

Communication Technologies and ECOWAS Regional Integration

by

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Abstract

Communication Technologies (CTs) are revolutionizing not only the way people communicate and how they live, but also how markets and economies operate. As it pertains to the Economic Community of West African States (ECOWAS) in particular, statistics show a boom in mobile communication, freeing the area from the limitations caused by the poor penetration of fixed telephone lines. At the same time, although there is a huge disparity within different members states, Internet access is spreading quickly across the ECOWAS region. With regard to CTs, it should be noted that the radio still remains the medium with the widest range of reaching the masses in the region. In this paper, we examine whether the widespread use of CTs is promoting regional integration within the ECOWAS. We argue that CTs have become a major aspect that no organization, small or large, can ignore. We add that CTs can be a reinforcing factor of regional integration, precisely through the communication links underlying these technologies. We further posit that the convergence of ICT programs and standards within member states, already in progress, and the benefits of having an economy of scale to this promising market sector, are also elements with an important role in the goal of consolidating integration.

Introduction

Communication Technologies (CTs) are indispensable in a competitive and globalized world, and also fundamental for establishing regional blocs that have bargaining power in the international market. As well, CTs play an essential role in the development of each country and in the success of regional community projects. They are a very important aspect facing a moment of intense development and in the eye of an ongoing information revolution.

When one talks about CTs, ‘one of the key by-products is incessant change, a transformation that embodies social, economic, political, technical and cultural processes, affecting nearly all economies and creating tremendous challenges and opportunities’ (Yonazi et al. 2012:166). In Africa, where some CTs are booming, there have been many studies and initiatives concerning information communication technologies (ICTs) and their access and policies. This is due to the fact that ‘ICTs have the potential to transform business and government in Africa, driving entrepreneurship, innovation and economic growth’ (Yonazi 2012:166). Thus, African organizations seem aware of the relevance of CTs. But do CTs have an impact on the aims of regional integration?

This paper seeks to answer the foregoing question by focusing on CTs as an element to reinforce regional integration in the ECOWAS region. Therefore, the major research question, which emerges from the preceding one, to be addressed in this paper is the following: How do communication technologies promote regional integration in the ECOWAS? This question leads us to formulate the following alternative and null hypotheses for empirical testing: H₁: Communication technologies promote regional integration in the ECOWAS; H₀: Communication technologies do not promote regional integration in the ECOWAS.

In order to systematically test our hypotheses, we analyze relevant literature, including key reports and official data, using a regional integration theoretical framework, qualitative methodology and an explanatory case study design. The rest of this paper is therefore divided into four sections. The first section entails a discussion of the theoretical framework, research methodology and design. The second and third sections discuss access to CTs and Internet access in the ECOWAS region. The final section assesses whether regional integration is facilitated in the ECOWAS through CTs. In the end, conclusion is drawn and recommendations provided. Before doing all this, however, we first describe our major concepts/variables that undergird the paper.

Communication, radio, mobile phones, fixed-line telephones, and the Internet are the five major concepts/variables that inform our study for the following reasons: (1) communication is key to facilitating interactions between two or more entities; (2) radio is traditionally the medium to which more people have access in Africa; (3) mobile and (4) fixed-line telephones are new versus old technology, respectively, with very disparate penetrations and potentialities; and (5) Internet, for its importance worldwide. This study is therefore important because it outlines how we can reinforce regional integration through various communication technologies. The main purpose of the paper then is to demonstrate that it is possible to reinforce ECOWAS’ regional integration through communication technologies. We will now describe the five major concepts/variables in the following subsections.

Communication

Communication refers to an interaction between two or more actors in terms of transmission and reception of information. Due to the explosion of the mobile phone medium in Africa, it now constitutes one of the most important media of communication in the continent.

Information and communication technologies (ICTs) have changed the way we live in the world. According to Bayo Idowu, Eyitope Ogunbodede, and Bimbo Idowu, ‘They [i.e. information communication technologies] enable people to communicate with family, friends and colleagues around the world instantaneously, gain access to global libraries, information resources, and numerous other things’ (2003:69). Indeed, communication technologies have been decreasing distances among peoples and countries, facilitating trade and contributing to the improvement of people’s quality of life.

As Enock Yonazi and his colleagues also point out, ‘Information communication technologies (ICTs) now offer major opportunities to advance human development—from providing basic access to education or health information to making cash payments and stimulating citizen involvement in the democratic process’ (2012:13). ICTs can be an engine of growth when they are embedded into the daily activities of people, such as agriculture, education, financial services, health care, and delivery of public services, among others. Now in Africa, there is an ‘African Virtual University (AVU) founded in 1997. It is a Pan-African intergovernmental organization whose aim is to significantly increase access to quality higher education and training through the innovative use of ICTs’ (Enock Yonazi et al., 2012).

Radio

Radio is a dynamic medium used to reach the most number of places. The presence of a radio station in a community has an immediate effect on the population: strengthening social relationships, informing and forming communities, increasing the level of education of the community, increasing the people’s knowledge about health and how to prevent diseases, among other benefits. Radio has yet another peculiar characteristic: i.e. even illiterates can hear and understand a radio message. Radio is one of the most democratic and democratizing media. With only one radio remote, many people can get information at the same time. Radio provides news, broadcasts live sports, and plays music. According to Patrícia Mota Paula (2014), the community radio stations of Guinea-Bissau are now recognized by international institutions as pure instruments of empowerment. The use of the radio in order to improve development is very comprehensive. Yonazi et al. also note that the agriculture sector was analyzed by Deloitte in a case study of the use of radio frequency identification (RFID) tags for tracking livestock in Namibia (2012:15).

The preceding examples show how radio can help Africa in its process of development. They also seem to suggest some challenges that Africa must meet for its optimal benefit: for instance, it needs more investment to extend its scope within the population. A radio station in a community can provide the forum for participatory public dialogue which is essential for social change. As Colin Fraser and Sonia Restrepo-Estrada state,

The radio station is a platform for identifying and analyzing problems and their solutions, thereby determining development inputs that truly meet local needs. Open access to on-air complaints from the audience can pressure local authorities to adopt practices of good governance and transparency (2002:69).

Radio has many good attributes that increase its importance. Among other advantages, it is inexpensive, easily available, portable, and accessible to illiterate rural audiences. Radio can therefore be utilized to contribute to social mobilization in rural areas. In this case, we can also proffer that radio is more than a communication technology; it can also be a very useful tool to promote regional integration in the ECOWAS region.

Mobile Phones and Fixed-line Telephones

Mobile phones use radio systems, making them instruments of wireless communication. Due to the explosion of the mobile phone in Africa, it now constitutes one of the most important media of communication in the continent. According to Yonazi and his partners, ‘In some African countries, more people have access to a mobile phone than to clean water’ (2012:22). Mobile phones have become a necessity for many people throughout Africa as in other parts of the world. The ability to keep in touch with family, business associates, and access to E-mail is only one of the reasons for the increasing importance of mobile phones. Today's technically-advanced mobile phone is capable of not only receiving and making phone calls, but also storing data, taking pictures, and can even be used as walkie-talkies, to name just a few of the available options.

Mobile phones are the perfect way to stay connected with others and provide the user with a sense of security in the event of emergency. The importance of mobile phones has increased the competition in the wireless service provider industry, making mobile phones very affordable and very easy to use. The mobile phone coverage has increased significantly throughout Africa, with over 78 percent of the market covered by 2007. Mobile phones lead to reduced search costs, more market information, and increased efficiency in moving goods across countries (Aker and Mbiti 2010). The penetration of mobile phones into Africa South of the Sahara has occurred with amazing speed, especially among young people. As Yonazi et al. point out, ‘In the year 2000, there were fewer than 20 million fixed-line phones across Africa, and phones were to be found only in offices and richest households. By 2012, there were almost 650 million mobile subscriptions’ (2012:13). Mobile phones are quickly transforming markets in low-income countries. The effect is particularly dramatic in the rural areas of Africa South of the Sahara, where mobile phones often represent the first telecommunications infrastructure.

Fixed-line telephones have not expanded in most African countries as mobile phones or the Internet. For example, ‘in Egypt, the Ministry of Communications and Information Technology has worked to reduce the cost of Internet access to that of a local phone call’ (Ewing et al. 2012). We can conclude that fixed-line telephones in an African country cost more than the cost for the Internet, radio, or mobile phone. Nonetheless, fixed-line telephones are an important CT because they are more cost-effective and efficient when used in companies, governmental and other institutions, and informal contacts.

The Internet

The Internet allows us to stay permanently connected, facilitating close collaborations among different companies and people. As an example, there are videoconference services that allow the connection of audio and video in real time, eliminating travel costs and time.

The Internet has been identified as a vehicle with the potential to improve the quality of health care systems as well as the efficiency of the health workers both in the developed and developing countries (Idowu, Ogunbodede and Idowu 2003). The Internet is a powerful communication technology because through it we can access all types of media.

Until recently, it was cheaper to call America or Europe from Africa than a neighboring country. Such disparities hindered cross-border regional trade. But this has changed with submarine cables. The Internet bandwidth available to Africa's one billion citizens grew 20-fold between 2008 and 2012 (Yonazi et al. 2012:14). The Internet is currently indispensable for any type of service, including any means of communication such as radio and mobile phones. Unfortunately, its penetration in African countries is still relative weak compared to those in other continents. But the situation is changing and 'the most comprehensive study carried out to date does point to the potential for effective rollout and a period of rapid growth ahead' (Yonazi et al. 2012:14). African countries must therefore invest in their communication operations to lower the cost of the Internet, to make more divulgation of that service, and to make the people know about the Internet's facilities.

Theoretical Framework, Research Methodology and Design

'Knowing that the integration project in West Africa was not, nor is it today, merely economic' (Duarte 2015), one sees that the 'classical economic theory of integration, sought to create a free trade area, a common market, a customs union and an economic-monetary union' (Asante 2010, as cited in Duarte 2015) was largely superseded. In the complexity of issues and goals of ECOWAS, communication is an essential rule. Through CTs, one can connect, inform, entertain, educate, develop, etc.

This paper, as already stated, tries to explain how the CTs promote regional integration, particularly in ECOWAS. It uses neo-functionalism as its main conceptual framework, although other less known models such as transnationalism are also important in the particular issue of ITCs.

To understand neo-functionalism we have to talk first about the Functionalist Theory from where it arises. Functionalist Theory is, as its name suggests, a pragmatic functional approach. Thus, it focuses on 'the creation of a number of functional agencies, abandoning the traditional link between authority and a given territory' (Duarte 2015). In other words, it is a theory that emphasizes the technocrat aspect of integration.

According to Mitrany, 'It insists that in a world of economic interdependence, common economic interests create the need for international institutions and rules' (Mitrany, 1966 & 1975, as cited in Bangura & Lamin 2016). It also insists on cooperation and elevates non-governmental actors to an essential role on the integration process. Function interdependence is here traced as the origin international cooperation (Bangura & Lamin 2016).

Functionalism, however, had its limitations, that neo-functionalism will try to fill. This 'new' approach, first defended by Ernst Haas in *The Uniting of Europe* (1968), would 'refine the functionalist assumptions' (Bangura & Lamin 2016). First, it blueprints a proposal to study regional integration and not internationalism (Duarte 2015). Second, it highlights the political will, or the 'importance of nation states' (Bangura & Lamin 2016) in the integration processes. The role of nation-states to create a conducive environment for development as well-being is reinforced. This would 'foster the growth of interest groups and promote closer cooperation among groups and fellow technocrats in member states which will then promote alliances across national boundaries that will then add to the integrative momentum' (Anadi 2005, as cited by Bangura & Lamin 2016).

We have also considered transnationalism in this paper, because this approach empathizes communication between states, as Bangura and Lamin (2016) synthesize, and it offers a much broader definition of integration than functionalism in an economic sense to include 'social perceptions, values, sentiments and articulation of these values and sense of community in formal and structured forms' (Duffy and Werner 1980:506). In a sense, major issues on a holistic integration that can be managed by ICTs are, thus, here included.

This article uses qualitative methodology (an approach that emphasizes words over numerical values) and the explanatory case study design (a method that seeks to answer the question 'why' or 'how'). Our main question, as noted earlier, is a 'how' type. That means we analyze primary and secondary data from databases of international organizations, ECOWAS, newspapers, reports, books, and journals. These sources are augmented with various statistical data on the existence of CTs in ECOWAS countries and the measures that the community has officially announced to promote the sector.

Access to ICTs

Two-thirds of African adults had by 2012 access to ICTs, according to Yonazi et al. (2012:23) and the number keeps increasing. There are lots of reasons to be optimistic about ICTs in Africa. For instance, 'ICTs directly contribute around 7 per cent of Africa's GDP, which is higher than the global average' (Yonazi et al. 2012:23). The spectacular growth in mobile communications was the principal element of this contribution as the 'number of mobile subscriptions in use in Africa increased from fewer than 25 million in 2001 to almost 650 million by 2012' (Yonazi et al. 2012:6).

In fact, the boom of new ICTs in the continent has been so intense that one can talk of a communication revolution that changed and potentiated inter- and intra-communication among states. The statistics to be discussed later in this paper support this contention. The data show a growth of ITCs in the ECOWAS region, as more people now have access to radios, mobile phones, fixed-lined telephones, and the Internet.

Access to Radio

Radio is the communication medium to which more people have access in Africa. In fact, according to a report by the African Farm Radio Research Initiative (AFRRI), over 55 percent of the households in Africa South of the Sahara listen to the radio weekly. For example, in Ghana, 87% of men and 75% of women have access to radio sets in their households; and in Mali, that goes for 90% of men and 79% of women (Sullivan 2011:5). Therefore, we can say that the ECOWAS population has easy access to radio, and that it is the most widespread media/communication technology in the region. This is because:

Newspapers are primarily concentrated in urban areas, are expensive and are inaccessible to illiterate populations. Less than 19 percent of individuals in sub-Saharan Africa read a newspaper at least once per week, with a much smaller share in rural areas. Landline coverage has been limited, with less than one landline subscriber per 1,000 people in 2008 (ITU 2009).

But, radio generally provides a limited range of information. This limitation can, however, be partially surpassed by combining radio with other IC technologies. Radio, Internet and mobile phones can be combined.

Access to Mobile Phones and Fixed-line Telephones

As shown in Table 1, there is an amazing mobile phone penetration in the ECOWAS region and a very low use of fixed-line telephones. Looking at the data, one can notice that in terms of telecommunications systems, ECOWAS is jumping into the new communication technologies without passing massively through the traditional ones. Also, as other observers have pointed out, 'Unlike the traditional fixed-line telecommunications sector, the mobile industry in Africa has always been competitive in most African economies, with Nigeria having as many as nine licensees, and most countries having three or more operators' (Kelly and Minges 2011, cited in Yonazi et al. 2012:22). The use of mobile phones is, as we see, remarkable and with impacts at various levels. Keeping up with the numbers, eight out of the 15 ECOWAS countries score in the first half of the table compared to other countries and regions (out of a total 219 countries and regions). In Cabo Verde, for instance, there are more mobile subscriptions than people (616,000 mobiles to about 500,000 people). Knowing that the total ECOWAS population is about 340 million people and there are 310,828 mobile phones, almost everyone has a mobile phone. If we agree that some mobile phones are shared with family members and friends (like radios and television sets are), almost every single person in the ECOWAS region now has access to a mobile phone.

Table 1: Selected Communications Media, 2016

Country	Fixed Line Telephones (total subscriptions) penetration%	Worldwide Comparative Position (WCP)	Mobile Phones (million) penetration%	WCP	Total Number of Internet Users penetration% (July 2015 est.)	WCP
Benin	194,666(2%)	127	9.318 (89%)	82	709,000(6.8%)	132
Burkina Faso	75,075(<1%)	141	14.447(76%)	74	2.156M(11.4%)	125
Cabo Verde	58,456(11%)	156	0.646(118%)	166	235,000(43%)	153
Côte d'Ivoire	277,248(1%)	124	25.408(109%)	57	4.892M(21%)	129
Gambia	45,000(2%)	158	2.586(131%)	146	337,000 (17.1%)	147
Ghana	275,570(1%)	120	35.008(133%)	42	6.181M 23.5%)	68
Guinea	18,000(<1%)	219 – last	10.764(91%)	93	554,000(4.7%)	156
Guinea-Bissau	5,000(<1%)	208	1.238(73%)	156	61,000 (3.5%)	181
Liberia	9,000(<1%)	198	3.652(87%)	136	248,000 (5.9%)	158
Mali	169,006(1%)	136	22.699(134%)	50	1.753 million(10.3%)	38
Niger	110,000(1%)	142	8.959(50%)	95	401,000(2.2%)	145
Nigeria	187,155(<1%)	130	150.830(83%)	9	86.138 million(47.4%)	9
Senegal	300,219(2%)	115	14.959(107%)	67	3.031 million(21.7%)	84
Sierra Leone	17,000 (<1%)	192	5.657 (96%)	120	147,000(2.5%)	173
Togo	52,690(1%)	155	4.657(62%)	121	538,000(7.1%)	138
ECOWAS Total	1,794,085	-	310,828	-	107,381 million	-

Source: Adapted from a self-generated table by Abdul Karim Bagura using data from the United States Central Intelligence Agency's The World Factbook, 2017

With regard to mobile phones, although the numbers for the ECOWAS region are lower than those for the European Union, by 2012, Africa surpassed the United States and the European Union, with almost 650 million mobile subscriptions (Yonazi et al. 2012:22). So the access to mobile phones, we conclude, has reached a very good level in the ECOWAS region (and Africa as a whole), and this opens up a wide range of opportunities and the possibility for intra- and inter-communication among states and citizens.

Access to the Internet in the ECOWAS Region

Yonazi and his colleagues point out that ‘mobile phones are now being used as a platform to provide access to the Internet, to applications, and to government services’ (2012:22). We have already shown data that tell us about access to mobile phones, and, as we know, cellular phones have the potential to be receptors of the Internet. So, we can infer that access to the Internet is facilitated by the easy access provided by mobile phones. But what do the numbers tell us? As table 2 shows, the penetration rate of the Internet among the 15 ECOWAS countries is very discrepant. While in a few countries almost half of the population has access to the Internet, in many others only a minority does. Thus, the average is one of the worst worldwide.

Table 2: Evolution on the use of internet in ECOWAS

Country	Internet users 31.12.2000	Internet users 31.03.2017	Population (Est. 2017)
Benin	15,000	1,232,940	11,458,611
Burkina Faso	10,000	2,156,498	19,173,322
Cabo Verde	8,000	235,183	533,468
Côte d’Ivoire	40,000	5,230,000	23,815,886
Gambia, The	4,000	373,865	2,120,418
Ghana	30,000	7,958,675	28,656,723
Guinea	8,000	950,000	13,290,659
Guinea-Bissau	1,500	84,000	1,932,871
Liberia	500	395,063	4,730,437
Mali	18,800	2,212,450	18,689,966
Niger	5,000	439,164	21,563,607
Nigeria	200,000	93,591,174	191,835,936
Senegal	40,000	3,647,939	16,054,275
Sierra Leone	5,000	310,000	6,732,899
Togo	100,000	545,020	7,691,915
ECOWAS:			

Source: Self-generated by the authors using data from Internet World Stats - <http://www.internetworldstats.com/stats1.htm>

In essence, although there is a boom in Africa, the continent is still at the world's tail in terms of access and use to the Internet. But, we must not forget Africa's realities. As Nwaobi writes, 'but measuring the numbers of users is not easy in African countries because many people share accounts; use corporate and acceding networks or visit the rapidly growing number of cyber cafes' telecentres and business services' (Nwaobi 2008:37). ECOWAS' desire to increase ICT access is described as follows: 'communication is the live wire of development. The community is mindful of the role of adequate communication in the realization of the integration programmers of ECOWAS' (ECOWAS n.d.). In the ECOWAS region, various measures and programs are underway to develop 'reliable and modern regional telecoms broadband infrastructures' in order to boost ICT access. For instance, measures have been undertaken by INTELCOM II to 'modernize and expand the existing network and insure its interconnectivity with the fast evolving telecommunications highways' (Ninsin 2009). The second program was designed after the Intercom I established connections among 15 West African capitals by automatic telephone, telex, and telefax links (ECOWAS n.d.).

The growing demand for bandwidth was filled with a new generation of submarine cables. Now, West Africa is served by four submarine fiber optic cables that have been put in place with at least one operational landing point in all coast countries of ECOWAS except Guinea Bissau. The three landlocked countries (Burkina Faso, Mali, and Niger) have at least two access routes to the submarine cables, and Benin Republic is also building a second landing point on ACE submarine cable. As for Guinea Bissau, it is in the process of getting a landing station on ACE submarine cable with financial assistance from the United Arab Emirates (UAE). Infrastructures go hand-in-hand with some other assumed priorities to ensure that ICTs have a great economic and social value in the region (ECOWAS n.d.). Thus, ECOWAS assumes the establishment of a single liberalized telecoms market as a priority. In order to benefit from economies of scale and lower costs for the citizens of West Africa, there is also the commitment for the adoption of common standards for transmission and compression as well as minimum technical specifications for Digital Terrestrial Television (DTT) receivers (ECOWAS n.d.).

Meanwhile, as Yonazi and his colleagues point out, the 'growing social and economic dependence on ICTs brings new challenges, not the least of which is the need for infrastructure to become more robust and resilient, and for services to become more reliable. Issues of cybersecurity and data protection will also come to the fore as security and trust become increasingly important' (Yonazi 2012:24). The adoption of appropriate legislations to establish a secure cyber space in the ECOWAS region through programs conducted with ECOWAS partners in the areas of cybersecurity and cybercrime, Internet Exchange Points (IXP) and E-commerce are issues in the order of the day at ECOWAS institutions. Safe, fast, region-spread communications are thus under the eyes of the community (Barreto 2015). But, how can ICT enforce regional integration? We have already talked about the convergence of programs and standards. We also talked about getting benefits for economies of scales in this prosperous sector. But there is more, as we will explain next.

Regional Integration in the ECOWAS via CTs

This section provides an analysis of the concept and the process of regional integration, with special attention to the ECOWAS region. Assessing the impact of radio, mobile phones, fixed-line telephones and the Internet on regional integration in the ECOWAS is therefore the objective of this section.

Regional Integration emerged in 1957 in Europe, at first to prevent wars between France and Germany, and later, in 1960, was spread to the other European countries, America, Asia and Africa with a new notion. The proposals of regional integration were to reinforce the economic and political strategies in these continents. In the view of Monica Herz and Andrea Ribeiro Holffmann, regional integration is ‘um processo dinâmico de intensificação em profundidade e abrangência das relações entre atores levando à criação de novas formas de governança político-institucional de escopo regional’ (2004:168). This quotation is translated into English by Ariana Vaz, one of the authors of the current paper, as follows: ‘a dynamic process of intensifying the profundity and comprehensiveness of the relationship between what the authors take to be the creation of new forms of governance for political-institutional regional purpose’ (Ariana translation).

So, we can assert that regional integration is an economic and political commitment among states involved in a specific region. That commitment is particularly economic and political, but requires other dimensions to be more efficient, similar to communication, education, culture, and the behavior of those member states, making it a route at all levels.

The regional integration effort in ECOWAS was launched in 1975 after the independence of the member states. Providing development, prosperity, and economic opportunities is the major goal of the integration initiative in ECOWAS. Benin, Burkina Faso, Côte d’Ivoire, Guinea, Mali, Niger, Senegal, Cabo Verde, Guinea Bissau, Togo, The Gambia, Ghana, Liberia, Nigeria, and Sierra Leone are the 15 member states of ECOWAS, and its headquarters is in Abuja, Nigeria (ECOWAS n.d.). Since Africa is considered problematic and the less developed continent,

African governments should seek to improve regional integration initiatives, which are key to sustaining development and encouraging long-term prosperity for the entire region. Increasing intra-African trade will be a key component to accelerating economic growth, as it will increase industry competition, improve productivity, and develop local infrastructure (Kwemo 2017).

The preceding statement by Angela Kwemo leads us to reinforce the notion that it is extremely necessary for the ECOWAS to establish efficient strategies for achieving effective and lasting regional integration. We cannot speak of an effective regional integration without the member states knowing one another: i.e. without breaking the social, political, cultural and linguistic barriers of communication that exist among them. So, we can safely affirm that radio, mobile phones and the Internet are three very strong communication technologies that would serve as the key elements in the implementation of the process of regional integration in the ECOWAS region.

Through CTs and a significant effort by the ECOWAS in this sector, ‘the ECOWAS region is now connected to the worldwide broadband network with enough capacity for businesses and users’ (statement of Isaias Barreto da Rosa, ECOWAS Commissioner for Telecommunication and IT 2016). CTs are also a powerful instrument to reinforce education, namely E-learning, to improve good governance and transparency, and to connect the citizens in the region, and ‘these are also major directives of ECOWAS’ (ECOWAS n.d.).

Conclusion and Recommendations

In this paper, we have tried to understand if and how CTs impact and promote regional integration in ECOWAS. We constrained our research to a manageable number of major concepts/variables (communication, radio, mobile phones, fixed-line telephones, and the Internet) and explained the differences and the functionality of these technologies in the ECOWAS context. We also discussed the data collected that allowed us to provide a picture of the access to these technologies. In addition, we provided an overview of the measures and programs of ECOWAS concerning ICTs.

Furthermore, this paper showed that CTs comprise a sector to which ECOWAS has given some serious attention. Moreover, we have been able to answer our major research question: How do communication technologies promote regional integration in the ECOWAS? We have also shown that, in fact, communications technologies do play a fundamental role in promoting regional Integration in ECOWAS. Thus, it is tenable to accept the alternative hypothesis we proffered in this paper—i.e. H_1 : Communication technologies promote regional integration in the ECOWAS. Consequently, it is justifiable to reject the null hypothesis—i.e. H_0 : Communication technologies do not promote regional integration in the ECOWAS.

Given the preceding findings, we cannot talk about regional integration without taking into account the communication technologies analyzed in this essay. The radio is still the principal medium of communication in the ECOWAS region, the use of the mobile phone is the most rapidly growing phenomenon in the region, and the Internet is the one that needs more investment, although there are a lot of initiatives currently under way. After all, these three media seem to be the most promising CTs for regional integration. We have also seen that fixed-line telephones are not growing in most of the ECOWAS countries. Contrarily, as we have shown, the mobile telephone has conquered African consumers.

Therefore, our first recommendation is that there is no good in investing in an old and outdated technology. Investment should be canalized to mobile connections. As we have shown, ICTs can play an important role in reinforcing regional integration, not only in market or economic terms, but also in facilitating communication among the governments and the citizens of ECOWAS member states.

In light of the findings in this paper, our second recommendation is that since ECOWAS has some good programs and investments in the ICTs area, it should continue to engage the member states on those programs and emphasize the convergence of standards. Since we are talking about constantly changing technologies, ECOWAS must also be very pragmatic and try to respect project schedules. In addition, infrastructural investments should be made in some joint contents (shows, webpages, and so on) that can promote ECOWAS and its member states. For instance, member states can launch common radio programs to allow the regional population to know more about the cultural differences and similarities, habits, and the potentialities that exist in the ECOWAS region.

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