the users.

Online environment and pharmaceutical market in Romania

“The pharmaceutical industry has had a spectacular development along the 20th century and in the beginning of the 21st century, having new challenges.” [9].

Online environment has begun to take over more and more fields, one of them being the pharmaceutical industry. In March 2010, the first online European pharmaceutical market was created in Romania, namely Farma-Agora Central [7], which is an internet exchange intra-pharmaceutical community, providing pharmacists with the advantage of exchanging drugs between units depending on their needs, ensuring the flow of the drugs which are less requested, selling surplus products, low costs, eliminating losses caused by expired drugs, growing profit, consolidating the pharmaceutical community, customer satisfaction. This website is dedicated to pharmacists, but also to the patients. They have the possibility to create a free online account. Pharmacies from all over the country are registered

here, while pharmacists and patients have the possibility to exchange information, depending on their demand. “At the same time, being a regulated market, the authorities through the authorization process controlled the number of pharmacies.” [3]. Apart from this online intra-pharmaceutical community, there are a lot of websites with medical recommendations for treatments including drugs, forums, online pharmacies, but which are only allowed to deliver OTCs and derma-cosmetic products, drugs with prescriptions under special treatment (e.g. antibiotics). The prescription on medications online must be released from licensed pharmacies and by professional pharmaceutical counselling.

“Medicines are special goods, which include a great dose of “human intelligence” that must be handled only by specialists. When it comes to medicines, the human facet should overcome the commercial one, therefore dispensing is strictly regulated. Nevertheless, within a pharmacy, other products, distributed also on other ways, can be found as well, such as: cosmetics and personal hygiene products, para-pharmaceuticals, dietary supplements, herbal products etc.” [1].

Another proof that pharmacies have the tendency to “move” on the internet is the introduction of the electronic prescription according to the standards provided by the master agreement. Besides all the benefits of the online environment, the main disadvantage is also the risk of counterfeit medicines purchased online, which could be fatal for patients with special diseases.

Phases of the online decision purchase process of medicines

Decision-making in online shopping is influenced as a result of the occurrence of certain cultural,

economic, demographic, technological, natural, political informational stimuli, or specific stimuli to the purchased product/service [5] and the decision-making in online shopping involves modelling the following activities: the emergence of an unmet need/desire, purchase intent, searching for information, identifying alternatives, mental assessment of alternatives, post-purchase assessment [2].

Unlike the traditional environment, in the online environment, decision-making significantly differs through the methods, techniques and technologies used, through the speed of making purchases, the time and costs involved in the purchase process.

The phases and factors involved in online decision-purchase process are presented in Figure 1.

Phase 1 - Emergence of need - Once the patient was diagnosed and a treatment was recommended, the need emerges and they will search for the fastest, cheapest and most useful ways to get the medicines and they will not hesitate to use the internet in order to find the needed treatment faster.

Phase 2 - Purchase intent - When the patient is prescribed a certain drug, there is also the purchase desire or intent in order to heal the disease they were diagnosed with.

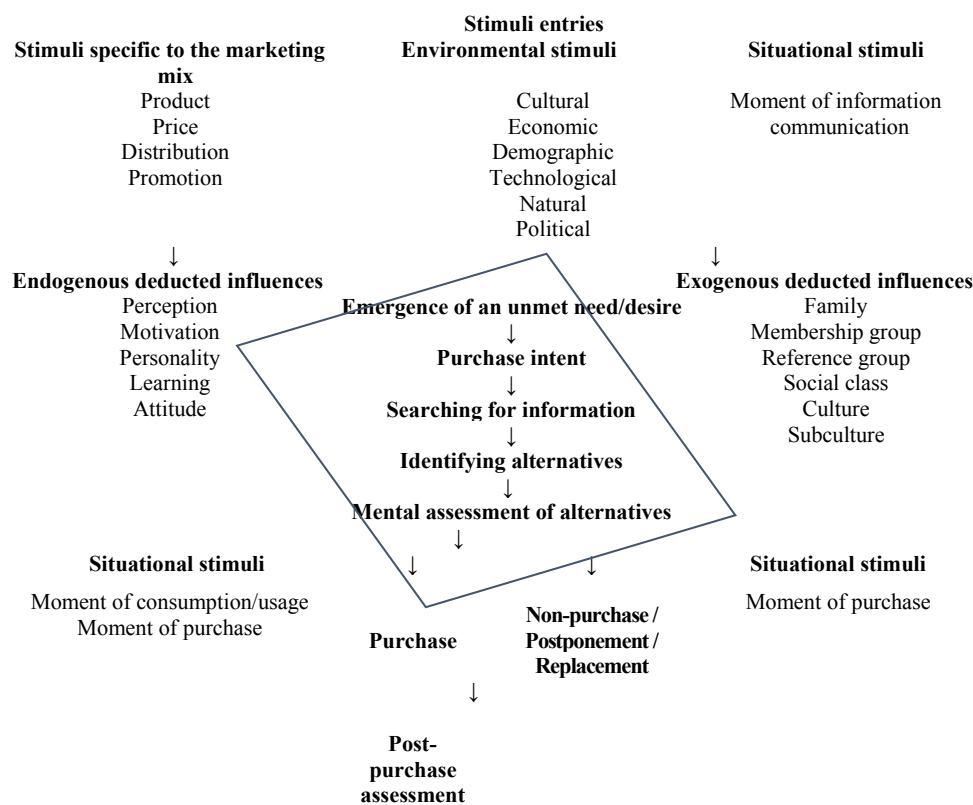


Figure 1.

Decision-making model in online shopping

Source: Stoica, I., (2015), Innovative studies regarding consumer behaviour using modern research tools and methods, postdoctoral dissertation, 2015, READ, POSDRU/89/1.5/S/61755, adapted after Engel, J-F, and Blackwell, R-D, 1982, Consumer Behaviour, 4th ed., CBS College Publishing, p. 130 and Cătoi, I, Teodorescu, N, 2004, Consumer behaviour, Publishing House Uranus, Bucharest, p. 34.

Phase 3 - Searching for information - The online environment is a flexible environment and whenever the consumer has a need, he/she starts searching for information on the internet about the physician, about the physician's diagnosis, about the prescribed drugs and it searches for ways to purchase drugs fast. External search of online information by the diagnosed patient is manifested by online study of the prescribed drugs, prospects, treatments followed by other patients diagnosed with the same disease, they will search for comments on forums, medical opinions, and they will also use internal search which involves the fact that, as result of a promotion of the

prescribed drug, they remember information about it from a moment when they were not interested.

Phase 4 - Identifying alternatives - After reading a sufficient volume of information, patients may begin identifying alternatives for the way of purchasing the prescribed drugs.

Phase 5 - Assessing alternatives - After analysing the alternatives corresponding to patient's need/desire, the next step is assessing the alternatives, in order to make a decision. "In this stage, the consumer filters the acquired information according to their structure of values and beliefs." [2].

In this stage, the patient is in the situation of choosing to purchase the drugs in the electronic network or depending on the category of the drugs; they will buy online because it is cheaper, faster and more convenient.

Phase 6 - Post-purchase assessment - After making the decision to buy, the patient enters a new important stage, namely post-purchase assessment. Here, they can assess their decision, only after following the treatment with the drugs purchased online and assess the quality-price *ratio*.

Conclusions

Although the online environment has many advantages, some of the disadvantages would be that of counterfeit drugs and naive patients who buy even from others, because of the lack of possibilities, of education and for reasons of convenience or simply because the lack of the drug on the Romanian market makes them resort to other ways of purchasing the prescribed drugs, without any doubts as to the authenticity of the drugs purchased online.

The digital environment has also expanded in the pharmaceutical field, except for medicines with special treatment, but nevertheless, the pharmacies changed their position and they adapted themselves to the buying behaviour of today's consumers.

As a solution in order to prevent or to eliminate these risks we could request an organism of quality control of online medicines.

“Common goal for patients, healthcare providers and governments is to control this novel practice of medicine distribution in a manner which will not restrict the required “freedom” of the patients and consumers, but guarantees the safety and quality of medicines” [11].

In the era of “digital society”, patients have the possibility to create accounts on medical websites and they can create their own offer according to the needs they have, the online environment offering the possibility of customization. In the pharmaceutical field, marketers may consider it as an advantage in

finding new customers, who, due to the fact that they are simply searching for information or they want to receive newsletters, become loyal customers of online pharmacies, benefiting from online promotions and services, before and after purchase.

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