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Marketing innovation in the pharmaceutical industry via Digital platforms

Study case of the Algerian digital platform PharmNet

الإبتكار التسويقي في الصناعات الدوائية من خلال المنصات الرقمية دراسة حالة
المنصة الرقمية الجزائرية-فارمانيت

Randa SAADI رندة سعدي- 1 ، Khaled GACHI خالد قاشي- 2

Laboratory of development policies and forward-looking studies, University of Akli Mohand Oulhaj- 1

Bouira, r.saadi@univ-bouira.dz

University Center Abdullah Morsli - Tipaza, khaledgachi2000@yahoo.fr2

Corresponding author: Randa SAADI, r.saadi@univ-bouira.dz

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Abstract :

Pharmaceutical industry depends on the abundance of technology, whether in manufacturing/marketing. Innovative marketing in the pharmaceutical industry provide an attractive marketing program that creates value for society. One of its most innovative means is digital platforms, as a conclusion the PharmNet digital platform offers innovative digital services for the public, health workers, also for a laboratory Pharmaceutical industry.

Keywords: Pharmaceutical Marketing; Pharmaceutical industry; Marketing Innovation; PharmNet Digital Platform.

ملخص:

الصناعات الدوائية تعتمد على غزارة التكنولوجيا من حيث كيفية تصنيع / التسويق، وجوهر الابتكار التسويقي الدوائي تقديم برنامج تسويقي جذاب غير مألوف يخلق قيمة لدى المجتمع، من أهم وسائله المبتكرة المنصات الرقمية، سعت هذه الدراسة إلى توضيح دور المنصات الرقمية باعتبارها وسيلة تسويقية مبتكرة في مجال الصناعات الدوائية إنطلاقاً من دراسة حالة المنصة الرقمية PharmNet الجزائرية التي تقدم خدمات رقمية مبتكرة للجمهور ككل، العاملين الصحيين في القطاعين العام والخاص ولختبرات الصناعات الدوائية. كلمات مفتاحية: التسويق الدوائي، الصناعات الدوائية، الابتكار التسويقي، المنصة الرقمية PharmNet.

1. INTRODUCTION

Health care is one of the sectors accompanying technological development; also, it is provide quality and excellence care to the individual.

Considering the pharmaceutical industries an important part of the health care market based on the intensity of advanced technology starting from the stage of inventing a new drug and what it requires from clinical applications to how it is marketed.

So pharmaceutical marketing was limited to traditional methods. Now, it is confused with information and communication technology led to appearance of “**digital platforms**” as an innovative way to market the pharmaceutical industries by creating a space that includes all actors in this industry.

Considering that the Algerian pharmaceutical industries market is a large and promising one. State strives to keep up with the information and communication technology’s application in order to enhance its marketing capabilities, by creating an innovative digital platform “**Algerian digital platform PharmNet**” that helps collect the Algerian Medicines Encyclopedia include

pharmaceutical industry laboratories, health professionals to clearly define customer needs and preferences, in addition better promotion and services.

Through the foregoing, we asked the following question:

How can be the Algerian digital platform PharmNet an innovative marketing tool in the pharmaceutical industry?

2. Pharmaceutical marketing mechanisms

The importance of pharmaceutical marketing is increasing day by day, since it is concerned with the marketing of drugs, which are the most important products for human survival, and helps reduce or control the spread of diseases.

2.1 Definition of pharmaceutical marketing

- Pharmaceutical marketing: “defined as the process by which the health care market is attained. The focus on care gives sufficient justification for the need for pharmaceutical marketing, and that competition and survival strategy means the necessity of excellence by providing value to the patient that is difficult to imitate by adopting distinct methods to accomplish activities. Also pharmaceutical marketing differs from other types of marketing by different pharmacological or pharmaceutical market from the rest in other sectors, where it has a unique feature which is that the non- patient influences the purchasing decision as the doctor greatly affects the direction of drug consumption.”ⁱ

- Pharmaceutical marketing: “is a group of activities that focus on making doctors, drug distributors and pharmacists as well as the general public aware of new and existing pharmaceutical brands. Pharmaceutical marketing can include patient support materials, medical device meetings, and it can also be said that drug marketing as a marketing process helps to determine patients' needs and meet their needs in a profitable way.”ⁱⁱ

2.2 Stages and system of pharmaceutical marketing

2.2.1 Stages of pharmaceutical marketing

Pharmaceutical marketing depends on the following steps.ⁱⁱⁱ

- First stage: It depends on the results of clinical studies, as these experiments conducted as a pre-marketing stage called human resource testing.

- The second stage: Experiments conducted on a group of 20 to 300 patients, which is important to assess the success of the drug, as well as to continue to assess the safety of the first stage in a larger group of volunteers and patients.

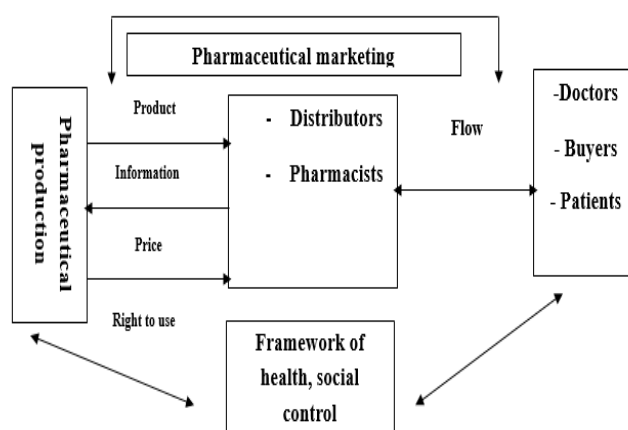
-The third stage: Is a multicenter randomized controlled trial with large groups of 300 to 3000 patients and aims to form a final evaluation of the effectiveness of the drug.

- The fourth stage: It takes place on the largest population, to determine whether the drug is safe over time, post-marketing research is also an important component of drug marketing, which enables pharmaceutical industries to expand their markets or enter new one.

2.2.2 Pharmaceutical marketing system

The characterization of pharmaceutical marketing system imposed by the external environment on pharmaceutical industries, as well as the flow of information from the pharmaceutical industry and the target market for doctors, drug distributors, pharmacists and patients. According to the scheme illustrates in **Figure (1)**

Figure (1): Pharmaceutical marketing system



Source : C MICKEY, Smith.(1991), **Pharmaceutical Marketing- Strategy and Cases**, pharmaceutical products Press, Haworth press, p :12.

Through **the figure (1)**, it can be said that pharmaceutical marketing is an environment formed by the producers of drugs that are governed by a reciprocal relationship between intermediaries (**distributors or pharmacists**) how are the link between the producers and (**doctors -patients - buyers**) by exchanging (**product-information-price-right to use**), all this is within the framework of health, social control.

2.3 Pharmaceutical marketing environment

2.3.1 The pharmaceutical market

There are five models for choosing a targeted drug market:^{iv}

- **Focusing on part of the market**: This method of reaching the target market adopted by large and small pharmaceutical industries because it achieves the following advantages:

- ✓ Specialization in the field of drug production, promotion and distribution, leading to lower costs.

- ✓ It can quickly create and increase return on investment.
 - ✓ It is more adaptive to the environment due to the limited variables.
- **Specialist choice:** depends on the choice of more than one specialized market segment to deal with, as for each market the establishment can set a goal that it seeks to achieve with one or more drug products submitted to a specific part of the market.
- **Service Specialist:** This pattern adopted in the market orientation through dealing to provide specialized health services in different markets.
- **Specialized market:** Enterprise Management seeks to choose this method in the market orientation when it aims to achieve coverage of multiple needs in a single pharmaceutical market.
- **Market coverage as a whole:** This method used by the mega pharmaceutical industries how provide public services for comprehensive market coverage.

2.3.2 Pharmaceutical marketing external environment

Pharmaceutical industries derive their survival from the surrounding environment, which is both comprehensive and complex.

The pharmaceutical marketing environment includes a number of areas:^v

- **Technological environment:** Due to the technology and capital intensity in pharmaceutical industry, it always strive towards original radical innovations because minor improvements bring risks that expresses a defensive position rather than an offensive one.
- **Political environment:** Marketers' decisions influenced by the strength of developments in the political environment such as the system, the approach of the government, the degree of political security and diplomatic relations of the country.

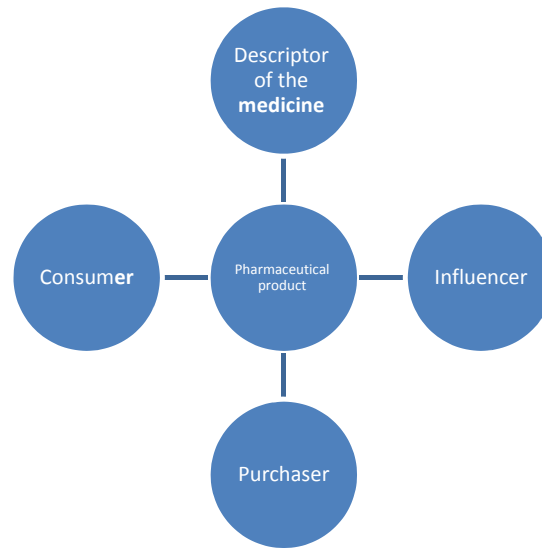
The pharmaceutical industry needs a favorable political climate, which encourages attention to citizens' health care.

- **Economic environment :** Pharmaceutical marketing is linked to a set of changes related to the economic environment, as the volume of government spending on this sector, as well as the purchasing power in order to prepare an effective marketing strategy, this industry must obtain information and data about a group of economic factors, especially pharmaceutical market size, exports and pharmaceutical imports.
- **Legal environment:** In the field of pharmaceutical industry, several strict laws and regulations issued, regarding the direct impact of this industry on human's life.

In addition, associations and organizations have emerged to protect the patient from the illegal practices of pharmaceutical industries, the latter finds themselves governed by laws and legislation to produce high-quality drugs, and to follow ethics marketing methods.

2.3.3 Medicines purchase process

Figure (2): the medicine purchase process



Source: BERRACHED, Amina. (2017-2018), **the decision to buy a compulsory or optional prescribed medicine-case of the wilaya of tlemcen**, PhD thesis in management sciences, Abou Bakr Belkaid University, Tlemcen, Algeria, p : 53.

The previous figure Illustrates the privacy of medicines purchase process

- **Descriptor of the medicine:** the person who has the legal right to prescribe the medicine as a doctor and a pharmacist.
- **Influencer:** hospital, doctor, pharmacist.
- **Purchaser:** it could be the non- patient or the patient may be himself.
- **Consumer:** the patient.

2.4 Pharmaceutical mix -marketing

The pharmaceutical mix -marketing consists of the following components:^{vi}

- **Product :** when pharmacists and doctors expressed a positive attitude towards the product in general, its packaging, size, trade name and labeling, if they did not seem the same position regarding the product's effectiveness and ease of use, they may be reluctant to deal with it and describe it patients.
- **Price:** an important and essential component of the mix -marketing due to its association with the purchasing decision, as purchasing power and perceived quality.

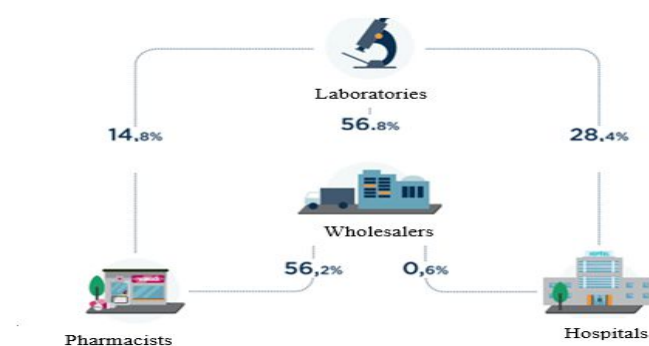
More over discounts are an encouraging factor for pharmacists to purchase the drug and prescribe it to patients, and pharmaceutical industries can benefit from such a positive advantage,

which is to obtain a better or similar quality level for competing drugs at an appropriate price.

-Distribution: efficiency of distribution channel plays in terms of providing sufficient quantities of the drug at the appropriate time and place.

It is worth noting that the distribution component is getting more important in particular with regard to pharmaceutical industries because it is related to people's life.

Figure (3): Pharmaceutical products distribution channels



Source: **Medicines Companies in France**. (2018), economic report, France, p10.

The figure (3), explains how to distribute pharmaceutical products. Either pharmaceutical industries (laboratories), may directly distribute to pharmacists, this estimated at 14.8% from its business number, or for hospitals directly, this estimated at 28.4% of its business number.

Alternatively, it depends on the indirect distribution channels represented by the pharmaceutical products distribution (wholesalers); these represent the highest percentage 56.8 % of pharmaceutical industries business number.

- Promotion: the dimensions related to promotion process in general, are marketing efforts, guarantees that reduce the impact of psychological risks and create positive trends that society accepts it.

The position of pharmacists and doctors towards promotion is through the need to take into account complaints as a basic point on the one hand, On the other hand for each drug his own marketing way.

Predominately there are two basis for classification:^{vii}

- depends on auto-medication: drugs sold directly to patients without a prescription either by ads or pharmacies.

- Drugs not permissible to sell except by prescription.

3. Using digital platforms as an innovative marketing program in the pharmaceutical

industry

Digital platforms vary in terms of activity, sector, business model, this platforms range from small, local to digital platforms to global companies that generate large returns that provides a variety of services.

Looking to healthcare field in general and pharmacology in particular, the creation of prototypes for digital platforms is a form of marketing innovation.

3.1 Definition of marketing innovation

Marketing innovation, known as innovation in the marketing mix built on an idea that reflects the serious view and correct understanding of market variables in order to build a successful business.

This is by applying ideas and translating them into innovations on the ground, with the necessity of continuous monitoring of market by relying on various researches necessary that affect products, the why how they are provided, their processes, pricing, distribution, and promotional methods.^{viii}

3.2 The concept of digital platforms

Digital platforms are an innovative promotional method that combines being unique, convenient and socially acceptable and its applicability as an alternative to traditional promotional programs that have become familiar.

Before discussing its concept, website's concept to avoid confusion between them.

3.2.1 What is a website?

A website is a group of related web pages that form a single entity and are usually used by one person or institution and devoted to one or several closely related topics.

It also combines functionality, content, form, organization and interaction, and there are group of elements that are key elements in a good website design called 7Cs:

- ✓ Context : includes presentation, appearance and design
- ✓ Content: text, images and videos.
- ✓ Community: the ability to make browsers in touch with each other.
- ✓ Customization: the ability to customize content as per the client (browser).
- ✓ Communication: whether from the site to the user or vice versa.
- ✓ Connection: relationships with other sites.
- ✓ Commerce: selling online or not.

Kotler adds another component updating and change.^{ix}

3.2.2 What is a digital platform?

Generally, digital platforms called «two-sided" or "multi-faceted" markets. Because users

regrouped on the platform operator in, order to facilitate interaction (information exchange, commercial transactions, etc.) in a specific context.

Users can be buyers of products or services, sellers, distributors, advertisers, or all at the same time.^x

3.2.3 Digital platforms features and objectives

✓ The features of digital platforms are as follows :^{xi}

- The ability to facilitate and extract value from interactions or direct transactions between users.
- The ability to collect, use and process a large amount of personal and non-personal data in order to serve and experience each user.
- The ability to collect data "**domain savings**" for platforms provides an informative advantage.
- The ability to build networks where any additional user will enhance the experience of all existing users by "**network effects**".
- The ability to create and shape new markets in efficient arrangements that bring benefits to users but may disrupt traditional markets as well.
- The ability to organize new forms of civic engagement based on collecting, processing, changing information.

✓ The objectives of digital platforms are :^{xii}

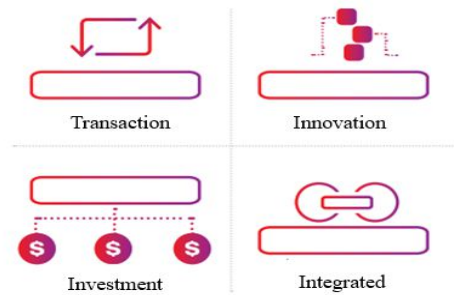
- Greater comfort and lower search costs.
- Increasing transparency and facilitating presentation across geographical regions.
- More choice or variety of products.
- The ability to bring together large numbers of users who are ready to interact.

3.3 Digital platforms in the pharmaceutical industry

3.3.1 Types of innovative digital platforms for the pharmaceutical industry

The following figure illustrate digital platforms for the pharmaceutical industry:

Figure (4): Types of innovative digital platforms for the pharmaceutical industry



Source: C, Peter, Evans, et Annabelle ,Gawer. (2016), **the Rise of the Platform Enterprise.the Emerging Platform Economy**, Series n° 01, p :09.

- **Transaction platforms:** a technology, product or service acts as a channel (or medium) to facilitate exchange or transactions between different users, buyers or suppliers.
- **Integrated platforms:** a technology, product or service that acts as a transaction platform and platform for innovation, this category includes giant corporations, who have their own phone apps and system developed to support their core content.
- **Investment platforms:** made up of enterprises that have developed a business portfolio strategy, operating as a holding or an active investor in the healthcare field.
- **Innovation platforms:** a technology, product, service or organization that organizes the work of enterprises in an innovative ecosystem by providing integrated services to all parts of the marketing environment.^{xiii}

3.3.2 The importance of innovative digital platforms for the pharmaceutical industry

Digital platforms used in the pharmaceutical industry achieve:^{xiv}

- Directing competitive and market intelligence to bring all the detailed and reliable information about the pharmaceutical industry.
- The quick access to reference information through the major global industry developments in the pharmaceutical and medical technology markets.
- Finding gaps and unmet needs by analyzing the forces of competition in the market.
- Digital platforms are an important medium in the marketing intelligence of pharmaceutical industries.

3.4 Pharmaceutical marketing strategies through digital platforms

Below are the strategies that pharmaceutical industries can adopt in the digital age:^{xv}

- **Cooperative Business Model Strategy:** The pharmaceutical industry is rapidly innovating through cooperation with partners and stakeholders, and digital technologies offer great potential for almost unlimited collaboration.

Where collaborators can efficiently and effectively research and develop new treatments, **Pfizer** has adopted an innovative cloud-based data platform, which enables participants to collect, analyze and visualize patient data for clinical trials across studies and drug programs, supporting smart experimental design, accuracy, drug alertness and organizational inquiries.

- **Business Partner Strategy:** digital strategies include collaborating with enterprises that address the complementary aspects of a specific disease. For example, companies that market anticoagulants should collaborate with medical device companies that identify these patients through remote heart monitoring.

- **Mobile phone application strategy:** mobile applications help to provide guidance for medical devices, full details of any drug mentioned in application for better marketing.

- **Patient and healthcare provider strategy:** as patients increasingly use digital technologies, they also expect pharmaceutical industries to provide technology-based services that can help them monitor and manage their health.

4. The Algerian digital platform for the pharmaceutical industry PharmNet

The PharmNet digital platform is one of marketing innovations in the pharmaceutical industry aspect, in addition is the Algerian reference for the drug over the Internet.

It contains the official designations for the medicines used in Algeria; it is update online every time a new product registered, with the possibility of referring to the medication bulletins, knowing the equations and drug interactions as well as other features.^{xvi}

4.1 Definition of PharmNet digital platform

PharmNet digital platform aims to be the Algerian Medicines Encyclopedia, with more than 5227 medications included in more than 171 medicinal and 28 medicinal classes, in addition to 349 Algerian laboratories, that aim to sort and sort data and allow the browser to search for drugs with multiple criteria.

Digital platform PharmNet features:

- Details of the drug indicated in terms of (INN, APP).
- Equivalent to original medicines.
- New drugs released upon release.
- Publish drugs withdrawn from the market.
- It is a statistical portal (consulting, research, comparison of laboratories).
- Contribute to time and get reliable answers.^{xvii}

4.2 Types of subscriptions and services in the digital platform PharmNet

The PharmNet digital platform provides a range of specialized services to all its clients.^{xviii}

- **Large public:** 100% free.
- **Health professionals:** For practitioners and health workers in the public and private sectors (Pharmacists, Doctors, Dentists and Medical Personnel, Commercial and medical Delegates) by subscribing to the PharmNet digital platform the following advantages:
 - ✓ Search for the product by brand or INN, with product visualization and instructions.
 - ✓ List of products (drugs) according to the laboratory.
 - ✓ List of products by category of treatment.
 - ✓ List of products by drug category.
 - ✓ List of products in alphabetical order.
 - ✓ Equations and interactions between drugs.
- **Pharmaceutical industries laboratories:** this subscription provides practically access to all features of the platform:
 - ✓ Search for the product by brand or INN, with product visualization and instructions.
 - ✓ List of products (drugs) according to the laboratory.
 - ✓ List of products by category of treatment.
 - ✓ List of products by drug category.
 - ✓ List of products in alphabetical order.
 - ✓ Equations and interactions between drugs.
 - ✓ Pharmaceutical and drug alertness with a simple click.
 - ✓ Managing the laboratory's product range.
 - ✓ Add / edit / show / hide a product.
 - ✓ Ability to download images from the laboratory's products and records.
 - ✓ Managing the commercial scope of the laboratory.
 - ✓ This service provides a kind of competitive intelligence by comparing products together from the public's point of view.
 - ✓ Statistics of views on products (drugs).
 - ✓ Summary (sales force) by period / state.
 - ✓ It also provides other features upon request.

4.3 Digital Innovative Service the E- Prescription Intelligent

An innovative digital solution provided by the PharmNet digital platform that helps:^{xix}

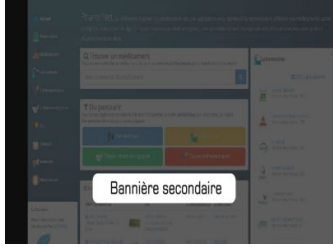
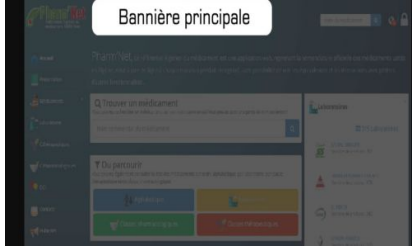
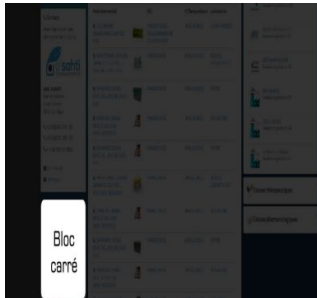
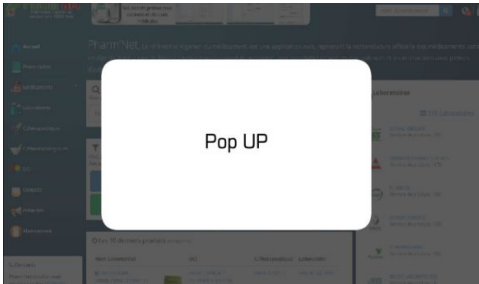
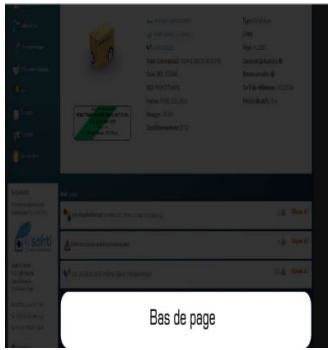
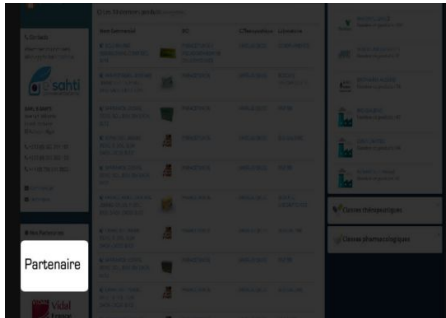
- Facilitating prescribing of prescriptions by a doctor.
- Pharmacists avoid confusion or ambiguity when decoding prescriptions.
- A direct link to the national drug designation.
- allowing participating pharmacists to find a prescription.
- Find the formulas for prescribed drugs.

-This confidential service guarantees doctor and patient' identity.

4.4 Innovative promotion on digital platform PharmNet

According to **table (1)** PharmNet provide digital advertising spaces of various shapes:

Table (1): Advertising space on the PharmNet digital platform

Secondary Banner	Main Banner
	
Square shape	Pop-Up
	
Bottom of the page	Show partner logo
	

Source: <http://pharmnet-dz.com/publicite.aspx>(consulted on 01/05/2020).

- **Main Banner:** 468 by 60 pixels, appearing to the public at large on all platform pages (above).

-**Secondary Banner:** 468 by 60 pixels, appearing to the audience as a whole on all platform pages (in the middle of the content).

- **Pop-Up:** 600 by 600 pixels, appearing to the public at large on all pages of the platform.
- **Square shape:** 336 by 280 pixels, visible to the audience as a whole on all pages of the platform (on the left).
- **Show partner logo:** 250 by 250 pixels, visible to the public at large on all platform pages (left).
- **Bottom of the page:** Its dimensions are 728 by 90 pixels, it appears to the public as a whole as medicine pages, INN, laboratories, medical departments, pharmaceutical and pharmaceutical categories.^{xx}

5. CONCLUSION

Digitization has become an important part of daily life, as all sectors have been adapted to the digital age at a faster rate.

Even the pharmaceutical industry has adopted digital marketing in this era, but it must be made clear that it does not sell drugs over the Internet, but rather uses digital marketing platforms to integrate it in its marketing strategy the allows best way of communication with clients.

Considering that the pharmaceutical sector is an information-intensive industry and as part of the health care market as a whole, it has not been affected by the digital revolution until recently.

Where it is still going traditionally until the present day due to the lack of strict regulations, appropriate digital strategies, and other essential obstacles to the adoption of digital marketing, however marketing is currently using innovative methods to become a professional system by creating value for clients and society as a whole.

Therefore, we conclude that:

- Pharmaceutical marketing is an environment that consists of producers of drugs that are governed by a reciprocal relationship between intermediaries and is distributors or pharmacists exchange (product-information-price-right to use), these intermediaries are the link between the producers (patients - buyers - doctors), this is all within Health and social control.
- This study evaluated multiple aspects of the use of digital platforms as a means and mechanisms to replace traditional marketing strategies in the pharmaceutical industry.
- The digital marketing platforms of the pharmaceutical industry distinguished by their ability to create new markets, and shape them into more efficient arrangements that bring benefits to users.
- The PharmNet digital platform is one of the marketing innovations in the Algerian pharmaceutical industry.
- The PharmNet digital platform provides a variety of services to the public, for practitioners and health workers in the public and private sectors and for the pharmaceutical industry laboratories.

- The PharmNet digital platform provides the E- Intelligent Prescription. An innovative digital solution facilitates prescribing by doctor and avoiding pharmacist's confusion or ambiguity.
- The PharmNet digital platform provides innovative promotional services such as varied advertising space.
- The need to exploit and create relevant digital media for the drug or health market in Algeria is necessary to create awareness among all segments of society, especially as society has become inclined to use digital social media.

6. Bibliography List:

1. Journal article :

- Bn Abdullah, Manal, Lahchem Kismeya.(2019), **The Role of Marketing Innovation in Creating Impulsive Procurement - Study of International Experiences**, Journal of Studies in Economics, Trade and Finance, Vol 08, Issue 01 ;
- C, Peter, Evans, Annabelle ,Gawer. (2016), **the Rise of the Platform Enterprise.the Emerging Platform Economy**, Series n° 01 ;
- Masood, I, M Ibrahim, M Hassali , M Ahmed. (December 2009), **Evolution of marketing techniques adoption in pharmaceutical industry and related issues**, the review of Journal of Clinical and Diagnostic Research ;
- Obaidat, Hamad, Al-Ghadeer. Hamad. (2011), **The effect of the mix - marketing on Jordanian pharmacists' preference for the local drug compared to its foreign counterpart**, Journal of Administrative Sciences Studies, Vol 38, Issue 01 ;
- Ouled zaoui, Abdul Rahman. (2014), **The reality of green pharmacological marketing in the SAIDAL complex**, **Journal of Economics**, Management and Commercial Sciences, Issue 12 ;
- Parekh, Dhara, Pankaj Kapupara, et Keten Shah.(January 2016), **Digital Pharmaceutical Marketing** , A Review : Research Journal of Pharmacy and Technology.

2. Thesis :

- Khatib, Rami Ata Muhammad. (2012), **The effect of direct drug advertising on customers on their purchasing decisions - An applied study on clients in the Hashemite Kingdom of Jordan**, Master's degree in business administration, Middle East University, Oman, Jordan ;
- Qatifan, Shadi Mohammed. (2007-2008), **Pharmaceutical marketing**, PhD thesis, Health Administration, St Clements University;
- Zidane, Karima, (2017-2018), **The contribution of digital marketing to developing the relationship with the customer - a sample of mobile phone operators study in Algeria**, PhD thesis in Marketing Management, Akli Mohand Oulhadj University, Bouira, Algeria ;

3. Repports :

- platforms Benefits of online. (2015), **Benefits of online platforms**, report for Google by Oxera ;
- Platforms Staff working document Online.(2016), **Online Platforms and the Digital Single Market**, European Commission report, Brussels ;

4. Internet websites:

- **Pharmaintelligence**, detailed website: <https://pharmaintelligence.informa.com/who-we-help/how/competitive-and-market-intelligence>(consulted on 01/05/2020);
- The role of pharmaceutical marketing**, detailed website: <https://bit.ly/2WVUYJS>(consulted on 01/05/2020);
- **The Algerian PharmNet digital platform** <http://pharmnet-dz.com/index.aspx>(consulted on 01/05/2020) ;

7. Citations:

-
- ⁱ Ouled zaoui, Abdul Rahman. (2014), **The reality of green pharmacological marketing in the SAIDAL complex**, *Journal of Economics, Management and Commercial Sciences*, Issue 12, p :11.
 - ⁱⁱ Masood, I, M Ibrahim, M Hassali , M Ahmed. (December 2009), **Evolution of marketing techniques adoption in pharmaceutical industry and related issues**, the review of *Journal of Clinical and Diagnostic Research*.
 - ⁱⁱⁱ **The role of pharmaceutical marketing**, detailed website :<https://bit.ly/2WVUYJS>(consulted on 01/05/2020).
 - ^{iv} Qatifan, Shadi Mohammed. (2007-2008), **Pharmaceutical marketing**, PhD thesis, Health Administration, St Clements University, p :41.
 - ^v Ouled zaoui, Abdul Rahman. **op cit**, P : 112.
 - ^{vi} Obaidat, Hamad, Al-Ghadeer. Hamad. (2011), **The effect of the mix - marketing on Jordanian pharmacists' preference for the local drug compared to its foreign counterpart**, *Journal of Administrative Sciences Studies*, Vol 38, Issue 01, p-p : 191-192.
 - ^{vii} Khatib, Rami Ata Muhammad. (2012), **The effect of direct drug advertising on customers on their purchasing decisions - An applied study on clients in the Hashemite Kingdom of Jordan**, Master's degree in business administration, Middle East University, : Oman, Jordan,p:18.
 - ^{viii} Bn Abdullah, Manal, Lahchem Kismeya.(2019), **The Role of Marketing Innovation in Creating Impulsive Procurement - Study of International Experiences**, *Journal of Studies in Economics, Trade and Finance*, Vol 08, Issue 01, p :359.
 - ^{ix} Zidane, Karima, (2017-2018), **The contribution of digital marketing to developing the relationship with the customer - a sample of mobile phone operators study in Algeria**, PhD thesis in Marketing Management, Akli Mohand Oulhadj University, Bouira, Algeria, p :32.
 - ^x Platforms Staff working document Online.(2016), **Online Platforms and the Digital Single Market**, European Commission report, Brussels, p :01.
 - ^{xi} **Ibid**. P : 02.
 - ^{xii} platforms Benefits of online. (2015), **Benefits of online platforms**, report for Google by Oxera, p :19.
 - ^{xiii} C, Peter, Evans, Annabelle ,Gawer. (2016), **the Rise of the Platform Enterprise.the Emerging Platform Economy**, Series n° 01, p :09.

^{xiv} **Pharmintelligence**, detailed website: <https://pharmintelligence.informa.com/who-we-help/how/competitive-and-market-intelligence>(consulted on 01/05/2020).

^{xv} Parekh, Dhara, Pankaj Kapupara, et Keten Shah.(January 2016), **Digital Pharmaceutical Marketing** , A Review : Research Journal of Pharmacy and Technology, p :111.

^{xvi} <http://pharmnet-dz.com/presentation.aspx>(consulted on 01/05/2020).

^{xvii} **Ibid.**

^{xviii} <http://pharmnet-dz.com/abonnement.aspx>(consulted on 01/05/2020).

^{xix} <http://pharmnet-dz.com/ordonnance.aspx>(consulted on 01/05/2020).

^{xx} <http://pharmnet-dz.com/publicite.aspx>(consulted on 01/05/2020).