

The Digital Content Distribution Trends in Emerging Market

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ABSTRACT

This paper examines the evolution of digital content distribution in emerging markets, focusing on technological advancements, business models, and cultural adaptations that have shaped the industry. The research analyzes key drivers of change, including mobile internet penetration, smartphone adoption, and cloud computing.

It also explores the challenges and opportunities presented by infrastructure limitations, piracy, and regulatory landscapes. The study concludes with insights into future trends and their implications for content providers and distributors in emerging markets.

Keywords: Digital content distribution, emerging markets, streaming platforms, mobile internet, content localization, monetization strategies, regulatory challenges, piracy, technological drivers

INTRODUCTION

A. Overview of Digital Content Distribution

Digital content distribution refers to the delivery of media, such as video, audio, and text, through digital channels. This process has revolutionized how content is created, shared, and consumed globally, particularly in emerging markets where traditional distribution methods have been limited or inefficient.

B. The Evaluation of Emerging Markets

The global content distribution market is evolving at a higher rate specially in emerging markets where economies are growing fast and the dependency on digital is rampant. These are the markets that include India, Brazil, and Nigeria to one extent or the other and their populations are characterized by young people with increased buying power and request for digital content.

C. Thesis Statement

Based on the findings, one could argue that due to technology development, new forms of business models and cultural differences, the digital content distribution in emerging markets represents both opportunities and threats for content providers and distributors.

D. Research Objectives and Methodology

This study aims to:

1. Evaluate the background of continued digital content distribution in emerging market and the enabling technologies.
2. Consider main stakeholders that you plan to engage in your system, the business models you intend to follow and the methods of generating revenue in this field.
3. Research content localization strategies and the issues of compliance.
4. Describe the general trend of development in the field in the future and its consequence for the industry.

The research approach entails the analysis of the papers, reports, and market analyses published up to 2021.

Historical Context

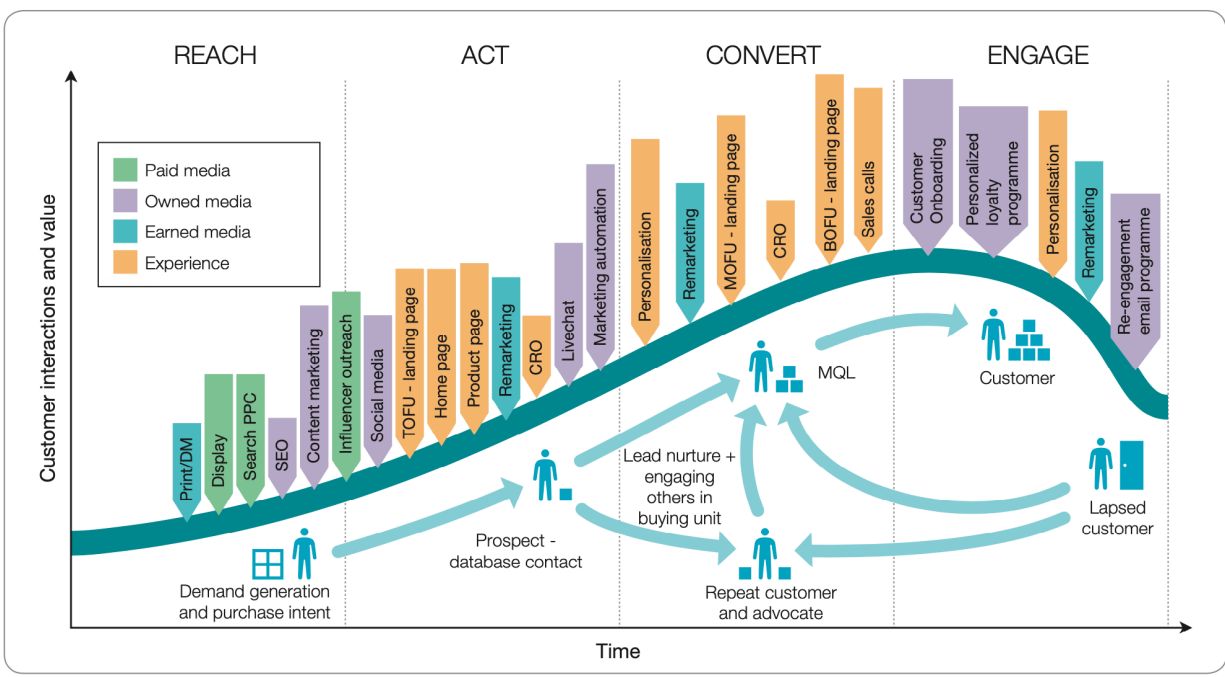
As stated before, below we have provided a brief list of the most traditional and more common means of content distribution:

Presently, there has been a dramatic shift on the manner through which content reached the emerging markets over the last few decades. In the past, distribution of content was majorly done through physical media and through the basic modes of broadcasting stations.

As to the forms of video and audio content, VHS tapes and DVDs are to be noted as the leaders, and cassettes and CDs – in the audio section. Terrestrial was the dominant form of television broadcasting with cable and satellite services just start to take off in the urban areas. Newspapers and magazines were also widely used in transmitting information and entertainment content in the print media.

It was further revealed that in the world’s emerging markets, 86% of total home video business was in sales and rentals of physical formats while in the developed markets this was at 69% as estimated by PwC back in 2010. This disparity brought out the issue of the inability of firms that operated in the emergent markets before 2000 to effectively embrace the digital technologies than their counterparts from the developed nations. The use of physical media and the conventional method of broadcasting were mainly forced by the lack of digital facilities, the low rates of internet connection, and high expenses on digital tools and services.

In many emerging markets, people usually watched TV in groups normally in the rural areas. For example, in India such places like “video parlors” that referred to small rooms or shops, where people of different age gathered to watch movies on VCR were rather popular in the 80s and 90s. This phenomenon highlighted on the social dimension of content consumption and the financial accessibility barriers that excluded many people from product technologies (Athique, 2011).



B. Early Digital Disruption

The Publication and the use of computers in the early part of the 1990s and around the mid-2000s signified the start of a revolution in content delivery systems. But this digital revolution did not hit the emerging markets right away, the after effects were and still are. The first wave of digital disruption was marked by peer-to peer (P2P) organization such as Napster and it initially favored the developed economies but was not easily implemented in emerging economy because of underlying infrastructure.

When Internet connection started growing gradually, emerging markets started facing challenges that came with digital disruption. The data obtained from the ITU outlined that internet user density in the developing nations was at 8 % in year 2005 and has risen to 21% in 2010 (ITU, 2010). Although slow the growth initiated the appetite for digital content markets among these markets. The emergence of streaming services in the mid-2000 synchronized with the emergence of new sites for streaming video, and YouTube in 2005 is the best example. Unfortunately, the use in the emerging markets only began slowly due to availability of bandwidth and the cost of data was very expensive. A survey conducted on Asian- Pacific

telecom operators in 2011 revealed that YouTube was only a 4 percent of mobile network usage during peak hours while the same statistic was 27 percent in North America (Sandvine, 2011).

As it was seen that the use of mobile phones acted as a catalyst in leading adoption of digital media within the emerging economies. The dramatic growth of mobile phone subscription rates especially of the feature phone offered a new platform for delivering content. The basic value services including news subscription options through SMS and downloading of ringtones proved feasible and this created room for other enhanced Mobile Content Services (GSMA, 2012).

C. Unique Challenges in Emerging Markets

The shift to digital content distribution in emerging market was fraught with several challenges which was not the case with developed economies. These challenges had a profound impact towards the rate and form which the utilization of advances was embraced in these areas.

Some of the challenges were as follows: Infrastructure limitations are one of the main barriers that we faced. According to the World Bank report, it was established that out of the total global population, 94 % of the people in the developed countries had been accorded the privilege of being connected to the electrical power while only 73% of the people from the lower-middle-income countries and a meager 29% of the people from the low-income countries had been similarly provided with the electricity. This difference in fundamental structure was influencing the possibility to obtain and consume digital goods in the most evident way.

The last factor identified in this study was price sensitivity; this was an area of concern for consumers. The Alliance for Affordable Internet (A4AI) told in the year 2020 that in Africa, the cost per 1GB of mobile Internet is 7\$. In the year 2020, as recorded by A4AI it reached only 12% of the average monthly income, a figure way much higher than the United Nations Broadband Commission's target of 2% of average monthly income. Due to this high cost of Internet access, the growth of data intensive content distribution platforms was not so popular.

Despite becoming apparent that digital literacy rates had significantly increased in the respective regions, the emerging markets were behind even the most developed economies. According to UNESCO's Institute for Statistics, (2017), it was estimated that only 40% of the people in developing countries have basic digital literacy while in the developed countries, 80% of the people possessed this ability. This brought about a digital skills gap which hampered the adoption of new content distribution technologies.

Piracy of products and services, and inadequate independent protection of intellectual property were the other hurdles encountered. According to Business Software Alliance, piracy cost of unauthorized software in the growth markets stood at \$16. These figures reached 4 billion in 2015 while California and other developed countries' software piracy constituted 73% of the software installed into their computers (BSA, 2016). This high anarchy of piracy was not only a problem to the earnings of the producers and providers of content but also an issue to the establishment of legal digital distribution.

Another factor that was rather characteristic for many emerging markets was the language differences which was also an issue. This was due to the fact that most of the contents that were posted on these sites were in the English language and people in different parts of the world especially those who had low English comprehension could not participate fully. A research done by the Common Sense Advisory in 2020 showed that thirty-six percent of internet consumers preferred purchasing products in their own language therefore emphasizing the significance of localization (CSA Research, 2020).

D. Consumer preference change

However, consumer tastes and preferences in emerging markets have shifted dramatically over the past decade owing to factors such as; Enhanced internet connectivity, proliferation of smart phones, growing disposable income per capita, and globalization.

One might estimate that the demand in instantaneous, personal materials has risen considerably. The same Deloitte conducted a survey in 2018 where it was observed that 69% of the consumers in the emerging market prefer streaming services than traditional TV as opposed to 65% in the developed markets (Deloitte, 2018). Such a shift in preference has been significantly more concrete in the groups of young consumers.

A key constituent emerging in the consumption structures is the mobile first models in the emerging economies. As per GSMA intelligence study, low and middle-income nations mobile internet user by the year 2019 was 3. Front, 3 billion,

which is 44 percent of the total population (GSMA, 2020). That shift has defined the delivery and consumption of content in these markets particularly with focus on the use of mobile devices.

Local and regional content has therefore been in high demand just like the international content. Research conducted by the Boston Consulting Group in 2018 unveiled that ninety-seven percent of the OTT platform users in India preferred content in regional languages (BCG, 2018). This trend has led international and local players to come up with investment in local content and localization enterprise.

Micro-content has become rather popular and especially among the youth. For example, TikTok has recorded 689 million monthly active users internationally by July 2020, and most of them use the application coming from emerging markets (Datareportal, 2021). This trend has been a major cause of the many changes that have been witnessed in the content creation and distribution networks.

Another trend that has emerged in the emerging markets has been the use of user-generated content (UGC). Expanded channels such as YouTube have enabled local creators to thrive, and therefore created this notion of the creator economy. The YouTube revealed that \$165K+ per year earning YouTube channels have grown more than 60% YoY in India in 2020 (Google, 2021).

TECHNOLOGICAL DRIVERS

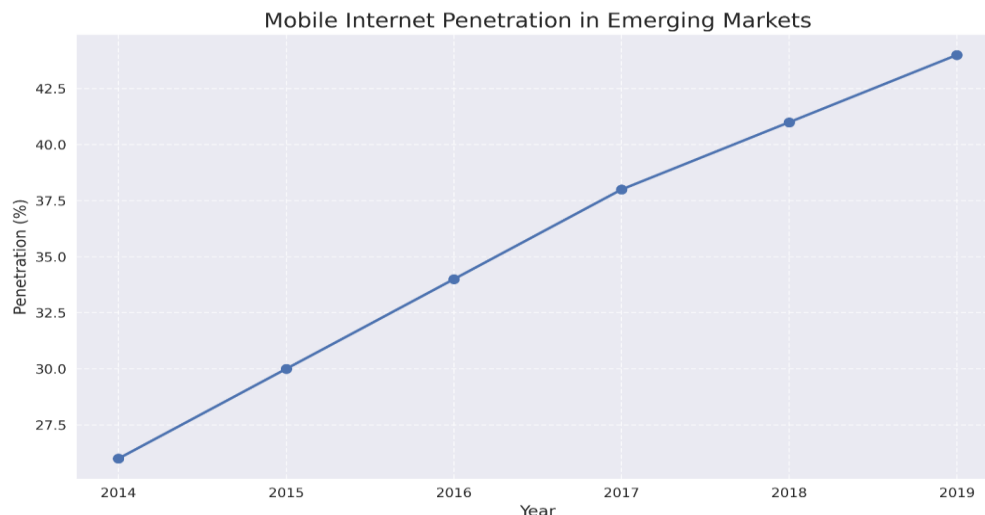
A. Mobile Internet Penetration

Mobile Internet is another developing force that became an essential factor for emerging markets' digital content evolution. Mobile internet connections increased in the low and middle income countries to 44% in year 2019 from 26% in year 2014 as depicted in the GSMA Mobile Economy Report 2020. This has in turn led to a significant increase which has over time afforded new opportunities in the distribution and consumption of content.

The effect of mobile internet has been most felt in areas such as Sub-Saharan Africa where mobile broadband connections are expected to be 483 million by 2025 out of 66% connection. This has been made possible by the increase in the availability of cheap smartphones and cheap data charges as well as network enhancements.

With the increase of reliance jio 4G services in 2016 making India one of the largest mobile internet market, the mobile data usage has more than tripled. The average number of monthly data usage per smartphone in India has also increased from 3. From 9 GB in 2017 to 12 GB in 2019, of data traffic per month, which is higher than the global average of 7.2 GB (source Ericsson Mobility Report, 2020).

Mobile internet has also become relatively cheap in many markets and partly due to this there is what is now called 'leap frogging' where consumers leap directly to mobile internet bypassing fixed-line broadband. This trend has clear consequences for the distribution of content, in particular, promoting content and the corresponding platforms adapted to mobile devices.



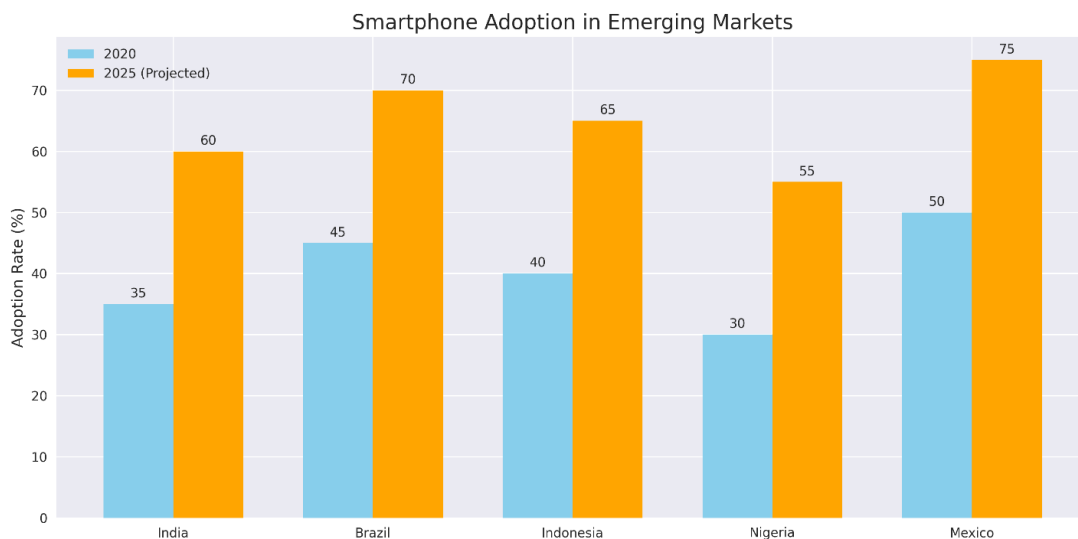
B. Smartphone Adoption

The fact is that with the help of owning a Smartphone, people from emerging markets are now provided with the opportunity to obtain digital content. According to IDC, while the novel virus outbreak affected global smartphone shipment, the emerging will record a 6% increase. 7% year over year in the fourth quarter of the year 2020 (IDC, 2021). This has been resulted by the increased access to cheaper devices and the use of smart phones as the most dominant internet access terminals.

Smartphone usage in India is also one of the fastest growing in the world by 2021, the statistic (2021) reveals that 760 million people in this country will use smartphones. This has a great impact on content delivery as it not only facilitates availability of high quality video and audio information but also the audience is able to access them on the go.

Low cost smart phones especially the ones that are sold around or below \$100 have been influential in this market especially in the developing world. Manufactures from China such as Xiaomi, Oppo, and Vivo have contributed to this trend by taking large market share in countries such as India, Indonesia and Brazil among others (Counterpoint Research, 2020).

This is due to enhance features of smart phones such as larger screens, better processors, enhanced audio features that made the phones preferred as media viewing gadgets. According to the App Annie study in 2020, the average consumer's spending in emerging markets was 4 hours, daily, on their smartphones and use them for 3 hours per day, which is higher than the world average by 3. 7 hours (Source: App Annie, 2020).



C. Cloud Computing and CDNs

Cloud computing and CDNs has enhanced the quality and reliability of contents in emerging markets due to the advancement of internet services. Akamai's 'State of the Internet Report' for 2020 indicated that the global average connection speed up by 12% yoy in Q4/2019 reaching 9. 5 Mbps.

As a result the cloud based content delivery solutions have let the content providers to address infrastructure constraint in the emerging markets. According to Markets and markets report, the CDN market size is expected to increase from \$14. 4 billion in 2020 pulling up to \$27. 9 billion by 2025 with there being projections for Asia Pacific and Latin America to experience massive growth (Markets and Markets, 2020).

With the help of such solutions as edge computing, content delivery in emerging markets has been improved even more. Edge computing has a beneficial impact on latency, especially to applications such as video streaming and interaction, as this technology moves computing facilities closer to the user. A study by Gartner shows that 75% of the enterprise data by 2025 will be produced and managed outside the mainstream central data center and cloud (Gartner, 2018). CDNs have also helped to considerably reduce the effects of a small number of bandwidths to international connections in many emergent markets. CDNs basically store data that is frequently accessed on their edge servers, thus eliminating the frequent relaying of data across the Pacific ocean, the Atlantic and the Indian oceans which makes it faster and cheaper. According to Cisco,

CDN traffic is anticipated to constitute fifty six percent of the Internet traffic in the year 2017 while the figures are expected to rise and reach seventy two percent by the year 2022 (Cisco Visual Networking Index, 2019).

D. 5G and Future Connectivity

5G networks are expected to bring novelty to content distribution mechanisms in emerging markets since the access speeds and latencies will be higher. According to the Mobility Report by Ericsson 2020, 5G subscriptions in Sub-Saharan Africa will total 70 million in 2026 while in India 5G connections will go beyond 350 million of the populaces in 2026.

Peculiarities of distribution of content through the application of 5G are believed to be revolutionary. According to a study by Intel and Ovum, the 5G will drive \$1.3 trillion incremental revenues for the media and entertainment sector on a global level and more than half of this stream is attributed to emerging markets today (Intel, 2018).

5G technology will allow new forms of content experience: AR/VR applications as one of the 5G service experiences. These technologies have the possibility to transform different industries including education, health, and entertainment in emerging economies. A report by PwC ofar1 and could contribute \$ 1 trillion in annual revenue to the industry within the next decade. 5 trillion to the global economy by the end of 2030, as other markets will contribute more to growth according to the PwC (2019).

But, the deployment of 5G in emerging markets has some issues such as high, investment requirement for networks and spectrum acquisition. That being said, most EM governments have made 5G a focal area for digitalization due to the following challenges. For instance, Brazil's spectrum auction in November 2021 is anticipated to facilitate the \$9 billion investment in the 5G networks (Anatel, 2021).

E. Use of AI in the Recommendation Process

Mobile has added more relevance in deciding about personalizing the contents and the interaction of users with the contents. It is widely known that Netflix uses an AI-based recommendation system: the company claims that it reduces the churn rate and increases customers' satisfaction which led to the saving of about one billion dollars annually (Netflix Technology Blog, 2020). Advancements in technology or artificial intelligence that is deploying recommendations to overcome the language barrier and cultural differences are experienced in the emerging markets. for example, YouTube AI recommendation has helped to catalyse home grown talents across geographies such as the Indian subcontinent and the Brazilian markets which has propounded the creator economy's growth in such places (Google, 2019).

Another of the use of AI is also in the enhancement of content localization. Self translation and subtitling are getting done more and more through machine learning algorithms, which helps content providers to make available their content in multiple languages more easily. The market research conducted by Grand View Research revealed that the global machine translation market size will be worth \$983. According to the current statistics, the total number of users is expected to reach 3 million by 2027, While asia pacific region is expected to experience the highest growth (Grand View Research, 2020).

In addition, computers are also being used to moderate content, which has become an issue for social media platforms where they need to figure out which contents are shameful in one cultural sphere and which are prohibited by the legislation of an emerging economy market. For instance, Facebook said that in the last quarter of 2020 only 3% of the hate contents deleted on the website were reported by the users while 97% were pulled down by the technique (Facebook Inc, 2021).

As the use of AI is growing in content distribution, it is not limited to the recommendation and moderation steps. Artificial intelligence has been assisting content providers and disseminators in identifying the growing markets' consumers and their habits. Such an approach allows for a better definition of site content themes as well as effective promotion and popularization of content, which might in turn increase the likelihood of monetization.

MARKET PARTICIPANTS AND OPERATIONAL MODELS

A. Global Streaming Platforms

Most streaming platforms have penetrated the emerging markets and adjusted the strategies applied according to the local conditions. For instance while presenting the Q4 2020 results Netflix revealed that it has was up by 37% as compared to the same period of the previous year in the Asia-Pacific region (Netflix Q4 2020 Earnings Report). The company has endeavored upon local content creation and launched mobile-only plans in countries such as India owing to competitive customers. To give an example, Netflix has started a mobile plan in July 2019 at INR 199 (\$2. 70) per month in India and then in other emerging markets (Netflix, 2019).

Amazon Prime Video has also entered into emerging markets, especially through the network of amazon's e-commerce empire. In India also, the Prime Video consumption tripling in 2020 with 50% of the new subscribers are coming from the tier 2 and below cities in the country (Amazon India, 2021). Another success story regarding the platform is a method of tying the video streaming service to its annual delivery service, Prime.

There is no denying that YouTube continues to hold a significant market share especially in the emerging markets because of its freemium model through ad-supported service. Sharing the same and important findings, Google noted that in India alone, the number of monthly users on You Tube in 2020 reached 325 million; you Tube is thus the largest video platform in the country (Google, 2020). Moreover, one can note that the growth of the platform is based on the availability of local authors and the orientation of the interface to different linguistic tastes.

Streaming surge

Subscriptions to streaming services in some of the largest emerging markets in Asia have grown exponentially in recent years.



Source: Media Partners Asia.

B. Local Content Providers

Localized platforms have come up to address different markets' needs that are unique from other platforms through creating niche, regional content and languages. In Africa more specifically, iROKOTv has become recognized as the premier online Nollywood content provider with more than 5 million registered users worldwide and in 100 plus countries (iROKOTv, 2020). I have learned that there is a huge demand for localized content especially in the emerging markets from the success of the platform.

This has been seen with some of the OTT platforms such as Hotstar (now Disney+ Hotstar) which relies much on the sports content especially cricket to cater for the user acquisition. Hotstar had 300 Million monthly active users in the year 2020, Hotstar success story can be traced to the fact that it provides local content and live sports (Disney, 2020). Moreover, choosing the methodology of free, viewership-supported content along with paid subscriptions is effective in the price-sensitive country like India.

C. Telco Partnerships

It is now gradually common practice for content providers to directly engage telecom operators particularly in the emerging markets. Such collaborations assist in offsetting infrastructure constraints and introduce combined services in the consumer market.

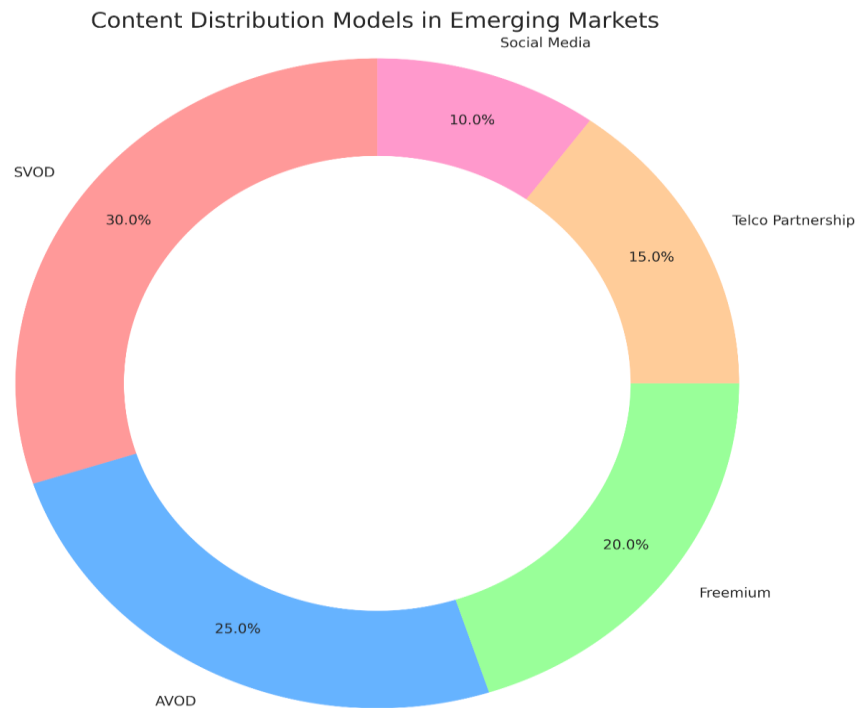
For instance, Airtel Africa's bundling deal with Netflix in 2020 that seeks to deliver Netflix streaming services to its customers in 16 African countries (Airtel Africa Press Release, 2020). Such relationships provide content owners with an opportunity to access the telcos customer base and billing.

In South east Asia, HOOQ had content collaborations with telecom operators in five nations and covered over 80 Million Customers (Pre HOOQ shutdown in 2020) including AIS Thailand & Globe in Philippines. Thus, the case with HOOQ clearly shows that regional players face a number of significant problems in the emerging competitive streaming environment, at the same time stressing the significance of the partnership strategy.

D. Social media as marketing channels

The role that social media play in content delivery has also been identified as key demonstration of content distribution in emerging markets. Facebook reported 2.7 billion monthly active users worldwide in Q3 2020, especially in the emerging countries (Facebook, 2020). Watch, one of the key focuses of the platform internal environment, has become virtually a separate conventional short-for-video site.

TikTok has witnessed strong growth in emerging markets; it had the highest downloads from India contributed to 30% of its total download before the ban of the application in the country (Sensor Tower, 2020). As a result of the success of the said platform, there are many other short-video applications that have emerged in the market regionally or locally especially across the Indian subcontinent. For instance, immediately after the TikTok ban in India, several home-grown applications such as Moj and Josh have received millions of downloads indicating the market for short-form, UGC (RedSeer, 2020).



E. Effects of piracy on Business Strategies

Piracy remains an important factor which affects the strategies of content distributors in emerging economies to a great extent. Investigation carried out by Irdeto revealed that 52% of consumers in emerging markets areas use pirate services while 39% are in the mature markets (Irdeto, 2017). Due to this high prevalence of piracy, content providers have been put on the spot on how they should protect their work.

Some measures that have been taken by content providers in order to fight piracy include: price spanning where content providers have come up with cheap packages, increasing availability of content and incorporating appropriate DRM solutions. Mobile-only plans launched for sure markets like India and Malaysian are in some part due to piracy and the hope to offer an and legal and cheap option instead of piracy. Some content providers have also chosen to add advertised funding so as to provide the public with legal means to get the content, instead of turning to piracy. For instance, the free service supported by ads, such as YouTube's, has proved effective in the Indian market, where this site ranks as number one in the sphere of video sharing. This strategy allows one to achieve the coverage of a larger audience without compromising on the income that is earned through the advertisement.

CONTENT LOCALIZATION AND CULTURAL ADAPTATION

A. Language and Subtitling

Language localization has been very essential in the growth of digital content distribution in the emerging markets. For example, Netflix, while focusing mainly on the international market, offers customer support in more than 20 languages

and subtitles in the same number of languages and is only expanding the list (Netflix, 2021). The firm has equally spend a lot on dubbing and subtitling understanding the fact that language is a key factor influencing the intensity of use of the products.

As stated in the analysis of Parrot Analytics the demand for local language content in the emerging markets was increased by 12% in 2020 comparing to 2018 (Parrot Analytics, 2020). This trend has led to more companies seeking to localize their technologies such as Artificial Intelligence technologies in translation and dubbing.

B. Local Content Production

Piracy has always been an issue thus leading to increased investment in local content production by both international and local stakeholders. Netflix also revealed that it was to spend \$420m on Indian content during the financial year 2021-22, (Variety, 2020). Worth mentioning is that Amazon Prime Video has also been creating original series in other markets, for example, Mexican, Brazilian, and Indian markets adjusted to the local viewers' demand.

Apart from meeting the cultural tastes of the people, there is the need to consider local content production when it comes to meeting the legal rules and regulations. For instance, in Vietnam, strict rules have been put in place where streaming platforms must provide at least 30% Vietnamese content hence encouraging investment on Vietnamese productions (Vietnam News, 2020). They have also led to the common increased partnership between international platform and domestic manufacturers.

C. Adapting to Cultural Norms

Today's content suppliers have been compelled to understand various cultural contexts and taboos in emerging markets. This has created formation of unique content policies and regulation concerning with different geographic areas. For example, content of Disney + Hotstar in India is rated for regulatory purposes and has different parental control measures that are implemented internationally due to cultural sensitivity mainly in India (Disney+ Hotstar, 2021).

It does not only affect the content moderation practice, but is also implemented in other areas. It also has an impact with regards to contents that can be created and the marketing methods that can be used. For instance, in the course of the holy month of Ramadan, application streaming services in most of the Muslim majority nations have both arrangements of their programs and various offers associated with the month since it is important in those markets (WARC, 2020).

D. International Collaborations

Interoperability has thus appeared as a model to produce content for national and global consumption at the same time. Cross content consumption was well illustrated by Netflix Spanish series 'Money Heist' which grew popular within the emerging markets mainly the Latin America and India (Netflix, 2020). This success has inspired more global coproduction's for the purpose of developing hit programmes that would have international appeal that would also appeal to local cultures. There has also been an improvement in coproduction between the big studios around the globe and small production companies in the region. For instance, HBO joined forces with Eros International and aimed at creating original content for the Indian viewers with focusing on the HBO's international quality while telling Indian stories (HBO, 2019). Such co-productions help to harness local creativity and understanding of the cultural needs but are accompanied by professional production skills from other countries as well as access to the market.

MONETIZATION STRATEGIES

A. Subscription Models

Business models such as Subscription Video on Demand (SVOD) have began to be used in emerging markets, although the appeal is somewhat modified to due to the existing economic climate. The high-volume, low-arpu strategy could be evidenced by Netflix's mobile-only plans launched in India priced at INR 199 (\$2. COPYING THE IDEA HAS BEEN DONE BY OTHER PLAYERS like Amazon Prime Video and Disney+ Hotstar which understand the price consciousness level among the emerging market consumers.

As it has been discussed before, the penetration of SVOD is still low in many emerging markets even though their subscription numbers are constantly increasing. The SVOD adoption in Southeast Asia was estimated to be at 14 percent in 2020, hence suggesting that the region had a lot of upside potential (Media Partners Asia, 2020). This has limited subscription TV's penetration resulting in the development of diverse models of part- subscription coupled with part-advertising.

B. Advertising-Based Models

This is because Advertising-based Video on Demand (AVOD) models are the most common in the emerging markets. YouTube, which mainly relies on the AVOD model, stated that viewership in TV screens increased by more than 250 percent YoY in India in 2020 (Google, 2020). The success of the platform can therefore prove that other revenue models such as the ad-supported model can work within the price sensitive market.

Local players have also adopted the AVOD model to good effect as well Local Players using AVOD model. MX Player of India that offers contents free of cost and providing ads support got 200 million Monthly Active Users in the year 2020 (MX Player, 2020). The success observed in the platform can be also attributed to the possibility of developing large audience with ad-supported counterparts in emerging economies.

C. Freemium and Hybrid Strategies

Freemium and a Cross-Sectional model, that is a business model, offering free ad-supported features and paid options, are popular in emerging markets. Spotify offers users the basic and premium service and it has 299 million monthly active users in total in the second quarter of 2020 with continent wise it has experienced most growth in Latin America and South East Asia.

In India, Disney+ Hotstar operates a three-tier model: Standard, where users get the application with ads, Premium with a lower number of ads and at a lesser price, and Premium ad-free at a higher cost. With this strategy it has attracted 400 million monthly active users (Disney, 2021). This makes light of such blended value chain that shows how such value chain works well in different segments of the consumption in the emerging markets.

D. Mobile Payment Integration

Mobile payments have played an essential role for addressing the problem of payment infrastructure constraint in emergent markets. Mobile payment system M-Pesa mainly operated in Africa has shown \$28 billion money transfer in Q1, 2020, through which DFPS help to purchase digital content (Vodafone, 2020).

Hence in India for digital payment, there is the Unified Payments Interface (UPI) which handled over 2 billion transactions in the month of 2020 (NPCI, 2020). Mobile payment solutions have presented the opportunity to address revenue generation from content proffering hence benefiting from markets with low utilization of credit cards.

REGULATORY LANDSCAPE

A. Content Censorship and Government Control

Pressure by the government to censor content together with control continues to plague digital content distributors especially in the emerging markets. This has reduced the presence of the foreign players such as YouTube and Netflix due to stringent content regulation, and the well-known 'Great Firewall' of China and the market is largely controlled by local players (China Internet Watch, 2020).

In 2021, India's government issued new guidelines for social media and digital media platforms which included the obligation of the platforms to set up a grievance mechanism in addition to being more cautious while curating the content displayed (Ministry of Electronics and IT, India, 2021). Such regulations do impact the practices of moderation and have serious consequences to such operational costs of such platforms.

B. Data Protection and Privacy Laws

The laws regarding data protection and privacy are still in the process of developing in emerging markets forcing digital content platforms to reflect on how they capture, store and utilize user data. Brazil has its own law of data protection that is quite similar to the GDPR; it is known as the General Data Protection Law or LGPD that was enacted in 2020 (DLA Piper, 2020).

Currently in India there is a proposed Personal Data Protection Bill under consideration and this contains stringent data localization provisions which have potential threat to global content providers that exist in the country (PRS legislative research bulletin volume, 2020). Such international changes in the regulations consequently call for very deliberate compliance measures that can be adopted by the distributors of content across jurisdictions.

C. Intellectual Property Rights

The problem of lack of protection of Intellectual property rights is still as rife in most emergent markets with its effect felt by those involved in content creation and distribution. Analyzing the latest trends and issues in the US Trade

Representative's latest Special 301 Report, it is possible to identify emerging markets with questionable stances on IP protection or enforcement in 2020, including China, India and Brazil.

But and nevertheless, there has been a progress in this aspect. For example, China has tried to enhance the protection for its IIP, where recent amendment to China's copyright law has raised statutory damages for infringement in 2020 (China Law Insight, 2020). Such enhancements in IP protection are essential for promoting investments in the cable programme production and distribution in the emergent markets.

CHALLENGES AND OPPORTUNITIES

A. Infrastructure Limitations

As things stand, however, there is much that still remains a hindrance to efficient deployment of digital content in the emerging markets especially concerning infrastructural provisions. ITU reported that of the global populations 19 percent have access to the internet. In 2019, only 5 percent of the least developed countries' population were using the internet while 86 percent in developed countries. 6% in the developed countries it was from International Telecommunication Union-ITU 2020. This digital divide is an issue on one hand and a prospect on the other hand especially for the content distributors.

To overcome such limitations some companies have sought for the following solution. For example, Google's Project Loon aims at providing internet access to the isolated communities with help of high-altitude balloons; this technology has been trial in the countries such as Kenya (Google, 2020). This project, although was not continued, gives a practical idea of how high-tech approaches are being tried to tackle infrastructure related issues.

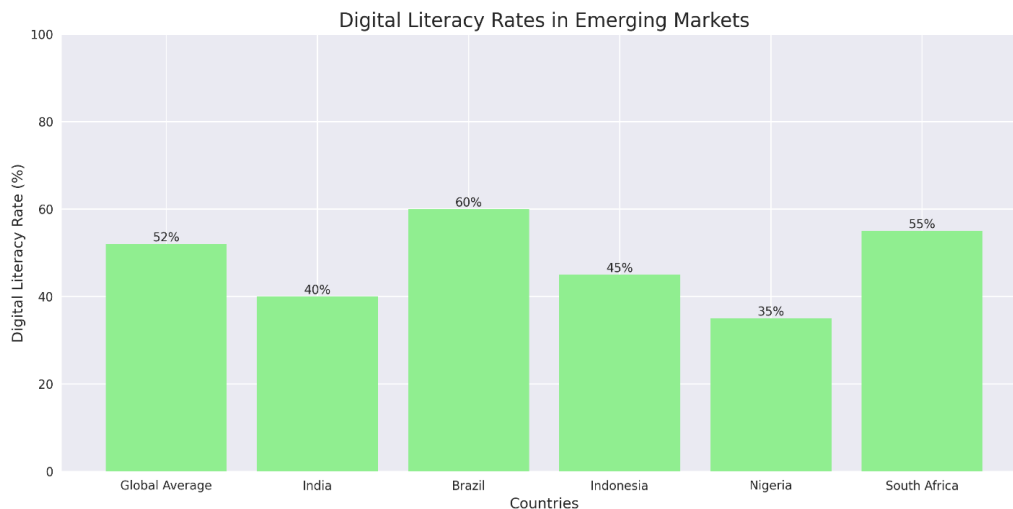
B. Copyright and Anti-piracy

Piracy is still a crucial problem in emergent markets where Asia Pacific territory is the leader in sharing 53% of the online TV piracy in 2019 (Asia Video Industry Association, 2020). To mitigate the problem of piracy, content distributors are adopting different measures such as encryption of content through water marking and DRM technologies besides taking legal action against the pirates.

Another area that is currently investigated as a potential application of the blockchain solutions is the protection of the content. For instance, many media companies have launched the Content Blockchain Project that plans to enhance licensing and monitoring of content usage (Content Blockchain Project, 2020).

C. Digital Literacy and User Adoption

The digital literacy levels in some of the emerging markets is still relatively low hence, affecting the usage of platforms that host digital content. UNESCO does consider that 40 percent of the world's inhabitants lack fundamental digital literacy (UNESCO, 2020). To counter this, flow many companies are providing support towards digital literacy programs. For instance, Google's Internet Saathi wherein over 30 million women have been imparted with skills using the Internet (Google India, 2020).



D. Emerging Technologies (AR, VR, AI)

The new technologies available in today's world such as Augmented Reality or VR, and Artificial Intelligence for the creation and distribution of contents of new markets. It was globally forecasted that the market for AR and VR will be valued at \$72 by the 2023. by 2024 which is likely to exhibit a strong increase particularly in the emerging regions (IDC, 2020).

AI is not used only when it comes to providing suggestions on content, but it is also used when it comes to producing content. For instance, India's MX Player has leveraged AI to add subtitles of foreign content in local Indian language thus growing the catalog to a significant extent (MX Player, 2020).

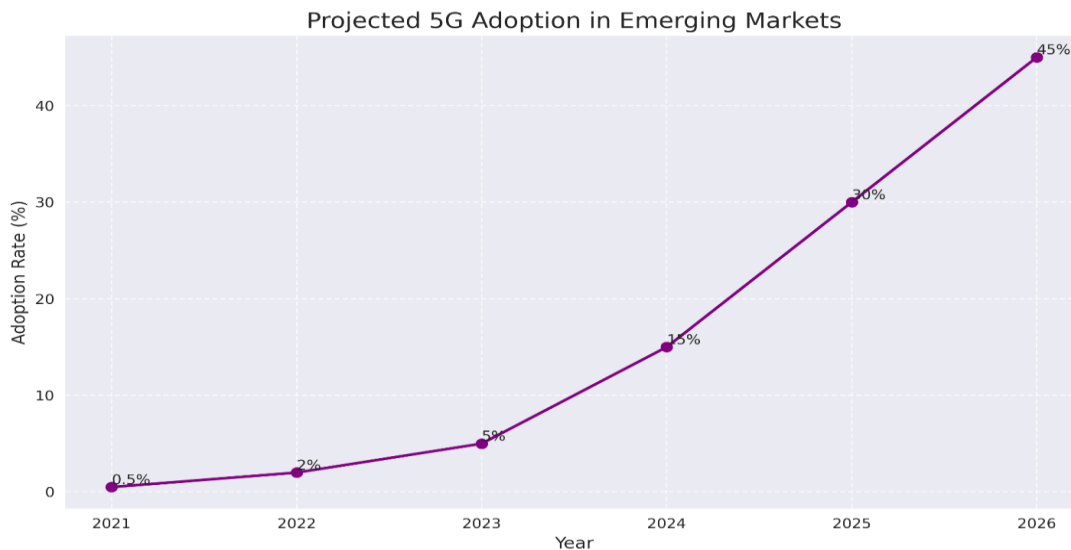
FUTURE TRENDS AND PREDICTIONS

A. Evolving Consumer Behaviors

This has however been precipitated by the outbreak of the COVID-19 pandemic which has seen more and more consumers turn to digital content. Deloitte's consumer tracker conducted across India, China & other Asian markets revealed that 35% of consumers, signed-up to a new video streaming service amid the pandemic (Deloitte, 2021). Such trend is likely to persist in the coming future as the consumption of content is expected to shift more on-demand and personalized.

B. Technological Advancements

The emergence of the 5G network is expected to introduce drastic changes into the future of content distribution to emerging markets. According to the company's analyst, 5G subscriptions will hit one billion by the end of this year, and Ericsson backs this forecast. 9 billion people worldwide by the end of year 2024 and with a particular focus on growth in emerging markets (Ericsson, 2020). This will enable superior types of content delivery experiences such as high quality live streaming and engaging AR/VR content.



C. Market Mergers and Competition

Emerging markets, that has already formed a significant part of the global DCD market, would continue to experience consolidation and competition. Local players may establish mergers or partnerships to challenge international players and establish long-standing connections with MNOs whereas global platforms may endeavor to acquire local content producers/re-sellers or reinforce their presence in existing markets.

CONCLUSION

I. Key Findings

New technologies continue to emerge along with distinct challenges and incremental business models that continue to shift as the distribution of digital content progresses. Mobile Internet and Smartphone usage have been the major factors behind this change since they offered easier access to content. Localized content as well as culturally suited strategies has gained prominence due to which both global and local players are highly indulged in investing on these two aspects.

B. Implications for Content Providers and Distributors

It is thus imperative that content providers and distributors offering their services within emergent markets have to apply more adaptable and local strategies. This encompasses, presenting a variety of monetization solutions, funding local content creation and development, partnership with telcos and other local players. Thus, it will also be vital for the future success to solve issues like piracy and to face the often complicated legislation.

C. Digital Content Distribution Future Projections

Emerging markets digital content distribution seems to have better future as it is exhibiting growth in the both, the number of users and the revenues. It is safe to assume that with the progress of technology and change in the consumer's behavior, we can expect even more attractive and individualized formats of content. But still, the company's existence in these markets will depend on the firm's efforts to innovate, respect the culture, and incorporate the local environment.

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