

CHAPTER SEVEN  
THE NEW DIGITAL WORLD IN TELEVISION BROADCAST

DR. ADUKU ARMSTRONG IDACHABA (Ph.D)

INTRODUCTION

There is no doubt that the switch from analogue forms of broadcasting, to the digital is the most substantive change to African and indeed the global television. Digital technology for the production, transmission and reception of television is clearly superior to analogue the one mostly used by African countries today. But the eventual complete transition to digital transmission throughout Europe and indeed the world seems inevitable. The transition is mandated by the global telecommunication union ITU.

It is apparent now that the main issues relating to digital transmission, is not whether to switch or not by when and how. According to Informal Telecoms and Media predictions at the end of 2008, 67 million digital household will be added to the number of house hold having access to digital television, bringing the worldwide total to 343 million and a penetration rate of 24 percent. It is expected that another 62 million will be added by 2009.

An American scholar of Nigerian descent Igyor(2004) projects that cable will be the main source of digital TV bringing in 290 million homes by 2013, followed by DTH 129, DTT 111million ,IPTV 54 million. He projects that at least half of the world's homes or 636 million households will have digital television by 2013. To achieve this in the UK, Great Britain is spending 400 million pounds over a seven year period to educate 60 million citizens about its digitization transmission.

The story of digital television in the UK effectively started in August 1995. The

policy document for the transition in the UK specifically projects that

Digital broadcasting could mean many  
More television channels and radio stations  
For many people it will provide their first  
Experience of the full potential of the information  
Super highway. It will provide significant opportunities  
For the British manufacturing and programme production  
Industries. In the longer term it may be possible to  
Switch off analogue transmissions of terrestrial  
Broadcast services, reloading significant amounts  
Of valuable spectrum for further broadcast or other uses.

The United Kingdom was the first European country to launch a DTTV transmission in 1998 as the USA. Sweden followed in April 1999, Spain in May 2000, Finland in 2001, and Germany in 2002. Italy went digital in 2003, France and Denmark came in lately with the 2004 launch. The rest of Europe it is expected will catch up with the digital divide in 2010.

### DIGITISATION IN NIGERIA

Is Africa and indeed Nigeria ready for this change? What are the challenges and ultimate value for Africa? We in Africa live in a committee of nations, can we be isolated from the impacts of global policies and initiatives. These are the problems this paper will attempt to address.

Firstly, millions of Africans do not see this as a challenge due largely to ignorance of the future direction of the industry. Secondly, who is going to ease the burden on the African households to help analogue dependent viewers buy converter boxes which are crucial and indispensable to equip their TVs to receive digital signals

To make the switch over possible in Africa, African leaders must address the needs of over 98 percent of African households who rely solely on analogue TV.

In the United States of America for instance, congress set aside 1.5 billion for a massive coupon support programme to help analogue dependent viewers to buy converter boxes to enable them receive signals on the digital platform.

Igyor (2004) notes that the major challenges that DTT will offer include the promotion of digital television, upgrade, new licensees, and channel availability.

To address this challenge he advises that the broadcast industry and governments must publicize, enlighten and create awareness. The second challenge is the entrance of new players, which according to him will precipitate a change in organization and strategies. Broadcasters as a matter of necessity must begin to re think their roles and business models, in a multi-channel environment that is particularly imperative for broadcasters wishing to get access to the increasing number of viewers using non-terrestrial platforms.

Thirdly, a multiplication of channels will boost the demand for television programmes and attractive content will become highly valued asset. Igyoor (2004) notes that the major challenges that DTT will offer include the promotion of digital television, upgrade, new licensees, and channel availability. To address this challenge he advises that the broadcast industry and governments must publicize, enlighten and create awareness. The second challenge is the entrance of new players, which according to him will precipitate a change in organization and strategies. Broadcasters as a matter of necessity must begin to re think their

roles and business models, in a multi-channel environment that is particularly imperative for broadcasters wishing to get access to the increasing number of viewers using non-terrestrial platforms.

Thirdly, a multiplication of channels will boost the demand for television programmes and attractive content will become highly valued asset. Delivery cost will decrease and no longer be an issue; the problem now will become a greater number of retail outfits competing for relatively scarce content. An increase in competing number of competing channels would bring about a reduction in the size of the average audience for each program broadcast, as average audience members will decline, the programming cost per audience member will increase and without a corresponding increase in advertising revenues the average profit of television channels will be greatly reduced.

Igyoor(2004)believes that advertising revenues per hour tends to fall while per hour cost of programming continues to remain constant at best, there will be a squeeze on the profitability of both public broadcasters and commercial services as a direct result of more channel availability. According to him granting of new DTTV licenses to existing broadcasters will enable them to operate differentiated channels and aggregate audiences across those channels, thus mitigating the potential financial harm of digital transition.

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Nigeria has set the date of April 2012 as the target date for the transition in Nigeria. The National Broadcasting Commission working for the federal government has constituted a presidential advisory and implementation committee to drive the process. But this target is fraught with various challenges. This historic shift according to Igyor(2004)will result in all the present television stations on the continent to vacate the analogue airwave which used to be the industry standard since television began in Nigeria in 1959.By the deadline it is expected that broadcasters ,political policy framers, producers, and all other stake holders will be actively involved.

Broadcasters will transmit only digital signals, which offer crisper reception, dazzling images and multiple channels from stations that now transmit in only one channel.

Betieng (2008) states that the obvious constraints that face digitization in Nigeria, include those associated with cost of reception and those related to service providers. Other constraints relate to filling the gaps in media literacy to be able to navigate and appreciate the new media, the systems capacities, upgrading of technologies and the required technical support. Other challenges to the industry include like high level of illiteracy, unreliable and erratic power supply due to mass corruption.

Betieng notes that above all there is the challenge for public service broadcasting

in an age when it is threatened with extinction from the pressures of consumerism and globalization. He wonders how local and small scale creative industries, media managers will survive global brands that will be competing in a digital age and platform.

Therefore, Betiang argues that we need some kind of public policy at transnational level which can harmonize the peculiar needs of local cultures to cushion effect of the march towards technology.

### benefits of digitization

Digital television is an innovative new type of broadcasting technology that will transform television viewing experience. It allows television stations to provide dramatically clearer pictures and better sound quality. DTV can also offer multiple programming choices, interactive capabilities and data services such as significantly enhanced closed captioning. DTV allows stations to offer a number of new and better services.

It will also enable television stations to provide several channels of programming at once. This is known as multi-casting. For programme producers, digital technology will simplify, streamline and reduce the costs involved with production, editing storage and transmission of television programmes and services. Because less power is required in digital transmission, the energy consumption and broadcast cost for each television service is lower than the analogue. Digital technology is more versatile in that it facilitates enhanced programming (multi-camera angles, additional information to complement

programming etc and interactive services, as in internet. The development of digital compression techniques has reduced the amount of spectrum required for television transmission, and this provides scope for a substantial increase in the number of spectrum required for television signals available to viewers. Where a station normally uses one channel it will be able to generate minimum of three channels.

### RECOMMENDATIONS

-The NBC (2008) recommends that for a smooth transition to digital broadcasting in Nigeria, Government should set up a digitization implementation task force to plan and execute the process and provide adequate funds to midwife the transition.

- Government should provide the necessary and enabling infrastructure, while operators of the industry must consistently educate the public on the implications of the coming environment.

-Recommended that for Nigeria to benefit from the envisaged reduction in the prices of digital equipment, the country should attract an assembly or manufacture of the facilities to the country.

-The need for sustained free enlightenment campaign be mounted by all broadcasting stations in Nigeria to adequately, sensitize the populace on the full implication of transmitting from digital to analogue.

There is need to in the interest of the poor people of Nigeria consider the introduction of an equivalent of the Universal Access fund of the

telecommunication to the broadcast sector.

-The need to standardize equipment especially the set-top boxes to save cost and enable reception, while government should get the private sector to assist in the funding process.

-Need to encourage local entrepreneurs to manufacture decoders and other equipment.

-The need for sustained efforts towards achieving the switch over target since the date is not open ended.

## REFERENCES.

Betieng, Liwhu (2008) Digitisation and the challenges for Nigeria Broadcasting Industry. NBC NEWS. Abuja, Nigeria.

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Udeorah, Bridget (2008) Nigeria Goes Digital: The Communique. NBC NEWS Abuja, Nigeria.

## WORK TO DO

### THEORY

1. Classify the three stages of television programme production?
2. Explain the production process of a television programme?
3. Identify the equipments required for television programme?
4. Enumerate and explain the key professional involved in TV programme production?
5. Explain the importance of the following equipment in television

- Lights
- Camera
- Microphone
- Switcher
- Non-linear editing
- Linear editing
- Cameraperson

6. Explain the production process and key personnel involved in television drama production?

## PRACTICALS

STUDENTS or Groups should engage in the following practicals to broaden their knowledge in Television Production

- (1) Write and produce thirty minutes documentary on any topic
- (2) Write and produce thirty minutes movie with less than ten characters
- (3) Write and produce fifteen minutes interview on road safety, bribery and corruption in Nigeria.
- (4) Write and produce fifteen minutes News Broadcast.

**NOTE:** Programme production on television is a collaborative effort. Therefore, students should get themselves involved in all the stages of production, including shooting /editing.

## GLOSSARY

**Ambient Sound.** Unintelligible background noise found in and generally unique to an audio environment.

**Aperture.** Opening in camera lens controlling and allowing light to pass through.

**Assemble edit.** A video editing procedure which records new video, audio, and control track information simultaneously without reference to any