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# **Electronic Commerce in Developing Countries: Challenges and Impact**

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## **Review Article**

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**Abstract:** Despite the lack of appropriate electronic payment systems and poor internet access, more and more African entrepreneurs are entering the e-commerce sector. However, its development remains dependent on greater than before access to the internet by the population. Several experts predict that Africa will experience the same type of technological increase in commerce as in mobile phones. With a rapidly expanding population, the emergence of a large middle class and an increasing number of Internet users, the evolution of virtual commerce seems to be well on the continent. However, the lack of customer confidence in the payment system, the logistical challenge or the risks of fraudulent transactions are likely to constitute obstacles to the development of this new digital economy. Nevertheless, even if e-commerce in Africa represents only 2% of the global market, growth prospects remain promising in a continent where everything remains to be done and built. Ivory Coast is one of the most connected countries in Africa and has the second fastest mobile connection in the continent. With a population of almost 25 million, and 6.3 million internet users, the penetration rate in the country was 26.3 % in 2017. Furthermore, 5.6% of households had a computer, and 13.5% of them had internet access at home. The strongest sector of the market is the mobile sector, as fixed internet and broadband are still underdeveloped. The Ivory Coast's growing Internet market and good telecommunications infrastructure prepared the country for the development of their e-commerce market, which is expected to grow significantly in the next few years. Although, traditional trade is still strong among Ivorian shoppers, the increasing development of technology in the country and a growing middle class are creating a shift towards online shopping. The country has become more attractive to companies based both inside and outside the continent.

**Keywords:** E-commerce, Business to Business (B2B), Business to Customer (B2B), Information and Communication Technology (ICT), Challenges, Barriers, Banking Services, Payment Method, Fraud and Trust.

## INTRODUCTION

E-commerce, also known as electronic commerce is the activity of buying or selling goods or services over the internet. It often used to refer to the sale of physical products online, but it can also describe any kind of commercial transaction that is facilitated through the internet. There are the four existing types of e-commerce models.

- Business to Consumer (B2C) The most common is business to consumer in which a business sells goods or services directly to individual consumers over the internet.
- Business to Business (B2B) is when companies sell goods or services to other companies over the internet.
- Consumer to Business (C2B) is when consumers sell goods or services to companies or organizations over the internet.

 Consumer to Consumer (C2C) is when consumer sells goods or services to another consumer over the internet.

E-commerce was first developed in the more advanced countries and emerged by the early 1990s. Since then, it usage has increased at a rapid rate. Over the years, e-commerce improved to make products easier to discover and purchase through online retailers and marketplaces. Freelancers, small businesses, and large corporations have all benefited from it. Today, most companies have an online presence, which enable them to sell goods and services at a scale that was not possible with traditional offline retail. Its growth was boosted by the large adoption of the Internet in these societies. This provided a large population of connected consumers. In these advanced countries, online traders were able to operate under an already paved logistical infrastructure, such as effective transport networks and postal systems.

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Africa does not present such a favorable environment. The low level of development creates many barriers to the development of e-commerce, on top of the general obstacles related to business climate [1], such as lack of internet access, poverty, a high rate of illiteracy, and logistical inefficiencies. Most of these problems persist but technology advances have given millions more Africans access to the internet and mobile payment systems.

The purpose of this paper is to present common barriers that impede developing countries to successfully adopt the e-commerce and to examine its impact on these countries.

## E-COMMERCE IN AFRICA

Africa is home to 54 developing countries and 1.25 billion people. Africa is primarily a mobile ecommerce market. Mobile devices, in combination with mobile friendly payment systems, have opened up new shopping opportunities in places where physical stores often don't exist, and infrastructure is lacking. After the significant boom of mobile telephony in Africa, the growth of the Internet is the next technological revolution expected on the continent. In the past five years, Africa had the most rapid Internet growth rate in the world. Mobile phone is used as the main Internet connection mean in Africa, as the fixed connections make up less than 10% of the total Internet subscriptions in many countries of the continent [2]. Internet usage is increasing in Africa due to city habits, middle class needs, and young population. This evolution seems promising for Africa, as the growth of the Internet should help solve some of the major issues hindering the development of all the social and economic sectors, such as high transaction costs, spatial constraints, limited information exchanges, and lack of access to international markets [3].

Still, Internet penetration rates remain low compared to other global regions. According to [4], Internet penetration is accounting for only 35% in Africa. Few consumers own desktop or laptop computers. Regardless of this, recent report identified 264 companies engaging in e-commerce activities in 23 African markets, in various subsectors of online sales, including capital goods, clothing, taxi services, and travel. In addition, research firm Statista estimates that the ecommerce sector in Africa generated \$16.5 billion in revenue in 2017 and forecasts revenue of \$29 billion by 2022 [4]. Furthermore, Over the last two years, this sector has been hugely popular with investors and entrepreneurs, galvanized by the current and expected dynamism of the e-commerce market in Africa, which could represent 75 billion dollars in 2025 [5].

The current dynamism of e-commerce in Africa is coming from an innovative and structured approach on behalf of the operators. By establishing themselves in new markets, they are shaping an original model of African e-commerce. African Ecommerce operations differ from that of developed countries through its intense offline activity, which is necessary to overcome constraints of the marketplace. They have adapted quickly and offer a wide range of services. By contributing to the spread of e-commerce, operators are providing the role the private sector could play in Africa's economic transformations. However, they still need to be supported by the states through high quality infrastructure, the effective promotion of Internet access, and more favorable business regulations.

African e-commerce differs from that of developed countries. For comparison, regarding the difference in organization of e-commerce transactions, it is extremely important to distinguish between customer-related activities, such as order receiving, sales and marketing (the so-called 'front end' of ecommerce), and the processing and shipment of the ordered goods (the so-called 'back end'). The Internet functions as a main platform for information exchanges, transforming them into market transactions. Most ecommerce innovations in Africa refer to the 'back end': the way goods or services are being delivered to customers. The constraints with which operators are faced in Africa (both back end and front end) force them to develop skills and innovations unlike those that are needed in developed country markets. Thus, African e-commerce results in intense offline activity to overcome the constraints of the marketplace. Through their actions, operators are building the structures and the ecosystem of African e-commerce.

## **BARRIERS TO E-COMMERCE**

E-commerce is still obstructed by social and cultural habits in countries that have not fully transitioned towards supermarkets and where markets are still a community activity and a place for socialization.

#### Information Infrastructure

There is high cost of equipment and connectivity of e-commerce as relates to physical goods or teleservices in the African continent. Limited bandwidth adds to the problem of providing off-line teleservices and online teleservices as such services demand high quality fast network access. The Information and Communication Technology (ICT) software production can contribute to the structural transformation of economies, that is, weans them away from dependence on low-technology goods and on a limited number of products for export [6]. ICT software in particular provides the much needed platform for ecommerce development and sustainability in Africa.

However, the UNCTAD report identified limited access to venture capital as the biggest challenge to the software sector of the Information and Communication Technology industry in African countries and this situation has not changed [7]. The report shows that ICT software and services are dominated by the developed countries with some developing economies catching up. The report also identified Kenya and South Africa as top suppliers of software and services for domestic consumption in the continent (smart phones, tablets and mobile application). Piracy, poor ICT infrastructure and inadequate protection of intellectual property rights are some of the major challenges hindering ICT software development and service (e-business) expansion in Africa [8].

## **Purchasing Power**

The income barrier is related to the purchase power of Africans. Indeed, the growing interest for ecommerce in Africa is boosted by the rising middle class as a consumer class. However, although this middle class is today estimated at 350 million people, 60 percent of them belong to the portion with an income of between \$2 and \$4 per day. This is just above the poverty line, as compared to the US poverty line of \$13 per day [9]. According to [10], on average, more than half of the expenditure of African households is on food. After adding housing, transport, health, and education costs, the part of the budget devoted to purchasing non-essential goods is minimal for the lower categories of the middle class, in both absolute and relative terms. The issue of purchasing power is crucial for ecommerce, as it limits the capacity of Africans not only to buy IT equipment, but also to access the Internet. In Côte d'Ivoire, for example, prepaid offers of 100 mega octets of browsing cost on average \$0.75, which represents a significant transaction cost for online purchases for the consumer [11]. Due to barriers related to illiteracy, e-commerce's target market mostly the richest classes and the upper middle class, as well as the diaspora community, as illustrated by the case of Afrimarket. It is a start-up which allows people to order online items from France and then organizes their delivery to several French speaking African countries. However, even though the segments of connected consumers are expanding, operators are also confronted with operational constraints that are preventing them from penetrating the market [4].

## Fraud

Africans are apprehensive to purchase online due to fraud. Reference [12] observed that distrust is a serious challenge facing e-commerce in Africa. Accordingly, in Nigeria, the Inter-Bank Settlement System (NIBSS) in 2015, reported the high level of fraudulent transactions, which amount to 8.8% of online transactions. It therefore becomes clear that the major challenge that has persistently kept many from buying

and selling online is distrust, which is tied to the security system of online payment platforms. Fraudulent activities are very common in Nigeria, where people are skeptical about putting their credentials online. As a result of this, many companies offer cash on delivery to alleviate this challenge. E-commerce sector therefore becomes attractive mainly to students and younger population.

## **Building Trust**

A major obstacle to the development of ecommerce in Africa is the lack of trust consumers have on these platforms. This is due to several factors: a cybercrime important on the continent, a lack of confidence in the postal system, and finally the early life of these e-commerce platforms. Cybercrime is indeed widespread in Africa. Most African consumer's worries using their credit card number on the Internet. To overcome this distrust, most platforms offer a system of payment by cash on delivery, which allows paying the purchase only at the time of delivery. This eliminates the burden to enter his credit card details on the Internet. Furthermore, the buyer can check the suitability of the product with his order before paying. So only a few percentage of orders is paid online, the rest is paid on delivery.

## The Means of Payment

E-commerce is developing its proper way in Africa due to skepticism on the use of credit cards for online transactions and payments. While some economies in the African continent have embraced the card habits as experienced in developed countries, many economies are still entirely using cash method. In such cash based economies, credit cards are virtually nonexistent and central bank clearing facilities are very limited. Payment can be an obstacle to buy because of lack of trust, but also the low rate of banking in Africa. E-commerce platforms have adapted quickly and offer a wide range of payment methods. One solution lies especially in the use of mobile payment widely offered by mobile operators. The most used methods are payment in cash on delivery and payment at an e-shop or a showroom. Not surprisingly, these methods are also the ones bringing the most trust for customers. Cash payment at delivery is the main payment method that online merchants, such as Takealot, Jumia and Konga among others), must deal with. It is frequent and represents more than 90% of orders [13]. Another main obstacle is the low penetration rate of banking services and the predominance of cash transactions, which further limit the development of online cashless transactions. A large segment of the African population is unbanked. Only 15 to 20% of the population has a bank account. However, almost 280 million Africans have mobile wallets, which is three times more than the number of Africans with bank accounts. The typical African digital consumer is young as the average age is

19. Older consumers prefer cash on delivery, which is still the dominant method of payment in Africa [14]. However, for international payment between the continent and the western world, e-commerce merchants have to set up country specific sites because of payment issues (most payment solutions operate in only one country), logistics problems, cultural differences, and taxes. But, in countries such as Nigeria, Kenya, South Africa and Ivory Coast, the massive deployment of globally accepted electronic payment cards (Mastercard, Visacard etc.) by African banks has actually bridged the gap in trade and payment methods between the continent and the western world. Therefore, the means of payment, whether on delivery or on moment of the passage of the order on the Internet, locally or internationally, remains a key in the process of buying an e-commerce platform.

#### The Delivery to the End Point

Placing an instant order has to be followed up with appropriately quick delivery of the goods. While this is eminently feasible for virtual goods such as music files, it is far from that when it comes to physical goods. Airfreight is risky, infrequent and expensive in Africa; customs clearance procedures are long and complex; local warehousing facilities hardly exist [15]. The delivery to the end point is complicated in Africa for several reasons: the small number of specialized companies, the weak postal system and finally a road in bad condition. Unlike Western countries, there are few subcontractors capable of making deliveries for ecommerce platforms. This situation forced them to develop their own network of distribution in the countries where they are located. Some partnerships are already working, such as the opportunity to work with associates for deliveries outside major cities. Transport companies have therefore been created: recruitment of deliverymen, purchase of vehicles. Actors also rely on relay points or on their showroom to avoid delivery with a possible withdrawal for consumers. For the others, a call is systematically made to the customer after his order to collect indications additional information at the place of delivery.

#### **Road Infrastructure**

The inadequacy of road Infrastructure, even in large cities create costly regularity and flow issues in the product delivery phase. Even with the distributor network and the exact address, a last obstacle exists: the quality of the network road infrastructure. The African Development Bank estimates that 60% of the population lives in more than 2 kilometers of paved track [13]. AIG Express uses including motorcycle couriers to eliminate the problem of the road network.

## Weak Postal System

The postal system also crystallizes consumer fears. It is still underdeveloped, with great diversity

between different African countries. The addressing system is often approximate. In 2013, more than a fifth of African post offices lacked electricity [16]. Thus, many consumers are fearing of never receive their package. Here again, the possibility of paying only on delivery eliminate this fear. Another solution is the delivery to a point relay which allows eliminate the issues of poorly referenced by the postal system. Finally the last fear for consumers is the youth of e-commerce platforms on the Continent. Often, these platforms are not brands already known on the market.

#### Lack of Physical Address System

According to [2], several countries lack even an organized physical address system. This lack of a national street address system in most African countries is a major obstacle. The delivery person and the customer often have to stay in constant touch by mobile phone on the day of delivery. This, in combination with the lack of paved roads, keeps global logistics companies out of most countries. Last mile delivery is extraordinarily expensive, and transportation costs are at least three times higher than they are in developed countries. Couriers riding bicycles or motorbikes make most deliveries in Africa. Jumia improved its delivery service in Ivory Coast by creating several pick-up points and distribution centers to reduce delivery lead time

## **IMPACT OF E-COMMERCE**

## **Impact on Employment**

E-commerce helps create opportunities due to information related services, software app and digital products. The growth in ecommerce boosted the demand for jobs in e-businesses, but since the size of e-commerce activity is still small, these new jobs can't be counted on to relieves existing labor market problems in some countries. The development of e-commerce create jobs that require highly skilled workers to manage large amounts of information, customer demands, and production processes. In contrast, people with poor technical skills cannot enjoy the wages welfare. On the other hand, because e-commerce requires sufficient stocks that could be delivered to customers in time, the warehouse becomes an important element of the chain. Warehouse needs more staff to manage, supervise and organize, thus the condition of warehouse environment will be concerned by employees. The areas with the greatest predicted job-loss are retail, postal, and travel agencies [17].

## **Impact on Customers**

E-commerce lacks human interaction for customers, especially who prefer face-to-face connection. Customers are also concerned with the security of online transactions and tend to remain loyal to well-known retailers. In recent years, clothing

retailers such as Tommy Hilfiger have started adding Virtual Fit platforms to their e-commerce sites to reduce the risk of customers buying the wrong sized clothes, although these vary greatly in their fit for purpose. When the customer regrets the purchase of a product, it involves returning goods and refunding process. This process is inconvenient as customers need to pack and post the goods. If the products are expensive, large or fragile, it refers to safety issues.

## **Impact on Geographical Barriers**

E-commerce allows customers to overcome geographical barriers and allows them to purchase products anytime and from anywhere. Online and traditional markets have different strategies for conducting business. Traditional retailers offer fewer assortments of products because of shelf space where, online retailers often hold no inventory but send customer orders directly to the manufacture. The pricing strategies are also different for traditional and online retailers. Traditional retailers base their prices on store traffic and the cost to keep inventory. Online retailers base prices on the speed of delivery.

## **Impact on Security**

Security is a primary problem for e-commerce in developed and developing countries. E-commerce security is protecting business' websites and costumers from unauthorized access, use, alteration, or destruction. The type of threats include: malicious codes, unwanted programs (ad ware, spyware), phishing, hacking, and cyber vandalism. E-commerce websites use different tools to avert security threats. These tools include firewalls, encryption software, digital certificates, and passwords [18].

## **CURRENT TRENDS IN AFRICAN COUNTRIES**

Selling online in Africa is not easy. Even Amazon has shown no interest in the African market. According to publisher Disrupt Africa's report, "Afri-Shopping: Exploring the African E-commerce Start-up Ecosystem Report 2017", 70 percent of e-commerce startups are unprofitable. However, despite these constraints, e-commerce adoption in Africa is in continual growing state. A recent report identified 264 companies engaging in e-commerce activities in 23 African markets, in various subsectors of online sales, including capital goods, clothing, taxi services, and travel. The report also identified three countries (Nigeria, Kenya, and South Africa) as the countries that dominate e-commerce activities in Africa [19].

## E-Commerce in Nigeria

Nigeria, with a population of 195 million people, is the most populous country in Africa and is the largest economy in terms of gross domestic product. It also has the most e-commerce sites as 40 percent of Africa's e-commerce ventures have headquarters in

Nigeria. However, it has an internet penetration of only 48 percent. This apparent dynamism does not contradict the difficulties and constraints mentioned above. Two group dominated the sector: the Jumia group, sometimes, called the African Amazon, and the konga.com.

Konga.com - Konga.com was founded in 2012 in Nigeria and initially sold only baby and beauty products. It does not operates outside of Nigeria. In 2014, Konga opened Seller HQ, a third-party marketplace. The site has about 1 million customers and receives over 300,000 unique visits daily. Konga has its own logistics network (KOS Deliveries) with a fleet of over 200 vehicles (vans, trucks, and motorbikes). Also available are pick-up points and distribution centers in every part of Nigeria. Konga.com has about 1 million customers. Konga also offers its own payment system (KongaPay) that works with all banks in Nigeria. The app ensures that the customer's money is held in escrow until a sales transaction is completed successfully. In March 2018 Konga was acquired by a local hardware and information-technology services company, Zinox. Financial losses and inability to fund growth contributed to the sale.

## E-Commerce in Kenya

Kenya has a population of 48.5 million and an impressive 79 percent internet penetration. This is because Kenya is home to M-Pesa, the mobile wallet provider started by mobile telecom provider Safaricom. The availability of a secure payment system encourages internet access and online buying. More than 45 percent of Kenyan adults use M-Pesa according to Emergent Payments. Safaricom also recently established a partnership with PayPal to enable Kenyan customers to easily transfer money between PayPal and M-Pesa mobile wallets. This collaboration will open global marketplaces to Kenyan entrepreneurs and businesses that wish to sell abroad. Kilimall, with headquarters in Kenya, also sells in Nigeria and Uganda. It offers affiliate programs for small African businesses as well as seller programs. It also sells goods from China. Launched in 2017, Kenvan e-commerce startup Sky. Garden is a SaaS mobile commerce platform that has raised \$1.2 million from Scandinavian companies. More than 3,000 sellers have Sky. Garden web shops and offer 23,000 unique products in 30 different categories. It only accepts MPesa payments from customers and pays all merchants using M-Pesa.

## **E-Commerce in South Africa**

South Africa with a population of 55.5 million has a 54 percent internet penetration. It has a substantial middle class and is perhaps the country with the best cross-border potential. Tiger Global Management formed South Africa's Takealot in 2011 as a result of an acquisition of an existing e-commerce firm. In 2014

Tiger Global invested \$100 million in Takealot. Following that investment, Takealot purchased an existing logistics company, Mr. D Delivery, giving it its own delivery network with more than 900 drivers. Besides delivery, Takealot offers pick-ups from its Cape Town warehouse seven days a week. For its marketplace merchants, Takealot offers storage, fulfillment and delivery, and customer service.

## IMPACT E-COMMERCE IN IVORY COAST

The E-commerce sector in Ivory Coast is dominated by foreign operators (Jumia.ci from Africa internet Group, the French afrimarket and Kaymu). No doubt, they saw quickly this growing market in Africa and especially in Ivory Coast, a country considered as the hubs of the digital economy of West Africa. Next to these big operators, we are also witnessing the proliferation of new local online operators. Below are the main local start up operators.

- Vendito.ci
- Kenneu.net
- Emarche.net
- Atre
- Tchanga.ci
- Babishopping.com
- 2kboutic.com
- Sanlishop.ci

Next to these start up, there are those who have taken advantage of the boom social networks to develop their business and increase their customer potential. This is the case of sales groups such as "Black Market of Facebook"," Market Day ", etc.

The engagement of these startups is creating a lot of dynamism within the sector. This is because Ivorian's are more and more to shop online. However, and very often, many start-ups, and even big companies, are struggling to make room on the market and/or are dying early. The problematic was on the agenda, on Friday September 1, 2017 in Abidjan, of a conference organized around the theme "Ecommerce, a great way of business in Ivory Coast" [20]. The adventure of the French giant Cdiscount stopped just after only few months of activity in Abidian, is the most known failure. Not to mention the many start-ups that is born and stay at the stage embryonic, to then disappear. What are the causes of these embryonic failures in this growing market? Especially when others companies, such as the Jumia Group, are doing very well. One of the major problems is the lack of professionalism and innovation. Many companies are simply doing a "copy and paste" without any added value. Also, some online operators are not sufficiently studying the Ivorian market before embarking on it. Other simply lack training. Having learned on the job, they go into the sector, believing them sufficiently equipped. Also, customers being more and more demanding in this area,

satisfaction, especially in terms of deadlines of delivery, should be an essential point for e-merchants. Many seem to neglect this aspect. In addition of all of this to the lack of methodology and business model, this result in a death of these start-ups in less than a year. Although taking place online, e-commerce, like traditional trade, has rules that must be respected by new online operators to ensure the sustainability of its business. They need to master the codes and rudiments of this business with serious and rigor. Also, the presence of competitors must be a motivation and push to improve the service provided. This service improvement must be done taking into account the expectations of the customer, the major players in the value chain. Therefore, Ivorian's online operators have to look at the business through the eyes of the customer and adapt to his needs.

#### The Mobile banking

The Mobile banking (E-banking) is main means of payment method in Côte Ivory under the name Mobile money. So the mobile has become now the main means to reach the population through the Mobile banking solution. In Abidjan, the economic capital, for every 100 meters you have at least 3 branches Mobile Money and most of them runs on 7/7. Major operators are the Orange, MTN money and Flooz of Moov. In terms of numbers, there are thousands of mobile agencies Money all over the country while the biggest Bank of the country has only 150 agencies in all the countries. According to [20] the mobile banking sector have reached 20 million users in Ivory Coast. There is remarkable growth in the mobile banking. The latest data show that there is 19 to 20 million customers from a population of 24 million. This represents a rate of penetrations of about 83%, compared to the banks, which is 14%. This shows that the need that existed before is being satisfied. According to several analysts and experts in digital Africa, a synergy between the Mobile industry and banks will inevitably reverse the rate of banking throughout Africa. While operators mobile are close to the populations through the mobile, the banks have the solutions of the finance in Africa. In view of this dynamism in the Ecommerce industry and Mobile-banking we can say that Ivory Coast is catching up very quickly in these two sectors of ICTs.

## The Ivorian Electronic Governance

The interest shown by Ivorians in the use of the internet is getting bigger and bigger. Aware of infinite possibilities presented by this revolutionary tool, the state government has launched several operations aimed at popularizing the internet with the Ivorian populations. This initiative has the dual benefit of responding no only to the electronic governance, but also to place e-commerce in the heart of the economic activity. Electronic governance is the use information and communication techniques (ICT) in public

administration. It is a necessity for the transmission and processing of everyday administrative acts. The transition of the Ivory Coast to e-governance is a necessity because of the huge financial losses that are linked to current management model of the public administration. The costs of taxpayer services remain high because services are very little computerized. But to achieve this goal, enormous efforts remain to be to done, especially with regard to access to the internet, link essential to the realization of such a project. Since 2012, several projects have been launched whose main ones are laying 7,000 km of fiber optical across the country. With the objective of creating 3,000 cyber center, even in the most isolated localities. Also, the launching of the operation named: "an Ivorian, a computer ", aiming to distribute some 500 000 computers to the Ivorians. In recent years, the ICT sector has experienced strong growth in the Ivorian market as it contributed to 7% to 8% of national GDP. With the breakthrough of the internet, the mobile internet represented a real opportunity for the Ivorian ecommerce sector. It has led to the opening up of rural populations, enabling easier access to basic services such as mobile payment or transfer.

## The Main Operators

Jumia group - When we talk about ecommerce in Ivory Coast, Jumia, is one of the pioneers and even the leader. Jumia is an e-commerce platform founded in 2012 in Nigeria by the Africa Internet Group, a subsidiary of the German company Rocket Internet. The group has progressively become more international while developing several start-ups specializing in various e-commerce subsectors (sales, real estate, catering, etc.). After being united in 2015 under the umbrella of the Jumia Group, they became an ecosystem of nine companies that are currently active in 23 African countries. In 2016, the group received investments of several hundreds of millions of euros from large investors such as Goldman Sachs and Axa Assurances, turning Jumia several months later into the first African "unicorn", valued at more than a billion US dollars. However, these trust marks struck a false note in comparison with the group's actual results. It has constantly shown deficits since its creation, despite a remarkable increase in revenue from 29 to 135 million euros between 2012 and 2015. This interest for Jumia can be explained by the rhetoric of its leaders. They describe their project as a long-term opportunity which aims to position the group advantageously in a market that is about to emerge. In other words, Jumia is not looking to make an immediate profit but to prepare its future conquest of the African e-commerce market. This forward-looking perspective, which is used by other key players, does not mean that they are passively waiting for this emergence: faced with significant constraints, they are designing adaptation and transformation strategies. The Group has more than 3,000 employees

and is Africa's best-funded e-commerce startup. It operates in 14 countries in Africa and the Middle East, with each country having its own site.

- Afrimarket.ci The European based ecommerce player, Afrimarket, focuses on the market of French-speaking Africa countries. In four years of existence, the e-commerce platform is a reference for Africans, as it is now a business in constant evolution with more than 100,000 customers throughout the continent and in Ivory Coast. It is the first of the local online sales sites that offers products of all kinds (electronic, clothing, food). In short, afrimarket.ci is a real online market to make direct purchases via Orange Monney. From Europe, customer can send a bag of rice, a sheep for the Tabaski festival, or more cement to build a house. It allows the sender in Europe to choose directly from an online catalog and the products will be delivered in timely manner.
- AfricaShop Installed by CFAO, the global distribution giant, AfricaShop is also making its way on the online market in Ivory Coast. AfricaShop participates, in its own way, to facilitate the life of the population through other type of purchase, payment and order. In partnership with a variety of brands, AfricaShop allows Internet users to make their purchase in euro then converted in CFA. In order to avoid the customers to suffer the constraints of online payment, AfricaShop offers to its customers an e-shops that allow to order online and pay in cash.
- Yaatoo Yaatoo is a service developed by the group prosouma, leader undisputed of the retail market in French Africa. With 152 stores under 20 brand names, Prosuma is one of the leading retailers in large scale in Ivory Coast. Likewise, his latest online sales service, Yaatoo, is positions more as one of the biggest online sales sites in the country. After his launch in July 2016, customers were recuperating their merchandise at any supermarket of the group Prosuma. But in recent months, following the signature of a partnership with the Ivory Coast postal service, Yaatoo is passed on delivery. This made his service even more solicited.
- Librairie de France Group This is nothing but the web platform of the Bookstore France based in Ivory Coast that allows you now to consult an online bookstore and to purchase it in Ivory Coast. So welcome to the site Official Library of France. With an experience of over 75 years, the Bookstore of France (LDF) Group has decided, since 2014, to switch to digital in order to diversify its sales and increase its customer base. The online purchase service of the largest distributor of books in Black Africa Francophone has increased its popularity within the Ivorian population. This not only demonstrates of the

LDF's desire to move closer to populations but also to embrace the era of the digital.

• Kaymu - Kaymu positions itself as the first market place that allows customer to buy and sell on line products more easily in Ivory Coast especially in big cities like Abidjan. Like Jumia.ci, kaymu belongs to the German group of start-up incubator Rocket Internet. Kaymu is transforming the market of Adjame, in the heart of Abidjan.

#### CONCLUSION

Ecommerce sites are on the rise in the continent. These new economic players (operators) offer services adapted to African realities and local needs while maintaining quality standards. Online purchases are slowly becoming part of the consumption habits of populations in major urban centers in Africa. The leaders of the classic distribution have to deal with this new situation. Despite the lack of appropriate electronic payment systems and poor internet access, more and more African entrepreneurs are entering the ecommerce sector. This dynamism is due to factors common to most countries of the continent: the insufficiency of quality commercial infrastructures, the increasing of people connected to the Internet, the young middle class eager to consumption, the capacity of the population to quickly adopt the technological innovations. The ecommerce sector is therefore in full growth on the continent. But its development remains dependent on increased access to the internet by the population. Several experts predict that Africa will experience the same type of technological increase in commerce as in mobile phones: it will quickly adopt the digital model. With a rapidly expanding population, the emergence of a large middle class and an increasing number of Internet users, the evolution of virtual commerce seems to be well on the continent. However, the lack of customer confidence in the payment system, the logistical challenge or the risks of fraudulent transactions are likely to constitute obstacles to the development of this new digital economy. Nevertheless, even if e-commerce in Africa represents only 2% of the global market, growth prospects remain promising in a continent where everything remains to be done and built.

The Ivory Coast is one of the most connected countries in Africa and has the second fastest mobile connection in the continent. With a population of almost 25 million, and 6.3 million internet users, the penetration rate in the country was 26.3 % in 2017. In 2017, there were only 0.6 fixed-broadband subscriptions per 100 inhabitants, while that number was much higher with mobile-broadband subscriptions of 53.9 %. Furthermore, 5.6% of households had a computer, and 13.5% of them had internet access at

home. The strongest sector of the market is the mobile sector, as fixed internet and broadband are still underdeveloped. This is partly due to high international bandwidth costs and monopoly over the submarine cable serving the country. Access to additional cables are proving to be a cause for the current price reduction of wireless broadband services. The Ivory Coast's growing Internet market and good telecommunications infrastructure prepared the country for the development of their e-commerce market, which is expected to grow significantly in the next few years. As the use of technology grows in the country, so will e-commerce. There is no official data on e-commerce revenue. Traditional trade is still strong among Ivorian shoppers, who value bargaining and the interaction they have in open markets. However, the increasing development of technology in the country and a growing middle class are creating a shift towards online shopping. The country has become more attractive to companies based both inside and outside the continent. The country's advances in terms of ease of doing business, strong growth, low inflation, a stable currency and solid infrastructure make the Ivory Coast a regional hub for e-commerce.

#### REFERENCES

- 1. Elsmani R, Rahim A, Mahmoud MA. A Review of the Ecommerce Barriers Faced by the SMEs in Africa. International Journal of Innovation and Business. Strategy. 2017; 7(1).
- 2. Africa B2C E-Commerce Market-2016. Available from http://www.prnewswire.com/news-releases/africa-b2c-e-commerce-market-2016-300347233.html. 23
- 3. Weigert M. How the Private Sector is Shaping African E-Commerce? Bridges Africa. 2018; 7(2): 37
- 4. An Emerging E-commerce Market with Many Challenges. Available from https://www.practicalcommerce.com/africa-emerging-ecommerce-market-many-challenges
- 5. McKinsey Global Institute. Lions go digital: The Internet's transformative potential in Africa. November, 2013.
- 6. Fredriksson T. E-commerce and development: Key trends and issues. InWorkshop on E-commerce, Development and SMEs 2013 Apr (pp. 8-9).
- 7. UNCTAD. Information Economy Report 2012. In Report no UNCTAD/IER/2012. United Nations Conference on Trade and Development. 2012.
- 8. UN report identifies challenge to Africa's ICT growth. In National Mirror. Available from from http://nationalmirroronline.net/new/un-report-identifies-challenge-to-africas-ict-growth/
- 9. Ncube L, Lufumpa M, Leyeka C, Kayizzi-Mugerwa S. The Middle of the Pyramid:

- Dynamics of the Middle-class in Africa. Market Brief, African Development Bank. 2011.
- 10. Bricas N, Tchamda C, Florence M. L'Afrique à la conquête de son marché alimentaire intérieur. Enseignements de dix ans d'enquêtes auprès des ménages d'Afrique de l'Ouest, du Cameroun et du Tchad. AFD, "Études de l'AFD" collection, no. 12. 2017.
- 11. How e-commerce is booming in Africa. In World Economic Forum. Available from https://www.weforum.org/agenda/2015/08/how-e-commerce-is-booming-in-africa/
- 12. The challenges facing e-commerce start-ups in Africa. In: Harvard Business Review. Available from https://hbr.org/2015/03/the-challenges-facing-e-commerce-start-ups-in-africa.
- 13. Decollage presque imminent pour le e-commerce en Afrique. Available from http://www2.deloitte.com/cd/fr/pages/systemesdin formation-et-technologie/articles/decollage presque-imminent-pour-le-e-commerce-enafrique.html. 2016.
- 14. Ayo CK, Adewoye JO, Oni AA. Business-to-consumer e-commerce in Nigeria: Prospects and challenges. African Journal of Business Management. 2011 Jul 31;5(13):5109-17.

- 15. Esselaar J. Towards electronic commerce in Africa: a perspective from three country studies. Southern African Journal of Information and Communication, 2002 Jan 1;2(1).
- Une meilleure qualite de service priorite du secteur postalafricain. Available from http://strategie2015.upu.int/no\_cache/cad/article/u nemeilleure-qualite-de-service-priorite-du-secteur postal-africain/, 2015.
- 17. Teriz N. The impact of e-commerce on international trade and employment. Procedia Social and Behavioral Sciences. 2011; 24: 745–753
- 18. Kohli GE. Commerce. Transaction Security Issue and Challenges. International Journal of Research in Commerce & Management. 2016; 7 (2): 91–93.
- 19. Disrupt Africa. Afri-Shopping: Exploring the African E-commerce Startup Ecosystem Report. 2017.
- 20. Diarrassouba S. President of the Association of Banking Professionals and financial institutions of Ivory Coast (APBEF-CI). Oral presentation proceeding the Conference "Ecommerce, a great way of business in Côte of Ivory Coast", organized by the APBEF-CI, Abidjan (Ivory Coast), Friday September 1, 2017.