SALES ONLINE OF HEALTH PRODUCTS: ECONOMICAL AND ADMINISTRATIVE PERSPECTIVE

ERCOLE VAGNOZZI

Alma Mater Studiorum, Università di Bologna

ercole.vagnozzi2@unibo.it

Abstract:

The continuing decline in the pharmaceutical expenditure deduction, the increasing fees paid by pharmacies in favor of the NHS and the crisis that reduces the spending power of the citizen, triggered a huge drop in the profitability of the Italian pharmacies. However the crisis can also be positive because it forces the companies to deploy all the resources needed to invert the situation, changing certain vicious behaviors in favor of virtuous ones. But if on the one hand, it is the single pharmacist who should implement corrective measures, on the other hand some problems must be solved by the entire distribution system in order to prevent the marginalization of the pharmacy. A good solution might be represented by the emerging tendency of the online sale of OTC pharmaceuticals, already recognized by the market trends and regulated at the European Law level, and almost completely implemented by the Italian legislation¹. This opportunity might increase the health related products demand whereas an optimal marketing and administrative strategy is executed. Nevertheless, the strategy should be designed to create the prospective for the pharmacy to re-achieve the distribution that has been lost; with a direct distribution the pharmacy loses and the intermediate distribution channel as well, with an higher number of losers than winners, in the end. Hence, the technological solution proposition i.e. the web pharmacy, has to take into consideration this disintermediation problem that should be strengthened instead of weakened, at least to some degrees. It can be already anticipated that the Italian normative alignment with the European directive proposes to solve the problem of the disintermediation naturally related to the e-commerce adoption, with the possibility for the E-pharmacy to exist only if a physical shop already exists behind it.

¹ European Directive 2011/62 UE

MARKETING STRATEGY

Marketing solutions

The pharmacy is becoming, from a drug manufacturer, where packaged and finished commercial products are distributed, to an health and wellness distributor; then the pharmacy is changing from a "production company" to "service company".

The pharmacy is considered a selling point different from the others, and for this it has always kept apart from all strategies that are related to products sale. But today, the pharmacy has taken a new role which tends to establish, maintain and strengthen long duration relationships between the pharmacist and the customer, it is moving from a pure distribution logic, to a customer retention logic, which leads to a profit or loss maximization and, at the same time, preserves pharmaceutical values. The technological improvement, resulting from the online drugs sale, will add value to this changing process, if caught with intelligence. There exist in literature some well-known activities in the online marketing field important to implement; current trends show the prevalence of activities such as keyword advertising and SEO (Search Engine Optimization) which absorb, on average, respectively 23% and 17% of the budget. Investment in e-mail marketing is growing with a 17% of the total (compared with 12% spent in 2012) as in social media (13% versus 12%). 8% investment in affiliate programs while banner and sponsorship receive, on average, 5%. The off-line strategies, such as newspapers, radio and television, is about 7% of the total advertising investment, 2% less than in 2012. The radio is the only channel in countertendency because showed an increase from 1% of 2012 to the current 3%².

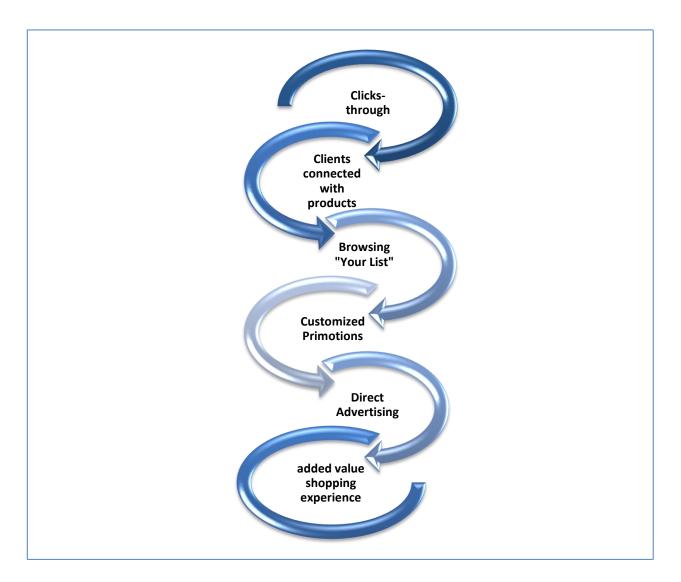
Best Practice

It has been decided to consider a comparison with the United States simply because it has been easier to find literature on the topic of online pharmacies which is already a widespread phenomenon in the USA. The issue in Europe is still young and therefore not sufficiently explored; despite some virtuous countries such as United Kingdom, the Scandinavian countries and France (which continue to generate larger volumes in terms of online sales, and accounts for about 70% of the European e-commerce market, 213.5 billion euros, and speed of transposition of legislation on drugs online purchase). The presence of too many differences and specificities

² Data from Report "e-commerce in Italy, 2013" Casaleggio Associates

of each single European country implies the necessity of much more extensive discussion, for all these reasons it has been adopted an example outside Europe.

Illustration 2 : e-pharmacy website marketing process



Drugstore.com³ uses a customer centric approach to create an easy and personalized buying experience:

³ one of the first legal pharmaceutical e-commerce sites born in the USA and in the rest of the world. That website appeared on the Internet scenes in the late 1999, soon after the introduction of Soma.com (which now exists with the name CVS.com) and PlanetRx.com; These three sites were widely regarded as among the most credible and reputable in the industry and Wall Street awarded billion-dollar valuations to companies like drugstore.com at the

- Clicks from Internet search engines (like Google), social networks (Facebook, Tweeter) and associate sites
- Customers are connected with products on the website
- Browsing "Your List," which is a list of items the clients have bought in the past or explicitly added to "Your List"
- Offers and promotions, which are all determined by the buyer's past behaviour
- Direct advertisement systems like emails, box-stuffers, and other communications instruments
- The result is a customized shopping experience
 - The Customers' Answer: Satisfaction Vs Dissatisfaction

The feedbacks' evaluation is a strategic step in evaluating the satisfaction rate of the e-commerce website user; like most of the businesses, online pharmacy companies could be successful only if they can make sure clients are satisfied with the level of service they obtain. An internet-based pharmacy presents many service quality attributes which can improve the purchasing process of the website user. These can be organized in three big sets: 1.Product Cost and Availability, 2. Customer service quality and 3.Online Information System Quality (Yang, Peterson, & Huang, 2001). Product cost and availability: Internet search engines can support buyers in comparing health care products offered by competing retailers. Price transparency drives online pharmaceuticals retailers to concentrate on other aspects like total delivered costs, product availability and variety. (Yang, Peterson, & Huang, 2001). A Customer Service Quality, in the field of Internet-based commerce can contain dimensions like design feature (content, layout, ease of navigation) and emotional experience (excitement and enjoyment), all these features induce users to revisit the website while lack of rapid response after emails causes high dissatisfaction among the users. (Yang, Peterson, & Huang, 2001) The last set is about aesthetics, timeliness (CRM before and after sale, delivery timeliness, order management) privacy evaluation. For each group there is a significant number of characteristics/dimensions which should be considered in order to determine consumer satisfaction and which should act as feedback to build a credible internet pharmacy website (Illustration 3⁴ in the following page). Internet pharmacies should focus on service in order to compete in the e-marketplace. A

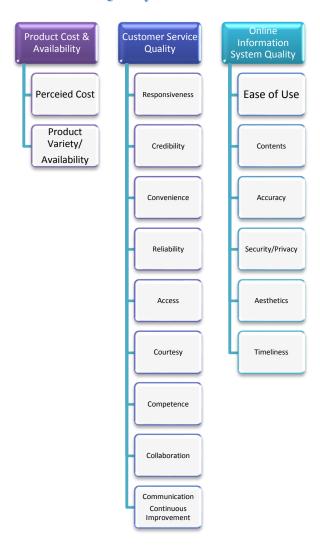
beginning of 1999 (Vagnozzi , E- commerce adoption in the pharmacy retailing: the smart social commerce distributive innovation, 2015)

⁴ Adapted Table from the article of Zhilin Yang, Robin T.Peterson, and Lily Huang: Taking the pulse of internet pharmacy, 2011

pharmacy online can create credibility only if it provides accountable and accurate delivery of promised services, this should be easier in the future Italian scenario because in the directive is specified the possibility to be present online only if the pharmacy is already physically established; this means that *virtual* credibility is enhanced and strictly connected with *real* pharmacy's performance.

Nevertheless, buying online means that the purchasing process is automatized but pharmaceuticals purchases could need human interaction so the pharmacists or other operators should be able to answer clients' questions, without forget the price strategies such as coupons, free gifts, discounts, seasonal promotions which is still, probably, the first reason to buy online.

Illustration 3 Quality Dimensions



PROS, CONS AND OPPORTUNITIES

Benefits and Drawbacks

It is doubtful that Internet pharmacies will replace traditional retail pharmacies, but they could be a useful supplement. Benefits and drawbacks are discussed in the following passage. The positive and negative aspects impact three macro areas: Access, Costs and Quality (summary in Table 2).

- i. *Access*: E-pharmacies may allow enhanced access to pharmaceuticals and health information. Online pharmacies are open 24 h a day, 7 days a week. Users could send questions to pharmacist by emails whenever they want but actually a pharmacist could not answer rapidly and this represents a disadvantage. Consumers may be more likely to buy health items which they consider embarrassing or sensitive through a dedicated website, because of perceived anonymity but this may expose them to a less conscious decision.
- ii. *Costs:* costs of non-prescription drugs may be lower on internet sites because of reduced, and sometimes eliminated, traditional pharmacies expenses like inventory maintenance, utilities expenses, in store employees etc...This costs reduction, due to online retailing, could benefit the users in terms of reductions in the final price on drugs bought.
- iii. Quality: Measures to assert the quality of pharmaceuticals sold online and the website credibility are considered in the European Normative, previously described. The pharmacies authorized to sell online will be handled by operators already authorized for sale in the territory in Italy. Their websites will report a specific logo defined according to the criteria of the Commission and then declined in various forms by the Member States with a link to the list of licensed pharmacies that will be managed by the Health. Ministry There will be a connection between this central site of sites certification with the Commission's website: citizens will turn to those pharmacies that have the logo and therefore those ones which appear in the list of authorized operators. These simple guidelines are fundamental to prevent disadvantages linked with the potential sale of illegal drugs. In addition, payment systems should be considered as well privacy issues because of personal and confidential information exchanged.

Table 2. Advantages and Disadvantages of Internet Pharmacies⁵

Advantages of online pharmacies	Disadvantages of online pharmacies
Available 24 h a day, 7 days a week	May bypass the pharmacist/ patient relationship
Less perception of intimidations when buying	Pharmacists not always immediately available
embarrassing or sensitive drugs	online to answer important questions clients
	may have
Possibility to check pharmaceuticals profile	Concerns about privacy issues
online	
Easy price comparisons with searchable databases	Concerns about security of financial
	information transmitted
Drugs items directly delivered to patient's home	Issues about the integrity of drugs shipped
through standard or special mail	
Pharmaceuticals availability to customers with	Issues about the quality of drug information
physical or other disabilities that hinder retail	provided
support	

Safety Considerations

As appears from the previous chapter, most of the disadvantages emphasized come from the safety and regulatory considerations; as said, although web pharmacies provide benefits to consumers, when compared with traditional pharmacies costumers' safety may be compromised. Buying pharmaceuticals online may pose a risk to consumers because they cannot tell whether the site is offering drugs of the same quality offered by a physical retail pharmacy. In the context of e-commerce development, it is emerging rapidly the methods to ensure quality in the sale of drugs through the net; primarily to protect the patient but also in the interests of the producing industries. One of the most widely used quality accreditation systems in the United States is the VIPPS (Verified Internet Pharmacy Practice Sites) sponsored by the National Association of

⁵ The table has been adapted from the one presents in the article of Stehanie Y. Crawford (Bibliography)

Pharmacists (NABP), which is a certificate of quality of the site and e-pharmacy based on 17 strict criteria continuously verified s by special inspectors. It is added to the code of conduct and accreditation of the American Medical Association, the AMA, that is the main Medical Association in USA. In Europe, a similar initiative, even if spontaneous and self-regulating, it has been promoted by Health On the Net Foundation, which has developed a set of guidelines for the accreditation of health-related websites and e-pharmacies. The WHO (World Health Organization) has recently published a brief guide toward the criteria for a proper research of medical products on the Internet. At the same time, the evolution of guarantee schemes for the truthfulness and correctness of the prescription, proceeds through electronic signature software and systems of network connection between doctor, e-pharmacy, delivery agency and patient. But coming to the Italian issue and the rules expressed by the Directive 2011/62 EU, the following is a short list, with the purpose to summarize and simplify, what it has already been described as preventive measures prescribed by law, to guarantee the safety of an Italian e-pharmacy site.

- 1. Only OTC and non-prescription drugs can be sold
- 2. The websites will report a specific logo, with a link to the list of licensed pharmacies (to sell online that will be managed by the Ministry of Health.
- 3. Removal of illegal sites
- 4. Quality control (the active substances contained in the pharmaceuticals must be produced using Good Manufacturing Practice even if drugs come from countries outside the European Union)
- 5. The Health Ministry and AIFA can carry out inspections without notice, at the production and storage sites for drugs items, whenever they want to test the authenticity.
- 6. Greater transparency and efficiency about the package leaflet which has to be written in a clear and understandable way
- 7. The Decree establishes the procedure by which AIFA shall notify to EMA⁶ the list of pharmaceuticals whose *the* AIC^7 have been refused, revoked or suspended

_

⁶ European Medicines Agency

⁷ Autorizzazione all'ammissione in commercio (Marketing Authorization)

Everything is designed to put the citizen in the position to defend themselves from adverse selection and moral hazard, typical of intermediary-based businesses but that in this case, given the sensitivity of the products, cannot and must not occur.

Future Scenarios

For the future, there is the possibility to imagine that the European countries and in particular Italy, which now lags behind the new economy of USA, will recover the disadvantage in a few years, driven first of all by Scandinavian countries, which have strong technological infrastructures and solid incentive policies in the field of innovation and development. Regarding the "health & web" users who navigate to search information on health will continue to grow twice more than general web users; the health is the second main reason for searching information on the Internet, suggesting as the patient is getting an actor of his own health and his own well-being, wanting to be more informed and able to decide for his own health care. For the pharmaceutical industry Internet can be a powerful tool to gain efficiency and effectiveness, optimization, improvement and competitiveness in the processes of research and development, in manufacturing, sales and distribution, being able to actually change the traditional dynamics. However, the European regulations on pharmaceuticals (fragmentation of markets, rigid welfare systems etc..) may constitute a serious competitive disadvantage for European operators against the U.S., where the support for R&D is more perceived as a social and economic fundamental value for the benefit of the entire population. The online sale of drugs, if properly regulated, could be competitive instrument especially if the price system were actually free, but the process of a true and effective liberalization is still far. However, more opportunities will come from the big chance in information and communication offered by the web: the "e-health communities" are already becoming centers of information, aggregation and sharing of health issues, acting as key factors in the development of combination between health & web, especially in Europe, including Italy, where the healthcare has still a strongly social, institutional and associative character. It is a tool to promote a shared and constant exchange of information, it is reserved to specialists, it is used by the doctor to communicate with the patient, it is intended for the information exchange between individual patients or between groups or associations of those. It offers many opportunities in the delivery of services even by health care companies as well as individual medical practitioner or specialists, in terms of facilitating the offer or as a "connection"

with the patient, encouraging the personal relationship between people and healthcare. In this context, the pharmaceutical industry can pose, for the medical profession, and for the other components of the system, a unique source of information about its medications, including those in development, becoming a service partner within a shared system The new technologies will be the driving force behind the accelerated use of the web. A strategic opportunity for Europe and Italy will come, for example, from the mobile phone, much more developed here than in the USA (45 % against 25%), and especially much more widespread than the use of Internet: today, the number of mobile phone users in Italy is 500% greater than the number of web users. The attention should be placed on the phenomenon of social networks in the shape of Facebook and Twitter which can be excellent platforms to build systems sales and find new customers; the social networks are the ideal ground to build a new social dimension of trade to deliver additional services. The sale of products and services via social networks, or in collaboration with multiple users connected to each other, will assume an increasing importance and will allow to exploit user information available on social networks with a customization objective in mind. The smart social commerce (Vagnozzi, Smart Social Commerce, 2011), is the new frontier of the ecommerce 2.0. Briefly, in the smart commerce, the concept of recreational shopping, so trendy nowadays, will be overcome and the e-trade will look like a platform where connected assistive consumer technology anticipates consumers' needs and drives them and even completes their transactions. Implementing these concepts in the web pharmacies of the future would assure a strategic advantage in terms of competitiveness.

CONCLUSION

Internet and the new economy represent, in its completeness, a big opportunity for development and progress, also in the pharmaceutical field. We are probably at the beginning of a change that can increase the productivity and efficiency of quantitative and qualitative drugs area and therefore, of the entire health system of our society. Internet is especially an element of competitiveness, in many ways revolutionary, able to redesign many of the major economic trends, even in an atypical market like that of the pharmaceuticals. As such, it represents an opportunity for growth and development for the pharmaceutical sector but also a crucial ground of challenge toward the international competition, in a logic of advancement and competitiveness

of the entire Country system, including the pharmaceutical production sector as an area of the economy based on research and innovation, which strongly wants to be an active and vital part. It is a challenge that the pharmaceutical industry operating in Italy is ready to raise with the same desire to grow with whom it has operated in recent years, but only if it can deal with the suitable regulatory, economic and market conditions in order to compete adequately with other countries. That means able to operate in a field of policies and regulations which promote confidence to invest, to grow, to create progress, skilled employment and produces better health for all, because that is the scope of the pharmaceutical industry.

Bibliography

Vagnozzi , E. (2015). E- commerce adoption in the pharmacy retailing: the smart social commerce distributive innovation. *University of Bologna*.

Vagnozzi, E. (2011). Smart Social Commerce. University Of Bologna.

Yang, Z., Peterson, R. T., & Huang, L. (2001). Taking the pulse of Internet Pharmacy.