

**Digital payment in Algeria:  
Opportunity to redefine the economic growth model**

الدفع الرقمي في الجزائر  
فرصة لإعادة تعريف نموذج النمو الاقتصادي

**Nassima Bouri<sup>1</sup>**

<sup>1</sup>Higher School of Economics – Oran - University of Oran 2.

LARAFIT Laboratory.nassimabouri@rocketmail.com

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**Abstract**

Emerging economies including Algeria need to formulate and restore policies of business practices and payment methods with increased participation in e-commerce and digital platforms. These e-commerce reforms aim to reap second-rate benefits and stimulate long-term competitiveness in order to push the economy towards a digital technology development position. The development of electronic payment in Algeria still encounters several obstacles and shortcomings in its evolution that have limited the acceleration of financial and economic operations.

Keywords: Digital economy, e-commerce, electronic payment, bank cards, electronic currencies.

ملخص:

تحتاج الاقتصادات الناشئة ، بما في ذلك الجزائر ، إلى صياغة سياسات الممارسات التجارية وطرق الدفع واستعادتها مع زيادة المشاركة في التجارة الإلكترونية والمنصات الرقمية. تهدف إصلاحات التجارة الإلكترونية هذه إلى جني فوائد من الدرجة الثانية وتحفيز القدرة التنافسية على المدى الطويل

<sup>1</sup>Corresponding author: Nassima Bouri, e-mail:  
nassimabouri@rocketmail.com

من أجل دفع الاقتصاد نحو وضع تطوير التكنولوجيا الرقمية. لا يزال تطوير الدفع الإلكتروني في الجزائر يواجه العديد من العقبات وأوجه القصور في تطورها والتي حدثت من تسارع العمليات المالية والاقتصادية.

كلمات مفتاحية: الاقتصاد الرقمي ، التجارة الإلكترونية ، الدفع الإلكتروني ، البطاقات المصرفية ، العملات الإلكترونية.

## Introduction

A digital economy is essentially defined as a global network of new economic and social activities that can be digitized, reproduced and transmitted. This new economy has opened a set of possibilities unknown or unthinkable before. Digitization could have effects of all kinds throughout the economy.

More and more operational activities currently being carried out by humans will be performed electronically. Many of these processes will take the form of digital components that will "speak" to other digital economy processes and will thus continue a constant exchange between several servers and several semi-intelligent nodes that update, search, verify and readjust. Then finally make a return to processes and humans in the physical economy "(Arthur, [2011], 3).

The various techniques of the Internet have revolutionized commercial and economic practices with electronic commerce and especially by offering several ways to make a financial payment. Indeed, the various commercial practices and payment methods that are current in the real world can find a complete or partial translation in the Internet world.

Notwithstanding the security constraints on the Internet and especially those relating to electronic payment, the added value of electronic commerce is undeniable and consists of: It is very interesting to note that

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despite the security constraints on the Internet and especially those relating to electronic payment, the added value of electronic commerce is undeniable and consists in ensuring an opening to the global market since the commercial sites are accessible by all Internet users in all corners of the world, Offer a better service to partners and suppliers by making affordable the technical and commercial documentation on Internet, thus Reduce costs by removing intermediaries.

The optimal use of new electronic payment methods, regardless of the sector, is an essential factor of competitive differentiation and is now essential for sustainable success! For this purpose, the article discusses these different payment methods, as well as the difficulties of setting them up in the Algerian economic market.

### **1. Issues and benefits of digitization of the economy**

#### **1.1. Challenges of the digitization of the economy**

The digital economy has challenged and profoundly transformed the processes of production, distribution, sale and consumption of goods and services. Its expansion is the usufruct of a long process of global economic and social transformation, which asserts itself every day a little more. The immediate consequence is a radical upheaval in the lifestyles and communication, the professional practices, the consumption habits of states and their citizens.

New needs, created by an increasingly aggressive, subliminal and diversified offer, were born in fields as varied as health (telemedicine), education (e-learning), energy and the environment, culture (digital content), commerce (e-commerce) media and entertainment (website, blogs, tweet,

etc.), security, defense (closed telecommunications networks), transport, administrations and public sector (e-government, open data), services (e-services), production methods and industry, computerization and business management (ERP, e-management) ...

In three decades, new technologies have progressively become part of the core business, creating new sectors, businesses, products and services that support the process of digitization of the economy and that offer opportunities for all stakeholders. of the global economy and enables them to conquer the key markets of the future and thus adequately address the major challenges in redefining the principles of international trade, for the advent of a new global economic order. This "new economy" requires economic actors (states, companies and other users) a new way of "doing business and creating value" for which the Internet and its tools and services are both the vector and the symbol.

## **1.2. Benefits of digitizing the economy**

The benefits of the digital economy for emerging economies are potentially significant. This is because it offers significant opportunities for competitiveness and productivity improvements in terms of access to digital products and services to optimize processes and production, reduce transaction costs and reduce costs. transform supply chains. The decline in information and communication technology (ICT) prices is encouraging investment and adoption of digital technologies in emerging economies, providing their companies with advanced services at competitive prices. All this allows companies to participate in global value chains and gain direct access to customers in foreign markets, which was only possible for large companies in advanced economies.

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#### **2. Digitization of the economy and emerging economies: a challenge of international competition or a lever for financial growth**

The digital economy is an opportunity for emerging countries to redefine their economic growth model. Specifically, the digital economy can play a key role in the expansion and modernization of markets in these countries, by facilitating the collection and dissemination of information, by improving the management of transactions ... -development in these countries is partly a result of the poor functioning of the markets. The challenge for emerging countries such as the Maghreb is to create around digital technologies a growth dynamic, truly autonomous and adapted to the needs of consumers and businesses in these countries, and not just dedicated to outsourcing.

For companies wishing to position themselves in this digital economy, it is also a question of defining specific business models, which take into account production and consumption behaviors specific to emerging countries and which do not seek to simply replicate the models of the economy. Business set up in developed countries (Raphaël Suire, Thierry Pénard, [2009]).

#### **3. Digital payment: Presentation and definition**

##### **3.1. Definition of digital payment**

"Electronic payment is a means of payment of various commercial and economic transactions of goods or services via different digital tools and

techniques. These payments are indeed based on the Internet by respecting the rules of security and eligibility and the procedures put in place for each mode used to satisfy all stakeholders».

### **3.2. The different electronic payment methods**

Internet payment methods are as follows:

- Bank cards (Visa, MasterCard, EuroCard, ...);
- Electronic checks;
- Electronic currencies (E-cash, Digicash, Millicent, ...);
- Payment by intermediary account (KLELine: Klebox, ...);
- The new generation of Internet payment services.

#### **3.2.1. Bank cards (credit cards)**

Credit cards are the most preferred way on the Internet for all businesses that allows them to benefit from payment guarantees. This method of payment is set up by banks through a network, such as MasterCard, VISA, or American Express, which allows for various transactions, such as the withdrawal of cash from a Distributor. Automatic Banknotes or even the payment of purchases from merchants. The American giants Visa, MasterCard and American Express are some supranational references.

#### **3.2.2. The checks**

Checks are in widespread use around the world, as strict regulations guarantee payment, the main advantage of which is to provide the creditor, subject to certain reservations, with the payment of the amount due. In concrete terms, any client wishing a check from a financial institution may make a request to his bank or financial institution.

#### **3.2.3. Payment by electronic money (Electronic wallet)**

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It is a powerful form of payment in terms of security and is presented in immediate debit allowing a payment without intermediary of the account of the buyer to that of the merchant. It is the reproduction on the electronic market of a bank transfer. This can be done over the Internet, if the money in question falls into an electronic purse (Boubaker, N., [2003]).

#### **3.2.4. Payment via an intermediary**

This method of payment is done indirectly, using the server of the intermediary on which are stored the bank details of the parties. By means of cryptological techniques, the intermediary provides identifiers to his customers and then centralizes and transmits the exchange of orders to the respective banks. Only the identifiers and transaction data circulate on the network via an interface platform equipped with a fire-wall.

**3.2.5. The new generation of Internet payment** (BOUBAKER Nobel El Houssine, [2003], P 11).

Intermediate servers also offer a multi-currency payment method. Anyone can shop online; the intermediary company is responsible for calculating exchange rates on sites of foreign partners regardless of the currency of his country and allows him to know the different prices of his currency. There are also proposed installment payment options:

**a. The pay-per-view option offers various online payment methods adapted to the specificities of each business sector.**

**b. Payment by installment payment:** During the act of payment on the web, the user only pays part of the total amount of his purchase.

**c. Deferred debit payment:** When purchasing the intermediary server interrogates the card networks in real time, without debiting the customer. The actual flow will be triggered upon delivery or at any time defined by the merchant in agreement with his client.

**d. The payment of a consumption plan:** This method of payment allows a customer to buy a good online for duration, without obligation to buy it every day but by freely choosing its frequency.

**e. The payment by regular withdrawal:** The customer gives once and for all the authorization to his intermediary server to carry out at a regular interval a fixed rate, for a given duration.

**f. Payment according to the allocated budget of a director to a certain number of collaborators:** Like the bank card, this version of online payment allows the various institutions and administrations to allocate budgets to a certain number of collaborators, according to their needs.

**g. The payline server for payment by credit card:** This mode allows merchants on the Internet a secure payment with credit cards.

**4. The qualities of an eligible process for electronic payment**  
(BOUBAKER Nobel El Houssine, [2003], P 14):

Overall, any secure payment system must meet these basic criteria:

**4.1. Identification and authentication of the seller and the anonymity of the buyer with respect to the merchant**

The identity must be validated by trusted third party. Thus the reference of the merchant owner on a merchant site with a reliable organization.

**4.2. Confidentiality of the transaction and banking information**  
**It is essential that the buyer must be able to keep a legally valid**



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**document "Track of the order", definitively certifying all the characteristics of the transaction:**

Identity of the parties, substance, amount and dates.

#### **4.3. Integrity of the process**

The transactions must be atomic, that is to say that they take place entirely and to the complete satisfaction of the parties or not at all.

#### **4.4. Non-repudiation**

It makes it possible to prevent one of the two parties from denying the transmission or receipt of the information during a data exchange ordering process or electronic payment over the internet.

#### **4.5. Access control**

In order to protect the information, only authorized persons can obtain access during payment.

### **5. The risks of electronic payment**

The risks of online payment come mainly from the operational errors of the stakeholders during an online payment. These risks have been summarized by specialists as follows:

#### **5.1. Cybercrime**

Cybercrime includes Internet scams, hacker attacks and virus destruction.

#### **5.2. Phishing**

Phishing is an Internet scam with a high level of computer science that impersonates real companies. These crooks create fake websites and launch criminal software to deceive people online and encourage them to disclose confidential information, such as their bank account and credit card numbers.

### **5.3. Attacks by hackers**

Social networks represent the paths that could cause attacks (Twitter or Instagram, and an online bank, ..), because none of these systems is 100% secure.

### **5.4. Virus destruction**

A virus is a small program that can destroy the data of a computer park or even completely erase the contents of the hard disk (eg the worm), and which adds malicious code smuggled into a computer and likely to disrupt its operation.

### **6. Digital payment in Algeria**

The optimal use of new electronic payment methods, irrespective of the sector, is a key factor of competitive differentiation and is now essential for sustainable success. Indeed, the involvement of digital payment in Algeria first took shape through the development of electronic banking and the creation of the technical operator of electronic banking see; SATIM "Company of Automation of Interbank Transactions and Monetics". Thus, the first electronic payment terminals dated 2005, after having created the first "ATMs" of banknotes in 1997. The sophisticated electronic payment is still in its infancy, since the various electronic means of payment mentioned above do not are not yet designed in the field.

Among other things, "the bank card" is the best used in commercial transactions recently, and the integration of online payment in 2015, which is now preparing the environment for the digitization of economic activities in Algeria. The bank card is considered as a new potential commercial means usable in particular with the law of finance 2018, which has stated its

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obligation.

In turn, the electronic payment "ePaye.dz" is an online payment first, a platform that acts as an intermediary with a bank account that will feed the user's virtual account by a simple transfer from the account user account only if you have created an account by filling in a phone number, an e-mail address, and a password, then the prepaid cards on sale nationwide can thus feed into the account of the user. The latter will be able to use all the commercial sites agreed with this platform.

Emerging economies including Algeria need to formulate policies with the ambitious goal of reaping second-rate benefits. Despite the importance of integrating digitization into the various monetary transactions, including electronic payments, which contribute to the acceleration of the various financial and economic operations, the development of electronic payment in Algeria still faces several obstacles to its evolution and development, namely: the informal economy, the culture of cash, which corresponds to the psychological feelings of Algerian citizens mainly related to the use of money, the infrastructure: insufficient political solutions and resources and technical means in terms of support for the e-commerce platform.

Indeed, legal anchoring is a major issue, since; "The lack of a legal arsenal governing e-commerce in" Algeria "especially the protection of users in this platform, the problem of lack of confidence in the Algerian banking system, and traceability, which allows the detection of money and the fight against evasion and fraud and tax evasion ". It is therefore essential to renew the traditional system and replace the previous methods in search

of advantage of ease in transactions, and especially digital security: a real challenge for growth and development in the field of digitization.

## **7. Conclusion**

The use of the internet offers permanent and unlimited access to the product thanks to its character of eternity. A company or product on the web is likely to be seen by Internet users 24 hours a day. With this advantage, there are many companies that no longer hesitate to converge on the net. Since this tool gives great visibility to products or companies and creates a relationship of trust between users. It also contributes to the increase of the number of potential customers. The advantage of the digital economy is also that it breaks physical and geographical boundaries.

Despite the importance of electronic payments in accelerating financial and economic operations, the development of electronic payment in Algeria still faces several obstacles to its evolution and development, namely: the informal economy, cash culture, psychological feeling linked mainly to the use of money, infrastructure: insufficient solutions and technical resources in terms of support for the e-commerce platform, the legal anchor: lack of a legal arsenal governing e-commerce in Algeria especially the protection of users in this platform, the problem of lack of confidence in the Algerian banking system, and traceability, which allows the detection of money and the fight against evasion and fraud and tax evasion.( MERBOUHI Samir, Pr HADID Noufyele, , [2017]).

It should be noted that emerging economies need to formulate policies with the ambitious goal of reaping second-rate benefits. Policies to enhance participation in e-commerce and digital platforms, for example, can only boost a country's long-term competitiveness if it is clear that additional effort will be needed to push the economy towards digital technology development position.

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#### **8. Bibliographic sources :**

- Acemoglu, D., and P. Restrepo (2017). "Robots and Jobs: Evidence from US Labor Markets," paper presented at the American Economic Association Annual General Meeting, Chicago, January 7.
- Agrawal, A., J. S. Gans and A. Goldfarb (2017). "What to Expect from Artificial Intelligence," MIT Sloan Management Review, Vol. 58, No. 3.
- Autor, D., D. Dorn, L. F. Katz, C. Patterson and J. Van Reenen (2017) Concentrating on the Fall of the Labor Share, Working Paper No. 23108, National Bureau of Economic Research.
- Derviş, K., and Z. Qureshi (2016). The Productivity Slump-Fact or Fiction: The Measurement Debate, working paper, coll. Global Economy and Development, Brookings.
- Ericsson, N.R. (2016). Economic Forecasting in Theory and Practice: An Interview with David F. Hendry, Board of Governors of the Federal Reserve, coll. "International Finance Discussion Papers", No. 1184.
- World Economic Forum (WEF) (2016). Digital Transformation of Industries: Logistics Industry, World Economic Forum white paper prepared in collaboration with Accenture.
- World Economic Forum (WEF) (2016). Digital Transformation of Industries: Automotive Industry, World Economic Forum white paper prepared in collaboration with Accenture.

- Frey, C. B., and M. A. Osborne (2017). "The Future of Employment: How Susceptible Are Jobs to Computerization? "Technological Forecasting and Social Change, vol. 114, No. C, p. 254-280.
- Fung, B., and H. Halaburda (2016). Central Bank Digital Currencies: A Framework for Assessing Why and How, Staff Analysis Paper No. 2016-22, Bank of Canada.
- Kaplan, G., B. Moll and G. L. Violante (2016). Monetary Policy According to HANK, Working Paper No. 2016/2, Council on Economic Policies.
- Lev, B., S. Radhakrishnan and P. C. Evans (2016). Organizational Capital: A CEO's Guide to Measuring and Managing Intangible Enterprise, coll. "Measuring and Managing Organizational Capital Series", No. 1, The Center for Global Enterprise.
- OECD Compendium of Productivity Indicators 2016, Paris, OECD Publishing.
- Poloz, S. S. (2016). From Wood Cutters to IT Professionals: The Expansion of Canada's Service Economy, delivered at the C.D. Howe Institute, Toronto, November 28.
- Schwab, K. (2016). The Fourth Industrial Revolution, Geneva, World Economic Forum.
- Syverson, C. (2016). Challenges to Mismeasurement Explanations for the U.S. Productivity Slowdown, Working Paper No. 21974, National Bureau of Economic Research.
- Van Ark, B. (2016). "The Productivity Paradox of the New Digital Economy," International Productivity Monitor, Vol. 31, p. 3-18.
- Varian, H. (2016). "Intelligent Technology," Finance and Development, vol. 53, No. 3, p. 6-9.