Implementing OTT Advanced Television Services In Africa

AN OPPORTUNITY TO IMPLEMENT OTT ADVANCED TELEVISION SERVICES IN AFRICA

EXECUTIVE SUMMARY

By reading this white paper, the reader will understand that IPTV/OTT Advanced Television is clearly the future for global digital-entertainment media broadcast and will be guided through the technology of OTT Platforms with a clear view to their implementation in the African market. The most promising countries in Africa for investment in this technology are presented in the paper. There is a great opportunity through strategic alliances between mobile operators and OTT Platform vendors to accelerate the delivery of Advanced Television in Africa and to benefit from sophisticated content monetization techniques.

The industry is currently positioned at the beginning of a new era in global digital communication. In recent decades, the dominant technology for the dissemination of news and entertainment media has been satellite and cable television with limitations in monetization and simultaneous multi-screen broadcasting. The emerging OTT platform technology offers solutions to these stringent demands for monetization choices and has elegant solutions for simultaneous multi-screen broadcasting. Indeed, IPTV/OTT based Advanced Television, is set to become the dominant technology (with the most paying subscribers) for the dissemination of news and entertainment media by 2030 with an estimated African revenue of 1.7 billion USD by 2027.

Many enterprises and medium to large consumers of broadcast television are afraid of the advanced technology that is the engine of IPTV/OTT platforms but this definitely is unnecessary. These platforms are relatively easy to install and commission and the commissioning or configuration can even be done remotely by an experienced team of high level support staff and engineers from the platform supplying company. In some cases, a vast IPTV/OTT platform can be installed and configured within a few days to supply simultaneous screen broadcast containing SVOD/AVOD/TVOD content monetization within a few days to millions of subscribers.
An opportunity not to be missed.

INTRODUCTION TO OTT SERVICES IN AFRICA

The introduction of OTT services and technology into Africa is currently one of the most promising fields in global communication technology with respect to Advanced Television. Research conducted during 2021 reveals that the African OTT market will reach $1.7 billion in revenues by early 2027 with SVOD services being the main generator of these revenues. Currently, Netflix services the most subscribers at just over two million with a projected growth to between five and six million subscribers by early 2027. There are a number of other providers that are preparing to enter the African market, for example, Disney+ and Amazon.

When one considers these large IPTV streaming companies poised to enter the African market, an African consumer may be intimidated and lose sight of the fact that to achieve an impressive array of viewing options in Advanced Television does not have to mean the high pricing or inconvenience in dealing with these large corporations. Global OTT services are beginning to open up and there are many agile small and medium OTT service provisioning companies that are experts in niche provisioning through the construction of alliances with already existing communication operators. They are set to provide the consumer with a dazzling array of viewing choices, at a price and service level that will be out of reach of the big corporations. The reader may ask, "So, what is an OTT service or an OTT platform?, and how do these platforms and services impact Advanced Television?"

Well, freedom of choice in the consumption of digital media received a turbo-boost with the development of OTT. Media distribution over the years has evolved from basic frequency or amplitude modulated, electromagnetically distributed, black and white/color TV signals (1960s), to IPTV streaming distribution (1990s), to where we are now, with OTT and Video On Demand over the internet and World Wide Web. A revolution in media access, and power of choice to the end consumer.

This means that with a properly configured OTT platform, consumers can watch any video, series or news channel on any of their devices, even simultaneously, at any time of their choosing. Besides this, there are many other services that users can enjoy over OTT at the same time, your choices will depend on the effective configuration of your chosen OTT platform. An OTT solution provider is distinct from some IPTV-only streaming services like Comcast or BT. These streaming services are powered by their specific OTT provider. If the streaming services provide the fuel stream of video and media data then the OTT platform can be seen as the engine transporting the end consumer to an endless array of viewing and monetization options.

INTRODUCTION TO OTT SERVICES IN AFRICA

An OTT platform is a universal real-time media delivery system, providing AVOD, SVOD, TVOD and a host of other video-based and IPTV streaming services.
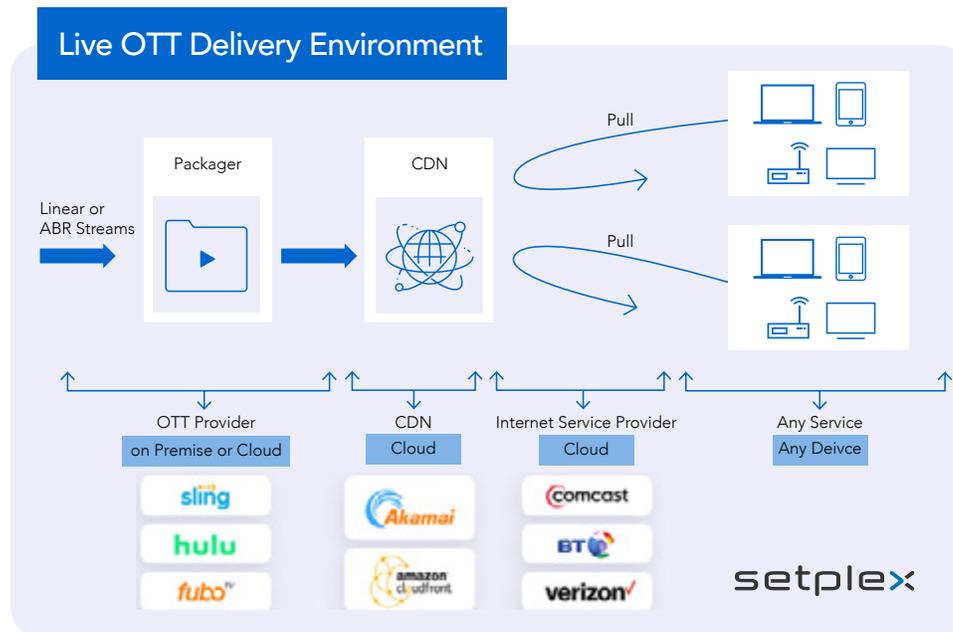

Diagram showing how the customer participates in content flow using OTT Platforms.

An OTT platform consists of a few very important hardware and software components:

1. IPTV Encoder/Transcoder - Hardware and Software
2. Digital Rights Management (DRM) and monetization - Software
3. Middleware Customer Management (CMS) and monetization - Software
4. Content Delivery Network CDN - Hardware and Software
5. Applications (ABR) for handling multi-screen devices - Software

## An OTT platform also provides the following outstanding benefits:

1. Comprehensive AVOD, SVOD, TVOD and IPTV stream monetization tools
2. Content organization through CMS
3. Tight Cyber Security through DRM and stream encryption
4. Customer Technical Support
5. User-friendly Video APIs

INTRODUCTION TO OTT SERVICES IN AFRICA

Today's OTT/IPTV platforms can be launched without advanced technical knowledge. All the software interfaces, cloud-content upload, easy customer management and its related product catalogs along with amazing ways to monetize your services are often found on the same location within the OTT platform. When launching, you can often use your already existing infrastructure to get your OTT platform, network and services operational within a very short period.

In the next section, the all-important subject of the monetization of IPTV content streamed from your OTT platform to your customers will be explained. A good understanding of the monetization tools on your OTT platform is necessary to maximize revenue per customer without impacting negatively on the viewing experience. Although some operators have been experimenting with OTT in Africa since 2014, in the recent past, media consumers in Africa still have not been able to experience seamless and subscriber relevant advertisements, stitched into movie, series or sports shows in real-time with interactive potential but with the new technology of OTT, this exciting viewing experience can now be a reality for African subscribers.
The most important consideration for consumers in Africa is to choose their OTT Advanced Television service provider wisely in order to maximize their viewing pleasure through OTT platform configuration excellence and friendly, professional support service.
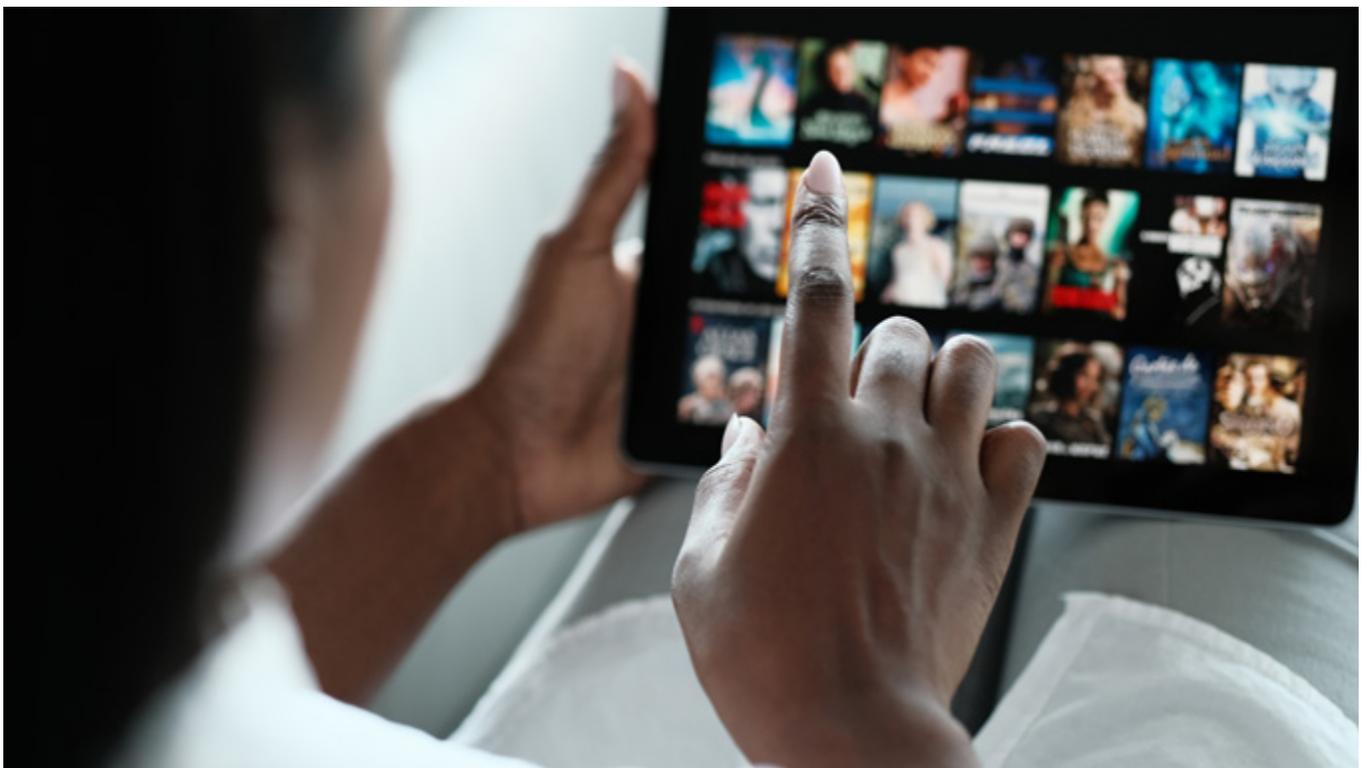
MARKETABILITY AND MONETIZATION PROSPECTS FOR OTT SERVICES IN AFRICA

It is expected that by early 2027, more Pay TV subscribers in Europe and North America will use an IPTV/OTT connection to receive video and television content than there will be Pay TV subscribers using a satellite or cable connection. IP-sourced Pay TV subscribers will increase by over 4 million to an estimated 47 million, whereas satellite and cable TV subscribers are expected to fall by 7 million. By 2030, if this trend continues, Pay TV subscribers using an IPTV/OTT connection will outnumber Pay TV satellite and cable subscribers combined. Good news for those interested in monetizing their content over OTT connections.

Monetization tools within OTT platforms include basic subscriptions, pay per view and dynamic ad insertion using intelligent targeting of the audience, all with a billing integration that can incorporate third-party payment systems and payment reports. Examples of African businesses that use these monetization techniques are ORTN Tele Sahel in Niger and Tele Congo in the Republic of Congo. With some variation from country to country across Africa, the majority of OTT content is consumed by mobile phone users on their mobile devices whether tablets or smartphones and OTT service providers should take this into consideration when tailoring services for their subscribers.
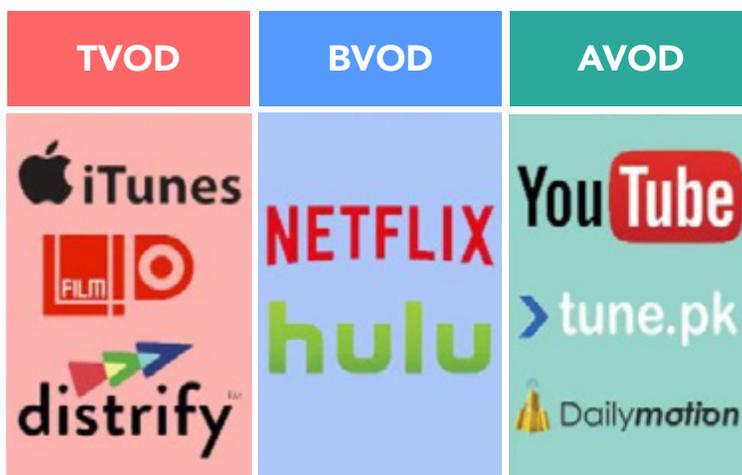
Distinction between three monetization options easily applied using OTT Platforms.

Various analysts1 report 15.06 million paying SVOD subscriptions in Africa by 2026, triple that of the 5.11 million expected by December 2021. Netflix will account for 51% of the region's SVOD subscribers by December 2021. Its share will fall to 39% by 2026 (5.84 million subscribers, double from 2.61 million in 2021). Disney+ will start in 2022, but only in an expected 12 countries, with 2.17 million paying subscribers by 2026.

Examples of other companies, currently offering SVOD services in Africa or planning to roll out in the near future are:

- AirtelTigo
- Amazon
- Apple
- DSTV
- Globalcom
- GOtv
- MTN
- Netflix
- Showmax
- StarSat
- Vodafone

POTENTIAL CONSUMERS OF OTT PLATFORM SERVICES IN AFRICA

Enterprises

It should be noted that most communications regulators and operators across Africa consider Whatsapp, Facebook, Twitter, Instagram, TikTok and other popular social media as OTT content. Currently, there is a very low level of technical, delivery and application knowledge of Advanced Television services offered through (SVOD/AVOD/TVOD) OTT platforms and there is poor distinction between Advanced Television OTT services and Social Media OTT services among African regulators and operators.

Tanzania

The Tanzanian video and OTT market3, comprising physical video (DVD, Blu-Ray sales and rental) and digital video (TVOD, AVOD, and SVOD) remains exceedingly small in volume and value. Among the main obstacles to the development of the online video market are the lack of payment methods, the insufficiency of adapted content in terms of localization and language and the low level of broadband penetration, quality, and affordability. The SVOD market is dominated by Showmax (MultiChoice) whose offer is available free of charge to subscribers of the satellite Pay TV operator. The competition comprises iROKOtv (iROKO Group), Netflix, Trace Play (Trace TV), and Amazon Prime Video.

Advanced Television OTT services are not being investigated as a future revenue source. Social network OTT services are currently not in place.

Smile
Has been in operation since 2009 and is currently the network with the smallest subscriber base in Tanzania with an estimated annual revenue of over 5 million USD from 300,000 subscribers. Basic data carrier services provide most of the revenue, with the company planning to expand into voice services as well.

Advanced Television OTT services are not being investigated as a future revenue source. Social network OTT services are currently not in place.
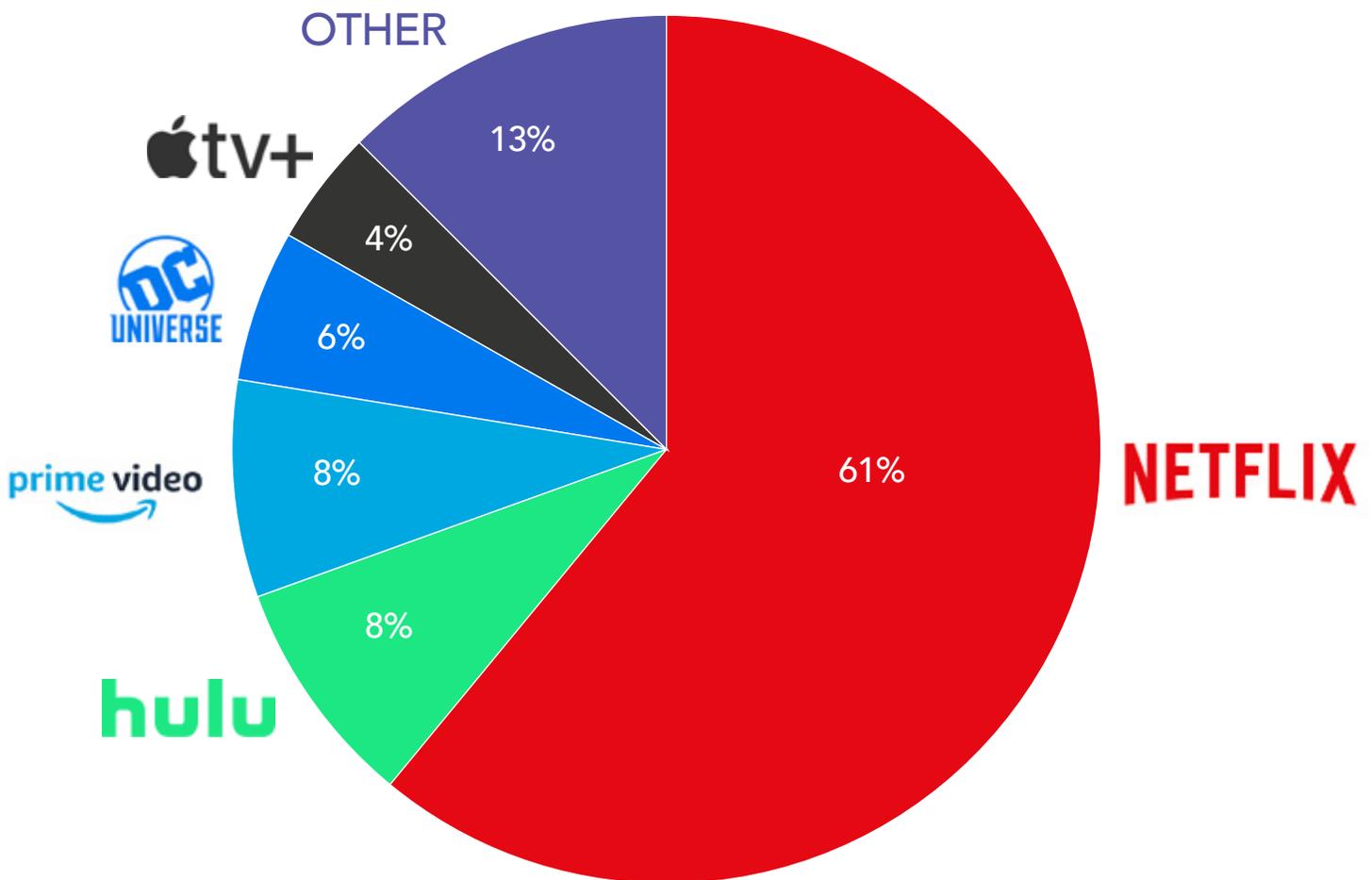
POTENTIAL CONSUMERS OF OTT PLATFORM SERVICES IN AFRICA

South Africa/Eswatini

South Africa

Out of the five streaming platforms with the highest South African demand4 for their original series, Netflix dominates the market. 61.2% of all demand expressed for digital original series between June and August is for a Netflix title. With a 61.2% share, Netflix outperforms in this market compared to global averages. Worldwide, the Netflix demand share is 56.9%. Relatively new streaming platform Apple TV+ has secured a foothold with South African audiences. Apple TV+ originals account for 4.4% of digital original demand, half a percent more than their global share of 3.9%.

South Africa - Demand shares of digital original series originating platform - June to August 2020

OTT demand shares in South Africa.

POTENTIAL CONSUMERS OF OTT PLATFORM SERVICES IN AFRICA

Nigeria

Networks in Nigeria with the potential to offer data bundles for the transmission of OTT content:

MTN Nigeria

Has been in operation since 2000 and is currently the network with the largest subscriber base in Nigeria with annual revenue of 2.52 billion USD from 50 million subscribers. Data packages and mobile money services provide most of the revenue, followed closely by Voice and SMS services. Advanced Television OTT services are being investigated as a future revenue source. Social network OTT services are currently in place at an advanced level.

Government

Currently, there are few African governments that are active operators of Advanced Television OTT platforms, yet this can be seen as a potential market both now and in the future, especially in times of elections.

Educational

Universities and large institutions of learning in Africa are increasingly beginning to display an interest in Advanced Television services, particularly in the era of the coronavirus where remote learning can be enhanced by the power of media distribution through OTT platforms.
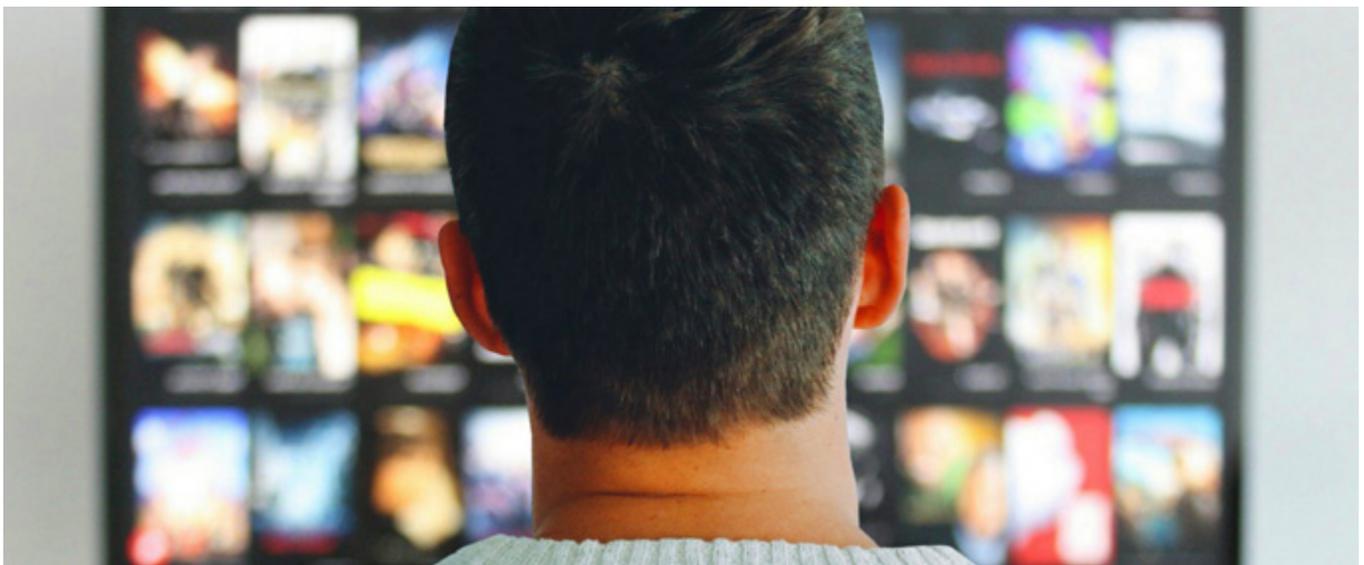
BARRIERS TO PENETRATION OF OTT SERVICES IN AFRICA

There are three very important factors that have emerged in recent market research5 that lead to barriers against the demand for high tech-based digital entertainment:

- Lack of awareness and locally relevant content: This was identified as the single most important barrier, particularly in countries like Egypt, Cameroon, Nigeria and South Africa.
- Lack of digital skills: This is a problem particularly and sometimes surprisingly, in countries like Tanzania.
- Affordability: Despite the fact that Africa has the lowest income per capita of any region, affordability was only identified as the most important barrier in one out of 13 markets in some surveys. Overall it was cited as a barrier by 36% of respondents in North Africa and 29% in Sub-Saharan Africa.

Political barriers and solutions
Governments often want to control the dissemination of media which can sometimes hamper the marketing of OTT platforms in Africa with governments applying unreasonable regulations and taxation on OTT applications, as was the case in Uganda with the OTT tax which has recently been repealed. Governments with solid constitutions and entrenched media freedom through regulation are optimum markets for OTT platform services.

Economic barriers and solutions (Including duties and taxation)
Some African countries simply do not have the financial resources to absorb high technology applications that target leisure activities such as watching video entertainment or sports data streaming. Countries with a healthy fiscal policy and growing GDP are therefore first priorities for OTT market entries. Countries with excessive or restrictive taxation, duties and trade policies should be avoided.

Educational barriers and solutions
There is a direct correlation between a higher level of education and consumption of leisure media like Advanced Television. A country with a healthy budget for education would be the optimum market for OTT platform service entry.

Logistic barriers and solutions
Due to the ease with which OTT platforms can be installed and the relatively small investment in hardware necessary, logistic problems are not likely to be of concern.

Social, language and cultural barriers and solutions
Some countries where films and television are banned through religious or political ideology are very difficult markets to enter and sell OTT platform services.

CONCLUSION

Recent market research supports a positive outlook for the increasing demand for OTT platform Advanced Television services in the African countries mentioned in this paper. The current development status of OTT platform technology is optimized to provide all the services that will be required to meet this demand. Through strategic alliances, African mobile operators and OTT Platform vendors can team up to provide powerful solutions for large enterprises, government and educational institutions to deliver Advanced Television to millions of African consumers.

APPENDIX 1: OTT PLATFORMS - TECHNICAL DETAILS

OTT platforms have various levels of advanced technical functionality. This functionality will have specific hardware and/or software associated with it at every level.

Transcoding/Encoding:

Today's OTT IPTV transcoder/encoder is way more than the historic cable and satellite decoders that restricted our freedom of choice while wasting our money during the 1990s. The OTT-STBs of today provide IPTV stream encoding AND transcoding, streaming catch-up, as well as monetization with Server Side Ad Insertion (SSAI). The SSAI functionality should be able to detect markers (SCTE35) in the live linear TV stream while producing an output stream in which ads are inserted dynamically via a third-party SSAI server. Altogether, the transcoding is highly scalable, flexible and customizable. The high quality and density of the encoding/transcoding enables the capture of both analog and digital raw feeds, converting the feeds into a variety of output protocols. The Encoder is managed from a simple web user interface with multi-user configuration options.

Multi-DRM Security:

Distributing IPTV and video over the open internet requires specific tools to secure the content and allow the content owner to determine how and by whom their content is being viewed. This makes Digital Rights Management (DRM) encryption essential on the OTT platform as functionality within the IPTV transcoder/encoder. DRM functionality needs to support a variety of DRM vendors and hosted rights management solutions. DRM also determines how content can be monetized. DRM should not be confused with standard encryption which is the process of obfuscating digital data whereas DRM is the overall management for content access. DRM does include the distribution of encryption and decryption keys and mostly uses AES encryption, it also has back-end licensing servers controlling policy and playback.

Middleware and Customer Management Software (CMS):

IPTV middleware is a critical administration interface on the OTT platform that needs to have a user interface or dashboard that is straightforward and intuitive through interface customization. It is here that subscriber profiles are managed with the help of powerful user analytics. Content can also be managed from this dashboard with user reports displaying content consumption patterns to aid monetization strategies. Using microservices architecture with docker containers, it is possible to have a middleware interface that is easily scalable.

APPENDIX 1: OTT PLATFORMS - TECHNICAL DETAILS

CDN: Content Delivery Network:

The quality of media delivery to your device depends to a great extent on the Content Delivery Network (CDN). A good CDN consists of a network of globally connected servers with fast processors and high bandwidth links between the servers. Usually, CDNs could deliver content of up to a 4K resolution of 4000 horizontal pixels per screen. Latency and packet loss over the links has to be kept to a minimum.

Multi-Screen Devices and Apps:

It is possible to have multiple devices connected, each device with multi-screen OTT delivered media, active simultaneously. For this amazing feat, intelligent applications are needed with enhanced Adaptive Bit Rate (ABR) functionality to synchronize the complex frame-timing requirements effectively, regardless of viewer location or device.

Support and Launch:

Ensure that you have a good relationship with your OTT provider, in an effective partnership, that will allow easy scalability of your IPTV services within a 24/7 Service Level Agreement. Be confident in the technical abilities of your provider.

APPENDIX 2: HOW TO ORDER THE PRODUCT, INSTALL AND ENGAGE SUBSCRIBERS

Setplex has a direct sales force with a global support team. If you would like to launch OTT platform services, visit our web page and fill in a contact form describing your needs. One of our team will contact you within 24 hours and your need will be resolved.

Setplex provides end-to-end pre-configured in-cloud or on-premises solutions and are experts in the remote configuration of IPTV and OTT solutions or hybrid solutions. Most large operators and telecommunication companies require both IPTV and OTT solutions. Post-installation and configuration consultation are ensured.

Support and SLAs:
We can offer up to 24 hours/day high-level support if necessary, depending on the customer's needs.

APPENDIX 3: REFERENCES

Web links denote references for Verbatim Text paragraphs in this paper and credit is acknowledged to the authors.

1.   https://advanced-television.com/2021/08/26/forecast-african-svod-subscriptions-to-triple/
2.   https://dataxis.com/product/market-report/ott-and-video-uganda/
3.   https://dataxis.com/product/market-report/ott-and-video-tanzania/
4.   https://www.parrotanalytics.com/insights/svodplatformtrend-southafrica-june-to-august-2020/
5.   GSMA Intelligence, Barbara Arese Lucini. (2016). Consumer Barriers to Mobile Internet Adoption in Africa. PDF.

APPENDIX 4: ABOUT SETPLEX

With over 15 years of experience, Setplex has launched more than 150 OTT platforms globally and is currently serving 5 million subscribers.

Setplex invests heavily in the research and development of OTT platforms and remains a pioneering force in this exciting, rapidly expanding industry.

With business activities in India, Europe, Latin America, Africa and our head office in New York - USA, we are capable of a rapid global response to customer queries and support requests.

Total **Flexibilty**

Low Capital **Investment**

Future **Proof**

24/7 **Support**

Global **CDB**
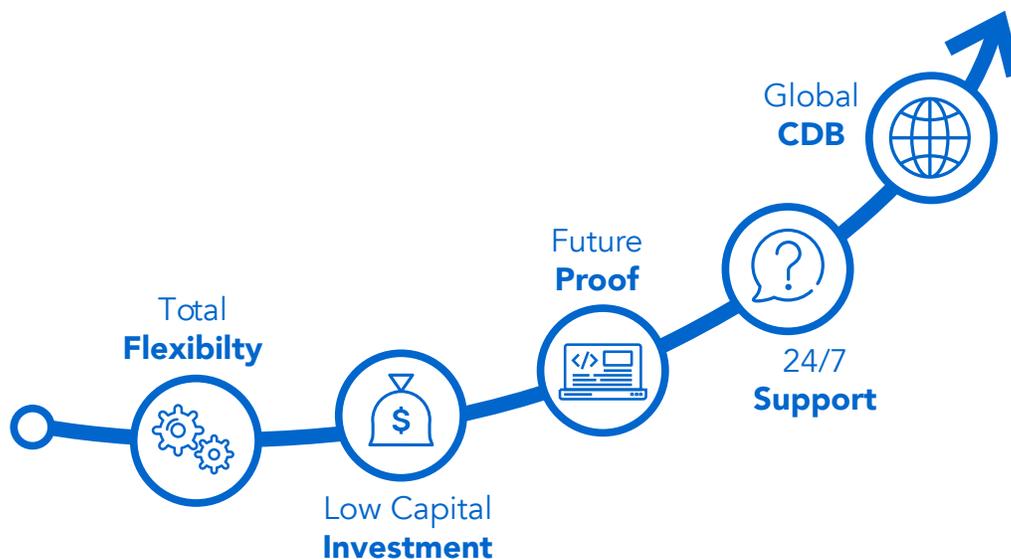
We also have a PARTNER PROGRAM where OTT SERVICE RESELLERS around the world can benefit from our advanced infrastructure and rely on our expertise to deliver services to their customers with minimal expense.

We develop world-class UI/UX systems and applications that support a variety of business models to increase profit from advertising and subscriptions.

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Let us help you deploy OTT services today!

Learn More