



## Values of Modern Technology to Electronic Media Management in Nigeria

**Columba Apeh**

Department of Theatre and Media Studies  
University of Calabar  
Calabar-Nigeria

[Apehcolumba1976@Yahoo.Com](mailto:Apehcolumba1976@Yahoo.Com) 0810-5722-745

### Abstract

This paper examines the influence, the impact and the communicative values of modern technology to electronic media management in Nigeria. It evaluates changes in distribution and consumer technologies, the impact of media content and new business models for electronic media. It concludes with a discussion on issues associated with technology in Nigeria's electronic media management. The study uses Nigeria's electronic media establishments as a case study. It adopts a cross survey method and applies it to research in the process of investigation. The findings from the study show that the electronic media occupies an important place in Nigeria's information and entertainment industry. The findings show that this is the case even when the country's information and entertainment industry continues to face a rapidly evolving climate due to the growth and expansion of modern technology in Nigeria.

### Introduction

Electronic media industries in Nigeria have continued to experience sweeping changes due to a combination of factors identifiable as technological, economic regulatory, global and social forces. Contemporary electronic media operators have continued to face a unique and rapidly changing environment as wide-spread competition and mutual rivalry have become increasingly intense. Chan-Olmsted asserts that:

*Technology has created multiple digital platforms to distribute content and engage audiences. Mergers and acquisitions have altered the makeup of the key players who operate networks, station groups, and multichannel*

*providers like cable, satellite, and telecommunication providers (201).*

Electronic media industries have continued to experience a rapidly evolving environment due to a variety of factors, but perhaps no single force has created as many challenges and opportunities as technology (Anderson 85). Distribution technologies are increasing for the electronic media industries through a variety of digital platforms targeting home and wireless devices. Consumer technologies are again expanding through smart phones, digital video recorders, wireless devices, interactive television, and household media centres. Together, this environment of expanded distribution and consumer technologies offers more control to consumers and allows for greater personalized services for users. In terms of media content, Clark writes that:

*... three areas are garnering attention of media firms. These include considerations of production involving high definition, the ability to repurpose and repackage content, and the emergence of user-generated content through social networking blogs, and sites such as YouTube (201).*

Based on the above backdrop, electronic media provides audience with a variety of entertainment and information products, and it influences the culture of a people and facilitates in defining the context of social reality. Again, it functions as an important component of the economic system. In many developed countries, most companies engaged in the electronic media, operate in the private sector and thus deliver their content and services for profit (McQuail 109).

Albarran writes that the electronic media pervades society and as consumers continue to exhibit an insatiable appetite for information and entertainment, levels of media usage reflect this trend. Television viewing, radio listening, and internet surfing dominate leisure activity in many households all over the world (39). Audiences can access information and entertainment content via band, wireless, terrestrial and consumer technologies (TV and radio receivers, personal computers and laptops cell phones, the Apple itouch, Blackberries, and Personal Digital Assistant (PDA) devices). Media operators or managers must respond to the hunger of their customers, recognizing that

their audience has many choices for entertainment and information content (Steinfeld 23).

According to Klopfenstein and Sedman, several demands for information and entertainment by the audience for profits by stockholders, and access by advertisers place managers of electronic media facilities in a challenging position as they try to serve the needs of the market along with the demands of the market place (203). This balancing act is made all the more difficult by constant changes in competitive pressure, technology, regulatory issues, social issues and consumer tastes and preferences.

Electronic media companies engage in similar activities. Sherman (1995) identifies four separate but interrelated activities: development, production, distribution, and exhibition. Development is concerned with new technological innovations. Technology stimulates the growth of the electronic media and improves the quality of media consumption (96). Advances in mobile content delivery and interactive television are but two examples of recent technological innovations in the electronic media. Technology continues to change the nature of the media business and the way Nigeria environment uses the electronic media.

Electronic media shares similar activities, each industry is undergoing considerable change as a result of media convergence. Media convergence as usually thought of, is the integration of video, audio, the internet and computing systems, as well as distribution technologies (Steinfeld, Baldwin, and McVoy, 1996). Due to the simple fact that co-operations in Nigeria now dominate the electronic media industries with multiple holdings in many states, cities, companies, have been engaged in converging operations to save resources, most especially, in Lagos- Nigeria.

In Nigeria's context, electronic media firms with multiple media holdings, which may involve a combination of radio, television, cable channels, newspapers, and websites, companies such as DSTV, GOTV, Star Times and NTA plus, just to mention a few, are taking the lead to integrate newsgathering operations, as well as back-office support, marketing, and engineering. Convergence continues to evolve and is another factor changing the face of electronic media management.

## **Technological Trends Impacting the Electronic Media In Nigeria**

Based on the investigation of this study, carried out in Nigeria's electronic media context, the following main points establish a premise for technological trends' discourse in Nigeria.

- Over 65 percent of households in Nigeria pay for television through a cable, satellite, or Telco distributor according to Nigerian Telecommunication Association.
- Nigerian households continue to increase their spending every year on entertainment and information technologies, and citizens are spending increasing amounts of their time with media.
- Over 65 percent of Nigerian households have internet access, and many of these households are spending increasingly more time with the internet than with the traditional media.
- There are more cell phones than landline phones in Nigeria.
- Ipods and other Mp3 players are preferred over radio listening by most young adults.
- Nigerian consumers are rapidly adopting wide-screen digital video recorders, Mp3 players and Smartphones.
- Wireless technology has emerged as the preferred way to access the internet via laptops, cell phones, PDAs, and other devices in Nigerian society.
- In Nigeria's electronic media scene, user-generated content in the form of blogs and video (YouTube) and social networking sites like MySpace, Facebook and Linkechin are redefining the web experience for their utility to share contacts, entertainment, and news.
- Smartphones such as the iphone and blackberry offer a range of functions including internet, email, mp3 player, digital camera, calendar, address book and more opportunities for media access and consumption.

Taking the above points into consideration, the study emphasizes that technology is both widespread and changing the way in which consumer's access media content in Nigeria and many other parts of the world. This intensive technological environment is posing havoc for electronic media operators, who are struggling to remain competitive in a world where the audience is increasingly fragmented.

This discourse on technological trends in Nigeria's electronic media centres on two major categories: distribution technologies and digital platforms. Both areas have implications for the electronic media industries.

- i. **Distribution Technologies:** Electronic media began by broadcasting a terrestrial signal that was received by coaxial cable and satellite, while in radio terrestrial broadcasting competes with satellite radio (Green 76). The distribution technologies available to electronic media firms in the 21<sup>st</sup> century Nigeria are as follows: *Digital Television (DTV)* and *High Definition Television (HDTB)*- the development and diffusion of digital television with high –definition capability has forever changed the television landscape (Dupagne and Seel 98). In Nigeria, there has been much effort to achieve a transition to DTV instead of the popular analog; *Broadband Distribution*- this includes a number of distribution modes, not excluding coaxial cable, internet, digital subscriber line (DSL), Fiber optics and wireless.

Broadband delivery means multiple channels of information and entertainment made available to consumers through any number of potential reception technologies-the TV receivers, a personal computer or laptop, a cellphone, mp3 player (Ducey and Kraemer 80). Nigerian electronic media operators negotiate carriage on broadband platforms, so that their content can be accessed by these different audiences and consider joint partnerships as a way to secure access to *Internet*-in Nigeria's electronic media backdrop, consumers' access to the internet in one of three traditional dial-up, higher-speed broadband, or wireless gargets. Dial-up mode of operation is in rapid decline as more consumers and households in Nigeria, have moved to broadband internet processes. High-speed access, driven by cable modems, DSL, and Fiber, have continued to grow as *wireless* or *Wi-Fi* subscription, which can be found just about everywhere in Nigeria except remote rural locations, is rapidly taking over. Wi-Fi access tends to make it possible to send internet-related content to cell phones, Mp3 players, PDAs, and other enabled devices, more effortlessly. *Hybrid digital and satellite radio*- this is another form of internet action which is fast-growing in Nigeria as more service-providers are now moving, almost completely, to offer new service to listeners. Radio managers are hoping to generate new audiences and revenue through their High Definition Channels, in the same way as their counterpart TV managers with DTV are doing.

- ii. **Consumer Technologies:** While there are increasing distribution options available to electronic media firms in Nigeria, consumers now have even more ways to use and receive media content aside from the traditional methods of terrestrial, coaxial, satellite, and tape/video systems. Current trends in electronic media are: *Smart phones (Mobile Phones)*-there are more mobile phones in use in Nigeria than land lines, and there is no doubt that mobile phone is emerging as a primary consumer communication device with

its many capabilities. For example Smartphones like the Blackberry, as created by research in motion or the iPhone as developed by Apple, have lured more consumers in Nigeria into adopting phones with many capabilities, such as Mp3, Video and audio applications, to mention a few.

*Digital Video Recorder*- this technology enables the consumers to record and store content on a hard disk and the user can go on to play back the material whenever the need arises. Again, it allows the user to skip commercial messages and offer a number of interesting features, such as the ability to watch one programme while recording another. *Wireless Reception Devices*, in addition to Smart phones, new and improved versions of iPods and other Mp3 players, were created to offer wireless reception. Products such as Apple TV and the Slingbox exist to enable household users to store and send video and internet content to other rooms in a household; and this means that consumers are able to enhance their viewing experience, where their TV experience is coupled with internet access that allows for all sorts of interactive applications, namely, from shopping and leisure activities to sports and news for example, Microsoft, Hewlett Packard, yahoo, and oracle (Lieb 103). *Media centers*- Microsoft, Hewlett Packard (HP), and other computer and software makers, have developed devices capable of integrating traditional computing and entertainment options. These products referred to as the Media Centre, have continued to provide a number of technological options for the Nigerian consumer of electronic media services in no small measure.

### **How Technology Affects Media Content in Nigeria**

Technological innovations have posed new challenges to electronic media managers in Nigeria as these media managers struggle to address how their content products must change and adapt to local situation. Three areas that are drawing the greatest attention are those of High Definition TV, Repurposing and Repackaging content and user-generated content: *High Definition Transition*- With the transition to a full digital environment in Nigeria, HDTV is now a reality in most local markets. This brought many challenges to management, most notably for news production. TV stations such as *channels, NTA; Supers ports, cartoon network, soundcity channel 0, Ajazeera and CNN*, to mention a few have had to adapt to larger and wider options for sets and reconfigure sets and graphics. HD also means more investment in preparing talent for on-air presentation. Talent must give more attention to hair, make-up and clothing considerations, as all appear much clearer and sharper in an HD environment (Baker and Green 96).

The second area drawing attention in Nigeria apart from Definition TV is *Repurposing and Repackaging content*. Repurposing is not a new trend, but an existing technology which enhances repurposing possibilities. TV broadcasters are enabled to integrate and expand existing content through duopoly/local marketing agreement/joint services agreements, via multicasting of standard digital television (SDTV) signals, and integration with their local web sites. News packages designed for broadcast is much longer in a repurposed environment, whether on another channel, over the internet, or sent to a mobile phone. This gives the electronic media firms in Nigeria the opportunity to consider how to repackage content. The third factor drawing attention and affecting electronic media content in Nigeria is *user-generated content* – with western technological development and as electronic media content morphs into other forms and formats, users do not only have more control over individual consumption and usages; they are creating and distributing their own content. User-generated content (social media) consists of social networking sites (MySpace and Face book) where user share personal information (photos, text) as well as preferences and tastes for music, movies, and television programmes (Lieberman 23).

In addition to social networks, YouTube demonstrated consumers' willingness to share original video content with one another. The ideal growth of YouTube forced electronic media firms in Nigeria to seek out content from their viewer for possible use in their broadcasts. Blogs, or blogging has also risen in popularity in Nigeria as media organizations were slow to respond to blogging, but now most journalists and other key personnel in the media industry, offer blogs via the company website and information, especially, outside of the mainstream media.

### **The search for New Business Models and Revenue Streams in Nigeria**

Historically, the electronic media industries have been heavily dependent on advertising for the majority of its revenues. This simple business model-selling advertiser's access to audiences continues to sustain the electronic media firms in Nigeria, but advertisers are very concerned about consumers or audience fragmentation and the difficulty of reaching new audiences with their messages, and many advertisers are increasingly moving money into digital/online media from traditional media.

Technology creates opportunities for new business models and revenue streams beyond traditional media advertising. Advertising continue to be

mainstay for revenues for electronic media industry through both spot placement and strategic product placement, but there are hopes that new business models will deliver new sources of revenues, especially through the internet and other digital platforms (Ha and Ganahi 87). There are three major areas that affect business models and revenue streams in Nigerian electronic media context – they include: multicasting, subscriptions, and pay for play respectively.

First, *multicasting*- the ability for television broadcasters to deliver a number of standard Definition Television signals raises the potential for new revenue streams. Using digital compression technologies, it is possible for most TV stations in Nigeria to broadcast between two to four different standard Definition TV channels. Also, there is the potential to use part of this spectrum to transmit specialized information, such as business and information services, either as simple text or as video and audio streams. Multicasting creates greater demand for content and takes creative marketing and promotional strategies to get these new services off the ground, create awareness and need among potential users.

Secondly, *subscriptions*- the electronic media industries continue to develop subscription-based services sold directly to consumers as they are always willing to pay for services they desire or want through paying monthly fees for television services in Nigeria such as cable and satellite, as well as for premium services like Home Boy Office (DSTV-Family and friends, premium and access; GOTV, Star Times, CNN, BBC, Telemudo and others). Electronic media has moved to an environment as-you-go as the firms identify new opportunities for subscription-based services, whether they are in print, in broadcast, online or multimedia and developed marketing strategies, to attract customers.

Third, *pay for play*- this can be thought of in much the same way as pay per view, that is. instead of a monthly or annual subscription, users simply pay for the actual content they consume (Bianco 69). This model is prevalent on the internet and continues to grow as a business option. Price point becomes an important issue in developing pay for play contact as it is common with the Nigeria electronic media.

### **Management Issues Associated with New Technologies in Nigeria**

The growth and diffusion of modern technology poses many challenges for electronic media management in Nigeria and Africa as a whole, involving



numerous areas of oversight and administration. Key issues concerned with technology and their overall impact on electronic media organizations in Nigeria include; personnel, fragmentation, and creating value in an increasingly technology-driven society.

One, *personnel* –employees, associates, workers or any other term used to describe personnel, represent the most important component of any organization. Technology impacts on personnel in many ways and places evolving requirements on the types of skills needed to be successful in electronic media firms. In addition to basic computer skills, electronic media personnel require a wider range of technical skills depending on their job function and department they call home. One key challenge is not only finding new personnel with the requisite skills but continually retraining and retooling for existing employees. Management invests more resources in their staff to keep them trained for new applications and technologies that impact upon their job function (Rose 119). In order to serve the need of electronic media firms in Nigeria, existing workers and people planning to enter the electronic media, must develop a variety of skills sets from a technical and standard point intended to position them for the best available job options.

Two, *fragmentation*- the fragmentation of the audience brought about by increasing options for entertainment and information in many electronic media environment including Nigeria, as well as a host of consumer-level technologies, is a killer management issue for electronic media firms (Anderson 11). Electronic media managers cannot stop fragmentation, but they only try to minimize its impact. These new efforts require creativity, as well as enhanced marketing attempts to properly target consumers.

In Nigerian electronic media environment, advertisers have continued to shift away from traditional media, hence, reaching consumers is becoming more difficult and more expensive (Bianco 69). Advertisers continue shifting more nairas to online and product placement at the national level in order to reach fragmented audience. They do so without considering Nigerian youths, who are less likely to read a newspaper, watch *NTA, Channels, CRBC, AKBC, Lagos channel* to broadcast TV networks or listen to regular radio. Of course, this again, impacts upon the electronic media as advertizers seek new clients and ultimately new revenue streams to counter these defections.

Three, *creating enterprise value*- all businesses, being what they are, operate to make or earn profit and always try to increase the value of their firms, not

just for stockholders and owners, but to provide the resources needed to function in a competitive business environment, thereby, building value for their enterprise. In radio industry, the audience have multiple alternatives for music and information from satellite radio, online or internet radio and podcasting (Albarran, et a 2-11., Green 2005). HD radio offer increased value to existing radio companies, giving them the opportunity to offer niche services such as satellite radio and even digital video radio (DVR) like storage and playback functions for audio.

In Nigeria electronic media context, broadcast television, cable, and satellite services, continue to siphon cost which is most often raised, even when the cost of converting to a digital environment is already expensive, with no way to recapture the investment in a short time. Cable is well positioned in its ability to draw revenues from many different areas and new services, like an high definition (HD) tier and video on demand, clearly adding enterprise value for cable operators. Satellite remains a strong number two service, constrained by not being able to offer high-speed internet service. Both services face increasing price pressures as the telecom companies target subscribers.

In a nutshell, management issues related to increased enterprise value, run across the electronic media industries in Nigeria. No industry offers a clearly competitive advantage over the others, and each area is often seen fighting and struggling for an audience, for advertisers and for their own economic future in the electronic media milieu.

### **Conclusion**

Electronic media industries in Nigeria have continued to face a rapidly evolving environment due to modern technology. This paper has successfully examined the key technological trends and their impacts on electronic media environment. The paper has successfully reviewed how technology has impacted upon Nigeria's media content. It highlighted some of the new business models and revenue streams in Nigeris's information and entertainment industries proceeding to summarize specific management issues associated with the impact of new technologies on Nigeria's electronic media context.

Distribution technologies in Nigerian electronic media industries are growing through a variety of digital platforms targeting homes and wireless devices. Consumer technologies are also expanding through Smart phones, digital

video recorders, wireless devices, interactive television, and household media centres. This enclave of expanded distribution and consumer technologies offers more control to consumers and permits greater individual and personalized services for users. Three areas are garnering attention in media firms, in terms of media content these include considerations of production involving high definition, the ability to repurpose and repackage content, and the emergence of user-generated content through social networking, blogs, and sites, for example YouTube.

Regarding business models, electronic media organizations are constantly searching for new revenue streams. Multicasting holds the most promise for Nigerian television broadcasters in a totally digital environment. Subscriptions are becoming more prominent across the electronic media, as consumers pay for new or specialized content, while pay for play media environment.

In a nutshell, in terms of management issues three major areas were discussed. People or personnel remain the most important part of any electronic media organization. Increasingly, technology will always demand staff with a variety of technical skills. Fragmentation is huge problem for traditional media firms, as audiences shift to other content providers and advertisers follow suit. All managers must be concerned with raising the value of their enterprise, and in a competitive and rapidly changing landscape, there are significant challenges for each industry highlighted in this paper.

### **Works Cited**

- Albarran, A. B. et al. "what happened to our Audience?" Radio and new technology uses and gratifications among young adult users. *Journal of Radio studies*. Vol. 14, 2007.
- Albarran, A. B. *Media economics: understanding markets, industries and concepts.*(2<sup>nd</sup> ed) Ames, IA: Blackwell, 2002.
- Anderson, C. *The Long Tail*. New York: Hyperion, 2006
- Baker, S., and Green H. *Beyond Blogs*. *Business week*, August, New York; 2008.
- Bianco, A. *The vanishing mass market*. New York: Business week, July 2004.
- Chan-Olmsted, S. M. "Content Development for the third screen: the Business and strategy of mobile content and applications in the United States" *The international Journal on media management*, Vol. 8, 2006.

- Clark, D. *A New Tech Battle for the home*. Wall street journal, Vol. 4 New York, 2005.
- Ducey, R. V., Fratrick, M. R., and Kraemer, J. S. *Study of the impact of multiple systems for mobile/handheld Digital television*. Retrieved from <http://www.bia.com/publications-reports.asp> (April 30), 2008.
- Dupagne, M., and Seel, P. B. *High Definition Television: A Global perspective*. Ames: Iowa state university, 1998.
- Green, H. Internet Radio 101, *Business week*, retrieved from [www.businessweek.com/print/technology/content/mar2005/tc2005037-3846-tc024.htm](http://www.businessweek.com/print/technology/content/mar2005/tc2005037-3846-tc024.htm), 7march, 2005.
- Ha, L., and Ganahi, R. *Webcasting Worldwide Business Models of an Emerging Global Medium*. Mahwah, New York: Lawrence Erlbaum, 2007.
- Kclopfenstein, B. C. and Sedman, D. *Technical Standards and the Marketplace: The case of Am Stereo*. *Journal of Broadcasting and Electronic Media*, Vol.34, 1990.
- Lieb, R. "Interactive's sear change". Retrieved for <http://www.clickz.com/experts/brant/buss/article.php/3344381>, April, 23, 2004.
- Liebman, D. "Cable could rule if it plays its cards right: *United states today*". Retrieved from <http://www.usatoday.com/money/media2005-01-23-cable-outlook-x.htm>, 2005.
- McQuail, D. *Mass Communication Theory* (3<sup>rd</sup> ed), Newbury park, CA: Sage, 1994.
- Rose, F. *The Lost Boys*. Wired, August 2004
- SteinField, C. Baldwin, T. S., and McVoy, D. S. *Convergence: Integrating Media, Information and Communication*. Thousand oaks, CA: Sage, 1996.