

# Morocco's Digital Economy: Portnet Case

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**Abstract-** The emergence of e-government around the world has profoundly transformed the relationship between citizens, enterprises and governments. Thus, the Moroccan authorities have decided to launch in recent years several projects and strategies to modernize public administrations and local communities to serve citizens and organizations. In 2008, Morocco's National Ports Agency launched a project to create a national single-window platform for Morocco's foreign trade. The company Portnet was created in 2012 to be in charge of the project.

**Keywords –** Digital economy, egovernment, Portnet, international trade and logistics, Kingdom of Morocco

## I. INTRODUCTION

Today, ICTs offer us several opportunities and alternatives that shape the way we see and do things. At the heart of this transformation, the Internet is not the only workhorse, this digital transformation is based on both tangible and intangible media. The global economy, which is also suffaking this digital transformation, is proceeding at a dizzying speed. Today we are talking about the digital economy, which revolutionizes the classic economic approach. So, what is the digital economy? It is the economic activity that results from billions of daily connections online, between people, businesses, devices, data and processes. The backbone of the digital economy is hyper-connectivity which means a growing interconnection of people, organizations and machines that results from the Internet, mobile technology and the Internet of Things (IoT). It takes shape and undermines conventional notions about how organizations are structured. <sup>1</sup>

In the face of these real facts, how do organizations interact and how do economic agents obtain services, information and goods? This work aims to draw up an analysis of the main achievements marked by the digital economy in Morocco on the cases of PortNet, while highlighting the main challenges and issues in the coming years.

## II. A LOOK BACK AT THE MAIN HIGHLIGHTS OF THE EMERGENCE OF THE DIGITAL ECONOMY

### A. Definition and birth of the digital economy

The digital economy in addition to being a new mutation, is an operational concept that has been promoted by international organization, especially through the reports of the Organisation for Economic Co-operation and Development (OECD), the initiatives and reports of the World Economic Forum, the initiatives of the MIT, as well as the financing program of the World Bank. The term "digital economy" was introduced in 1995 by Don Tapscott who argued that the digital economy will take us to the epicenter of a new convergence of information, telecommunications and entertainment.

In the same perspective, the OECD reveals in one of its publications that: "The digital economy has had a profound impact on the global trading landscape. It has given rise to new global companies and industries, transformed the business models of traditional industries and, as an underlying factor in global value chains (GVCs), reshaped the organization of the global economy." <sup>2</sup>

As a result, the term "digital economy" stems from the recognition of the importance of technologies in the modern economy that is leading us into a new era: the fourth industrial revolution or industry 4.0. In the last 15 years, we have seen the enormous growth of digital platforms and their influence on our lives. Now, consumers are influenced by the things they see on the internet, especially through social networks. This economy is therefore a way of exploiting this

<sup>1</sup>Deloitte Malta: What is digital economy? Unicorns, transformation and the internet of things : <https://www2.deloitte.com/mt/en/pages/technology/articles/mt-what-is-digital-economy.html#>

<sup>2</sup> THE DIGITAL ECONOMY, MULTINATIONAL ENTERPRISES AND INTERNATIONAL INVESTMENT POLICY OCDE 2018

opportunity. It is integrated into all aspects of the user's life: administrations, healthcare, education, banking, entertainment, etc. Almost half of the world's population is now connected to the Internet, compared to only 4% in 1995. In 2016, in the OECD area, 83% of adults had access to the internet and 95% of businesses had a broadband internet connection. In June 2017, there were nearly 102 mobile broadband subscriptions per 100 inhabitants in the OECD area, an average of more than one subscription per person. In the countries of this area, the digital transformation today is characterized by almost universal connectivity, but also by ubiquitous computing, and relies on the production and use of huge amounts of data. <sup>3</sup>

### *B. E-government*

Digital transformation affects all macroeconomic actors, including states, through their administrations. It thus changes or brings added value to the concepts of the welfare state and the police state with the emergence of new concepts such as electronic administration (also designed by e-administration or e-government). Indeed, recognizing their role in sustainable economic development, governments are among the main macroeconomic agents on which a great deal of responsibility rests. Digital transformation is today a vector of growth that re-sculpts the transactional relationship between households, companies, administrations, financial institutions and the rest of the world.

The term "e-government" appeared in the late 1990s, but the history of government organizations revealing the use of information dates back to the preludes of computer history. We propose two examples of definitions of the concept of E-government:

"E-government refers to the use by government agencies of information technology that has the ability to transform relationships with citizens, businesses and government components. These technologies can serve a variety of different purposes. First, better government services to citizens, then improved interactions with businesses, and access to information, and also more effective government management. Several advantages can result: less corruption, transparency in revenue growth, cost reductions... » . <sup>4</sup>

The European Union's efforts are based on the following definition: "E-government is the use of ICT in public administrations, combined with organisational change and new competences, in order to improve public services and democratic processes".<sup>5</sup>

### *C. The case of Morocco*

Since 2009, Morocco has initiated the "Maroc Numeric2013" plan, which represents a vector of economic and social growth for the Moroccan economy. At its end, a renewal towards a new program was necessary, giving rise to "the Digital Morocco 2020 strategy". Despite the strong desire for the emergence of a digital economy, the 1st programme ultimately did not achieve the desired objectives. The failure lay in the approach, given that this program only reflected the digital showcase of the State with mixed indicators, and through a simple consolidation of existing IT services, by issuing a "greeting card" of projects made in "Information Technologies".<sup>6</sup>

In order to ensure the continuity of the will and actions created by the 2013 strategy, and to mitigate and propel the development of the digital economy sector, the new 2020 strategy aims to: <sup>7</sup>

Accelerate Morocco's digital transformation;

Strengthen Morocco's place as a regional digital hub;

Identify eco-systemic barriers, addressing in particular the issue of governance and digital skills;

- This new strategy is based on three initiatives:
- E.gov – Digital transformation of the administration;
- Bridging the digital divide for the benefit of citizens;
- Integrated transformation of critical sectors of the economy;

<sup>3</sup> VERS LE NUMÉRIQUE DANS UN MONDE MULTILATÉRAL, Réunion du Conseil de l'OCDE au niveau des Ministres, Paris, 30-31 mai 2018

<sup>4</sup> OCDE, 2003, p. 23]

<sup>5</sup> [UE, 2004].

<sup>6</sup> -Youssef GuerraouiFilali : Compétitivité numérique: Comment le Maroc peut-il mettre en place un cluster innovant et performant? 06/03/2018 Huffpostmagreb

<sup>7</sup> UNESCO : Stratégie Maroc Digital 2020 : <https://en.unesco.org/creativity/periodic-reports/measures/strategie-maroc-digital-2020>

### III. PORTNET CASE:

Among the 'E-gov' solutions with a strong impact on the Moroccan economy and foreign trade, we mention PORTNET.

PORTNET or the National Single Window for Foreign Trade Procedures initiated in 2008. It has gradually become an essential tool in the acceleration and integration of Morocco's foreign trade chain. It is a precursor model of the successful public-private partnership at the service of the competitiveness of economic operators in Morocco and abroad. <sup>8</sup>

This computerized instrument allows the processing in electronic form of authorizations, permits, certificates, customs or other documents issued by the competent State organisms, for the carrying out of specific import and export operations. The IT development ensured, guarantees the technological and legal security of the various documents when integrating the digital signature and the electronic payment online.

Regarding the evolution of usage, the number of pages consulted increased from 3.16 million pages in January 2020 to 3.22 million pages for the same period in 2021, an increase of 1.9% and from 3.12 million pages in February 2020 to 3.60 million pages in February 2021, an increase of 15.38%. The average rate of evolution for the period of January, February of the year 2020 compared to the same period of the year 2021 is 8.64%.



Figure 1. The number of pages consulted on million

Users of the single window consist of shipping agents, banks, exporters and importers, handling operators, control organisms, customs brokers, bonded warehouse operators...

The table below shows the upward trend in the number of customers between 2020 and 2021, it reflects the good marketing and communication policy used by the portal to encourage the various operators of logistics, transport and foreign trade to adopt these dematerialized solutions.

Table -1 Evolution and type of Portnet users

Users	28/02/2020	28/02/2021	Evolution
<b>Shipping agents</b>	153	159	4%
<b>Banks</b>	19	20	5%
<b>Exporters</b>	1300	1613	19%
<b>Importers</b>	41626	47377	12%
<b>Handling agents</b>	25	26	4%
<b>Control organisms</b>	41	41	0%
<b>Customs brokers</b>	1422	1587	10%

<sup>8</sup><https://portail.portnet.ma/fr/a-propos>

IV. REVIEW OF THE DEMATERIALIZATION IN THE LOGISTICS AND TRANSPORT SECTOR IN MOROCCO:

In a study started in March 2021 with 116 companies operating in the transport and logistics sector in Morocco, we tried to decipher the level of adoption of the dematerialization of procedures:

A. *Training proposal to logisticians and carriers by their companies for the proper conduct of digitalization projects:*

Table -2 Survey result:

Argument	Completely agree	Agree	Neutral	Disagree	Completely disagree
My company offers training to members of the logistics and transport team in order to better manage digitalization projects.	25	48	18	14	11

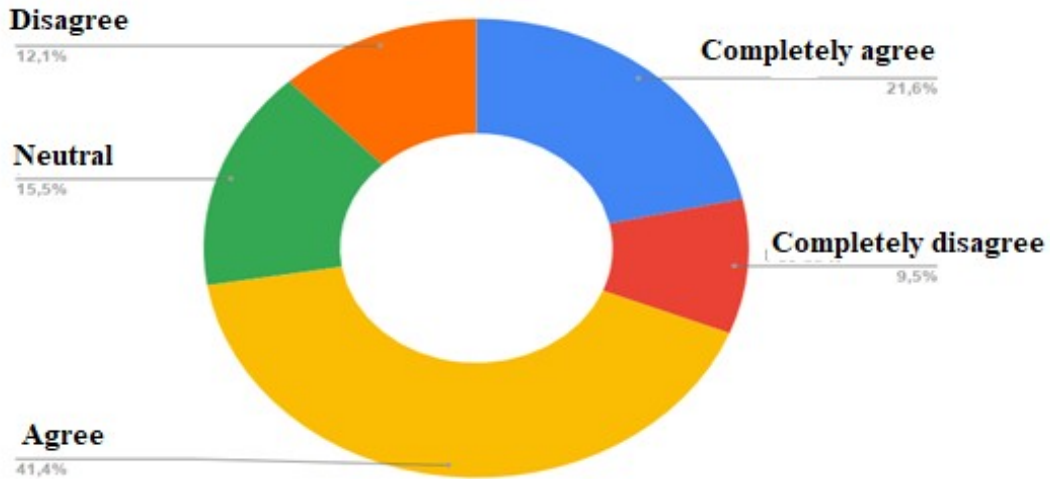


Figure 2. Scale of training proposal

In the 1rd argument, we wanted to see if the members of the logistics and transport teams had experienced training sessions for the management of digital projects proposed by their companies or those proposed by state authorities and professional associations.

B. *Nomintation of a manager or a leader to support the digitalization of logistics activities:*

Table -3 Survey result:

Argument	Completely agree	Agree	Neutral	Disagree	Completely disagree
My company has a leader to support the digitalization of logistics activities.	24	50	21	13	8

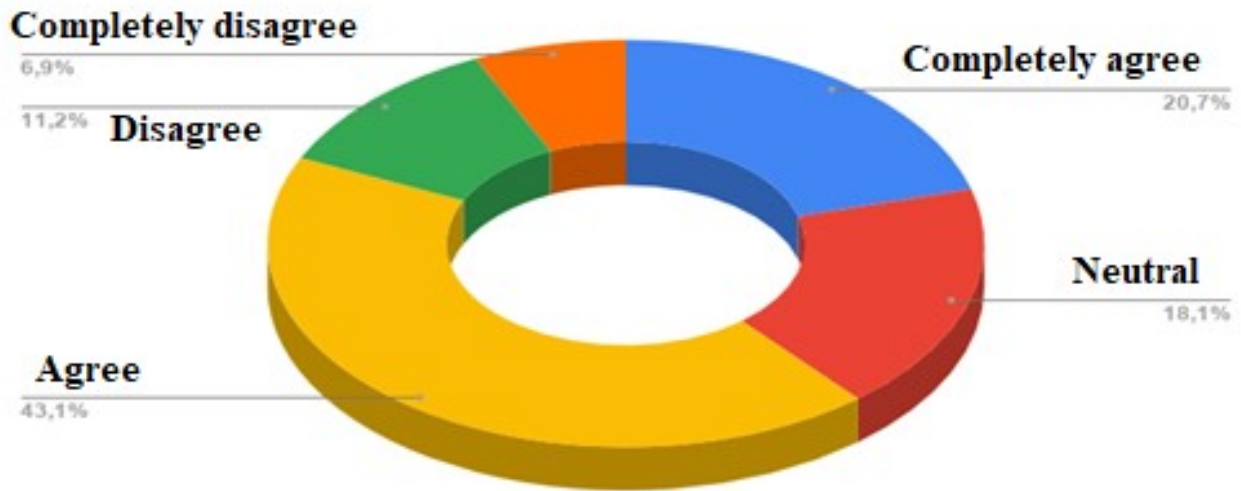


Figure 3. Scale of managers nomination to support digitalization

The fourth point aims to elucidate whether the companies interviewed have officially appointed digital project management managers or unofficially put forward leaders for the support of the digitalization of logistics activities. In recent decades, leadership specialists have tried to monitor the effects of digitalization processes. Part of the academic debate focused on the role of leaders' ability to integrate digital transformation into their business and, at the same time, inspire employees to embrace change, which is often seen as a threat to the current status quo (Gardner et al., 2010; Kirkland 2014).

To clarify this debate, the construction of the e-leader was introduced to describe a new profile of leaders who constantly interact with technology (Avolio et al. 2000; see also Avolio et al. 2014 for a review). Therefore, e-leadership is defined as "a process of social influence under the work of new information technologies to produce a change in attitudes, feelings, thoughts, behavior and/or performance with individuals, groups and/or organizations" (Avolio et al., 2000, p. 617). The carrier and logistician type is the one with the highest rate as a percentage of total agreement, i.e. 29.4% followed by logisticians who are in complete agreement at 21%. As far as the percentages of agreement are concerned, these are respectively of the order of 42.1% for logisticians, 37.5% for costumes brokers, 50% for carriers, and 39.2% for carriers and logisticians. The largest share of agreement is found among carriers.

C. Provision of resources for the conduct of digitalization programs:

Table -4 Survey result:

Argument	Completely agree	Agree	Neutral	Disagree	Completely disagree
My company has dedicated appropriate material and intangible resources to the conduct of digitalization programs.	30	47	19	15	5

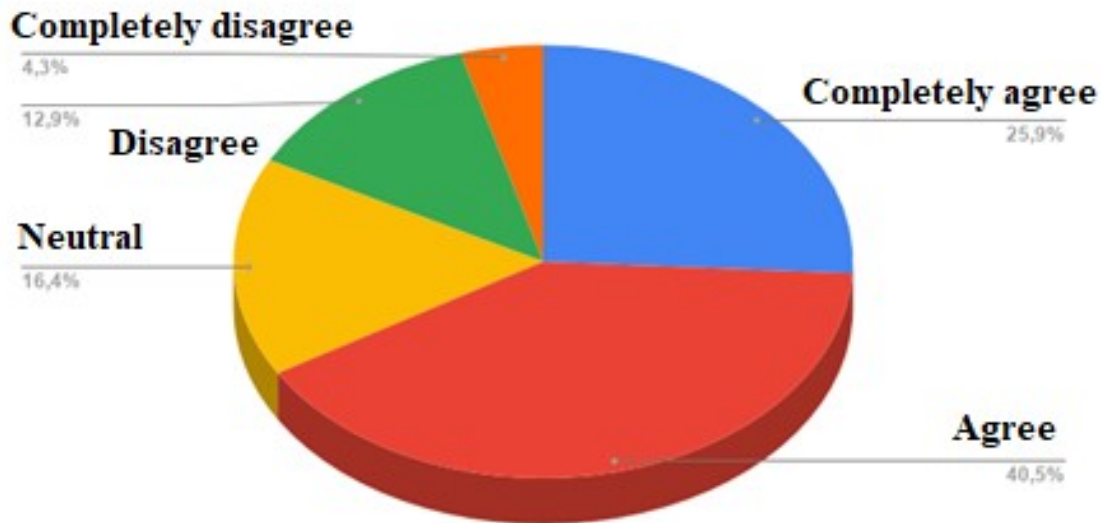


Figure 4. Scale of resources provision

For a company, dematerialization covers multiple realities. This can be done simply by scanning invoices to facilitate their processing or by sending digital files to an external service provider. Dematerialization requires considerable capital expenditure for the acquisition of hardware and software resources, support and training of teams to guarantee the success of projects. The registered customs brokers have the highest total agreement rate which is 37.5% and a total absence of disagreement, followed by carriers and logisticians which has a total agreement rate of 31.4% and a total disagreement of only 2%.

These figures are an illustration of the programs to accelerate the dematerialization of exchanges with customs and port and airport authorities in Morocco through Portnet, but also the standards imposed by customs concerning the archiving, the communication of documents online, which requires an IT infrastructure capable of responding to these new work processes.

#### IV. CONCLUSION

However exciting it may be, the dematerialization of procedures is not in itself a point of arrival; on the contrary, it is a question for the administration not only of continuously adapting to new constraints, but also of seizing new opportunities in the service of the general interest. The dematerialization of procedures has become a mode of public action in its own right, one of the objectives of which is to "simplify uses and reduce the administrative burden through digital technology.

In this regard, it seems relevant to ask whether the digital revolution in general and the dematerialization of procedures in particular make the State smarter, particularly at the service of national and international citizens and investors. The question may seem mischievous, because, at first glance, dematerialization seems to offer an infinite horizon of possibilities for improvements in public action. However, because this is in the general interest, the nuance must be the order of the day. Indeed, the process of dematerialization of procedures largely benefits citizens and businesses since it allows the administration to optimize its procedures internally and improve the service provided to users.

First of all, the digital approach does not in any way guarantee that the procedures themselves are not complex, which can cause difficulties for citizens in their sometimes difficult relations with the administration. The true paradigm was described by His Majesty King Mohammed VI in his message to participants at the National Forum of Senior Civil Service on 27 February 2018: "... Ultimately, what we want is to raise the productivity of the Administration to higher levels and to influence it so that it adapts to the changes that have taken place at the national level, assimilates the dynamics of change at work at the global level, and contributes to meeting the development challenges facing our country.

It is for these reasons that we have consistently insisted the need to reform the Administration and to upgrade the human resources at its disposal. For our country, the choice is strategic in that such an orientation will undoubtedly make it possible to lay the foundations of the development model that we are hoping and praying for. In this way, the Administration will be able to elaborate and develop, in various areas, effective and efficient public policies ...".

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