

# Your Market Is Everywhere

International Market Series

## Africa

How Canadian producers can benefit from looking beyond borders



This report focuses on the state of the media, technology and entertainment industries in select English and French language markets in Africa.

Also included: A look at the continent's OTT and mobile ecosystem, examples of strategies for market entry in Africa, and a spotlight on the up and coming production centre of Côte d'Ivoire.

Fast facts:

- ▶ There are over a dozen countries in which French is one of the official languages, and the more than 100 million French speakers of these countries make up about half of the world's French-speaking population.

- ▶ Africa has become the fastest-growing market in the world for mobile phones. ↓

- ▶ Certain countries, such as Côte d'Ivoire and Senegal, report mobile Internet penetration rates of over 100%.

- ▶ In 2014, Canal Plus launched A+ to expand its lifestyle/female-oriented content offer. Subscriptions to the A+ channel are expected to reach 2 million by the end of 2017 and 4 million by 2018. These are dramatic increases compared to the 700,000 subscribers the channel had in 2015. ↓

- ▶ Netflix is the market leader in the up-and-coming OTT space, but there are more than 100 video streaming services available in Africa which are operated by broadcasters, telcos, media companies and pay TV providers. ↓

- ▶ Continued uptake of social media platforms is being watched by many in the media and entertainment industries as an important growth area for content consumption in Africa.

This report provides an overview of the media, technology, and entertainment landscape of Africa considered as a whole, with the exception of South Africa, which is covered by [a separate report](#) in this series.

The document deviates from the format of other reports in this series, which followed a template organized into categories such as record of co-production with Canada, popular programming genres and regulatory policies. However, only a handful of the African countries (i.e., Algeria, Morocco, and Senegal) examined in this report have co-production treaties with Canada, and very little co-production has taken place.

There are, however, a few Canadian companies that have had recent successes selling to African countries. For example:

- ▶ Guru Studio with its pre-school program *Justin Time* sold to E-vision for North Africa<sup>1</sup>
- ▶ DHX with *The Deep* for broadcast on Zap in Angola and Mozambique<sup>2</sup>, and *Bob The Builder* to Nuvu, Ericsson's subscription video on demand service launched in partnership with mobile operator Airtel Nigeria<sup>3</sup>

As export markets for television, games, animation, and documentaries, African territories offer huge potential in the years to come. This report therefore provides an overview of the massive infrastructure growth taking place across the continent, particularly with up-and-coming mobile and OTT platforms that are making products and services available to hundreds of millions—many for the first time.

In addition, examples of media and technology strategies currently being used in both select English- and French-language markets in Africa will be covered. Here is an at-a-glance look at the size of Africa's respective English- and French-language markets:

There are about two dozen African countries in which English is one of the official languages. There are over a dozen countries in which French is one of the official languages, and these countries' over 100 million French speakers make up about half of the world's French speaking population<sup>4</sup>. By one estimate, the number of French speakers in the world will reach 700 million by 2050, of which 80% are anticipated to live in Africa<sup>5</sup>.

## INSIDER TIPS

### On opportunities in Africa for Canadian producers

**“France is already quite involved in media production in Francophone countries in Africa, but there's also opportunity for Canadian producers, for sure in French but also in English, for programming with subtitles. There's a real demand for fiction/drama and also for animation.”**

– Eric M'Boua Broadcaster, producer and host  
Abidjan, Côte d'Ivoire

In terms of content, television on the African continent is a mix of programming produced in Africa (e.g., genres such as dramas, entertainment magazines, and news and information), imported programming produced abroad, and localized versions of well-known formats such as *The Voice*, *Africa's Got Talent*, and *Big Brother Africa*, said to be the most watched TV show on the continent.<sup>6</sup>

An unexpected trend in the African media landscape has been the massive popularity of Latin American 'telenovelas'—or melodramatic soaps. These programs produced throughout Latin America are generally dubbed into local languages, though sometimes only subtitles are provided, and not always in the local language. In mid-2017, for example, Latin America's largest media company Globo completed a deal to bring three of its top telenovelas—*Total Dreamer*, *Empire*, and *Hidden Truths*—to the African market, where they will be broadcast with English subtitles<sup>7</sup>.

## INSIDER TIPS

### On the runaway success of Latin American telenovelas in Africa

**“Everybody aspires to move into the middle class. So these sorts of stories resonate in terms of people seeing [a lifestyle] that is possible for them.”**

– Pascal Koroso, Managing Partner African Voices Dubbing Company Nairobi, Kenya<sup>8</sup>

## AFRICA: AN ‘INTERNET FIRST’ MARKET? YES AND NO...

While western countries think of television as a precursor to online programming, on the African continent, both the set and the infrastructure required to deliver television programming have been a luxury not afforded to all that many. Therefore, equating the media and entertainment industries with television is not necessarily the best way to think about the African market.

Africa has become the fastest-growing market in the world for mobile phones<sup>9</sup>, and Internet access by way of mobile devices and cellular networks has enabled many to shift from a life without television or computers in the home to a life of Internet connectivity on the go.

But the experience of Internet quality and connectivity in Africa is radically different from the Canadian experience. There are several layers of infrastructure that affect the availability of the Internet as well as media and technology services in general in Africa. Starting from the bottom up is the electrical grid. According to a May 2017 World Bank

report, there could be about 1 billion with access to electricity in Sub-Saharan Africa by 2040, but another 500 million people without<sup>10</sup>. Furthermore, even those with power must often live with an unreliable system providing intermittent service. Recent solar power developments look promising and may provide rural areas in particular with cheaper and more reliable access in the years to come<sup>11</sup>.

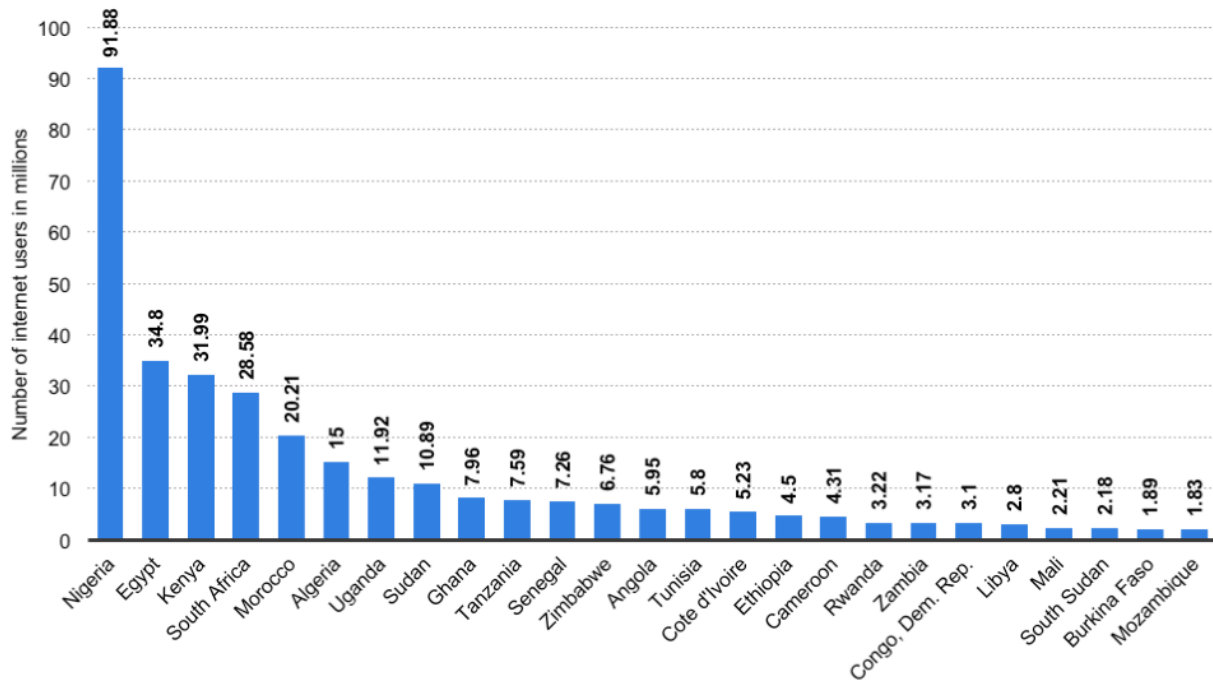
Fixed broadband rates are at about 6% in Africa<sup>12</sup>, and the continent’s average level of Internet penetration sits at about 10%<sup>13</sup>, buoyed largely by mobile subscriptions. For additional context, compare these numbers to the approximate 90% broadband availability in Canada (though differences in speed are noted between rural and urban areas)<sup>14</sup> and to the 25 million Canadian mobile phone subscriptions in 2017 out of a population of about 35 million<sup>15</sup>.

There is also a great disparity between Africa’s least connected and most connected countries. Countries such as Burundi, Niger, Sierra Leone and Somalia have Internet penetration rates that vary between 2% and 5%, while Morocco and Nigeria enjoy about 50% Internet penetration<sup>16</sup>. The leading African country in terms of Internet penetration is Kenya, with a rate of about 80% in 2017, of which almost all is access obtained via mobile networks and devices<sup>17</sup>.

Certain countries, such as Côte d’Ivoire and Senegal, report mobile Internet penetration rates of over 100%<sup>18</sup>. A broadcaster and producer based in Côte d’Ivoire explained the puzzle of the ultra-high mobile Internet subscriptions in his country in the following terms: “We have 3 or 4 companies that provide mobile Internet access here, and not a single one is fully reliable, so what people do is have 2 or sometimes 3 mobile phone subscriptions and when one service’s connection is weak they try the other one. Most people used to go to cyber cafes to watch videos on YouTube or use Facebook, now it’s more common for people to access the sites on their phones and, if they use up their data, they just go to the corner store and add value to their account right then and there so they can keep watching.”<sup>19</sup>

The following chart details the number of people accessing the Internet in over two dozen countries in Africa.

### Number of internet users in selected countries in Africa as of March 2017, by country (in millions)



**Note:** Africa; March 2017; includes access via fixed and mobile connections

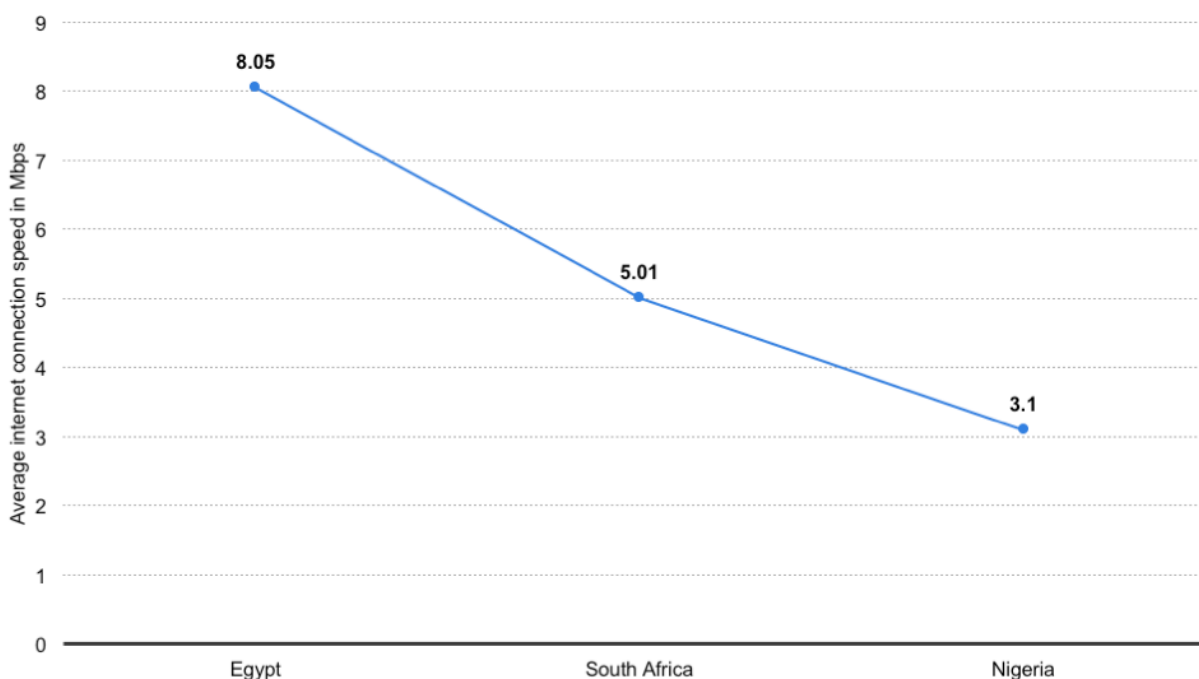
Source: Internet World Stats; ITU

statista

As the above chart illustrates, the top four countries in Africa in terms of Internet use account for about 200 million users. From there, the market is highly fragmented across several dozen countries.

It goes without saying, however, that the number of Internet users is only part of the story. When three of the most populous countries in Africa in terms of Internet penetration are separated out, a sobering picture emerges. The chart below illustrates the limits of mobile connection speeds in Africa. (For comparison purposes, Canada has an average mobile download speed of 26.5 Mbps<sup>20</sup>.)

### Average net connection speed from mobile internet connections in selected African countries as of 3rd quarter 2016



Note: Africa; 3rd quarter 2016

Source: Akamai Technologies; We Are Social

statista

It is against this background of a continent of approximately 1.2 billion people—many of whom are newly connected audiences following the expansion of mobile networks and given the decreasing cost of mobile devices—that this report will now examine at the following:

- ▶ Select companies' strategies to enter the African market
- ▶ Africa's developing OTT ecosystem

## STRATEGIES FOR MARKET ENTRY IN AFRICA: TELEVISION & TELCOS

The United Nations' 2017 World Population Prospects report indicates that about half of the growth in the world's population between now and 2050 will take place in Africa. The current African population of approximately 1.2 billion people is expected to double to about 2.5 billion during this period. Nigeria is projected to replace the U.S. as the third most populous country in the world, after China and India, and the populations of the Democratic Republic of Congo and Tanzania are forecast to almost triple<sup>21</sup>.

To address this explosive growth, a handful of multinational media and communication companies based in France have been making inroads into the African market. This section will provide an overview of their African market entry strategies.

France-based media conglomerates Canal Plus and Lagardère both have operations in African francophone cities. Their strategy is based on a multi-pronged approach, specifically:

- ▶ To reach new audiences with programming produced in France;
- ▶ To explore new opportunities for the production of local content, for which there is a growing market;
- ▶ To distribute content produced in neighbouring African countries.

### Canal Plus

This French premium cable channel has been active in Africa since the 1990s, with over two dozen television channels covering genres such as sports, youth programming and movies. As operations on the continent are rapidly expanding and are already profitable, the company continues to expand<sup>22</sup>.

In 2014, Canal Plus launched A+ ("A Plus", short for Africa Plus) to build out its offerings in lifestyle/ female-oriented content. Based in Abidjan, Côte d'Ivoire, the A+ channel is considered 'premium pan- African entertainment' and features programming from 17 African countries. Subscriptions to the A+ channel are expected to reach 2 million by the end of 2017 and 4 million by 2018; dramatic increases from the 700,000 subscribers the channel had in 2015<sup>23,24</sup>. For comparison purposes, Canal Plus boasts 5.6 million subscribers in France<sup>25</sup>.

## INSIDER TIPS

**On why French companies are bullish on the African media market**

**"There's more development to be expected for the French media (in Africa) than in France, where the market is pretty saturated."**

- Francois Deplanck, Canal Plus Overseas<sup>26</sup>

### Lagardère

France's leading media production company operates a total of 16 international television channels. Its specialty children's channel, Gulli, has 10 localized versions for countries in Eastern Europe and its Gulli AFRICA channel is available in 22 African francophone countries<sup>27</sup>.

In the past year, Lagardère has also doubled its catalogue of African television programs and movies. According to Lagardère's CEO Christophe Thorat: "Our catalogue of African movies is extremely rich and diversified – it encompasses 70 producers coming from 24 nationalities... We're seeing the emergence of a contemporary cinema in Africa and we're looking to play a role in these movies by giving minimum guarantees, handling their distribution and selling them worldwide."<sup>28</sup>

## Orange

Since mobile telephony transformed the African market in the early 2000s, France-based telco Orange has pursued an aggressive growth strategy throughout the continent. Orange now serves about 100 million customers in 19 African countries, from Morocco in the North to Côte d'Ivoire and Senegal in the West, to Kenya in the East, and Sub-Saharan Africa in the south. A total of 80% of the company's revenue in Africa is generated from mobile services, which include voice and data services, mobile banking, mobile entertainment services (such as gaming and music) as well as mobile commerce, both B2B and consumer-facing<sup>29</sup>.

As of 2017, Orange offers a new service in select African markets (e.g., Senegal, Mauritius, Côte d'Ivoire): Orange TV, i.e., a video on demand platform that is available in high definition. A mini Netflix of sorts, it offers a mix of local, national, and international television and film programming. Orange TV is available to those with either a fixed Internet subscription from Orange or a 3G/4G-compatible smartphone, using the Orange app<sup>30</sup>. Orange TV also targets African expats living in Europe and proposes a bundle of 'homegrown' content including channels such as RTS (Radio Television Sénégalaise), RTI (Radio Télévision Ivoirienne/Côte d'Ivoire), CrTV (Cameroon Radio Television) and Télé Congo (Democratic Republic of Congo)<sup>31</sup>.

## SPOTLIGHT ON CÔTE D'IVOIRE

Here's an overview of Côte d'Ivoire's media and entertainment industries.

Côte d'Ivoire's capital, the coastal city of Abidjan, is third-largest French-speaking city in the world. Paris recently lost its top position on the list of the largest French-speaking cities to Kinshasa in the Democratic Republic of Congo. Montreal occupies the fourth spot on the list<sup>32</sup>.

Described over the years as the 'Paris of West Africa' and the 'Manhattan of the Tropics' because of its vibrant cultural life and metropolitan flair, Côte d'Ivoire's Abidjan has been in infrastructure rebuilding mode ever since the end of the civil wars that were waged in the country between 2002 and 2011<sup>33</sup>.

### Media and technology landscape

Television in Côte d'Ivoire:

- ▶ RTI (Radio Télévision Ivoirienne)  
State-operated terrestrial channels (free-to-air)
  - RTI 1
  - RTI 2
- ▶ A+ (Canal Plus)
- ▶ Satellite TV via Eutelsat: approximately 170 French and local language channels such as France 24 (news) and TV5 Monde (France-based general interest channel)<sup>34</sup>

### INSIDER TIPS

**On locally produced television in Côte d'Ivoire**

**“Television shows such as *Ma Famille* and *Teenager* are local hits that have emerged in Côte d'Ivoire in the past few years. They are able to compete against the television series coming out of Nigeria's much more established 'Nollywood' machine.”**

– Laetitia Gadegbeku, Trade Commissioner, Embassy of Canada Côte d'Ivoire<sup>35</sup>

Stéphane Baumier, general manager of France's Canal Plus operations in Côte d'Ivoire, attributes the popularity of the *Ma Famille* and *Teenager* dramas to people wanting to see their lives reflected on the screen. Such programs use local crews, local actors and locations familiar to audiences. To increase audience relevance outside of Côte d'Ivoire, *Ma Famille* is planned to be shot in three additional African countries—Burkina Faso, Mali, and Senegal—and local actors will be hired in the respective locations<sup>36</sup>.

## Internet and mobile in Côte d'Ivoire

- ▶ Approximately 5 million Internet users, or 20% of the population<sup>37</sup>
- ▶ Over 25 million mobile phone subscriptions, representing over 100% penetration (population estimated at approximately 24 million)<sup>38</sup>
- ▶ In its Networked Readiness Index, in the 2016 Global Information Technology Report, the World Economic Forum describes the state of development of ICT (information and communications technologies) in Côte d'Ivoire in the following terms:

"The business community reports large gains in the regulatory and business environment. Business executives also feel that the government has a strong ICT vision and correspondingly considerable success in ICT promotion... In addition, they attest to considerable ICT-driven improvements in government efficiency. As business and individual usage is also growing strongly, the existing infrastructure is starting to be stretched—this is one of the few areas where Côte d'Ivoire is falling behind. Going forward, upgrading the infrastructure and tackling the issue of affordability seem to be top priorities for sustaining momentum."<sup>39</sup>

Africa's premier industry event for film, television, and content is **DISCOP**, with international events held in countries such as Côte d'Ivoire, Nigeria and Kenya.

## FROM TV TO OTT: HOW IS THE ECOSYSTEM DEVELOPING?

As a result of major differences in the expansion of terrestrial broadcasting and cable infrastructure, Africa's television landscape has always differed significantly from that of North America's and Europe's landscapes.

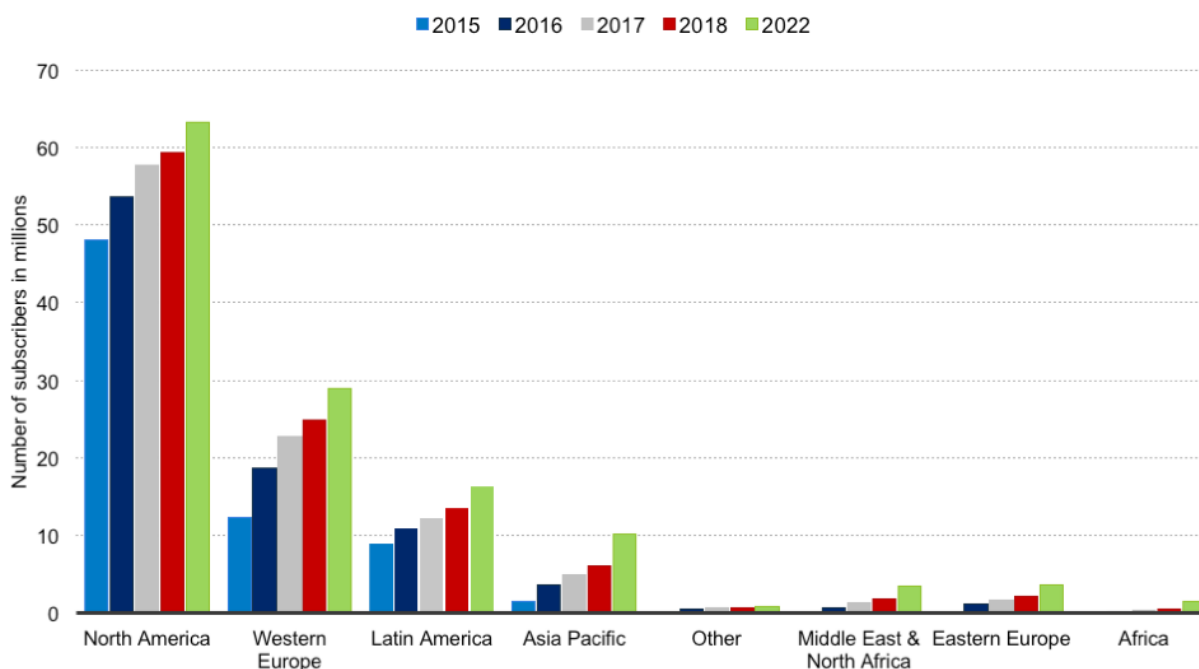
Mid 2017, an analyst's report on the television industry in the MENA region (Middle East and North Africa) reported the following<sup>40</sup>:

- ▶ Free-to-air TV remains the dominant transmission mode, with just 14% of households having subscribed to a pay-TV service in 2016;
- ▶ Pay TV and OTT subscriptions are likely to double from current levels by 2022;
- ▶ Pay TV pricing will probably be driven down due to extremely high levels of piracy throughout the continent;
- ▶ Alternative modes of transmission such as digital broadcasting and IPTV (Internet Protocol Television) are developing at a much slower pace than satellite broadcasting and OTT are.

It is worth noting that while, at first glance, IPTV and OTT may appear to be the same thing, i.e., programming delivered through the Internet, outside of traditional broadcasting or cable networks, they are in fact different in a number of ways. The biggest difference is that OTT providers such as Netflix, Amazon and Hulu use the open Internet as their platform, whereas IPTV delivers its programming via a closed, proprietary system requiring a much larger investment in bandwidth and infrastructure capabilities than OTT, but delivering a higher quality and more reliable service to customers<sup>41</sup>.

When most people think of OTT services, they think of Netflix... Indeed, it is the market leader in this up-and-coming space, but there are more than 100 video streaming services available in Africa which are operated by broadcasters, telcos, media companies and pay TV providers<sup>42</sup>. Netflix is the dominant provider of streaming entertainment, with about 400,000 subscribers. This number is projected to reach 1.5 million over the next 5 years, which represents growth of over 300%. However, it is still a tiny slice of a continental market with a population base of 1.2 billion and growing.

## Number of Netflix subscribers worldwide from 2015 to 2022, by region (in millions)



**Note:** Worldwide; 2015 and 2016

**Source:** Digital TV Research

statista

Substantial barriers to OTT growth in Africa span across three key areas: weak Internet infrastructure, low connectivity speeds and a lack of payment systems. Though mobile services such as M-Pesa have gained significant traction in Kenya, Tanzania and South Africa, dozens of African countries lack the necessary payment systems to deliver OTT services<sup>43</sup>. Some investors have lost confidence in the sector, as evidenced in the fall of 2017 with the abrupt shuttering of Afrostream after just two years in business. The African-themed SVOD service was available in 24 countries in Africa and the African diaspora.

Despite these challenges a number of OTT platforms are starting to make inroads into the African market<sup>44</sup>:

- ▶ Showmax (Kenya)
- ▶ Trace Play:
  - Trace Africa (Sub-Saharan Africa)
  - Trace Mziki (East Africa)
  - Trace Naija (West Africa)

But perhaps the biggest African success story in terms of OTT streaming is Nigeria's iROKOTv. The company is built largely around Nigeria's booming 'Nollywood' movie industry, alternately the world's second or third largest, after the U.S. and India<sup>45</sup>. As such, it attracts millions of Nigerian expats from around the world. "Over 50% of our traffic comes from the U.S. and U.K. and more people watch iROKOTv in London than they do in the whole of Nigeria," reveals founder Jason Chukwuma Njoku. "But when Africa comes online and the Internet is not only faster but less financially prohibitive, iROKOTv's business will look completely different. We know the thirst for African content is out there, it's just a matter of ensuring as many people as possible can access it."<sup>46</sup>

OTT also includes video delivered through Facebook and YouTube. Social media sites boast an average penetration rate of only 12% in Africa, and they are largely accessed using mobile connections. The number may not be large, but it does represent an increase of close to 50% compared to 2016<sup>47</sup>.

Continued uptake of social media platforms is being watched by many in the media and entertainment industries as an important growth area for content consumption in Africa. For example, YouTube is about to launch a data-saving version of its video-streaming platform for offline use in Nigeria—the continent's most populous country in terms of Internet users. Called “YouTubeGo,” the service was introduced in India in April 2017, with the same aim of increasing viewership while reducing users' data costs<sup>48</sup>.

## FOOTNOTES

1. <http://playbackonline.ca/2016/02/12/deals-ole-guru-studio-true-gravity/#ixzz4iaKQPMYf>
2. <http://playbackonline.ca/2017/08/03/dhx-signs-raft-of-broadcast-deals-for-the-deep/>
3. <http://kidscreen.com/2016/10/13/ericsson-signs-dhx-nick-mattel-content-to-new-svod/>
4. <http://www.diplomatie.gouv.fr/en/french-foreign-policy/francophony-and-the-french-language/the-status-of-french-in-the-world/>
5. <http://www.diplomatie.gouv.fr/en/french-foreign-policy/francophony-and-the-french-language/the-status-of-french-in-the-world/>
6. <https://buzzkenya.com/african-tv-series/>
7. <http://worldscreen.com/tvmiddleeastfrica/african-deal-on-globo-novelas/>
8. <http://www.npr.org/sections/goatsandsoda/2017/06/05/529683214/why-east-africa-is-hooked-on-telenovelas>
9. <http://www.intelsat.com/news/blog/2017-outlook-for-africa/>
10. <http://www.worldbank.org/en/topic/energy/publication/sear>
11. <http://www.newyorker.com/magazine/2017/06/26/the-race-to-solar-power-africa>
12. <http://www.oecd.org/sti/broadband/oecdbroadbandportal.htm>
13. <http://www.Internetworldstats.com/stats1.htm>
14. <https://cira.ca/factbook/domain-industry-data-and-canadian-Internet-trends/canada's-Internet>
15. <https://www.statista.com/statistics/482507/canada-mobile-phone-Internet-users/>
16. <http://www.Internetworldstats.com/stats1.htm>
17. <http://allafrica.com/stories/201702020136.html>
18. [http://www.indexmundi.com/cote\\_d\\_ivoire/population.html](http://www.indexmundi.com/cote_d_ivoire/population.html)
19. Interview with Eric M'Boua of Abidjan, Côte d'Ivoire, August 1, 2017
20. <https://www.statista.com/statistics/635167/lte-download-speed-by-country-worldwide/>
21. [https://esa.un.org/unpd/wpp/Publications/Files/WPP2017\\_KeyFindings.pdf](https://esa.un.org/unpd/wpp/Publications/Files/WPP2017_KeyFindings.pdf)
22. <http://variety.com/2015/tv/global/frances-canal-plus-group-targets-africa-as-growth-driver-1201544631/>
23. <http://variety.com/2015/tv/global/french-tv-companies-canal-plus-lagardere-invest-in-africa-1201648248/>
24. <http://variety.com/2015/tv/global/french-tv-companies-canal-plus-lagardere-invest-in-africa-1201648248/>
25. <http://variety.com/2015/tv/global/frances-canal-plus-group-targets-africa-as-growth-driver-1201544631/>
26. <http://variety.com/2015/tv/global/french-tv-companies-canal-plus-lagardere-invest-in-africa-1201648248/>
27. <http://www.digitaltveurope.net/710991/lagardere-launches-new-kids-channel-for-arabic-world/>
28. <http://variety.com/2017/tv/markets-festivals/lagardere-studios-ramps-up-its-business-in-africa-bows-format-rd-unit-1202025067/>
29. [http://www.connectingafrica.com/author.asp?section\\_id=530&doc\\_id=729342](http://www.connectingafrica.com/author.asp?section_id=530&doc_id=729342)
30. <http://medafricatimes.com/13036-ivory-coast-orange-group-launches-orange-tv.html>
31. [http://www.balancingact-africa.com/news/broadcast\\_en/20264/orange-tv-adds-african-content-to-its-bouquet-to-target-diaspora](http://www.balancingact-africa.com/news/broadcast_en/20264/orange-tv-adds-african-content-to-its-bouquet-to-target-diaspora)
32. <http://dialoguereview.com/name-worlds-two-largest-francophone-cities-might-wrong/>
33. <http://www.screenafrica.com/page/news/africa/1651546-Welcome-to-Babiwood#.WYThka2ZPEY>
34. <http://news.eutelsat.com/pressreleases/satellite-tv-one-of-the-fastest-growing-media-in-west-africa-1307643>
35. Interview with Laetitia Gadegbeku, Trade Commissioner, Embassy of Canada, Côte d'Ivoire and Liberia, on July 5, 2017.
36. [http://www.lemonde.fr/actualite-medias/article/2017/06/09/a-abidjan-canal-veut-stimuler-babiwood\\_5141306\\_3236.html](http://www.lemonde.fr/actualite-medias/article/2017/06/09/a-abidjan-canal-veut-stimuler-babiwood_5141306_3236.html)
37. [http://www.indexmundi.com/cote\\_d\\_ivoire/Internet\\_users.html](http://www.indexmundi.com/cote_d_ivoire/Internet_users.html)
38. [http://www.indexmundi.com/cote\\_d\\_ivoire/population.html](http://www.indexmundi.com/cote_d_ivoire/population.html)
39. [http://www3.weforum.org/docs/GITR2016/WEF\\_GITR\\_Full\\_Report.pdf](http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf)
40. <http://tbivision.com/news/2017/06/mea-tv-market-set-massive-growth/768841/>
41. <http://www.mediaentertainmentinfo.com/2013/04/2-concept-series-what-is-the-difference-between-ott-and-iptv.html/>
42. <https://www.muvi.com/africa-ott-market-today-tomorrow.html>
43. <https://www.muvi.com/africa-ott-market-today-tomorrow.html>
44. <http://www.digitaltveurope.net/625342/the-rise-of-svod-africas-homegrown-netflixes/>
45. <http://www.djembecommunications.com/language/en/nollywood-a-closer-look-into-the-worlds-3rd-largest-film-industry/>
46. <https://qz.com/76192/nigerias-streaming-web-mogul-im-a-hustler-at-heart/>
47. <https://wearesocial.com/special-reports/digital-in-2017-global-overview>
48. <http://www.tubefilter.com/2017/07/28/offline-first-youtube-go-app-nigeria/>

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