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The emerging markets e-commerce opportunities, during and post covid 19 pandemic - a case study of Algeria

فرص التجارة الإلكترونية في الأسواق الناشئة ، أثناء وبعد جائحة كوفيد 19 – دراسة حالة الجزائر

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Abstract:

The importance of e-commerce in emerging economies is due to the accompanying development in all activities and sectors, and its transfer from the traditional to the electronic framework by optimal use of the latest elements of technology and communications in order to achieve excellence and improve efficiency and quality of business transactions in terms to save time, effort and money. Recently, and as result of the lockdown caused by the covid-19 pandemic developing countries, including Algeria, have become aware of the gains they can achieve by adopting facilitating electronic commerce and apply it with its components as a means to achieve its future development goals. This study shows the benefits of e-ecommerce the emerging markets gains during and after the pandemic.

Keywords: e-commerce; emerging markets; covid-19 pandemic.

JEL Classification Codes: L81-L86

ملخص:

ترجع أهمية التجارة الإلكترونية في الاقتصاديات الناشئة إلى التطور االدي تجلبه لجميع الأنشطة والقطاعات الاقتصادية ، والمساعدة في انتقالها من الإطار التقليدي إلى الإطار الإلكتروني من خلال الاستخدام الأمثل لأحدث عناصر التكنولوجيا والاتصالات من أجل تحقيق كفاءة و جودة المعاملات التجارية من حيث توفير الوقت والجهد والمال .في الآونة الأخيرة ، و نتيجة الحجر الناجم عن جائحة كوفيد –19 ، أدركت البلدان النامية ، بما في ذلك الجزائر ، المكاسب التي يمكن أن تحققها من خلال اعتماد التجارة الإلكترونية وتطبيقها بمكوناتها كوسيلة لتحقيق أهدافها التنموية المستقبلية نحاول من خلال هده البحث دراسة فرص التجارة الإلكترونية في الأسواق الناشئة أثناء الجائحة وبعدها.

كلمات مفتاحية: التجارة الإلكترونية.، الأسواق النامية.، جائحة كوفيد –19.

تصنيفات JEL: L81 ، L86.

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INTRODUCTION:

The world is witnessing a huge revolution in the field of information and communication technology, which has contributed to increasing the interdependence between markets in the world, which has given commercial transactions a global character. Algeria is among the countries that have made amendments to their laws in order to enter the world of e-commerce. E-commerce has flourished in light of the Corona pandemic, as sales of electronic platforms have increased by a large percentage, and many marketers have found an alternative to their traditional shopping. Remote shopping saves effort and time, as the buyer and seller negotiate remotely about price, product quality and other matters. The importance of the study derives from considering the Corona pandemic from the emergency crisis that affected all of life, including the movement of trade, buying and selling by traditional methods, and at a time when it negatively affected several sectors of an economic nature, but in return it contributed to the recovery of e-commerce in Algeria. We have the quality of this influence and its role in the growth and prosperity of contracting individuals and small and large enterprises through e-commerce sites..

1- **E-commerce definition and features:**

E-commerce is simply an activity of buying and selling goods or services over the Internet, and the concept of e-commerce currently occupies a great position in terms of its benefits for doing business internationally recognized (Hassen, 2020). In the nineties of the last century was the beginning of the development of electronic commerce, it was called electronic transfers of money, and it was limited to large institutions after the emergence of electronic data interchange (Zahra, 2017). The wide spread of the Internet and smart devices and the development of e-commerce applications have also contributed to its greater and wider spread, hence the name e-commerce in Algeria and the world in general. It has become widespread in all countries of the world, and from it many companies and entrepreneurs have installed this wave of development in all fields, so that each of them has its own website. Today, most companies in the world conduct their business through various platforms and websites, considering that this type of commerce is what has become popular now.

The characteristics of electronic commerce mean the sum of the characteristics and determinants that distinguish it from traditional commerce, and the most important of these characteristics are (Chaabna, 2015):

- Reliance on the electronic medium, as the instructions between the participants in this trade are carried out through electronic means such as computers that are formed and connected to various networks that are essentially represented in the open global network, which is the Internet.
- Cross-border trade, as it is a global trade that knows no borders between countries or continents, so anyone can deal with it regardless of his nationality or place of residence.
- Developing business establishments and improving their performance for your nation the rapid development in the field of electronic commerce has prompted business establishments to adapt quickly so that they can meet business needs
- The total and partial absence of paper documents in transactions, as it is possible to complete a complete commercial transaction, starting from negotiation until purchasing, paying the value of the goods and receiving them electronically without exchanging paper

bonds at all.

- Speed E-commerce takes place at high speed, that is, the speed of contracting and the speed of delivery for many deals, according to the time system.

- Its importance varies in relation to commercial activities, meaning its importance varies according to the type of commodity or service, because some of them, in their dependence on traditional trade, achieve better results than if they used electronic means in their commercial exchanges.

- Rapid Development Due to its close connection with modern information and communication technology, it is always rapid developments, e-commerce is characterized by rapid and continuous change that leads to instability of the system and the rules to which it is subject.

- Dealing without disclosing the identity of the dealers. It is possible that a commercial transaction on the Internet between two parties that do not know each other.

- Price sensitivity is perhaps one of the most distinguishing features of electronic commerce is the so-called open play, especially with regard to prices and with regard to the electronic seller, the world is visible in front of him

2- forms of e-commerce The emergence of electronic commerce has been accompanied by a great revolution represented in the development of means of communication and information technology and the increase in its use, not only for projects, but also with the level of users and consumers in the councils of goods and services. As e-commerce is a multi-dimensional concept that can be applied through more than one form (Qin, 2014),

2-1 Business-to-Consumer or B2C: Recently, a lot of e-commerce is b2c, it is the type of ecommerce in which electronic commerce relationships are established between companies and end consumers, it is similar to the retail division of traditional commerce.

2-2 Business-to-Business or B2B: is the type of commerce that includes all electronic transactions of goods or services that take place between businesses. The merchandise producer and traditional wholesalers usually work with this type of e-commerce.

2-3 Business-to-government or B2G: This type of e-commerce is based on an agreement between two parties, one of which is the government and the other is a company or a brand.

2-4 Consumer-to-Consumer or C2C: In this type of e-commerce, electronic transactions of goods or services are made between consumers. Where these transactions are conducted through a third party that provides an electronic platform or online system that enables consumers to actually complete these transactions.

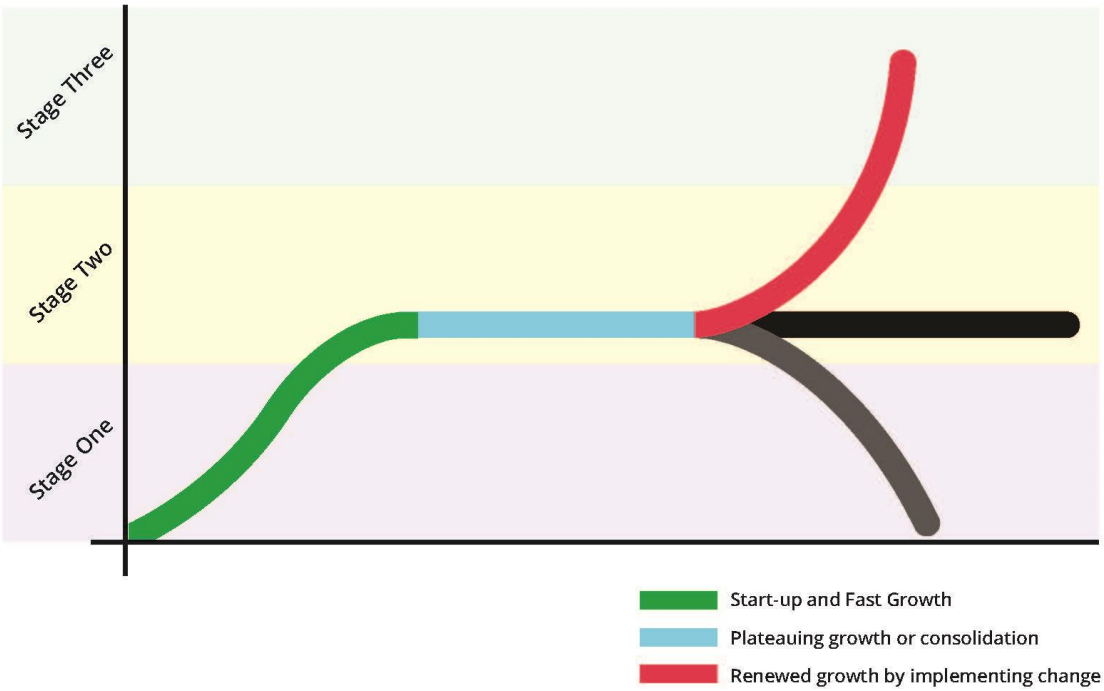
2-5 Consumer-to- Business or C2B: In this type of ecommerce the consumer serve the business by advertizing their product, it is not a popular type but it has started to spread and especially with the spread of social media. One of the most famous examples of C2B trading is the agreement of a social media celebrity with a company or commercial organization to offer and market their products and services to their followers.

3- The lifecycle of e-commerce' products:

Life Cycle of a Product in e-commerce means the stages that the product goes through, starting from the moment of its launch and ending with a period of decline and fading of its

importance, and these stages depend closely on the nature of the market (Nevil Bhatt, 2022)

Fig (1): lifecycle of E-commerce' products



Source: Nevil Bhatt, The Ecommerce Lifecycle And Its Stages For Growth, available at: https://nflowtech.com/the-ecommerce-lifecycle-and-its-stages-for-growth/

The chart above shows that the product passes through 4 basic stages depending on the nature of the market, are as follow (The ecommerce lifecycle and the three stages of growth):

3-1 Stage one: start-up and fast growth

At this stage, the sales of the product start slow, so the spread in the market and the demand for purchase by the customer can be low. In this stage comes the importance of investing in social media channels to help spread the product further and reach the segment interested in the product. Than at the growth stage the sales rise, and the profitability returns witness a significant growth and here the business benefits from the returns on profits in the growth of production, and to obtain better returns and wind margins. At this stage, it is important to keep a continuous survey of the market and competitors, and accordingly determine the appropriate marketing strategies in promoting the growth of the activity.

3-2 Stage two: plateauing or consolidation

The business at this stage should be focused on maintaining the position of the product gained from the product's growth stage. it is necessary to take some considerations into account to ensure the continued life of the product, such as market developments, and customers desires.

3-3 Stage three: the rebirth or decline

At this stage, the product needs to go through a series of continuous changes and modifications, considering that customers' desires and preferences are constantly and rapidly changing, which requires flexibility.

4- The " Electronic Algeria" project and e-commerce strategies:

As part of its endeavors to keep pace with technological and economic changes, and to

confront the post-petroleum phase, Algeria is working to focus the components of the immaterial economy and establish a knowledge society through the development of a strategy called "Electronic Algeria", which focuses on the development of the information and communication technology sector due to its effective role in spurring the national economy and making it an electronic economy. And it will work to generalize the use of information and communication technology, especially Internet connectivity, Algeria has started its efforts to embody an information society since the beginning of 2000, focusing on the field of telecommunications, but it did not develop a comprehensive national plan with a vision related to modern technologies until December, 2008 by the launch of the multi-sector national strategy (Sabiha, 2022),

After six-month period of work by 300 experts, they came up with a national strategy includes 13 main axes, and focuses on three topics: e-management, e-enterprise, e-citizen, and the development of these three axes requires a legal framework, international cooperation and human competencies. Each main axis has a set of main and specific objectives to be achieved over a period of 5 years (2009-2013), and a list of actions necessary for implementation has been set. The topics are:

-Accelerate the use of information and communication technology in management.

-Accelerate the use of information and communication technology in companies.

-Developing mechanisms and incentives for citizens to benefit from information technology equipment and networks.

-Drive the development of a digital economy centered on software services and equipment.

-Strengthening the infrastructure of fast-flowing communications.

-Developing human competencies and supporting research, development and innovation.

5- Conditions for practicing e-commerce in Algeria: In order to practice e-commerce in Algeria, you must follow what has been specified by the recently issued e-commerce law in Algeria, namely:

- The merchant must register in the commercial register authorities or in the register of traditional or handicraft agencies, according to his condition.
- That the merchant owns a website with the domain name "com.dz".
- The website must have methods to verify its authenticity.
- The Algerian state undertakes to create national cards bearing the names of all e-merchants registered in the commercial register or in the register of traditional and handicraft industries, and only these are the ones who can engage in these e-commerce activities.
- Thus, consumers can view the list of electronic suppliers, as the national card for electronic suppliers is constantly published.
- Each electronic commerce transaction must be preceded by an electronic commercial offer and documented under an electronic contract authenticated by the electronic consumer.
- The e-merchant shall present the commercial contract in a visible, readable and understandable manner, and shall include all the necessary information.

6- Opportunities of e-commerce in Algeria:

Algeria's desire to shift towards a knowledge economy, of which e-commerce is a part, is

forced to be realized and embodied on the ground with the maturation and development of the Internet as an electronic medium that leads to bridging distances, removing barriers, achieving costs, raising efficiency and speed in completing transactions, and the Algerian state's awareness of the necessity of This transformation, as the first steps taken to achieve this desire and popularize Internet technology were to assign the task of establishing a national network and linking it to international networks.

6-1 Automated cash network: It is a subsidiary company of eight Algerian banks, namely (Bank of Rural Agriculture BADR, Bank for Local Development BDL, External Bank of Algeria BEA, National Bank of Algeria BNA, CPA, National Fund for Savings and Reserves CNEP, National Fund for Agricultural Cooperation CNMA, Albaraka Bank ALBARAKA). On the initiative of the banking community on 25/03/1995 under Law 95-103 where this company is responsible for activating the interbank payments system as it works to promote payment methods by cards. SATIM includes 17 members in its interbank banking network, 16 banks of which are public and 9 private banks, as well as Algeria Post.

6-2 Internet users in Algeria: The Internet has become one of the necessities of life in light of the adoption of many administrative (Medjani, 2017), cultural, entertainment, sports, and economic services on it, and Algeria is not in the midst of the global movement to adopt this revolutionary technology that made the world a small village. Some figures about the use of the Internet in Algeria, according to a report issued in 04/17/2022 • The number of Internet users is 2728 million; • An increase in the number of Internet users by 1.8 million (7.3%) between the years 2021/2022; • More than 46.82 million people use a mobile phone to access the Internet; • Most visited sites are YouTube/Google/LinkedIn.; • Payment activity on the Internet in Algeria during the period (2016-2022) (National convention of Automated Payment Services, 2022).

6-3 Online payment activity in Algeria: during the period (2016-2022) Since October 2016, online payment by bank card has become practical in Algeria, and this service has been opened in the first stage for those in charge of the billers (water and energy distribution companies, gas and electricity, fixed and mobile phones, insurance companies, air transport and some other departments) and there are 153 merchant sites involved in The bank electronic payment system resulted in about 14086,166 transactions (National convention of Automated Payment Services, 2022).

6-4 E-commerce websites in Algeria: Many companies in Algeria recently conduct their business through various platforms and websites, considering that this type of commerce is what has become popular lately. The following is a list of the most popular shopping and e-commerce websites in Algeria

- Oued Kniss website (Oued Kniss , 2022): It is considered one of the first e-commerce sites in Algeria back in 2006. This site deals a lot in the field of marketing cars and some products, clothes, household appliances, and it serves as a commercial mediator between advertising owners who want to sell or buy a specific product and even rent all new and used things, This site has achieved remarkable success, as the number of visitors to this site has reached more than 100 thousand visitors per day. This site has increased in popularity and development since the emergence of the Corona pandemic. As for payment methods, payment is made hand in hand after the customer receives his order, he pays directly.

- Jumia website (Jumia Algérie, 2022): The company "jumia" opened in 2014, where it established its website with a domain (dz). In order to promote its various products, mainly groceries, office products, health and beauty products, electronics and sports supplies, mobile phones, computers and children's toys, the Corona pandemic contributed to the spread of this site, as the number of visitors to the site increased in 2020 to more than 2 million visitors per month after That was about 1.7 million in 2018, and the site received between 220,000 and 250,000 orders during the quarantine period, and Jumia announced a fourfold increase in sales of groceries and basic commodities in the first quarter of 2020 compared to the previous year. As for the payment methods, it is done directly after the customer receives his order by hand.
- Algeria Postal Corporation (Algérie Poste, 2022): Algeria Post has worked during the Covid-19 pandemic to advertise on a large scale to promote the various services it provides remotely through the Internet, and these services mainly represent viewing the postal current account and transferring money from one account to another through the postal application "Baridi Mob", payment of various bills using the Algeria Post gold card (telephone and internet bills, electricity and gas, S-site and mobile phone accounts) is done through the Internet, via the website https://baridinet.poste.dz.
- BM Shopping Algeria website (BM Shopping algerie, 2022): This commercial website specializes in selling clothes, shoes, electrical household appliances, shaving tools and hair care. This site appeared in the year 2017, but it was imagined and the number of its followers and customers increased in the year 2020 with the beginning of the Corona pandemic in Algeria.
- Massrofek website: This site is active in the state of Tiaret only, and it specializes in selling food products and some other products. This site launched in 2019, and the number of its customers was about 30 customers until this number developed in 2020, especially in light of the Corona crisis, until this number reached about 200 customers aday, And people admires the services of this commercial site, the site relies on traditional payment methods (hand in hand after the customer receives his order).

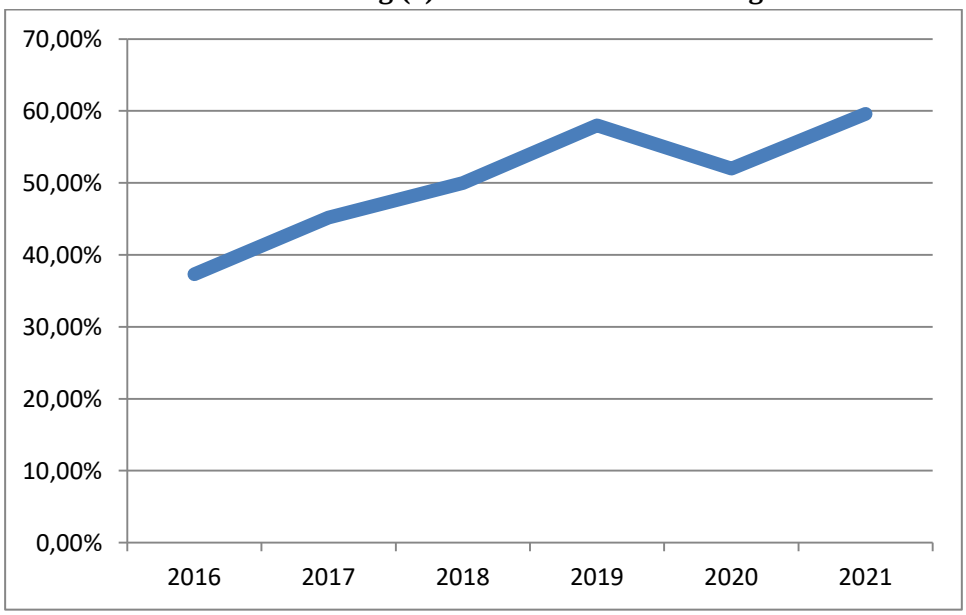
All websites specialized in e-commerce in Algeria provide services of buying, selling, advertising, promotion and obtaining information, but it has not yet reached the understanding of e-commerce as a means of immediate electronic payment, as it does not provide electronic payment services such as Visa Cards and Master Cards. The Digital Algeria 2021 Report also indicated that 88.3% of Algerians use prepaid internet balances via their mobile phones, and 11.7% of them use postpaid internet subscriptions.

7- The reality of e-commerce in Algeria during and post covid-19 pandemic: in this part we're going to discuss the most important determinant of e-commerce in Algeria before and after the pandemic

7-1 The internet users: A report, recently issued by Data reportal (Datareportal , 2022), revealed the number of internet and social network users in Algeria for the year 2022. According to the report, the number of mobile phone lines reached 46.57 million telephone lines, while the number of Internet users reached 27.28 million users, including 26.60 million users of social networks. He added that the number of new users of the

Internet amounted to about 1.7. Million new users, including 1.6 million new users of social networks, noting that the number of Facebook users alone amounted to about 25.43 million. The report indicated that the average internet flow in Algeria is 11.44 Mbps for mobile and 9.78 Mbps for fixed internet, an increase of 170 percent over the previous year. It follows that most of the Internet users use the mobile phone at a rate of 58.95 percent, while about 38.97 percent use the Internet on computers. According to the same report, "Google Chrome" is on the throne of Internet browsing tools by 86.14%, while Google remains the master of search engines with 98.60%. In the same context, he revealed that the number of Instagram users reached 8.60 million users, an increase of about 1.8 million users over last year, while the number of Messenger users reached about 14.25 million users. The number of LinkedIn users reached 2.80 million, an increase of about 300,000 users over last year, and Snapchat to 6.25 million, an increase. 1.3 million Users, while Twitter is still slow in Algeria with less than one million users with 891 thousand users only (Datareportal , 2022).

Fig (2): The internet users in Algeria



Source: Datareportal, available at: https://datareportal.com/reports/digital-2022-algeria

Through the above figure, we note that the number of Internet users in Algeria has witnessed a remarkable development in recent years, as it moved from 50,000 users in the year 2000 to reach 27,280,000 users in 2022.

7-2 Online payment activities:

Online payments have witnessed a remarkable increase since the beginning of the outbreak of the Covid-19 epidemic in the country

Table (1): Online payment activities in Algeria from 2016-2021

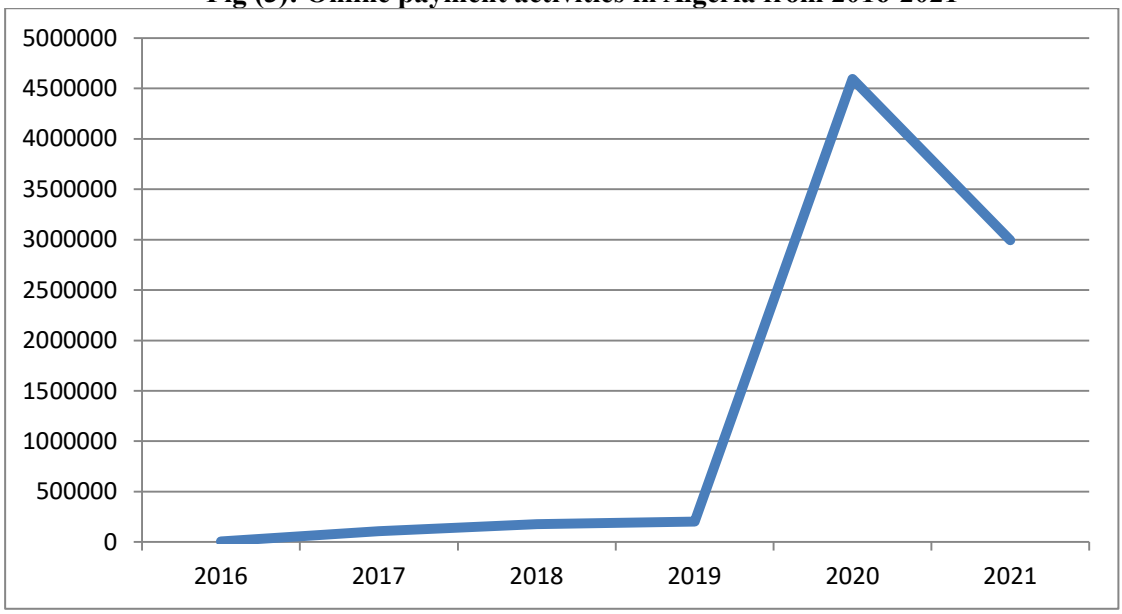
Year / Sector	2016	2017	2018	2019	2020	2021
Telecommunications	6536	87286	138495	141552	4210284	2735260
Transport	388	5677	871	6292	11350	16456

Insurance	51	2467	6439	8342	4845	1783
Electricity and gas	391	12414	29722	38806	85676	42487
Administrative Services	0	0	1455	2432	68395	29530
Service Providers	0	0	0	5056	213175	163686
Merchandise sell	0	0	0	0	235	3127
Total	7366	107844	176982	202480	4593960	2992329

Source: National convention of Automated Payment Services 2022, avialble at: https://giemonetique.dz/ar/qui-sommes-nous/activite-paiement-sur-internet/

Regarding the operations that took place and the sectors concerned with the online activities, National convention of Automated Payment Services indicated that 76,601 deals were made during the first five months of 2019 with a value of 150.48 million DA, an increase of 5% compared to January-May 2018 and 71 percent compared to the same period in 2017. This increase was mainly recorded in the deals made in the field of providing services (hotel reservations, visa costs...) that were launched February 2020, which amounted to 1,321 deals, in addition to administrative services (commercial records and the National Social Security Fund for wage-workers), which increased by 181 percent (National convention of Automated Payment Services, 2022).

Fig (3): Online payment activities in Algeria from 2016-2021



Source: National convention of Automated Payment Services 2022, avialble at: https://giemonetique.dz/ar/qui-sommes-nous/activite-paiement-sur-internet/

The above figure shows the continuous increase in the number and volume of electronic payment transactions since the launch of this service, but the qualitative leap was in light of the Corona pandemic, as the total number of transactions doubled by more than 22 times in

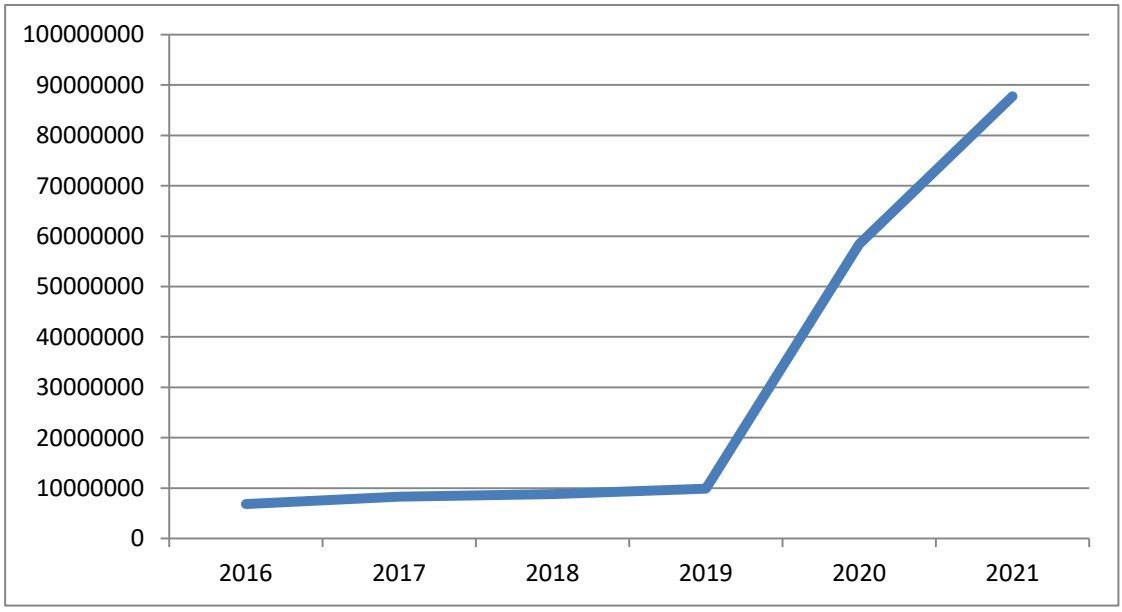
2022 compared to 2019 to reach 4593,960 transactions worth 5423727074.80 DA, as it appears in the table that The sector that has known a greater number of electronic transactions and an increasing increase between the years of Corona is the communications sector, but the development in the use of electronic payment in various other sectors cannot be neglected during the Corona pandemic.

It should be noted that online payment transactions have witnessed a continuous increase during the first three months of 2022 due to the great demand of citizens for this service, for fear of infection and the transmission of the virus through banknotes and coins.

7-3 The number of withdrawal transactions:

The number of withdrawal transactions has been increasing continuously from 2016 to the present day In light of the Corona pandemic, with the spread of this epidemic, e-commerce has benefited and the development of the electronic payment system has promoted, as the Corona pandemic has accelerated the transformation towards a more digital world.

Fig (4): The number of withdrawal transactions in Algeria from 2016-2021

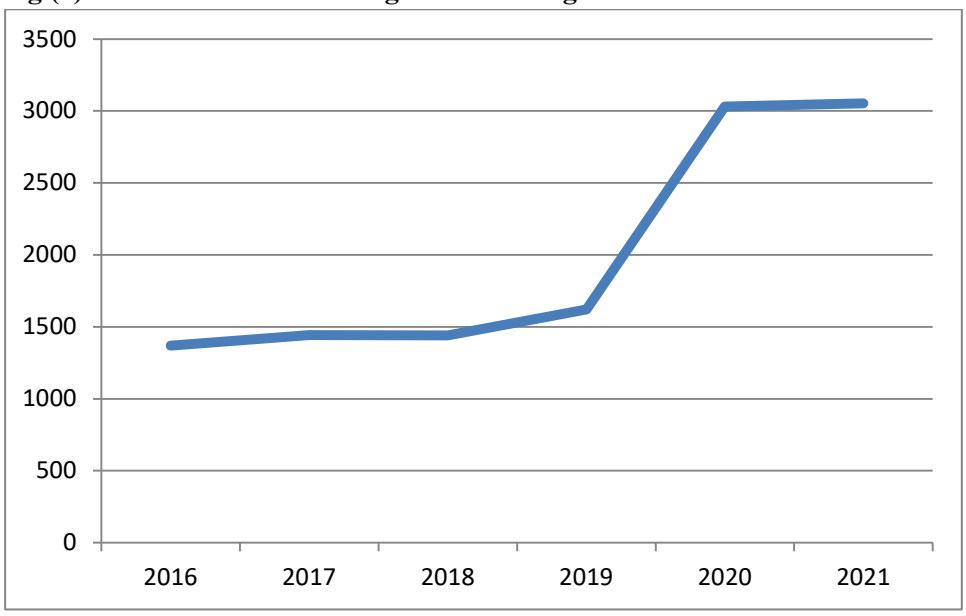


Source: National convention of Automated Payment Services 2022, available at: https://giemonetique.dz/ar/activite-retrait-sur-atm/

From the figure above, it is clear that the total amount of withdrawal transactions hs increased amounted to 98822824500.00 in 2016, and continued to rise until it reached 1590760570000.00 DA in February 2022.

7-4 The Number of working devices:

Fig (5): The number of working devices in Algeria from 2016-2021

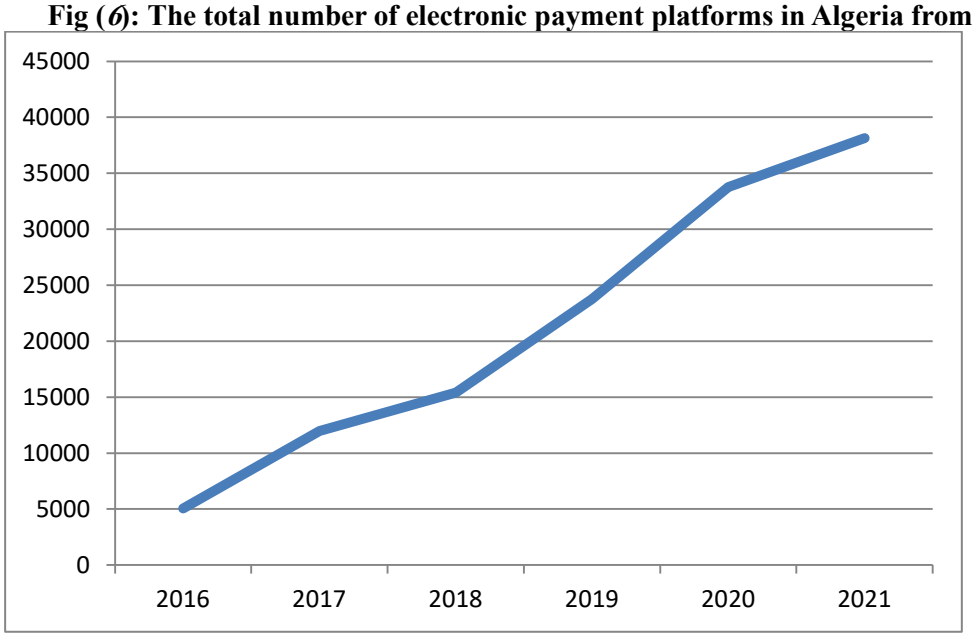


Source: National convention of Automated Payment Services 2022, available at: https://giemonetique.dz/ar/activite-paiement-sur-tpe/

Through the above figure, we note that the number of operating ATMs has increased since 2016, reaching 1,370 ATMs and continuing to rise during the following years until it reached 3053 in 2022.

7-5 Payment activity on electronic payment platforms:

Fig (*6*): The total number of electronic payment platforms in Algeria from 2016-2021

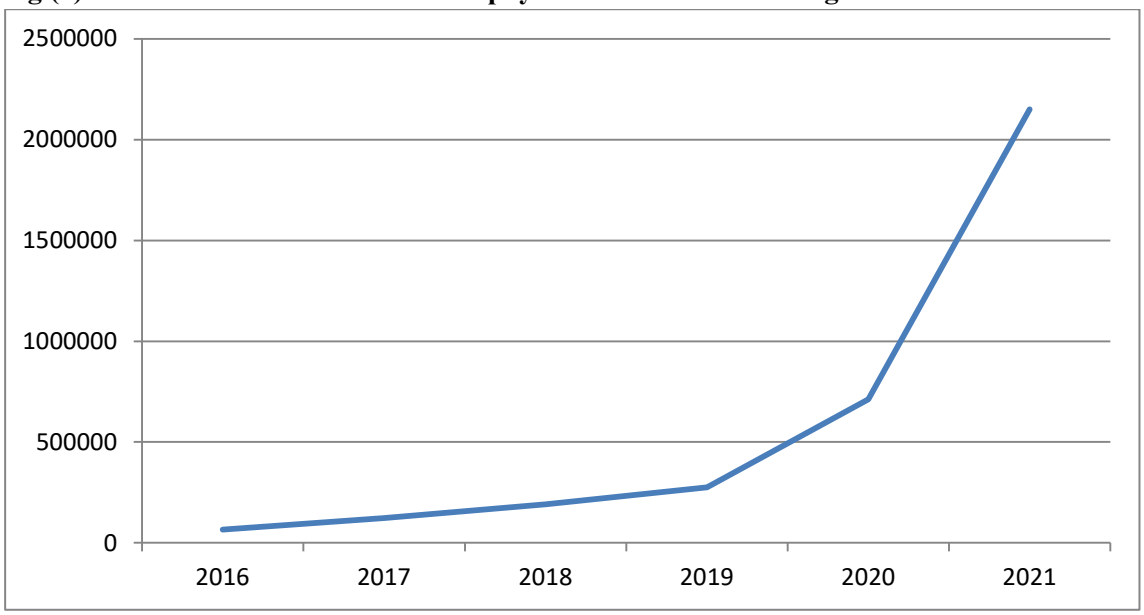


Source: National convention of Automated Payment Services 2022, available at: https://giemonetique.dz/ar/activite-paiement-sur-tpe/

the above figure shows that the total number of electronic payment platforms coming into service in Algeria has known an increase since 2016, reaching 5049 devices in a hill as a year to continue to rise during the following years until it reached 38,144 at the end of 2021.

7-6 Total number of payment transactions:

Fig (7): The total number of electronic payment transactions in Algeria from 2016-2021



Source: National convention of Automated Payment Services 2022, available at: https://giemonetique.dz/ar/activite-paiement-sur-tpe/

Payment transactions also witnessed a rise from 2016 to 2021, reaching 65,501 transactions in 2016, and this number continued to rise in the following years, reaching 20,670 transactions in February 2022, the period during which the Corona virus spread and the application of quarantine, and the total amount through this device was It rose to more than 4445 million DA in 2016 and continued to rise until it reached 1602 billion DA in February 2022.

Conclusion:

The The Covid-19 pandemic negatively affected several economic sectors due to the lockdown and social distancing measures, but in return it contributed to the recovery of electronic commerce, By awareing citizens about the importance of using information and communication technology, especially in payment operations, especially the excluded groups that do not deal with this technology, and trying to direct them towards non-traditional transactions to reduce movement and friction between individuals and limit the circulation of banknotes and coins that may carry the virus on the other hand.

- The global economy has been greatly affected by the pandemic, and various economic sectors have been affected (tourism - transport - trade...) and it is not expected to recover quickly in Algeria;
- The pandemic has created a habit of using e-commerce among consumers, which is expected to be difficult to abandon in the future;
- There is a shortage of electronic payment methods, which has led to the delay in the development of e-commerce in Algeria;
- Despite the enactment of laws regulating e-commerce in Algeria, there are still challenges that prevent its development and prosperity to keep pace with developed countries in this field.

- Despite the efforts made by Algeria to promote electronic commerce and give a strong impetus to its advancement, it is lagging behind in comparison with other countries, due to the lack of confidence in the electronic market in the products offered to it from a distance;
- E-commerce in Algeria is still far from the actual aspirations and capabilities due to the weak digital infrastructure;

Thus, we recommend the following to enhance the e-commerce in Algeria:

- Investing more in information and communication technology to keep pace with the development taking place in the economies of developed countries;
- Improve the infrastructure of the digital economy in Algeria, by creating a fast and highly effective communications network,
- Providing good Internet services, and creating the appropriate legislative and legal infrastructure that protects intellectual property rights and helps establish information technology companies and other digital economy companies.
- The need to update the laws regulating e-commerce in Algeria, to contribute and reduce the burdens imposed on this type of activity to encourage merchants to break into this field, and to contribute to raising the local levy and for the law to work to protect the merchant, the customer and the accompanying companies,
- It is necessary also to develop electronic payment methods and generalize their use in shops so that the Algerian citizen can complete the stages of electronic purchase.

Bibliography List:

(n.d.). Retrieved from https://giemonetique.dz/ar/activite-paiement-sur-tpe/

Jumia Algérie. (2022). Retrieved from https://www.jumia.dz/

(2022). Retrieved from Oued Kniss : https://www.ouedkniss.com/

Algérie Poste. (2022). Retrieved from https://edcarte.poste.dz/fr/bienvenue_adhesion.php

BM Shopping algerie. (2022). Retrieved from https://bmshoppingalgerie.ecwid.com/

Chaabna, S. a. (2015). Analysis of the State of E-commerce in Algeria. *International Journal of Marketing Studies* , 44.

Datareportal . (2022). Retrieved from https://datareportal.com/reports/digital-2022-algeria

Hassen, H. A. (2020). Factors Influencing the adoption of e-commerce by Small and Medium-Sized Enterprises (SMEs) in Algeria: a qualitative study. *International Journal on Perceptive and Cognitive Computing* , 8-17.

Medjani, F. (2017). mpirical Study of Algerian Web Users' Behavior. *nternational Conference on Digital Economy* (pp. pp. 55-63). Cham: Springer.

National convention of Automated Payment Services. (2022). Retrieved from https://giemonetique.dz/ar/activite-paiement-sur-tpe/

Nevil Bhatt. (2022). *The Ecommerce Lifecycle And Its Stages For Growth*. Retrieved from https://nflowtech.com/the-ecommerce-lifecycle-and-its-stages-for-growth/

Qin, Z. e. (2014). *E-commerce strategy.* Springer.

Sabiha, B. &. (2022). Analysis of the effects of digital technology on the Algerian economy. *InManagement and Information Technology in the Digital Era* , pp. 127-138.

The ecommerce lifecycle and the three stages of growth. (n.d.). Retrieved from https://www.space48.com/blog/ecommerce-lifecycle-three-stages-growth/

Zahra, B. F. (2017). The reality of e-commerce ethics in the algerian economic institutions. *Revue Organ. Travail* , 155-171.