



## Radio Pakistan in the Digital Age

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### ABSTRACT

With the advancement of technology, the use of streaming media by media petitioners has taken a quantum leap in recent years. The use of webcasting is now common in PSB (public sector broadcasting) across the globe. With the adaptation of the latest technology and its use in different program formats, Radio Pakistan has planned to use the best streaming gadgets in the coming years. Webcasting has increased the availability of radio communication, to anyone who has access to a computer. Pakistan Broadcasting Corporation, commonly known as Radio Pakistan, adopted web-based technology for its programming in 2010 in its initial stages. To reach across the globe, medium waves and FM broadcasts of Radio Pakistan are now using Garden Radio Apps to increase their listenership and improve their reception. Under the vision, 'Digital Pakistan had decided on a complete digital migration of Radio Pakistan under the Phase 1 and Phase 11 DRM (Digital Radio Mondiale) Plan.

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## 1. Introduction

Since the inception of Pakistan in 1947, Radio Pakistan, now Pakistan Broadcasting Corporation (PBC), has made good headway. Once, it was considered the government mouthpiece and confined to the programs that suited the ruling elite. Since the Pemra (Pakistan Media Regulatory Authority) was established in 2002, the licenses have been opened with the mandate to increase the opportunities for listeners and specific program lovers to tune into the shows of their own choosing to listen to. After consultation with Pakistan Telecommunication Authority (PTA) and Frequency Allocation Board (FAB), PEMRA opened licenses in the following categories. To decentralize Pemra, it allowed the installation of stations at the provincial scale;

- The Pakistan Media Regulatory Authority can issue licenses for radio stations operations at the national and international levels.
- To encourage the local community, community-based radio stations were allowed to obtain broadcast licenses for radio and TV.
- Specific and specialized subject stations like agriculture-based community or education radio were also allowed to obtain licenses.
- Pemra also decided to provide uplink facilities after paying a certain fee.
- Teleporting and distribution services would also be provided by Pemra on certain

Radio has industrialized through an important evolutionary process in Pakistan since 2002. Whereas in the past, Radio Pakistan was totally under government control and the airwaves were strictly monitored by the FAB (Frequency Allocation Board). News, drama, sitcoms, and procedural plays were all monitored before they went on air. Today, FM radios are operated by a variety of public and private sectors (Lull, 2013). It is beyond doubt that FM broadcasting brought about a significant change in creating harmony and bringing societies closer to each

other. Before, the development of FM broadcasting, AM and SW services were the most important sources of information and entertainment (Machado-Fernández, 2015).

It is a recognized fact that the media is crucially important as a communication sector and greatly influences society. Radio, TV, film, and now the internet, one can get updated news about the world just with one click. Proximity is the main feature of digital communication. Pakistan has yet to modernize its electronic broadcasting. The process under the digital migration policy has been started, but the present situation indicates that this policy will be delayed considerably due to the financial crunch (Riegert, Roosvall, & Widholm, 2015).

If we see the role of Radio Pakistan, now a statutory corporation, it has had a tough time since its start in 1947. Before partition, three radio stations were already in service in what later became Pakistan. Radio Station Peshawar was established in 1935, Radio Station Lahore in 1937, and Radio Station Dhaka (now in Bangladesh) was established in 1939. Karachi, the capital of Pakistan from 1947–1959, with a dense population of around 21 million, was without any broadcast service. Keeping in view the importance of the city and its diverse population, Karachi Radio Station was established in 1948, followed by Hyderabad, Quetta, and Rawalpindi. One monitoring station (the receiving center) started its function in Peshawar in 1960. The purpose was to monitor the programs of other countries, particularly India (Bhuvaneshwari, Hettiarachchi, & Meegoda, 2019).

In fact, centrally controlled Radio Pakistan was the mouthpiece of the government. Radio The status of Radio Pakistan was transformed on December 20, 1972, into a statutory corporation body managed by a panel of experts from various fields, called the Board of Directors, and a Director General as head of the organization. The name was changed from Radio Pakistan to Pakistan Broadcasting Corporation. Pakistan Broadcasting Corporation, formally Radio Pakistan, started its FM transmission in October 1998. Keeping in view the popularity of FM in local communities, FM radio stations were installed in Islamabad, Gwadar, Mianwali, Sargodha, Kohat, Bannu, and Mithi. With this expansion, the concept of people talking about government—that state-owned Radio Pakistan is the mouthpiece of government and only typically new organizations—changed. After the induction of the visual medium in the form of TV in 1964, radio gradually lost its importance as a social medium. Television started a variety of musical, current affairs, and Islamic programs (Zeisler, 2022).

FM broadcasting arrived in Pakistan in the private sector in the 1990s but was confined to entertainment programs like jazz, folk, and classical music. Radio Pakistan launched the FM service in 1998. In 1994, FM 100, in the private sector, took initiative and started programs that suited the young generation (Johnson, 2014). Currently, in Pakistan, we have a range of FM radio stations airing programs in various genres on the Pakistan airwaves. With the progression of the latest technology, Internet radio broadcasting has taken a quantum leap and is becoming a source of revenue generation through advertising and live sports like PSL, OID, and short format matches.

The Daily Guardian, in its report under the title "The Emergence of New Technology in Radio," stated that since the 20th century, technology has greatly changed the whole scenario of the world in all fields, and with time, it has continued to grow to date. We are living in a world driven by technology. This advancement has played a very important role in the development and understanding of human civilization. We can see a big change in the culture and lifestyle of people. This is all because of the media and its specific transmission to bring about change in human behavior. Referring to the quote from David Bohm's article, it further states that even today this proverb is a "network of communication which puts each part of the world together and makes it much easier for people to get information, share, and communicate". This statement seems very pertinent today. One of the most important functions in human progress has been the power communication sector, which has continually developed over time. We have come a long way from pigeon carriers, couriers, telegraphs, and now radio and the internet (Kalla et al., 2022).

### **1.1. PBC/Radio Pakistan digital migration policy/Modern Trend and Technology**

To compete with the world and to defend the geographic importance, Pakistan now has decided to digitize the state-owned radio by introducing latest technology in different sectors with the purpose to expand its transmission with in the country and across the border with better

reception of programs. To convert all analogue station into digital format the Government announced Digital migration policy of Radio Pakistan was announced on 24th Dec, 2019. As per report published in Dawn policy would be implemented in three different phases at the cost of Rs3.995 billion. The project will be completed in six years (Gupta, Dhurandher, & Kumar, 2019). To expedite the digitalization process of broadcasting Network, an estimated three billion rupees would be spent on the installation of a 1000-Kilowatt DRM Medium-wave transmitter in Anari Mool, now known as Fort Monroe a famous attraction point for tourist in D.G Khan Region. It will be a first mega digital project of state-run radio transmitter as part of Phase-11. With this induction people of regional will be able to receive a noise clear programs of Radio Pakistan.

Ministry of information and broadcasting and concern Engineering Unit of Radio Pakistan and other stakeholders are negotiating the international donor's agencies to start this the mega project (1000KW DRM transmitter, After the commissioning of this transmitter, Radio Pakistan would be able to extend its transmission to specific strategic points including arch rival India. The transmission will also spread into Afghanistan, Iran, Center Asia and some part of Gulf States. It is important to state that Pakistan arch rival India has previously connected two 1,000-kilowatt digital transmitters to its huge broadcasting Net-work. India also have the considerably volume to install digital transmitters alongside of Pakistani soil adjacent to India (Thomas, 2022).

Government is keen to take all necessary measure to complete the project with in time. The Punjab government in this regard has been requested to purchase land for the specified use. Punjab, Sindh, and Baluchistan are all connected by the district of Dera Ghazi Khan. It would help to remove their sense of deprivation living in South Punjab. The process of converting analogue Transmitter to Digital format five well equipped digital low power transmitter for AM broadcast will be installed all in designated areas. In the binging Islamabad, Lahore, Karachi, Faisalabad and Multan station will be digitalized.

Islamabad, Lahore, Karachi, Faisalabad and Multan station will be digitalized. Besides, above development 8 new DRM and FM station with the coverage area of five kilowatts would be installed in Quetta, Peshawar, Gilgit, Skardu, Gwadar, Mirpur (Azad Kashmir), Khairpur, and Narowal. Radio Pakistan have planned to expand its network to Lahore, Skardu, Quetta, and Peshawar with latest facilities of transmitting programs. This expansion will be carried out in its Phase-111 stage. "The project of phase one is already in progress under in which the existing 400-kilowatt DRM-enabled Medium Wave transmitter at Peshawar and 100 KW DRM will be upgraded for operation on simulcast mode with the expenditure of Rs176.882 million" (Yasin Ar, 2020).

### **1.2. Digital Radio Mondiale (DRM) Welcome Pakistan in DRM Consortium**

With digital migration Radio Pakistan will able to be benefited of providing more channels using present allocated frequencies of analogue stations. This will help to save considerable amount of power and lot better quality. To achieve this purpose concerned authorities are considering to obsolete analogue radios to digital receivers. It is expected that these receivers will shortly be available in the market. Car manufacturers are already on digital mode.

As the more and more companies are joining DRM Consortium, the Radio Pakistan, Now Broadcasting Corporation (PBC) is eager to familiarize with the latest technologies being used for the benefit of listeners in Pakistan and overseas. At present radio programs are being disseminated through FM, AM, SW, and satellite, frequencies. At national level, PBC broadcast its programs in twenty-three different languages in its twenty-four transmission, covering, Eastern, Northern Asia, Western, Southern, and specific areas of Eastern Europe.

### **1.3. Streaming Media service of Radio Pakistan**

PBC Network broadcast the following services.

- Programs to cater the need of local community of all different region Home Service is available.
- Medium Wave Network
- To reach beyond boundaries External and world Service are playing its effective role using short wave transmitter

- FM network is very popular amongst community and FM – 101, FM – 93, FM – 94 and FM – 93.5 are transmitting programs of public choice.
- Saut ul Qur'an Network. The Streaming Services of all above networks available.

#### **1.4. Radio Pakistan, Politic and revenue generation strategy**

Private sector earn revenue by attracting commercial and radio spots, but in Public Service broadcasting, the only source of income is revenue collection through license fee which the Prime Minister Nawaz Sharif in its tenure (2012), abolished. Radio license fee, which in those days was a substantial source of income for state broadcaster. With the abolition the Radio Pakistan became totally dependent on government grant.

In favour of Radio Pakistan, English daily Tribune in its publication, February 27, 2012 (Letter to the editor) published a letter criticizing Government action of abolition the Radio. Criticizing governmental actions the author of the piece states his opinion that public broadcasters are not factories producing goods to be purchased and sold. They offer invaluable public utility programming in fields and on subjects that are crucial to a country's development. Public broadcasters are not businesses oriented entity and not make money through advertisement/commercial spots. The provision of public service broadcasting is similar to the provision of other national organizations' services.

#### **1.5. Radio and Global Market Overview**

The market for radio broadcasting is made up of organizations (sole proprietorships, partnerships, and organizations) that run broadcast studios and facilities for the over-the-air or satellite delivery of radio programs. These radio programs may include entertainment, news, talk shows, business data, or religious services. Radio broadcasting is a market. The market for radio broadcasting also includes donations and subsidies. AM, FM, SW satellite radio, and HD radio are the four primary categories of radio broadcasting services. Amplitude modulation is a type of modulation used in electronic communication, particularly for the transfer of data over radio waves. Public and private broadcasters fall under the different categories, and they use distinct frequency bands such extremely low frequency, low frequency, and medium frequency.

In many ways, the Nordic public-service broadcasting organizations can be considered as the foundation of the media welfare state. The public service broadcasters, more than any other media structures, exemplify the four key principles we have identified: they are Government funded and the accessibility of PSB (Public service Broadcasting is remarkable. In digital broadcasting world the Nordic public broadcast sector were first established as radio monopolies during the interwar period, but they have since changed and matured into self-assured, cutting-edge, and well-liked multimedia enterprises (Syvertsen, Mjøs, Moe, & Enli, 2014).

#### **1.6. Digital Platforms**

Analogue broadcasting is being speedily replaced digital signal. Now all over the world digital television broadcasting is common feature. Majority of broadcaster/ radio stations now have their own digital library which is available their websites for On-Demand listener's choice. Because of digital transformation many gadgets are avail for podcast service. Like BBC podcast, Radio Pakistan's podcast are very common. It's an easiest way to grasp the audience through podcasting. It is just like an audio blogging.

Radio Pakistan broadcast podcast on special days programs. On International Women's Day the interview of Head Community Safety and Information and Pakistan Day Special Show received immense popularity. This push and pull technology was not available in Past. Secondly, it is a free service which allows Internet users to pull the MP 3 files from any podcasting Web site to listen to on their computers or digital audio players. Podcast listeners can have these cherished acumens into their life. They can host, encourage, and get a pathway through this gifted digital service of broadcasting (Antonio, 2022).

This digital platform brought a big change in broadcasting. In this digital format you can discover wisdom of the world's top musicians, players, leaders and know a lot about different field of knowledge encompasses from legendary creators, scholars, inventors, to intelligence operatives, to visionary change-makers. The audio-video presentation of short duration of all above and more can provide new learning and experience to listeners and viewers. Apple

Podcasts, Spotify, Google Podcasts, and more are accessible by the listeners free of cost (Bratcher, 2021).

Induction of webcams and its vast use in and new media platform have altered the audience perception about radio by making listeners feel more linked to the host. Radio service on you-tube and webcasting is lot more attractive as compare to analogue service. So digital conversion of radio, has undergone a digital evolution. Indeed web radio shows are promoting new rising talents (Raza, 2022). In fact technology has totally change the landscape of Radio Broadcasting and has shaped a new horizon of opportunities for new talent to showcase their skills (Kalla et al., 2022).

### **1.7. Transmission Network of Radio Pakistan**

Inherited with 3 Radio stations Peshawar, Lahore and Dhaka, at the time of independence in August 14, 1947, Now Pakistan Broadcasting Corporation (Radio Pakistan) have 62 transmitters, and central production unit for use of archival material. This huge network is still lagging digital transmission. PBC's extensive national network comprises AM –FM-SWs radio stations covering 98% of population of Pakistan. Information through different programs and covering 98 percent of geographic area. The Core functions is:

- To provide communication support to the development plans of government.
- To cater the communication need of whole of society that includes:
- To Promote Art, culture, ideology of Pakistan and create interfaith harmony and peace in diverse society.

Radio Pakistan services includes:

#### **1.7.1. News Service**

Largest source news in country, 123 news bulletin in 31 languages

#### **1.7.2. Home Service**

For domestic network

- National-22
- Regional-79
- External-17
- District News- 01

Business and weather forecast is part of Top of clock hour news bulletin

#### **1.7.3. External Service**

Radio Pakistan started external service on 1949. As Pakistan is situated at rare area surrounded by important countries of the globe, it is necessary to use Radio Pakistan as an instrument to project country's true perspective in front of the world specially its neighbors. Broadcast in 24 languages and daily transmission time of these services is, 12hrs 45mnts (Ahmed, Asghar, & Hämäläinen, 2022).

Ref: Khalid Asghar, Media Practitioners, and Former Station Director Radio Pakistan, Lahore.

### **1.8. Development of FM Culture**

As per Global Media Registry, 2018, Pakistan Electronic Media Regulatory Authority (PEMRA), control all media channels operating by the private owners Regulatory body for electronics media in Pakistan was established in 2002 and has issued around 210 licenses for FM stations in the private broadcast sector, till 2018 including 155 commercial FM stations and 55 non-commercial stations. Radio Pakistan FM Network is more popular medium because of its entertainment value (Global Media Registry, 2018). There are four FM radio stations each in Karachi and Lahore that are owned by Radio Pakistan. Moreover, community radio in Pakistan is only accessible through non-commercial FMs in academic institutions. The University of Peshawar's Mass Communication Department created the first such station in January 2004. FM

stations are currently running in 26 universities and colleges in Pakistan, and they constitute a vital supply of skilled personnel for the country's radio sector (JWT, 2018).

### **1.9. Interactive Online Service of Radio Pakistan**

Keeping in view the importance of using modern technology Radio Pakistan official Mobile app was launched and updated on 21th July, 2022, which brought the listeners for quick access of different radio programs from the Radio Pakistan network. This app is available for all devices. It is indeed a great achievement that despite the financial crisis radio Pakistan develop an app, which made it possible that Radio Pakistan channels could be retrieved live streaming and the listeners can enjoy different programs of their own choice including the news updates available on its World service, External services, NCAC (News and Current Affairs Channel, and all FM station including Islamic Program '*Saut-ul-Quran*' (Nadeem et al., 2022).

The fact that FM receivers are now found in cellphones and automobile decks has made FM radio listening further more accessible to a wide range of listeners, from the common person to the wealthy. In the same way that FM revitalized radio in Pakistan in the 1990s, internet-based radio and the convergence of media may lead to the emergence of even more cutting-edge formats or programming styles in the present. Whereas once plans were being made for radio's funeral, the medium's future in the nation now appears bright (Khan, Ma, Owusu, & Shah, 2022).

### **1.10. Digital Radio Broadcasting and Radio Pakistan in Prevailing Situation**

"Worldwide there are four digital systems are working four standards for digital radio systems exist worldwide, according to a report from Media School that was updated on February 22 on its *website beonair Network*, In-band on-channel (IBOC), which is a hybrid method of transmitting digital radio and analog radio broadcast signals simultaneously on the same frequency. Then comes DAB (Digital Audio Broadcasting basically, it is just a digitally transmitted sound. ISDB-TSB (Integrated Services Digital Broadcasting-Terrestrial Sound Broadcasting. It started in Japan in 2003, and since then, many Japan is using this digital broadcasting system". The Digital Radio Mondiale (DRM) is a digital broadcasting technology that is worldwide, freely standardized, and applicable to all broadcasting frequencies. All of them differ from one another in a number of ways. Radio Pakistan under its Digital migration policy joined DRM Consortium 3-years ago. Lot behind with the rest of the world.

#### **1.11. IBOC**

IBOC was created and is being run by a firm called iBiquity Digital Corporation, which has the trademarked term of HD Radio. It was first used often in 2003 but is now uncommon in the United States. Nowadays, the IBOC digital radio services are used by more than 2,000 AM and FM stations in the United States. The majority of HD radio stations in the United States operate on FM bands, and the majority of those now provide one or more multicast services. As per report as per by Media School, *beonair published in Feb 2022*, The IBOC stations broadcast their main programming in both analogue and digital formats. They are thereby providing services to both legacy and modern receivers using utilizing the same broadcast channels.

#### **1.12. DAB**

As compare its transmission mode is different to FM, for example, this is sound that is sent over radio waves, and you are able to alter it to fit your location. DAB is popular in Europe. The range of DAB transmissions is expanded by these advances. DAB services are currently available in approximately 40 countries throughout the world (primarily in Europe), and more are considering adopting it or one of its versions.

#### **1.13. DRM**

DRM was primarily created as a replacement of old aged short-waves and AM broadcasting. A DRM broadcast can share a channel with an analogue station under certain conditions and with some modifications to the analogue service, which employs a channel plan similar to that of the analogue services. It is a single audio channel system. DRM Plus, which was introduced in 2007 for the VHF band, is an improved version.

### **1.14. Financial factors and its impacts Digital Migration Policy of Pakistan**

Unfortunately, the pace of Radio Pakistan to meet these standards and continue its programs on digital network is very slow. This is due to No.1 severe financial crisis facing by the state run broadcaster. No2. Induction of Non-Professional officer from CSP cadre more often

called bifurcates. These officer has no experience to run Media organizations and its importance in shaping public opinion through programming. No.3 unnecessary staff in all sections and their wages are extra burden of national treasure. No.4 Public Service Broadcaster all over the word is funded by the government. Government of Pakistan is not taking responsibility to support state run broadcaster. In United States federal funding is available through congress and also support thousand enormous public radio stations and television outlets. BBC get money from radio license fee from public and smoothly running their business with no financial crunch. The management is experienced and well connected with the latest development being carried out across the globe. Because of above reason, radio Pakistan no money for start new programs and losing its popularity and image as a National Institution.

Radio Pakistan is a national institution which is still regarded as the official spokesman of the Pakistan and has several attainments to its credit over the years. This National institution is failed to Pay Salary and Pension to its employees in Dec 2022 and February 2023 due to severe financial crisis. Country renowned National Daily (Nation, 2022) reported that Radio Pakistan an official spokesman has lost its credibility due to non-serious attitude of Radio Pakistan Management and ministry of information and broadcasting.

The Delay in Digital migration policy could be a serious harm to Nation, if Government fails to manage funds. It is indeed a matter of concern for the people living in the rural areas who only rely on radio programs and have the only source of information will be deprived from their basic right. "The Development plan seem to be delayed due to these financial constrain" (Sheikh, Foth, & Mitchell, 2023).

### **1.15. Significance**

This study focused on the role of radio in the digital age and Even if Radio Pak's technology has advanced, at what cost have we progressed? The government's periodic "money injections" are the only thing keeping this organization viable. It's only natural to have doubts about the outcome, given the size of the investment. At least in terms of maintaining an interest in the news, requirements have been greatly loosened. There was a time when any mistake in grammar or pronunciation on the part of a Radio Pak announcer or news reader was unimaginable. As expected, cronyism has led to some annoying changes. One manifestation of this prejudice is the news reader, who tries so hard to appear American by stumbling over words and skipping around while reading the news. The impact of Radio Pak's international news broadcasts on foreign audiences is easy to foresee.

### **1.16. Objectives**

- To show how far radio has come in its transition to the digital era.
- To illustrate radio's development and progress as a conventional medium.

### **1.17. Research Gap**

This research shows that community radio reduces the knowledge gap and boosts literacy rates all throughout the world, not just in third-world countries. It has aided the progressive movement worldwide, including in the Western world (Tahir, 2002). Radio is seen by many groups and people as a place where imagination can be encouraged and listener participation can grow. No matter where it's broadcast, community radio has one consistent goal: to benefit local communities in the digital age.

## **2. Literature Review**

Convergence has simplified the news production process and enhanced the pace at which stories can be broadcast, according to numerous researchers (Micó, Masip, & Domingo, 2013; Paterson & Domingo, 2008). notwithstanding some difficulties. As a result, journalists have modified their approaches to gathering and reporting news. Photojournalists can now take, edit, and email digital photographs to their editors without having to use a darkroom or print and distribute hard copies. Before reporters ever get back to the office, editors can read and share their stories (Coppins, 2021; Ferrer-Conill & Tandoc Jr, 2018; Schmalzbauer, 1997; Zeisler, 2022). The confluence of technologies has made it possible for online newspapers to publish and disseminate news before print editions of newspapers have even begun production (Jamil, 2020).

According to the literature on convergence (Barbrook, 1999; Campbell, R Martin, & Fabos, 2016; Riegert et al., 2015; Zatonskaya, 2021), the introduction of new technology has had a significant impact on the way news is reported all over the world. Several scholars from different parts of the world have recently brought attention to the role that digital technology is playing in the development of ethnic news media (Vartanova & Gladkova, 2019). However, there hasn't been much qualitative research into how digital technology (including but not limited to computers, multimedia, the internet, mobile phones, digital journalism tools, and algorithmic or computer-assisted reporting) has impacted Pakistan's ethnic news media (in terms of news production and distribution) or the challenges that local journalists encounter when attempting to use digital technology (Lin & Lewis, 2022).

It is the goal of this study to examine the impact that digital technology has had on the working methods of journalists in Pakistan's mainstream media and Pakistan's ethnic news media (Siraj & Hussain, 2012). This study demonstrates that community radio helps close the reading gap and increase literacy rates all throughout the world, not just in developing nations. The progressive movement, including in the West, has benefited from this (Machado-Fernández, 2015; Mutula, 2008). Many people and organizations now see radio as a medium that can be used to inspire originality and captivate listeners. Community radio, no matter where it's transmitted, always seeks to improve local communities. Community radio workers from all over the world are brought together by the World Association of Community Radio (AMARC), an international non-governmental organization that serves the needs of the community radio movement (Tucker, 2013).

### **3. Theoretical Framework**

"Use and Gratification Theory" led this investigation. The use and enjoyment technique has described media use and satisfaction since radio, television, newspapers, and now the internet were founded. The theory states that intrinsic desires, formed by social and individual variation, fulfill needs. Blumler and Katz (1974) proposed media consumption benefits. Early communication methods studied media use, selection, and demand fulfillment. Media users were given uses and pleasures. The theory implies active media consumers. Uses and satisfaction theory suggests audiences choose media for their objectives. This explains media use (Muhaisen, 2020) argue that newspapers are the oldest modern media. Social media interrupts news dissemination. Most people use social media for news and socializing. Social media accounts reveal contacts' hobbies, backgrounds, education, and tastes, making idea exchange and connection development easy. Multiple tools link consumers.

### **4. Methodology**

Quantitative study. The data was collected using 10-question surveys. 600 students from Khyber Pakhtunkhwa, Pakistan, Kohat University of Science and Technology, Kohat, completed the questionnaire use purposive sampling. Khyber Pakhtunkhwa's Kohat University of Science and Technology students 2020 November–December poll Descriptive Analysis Descriptive analysis was used to address this study's research questions after entering all online questionnaire data into SPSS. 600 pupils were surveyed. Frequency-counted face-to-face university questionnaire data Summarizing each participant's answers, I found the highest frequency. Percentages showed these responses. Tabular analysis. Researchers use one- or two-variable tables. Bannu, Lakki Marwat, Waziristan, Karak, Orkazai, Kohat, Attack, Peshawar, Shanglah, Khyber, Hungu, D.i. Khan.

### **5. Findings**

There are four questions regarding educational goals on the satisfaction questionnaire. The value of 0.83 for Cronbach's alpha suggests that there is an extremely high level of dependability between these goods. The dependability of the components is assessed by an alpha coefficient, which can take on values anywhere from (5) to (1). According to Santos and Brito (2012), a grade of 1 denotes performance that is below average, while a rating of 5 denotes quality that is of the highest possible standard.

According to the data, an overwhelming majority of respondents (84.1%), with 45.2% agreeing and 38.9% strongly agreeing, stated that they listen to radio broadcasts for the purpose of obtaining assistance with academic matters. Only two of the respondents, or 0.9%, were against the idea that they would appreciate any kind of guidance from campus radio on academic concerns. This percentage represents the people who were against the idea. 14.9% of replies



are neutral. As expressed by 46.2% (N = 102) of the respondents who strongly agreed with this assertion and by 40.7% (N = 90) of the respondents who agreed with this statement, they look to college radio programs for an understanding of the fundamentals. There were between zero and six respondents who had the opposing viewpoint, but not a single one of them held a strong opinion. 23 (10.4%) people replied as neutral.

**Table 1**

Statements	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Radio broadcast should be helpful in exams preparation.	95	43.0	91	41.2	30	13.6	4	1.8	1	.5	221	100
Radio needs to be helpful in the preparation of assignments and projects.	83	37.6	95	43.0	37	16.7	6	2.7	0	0	221	100
Radio should guide students in their academic problems.	100	45.2	86	38.9	33	14.9	2	.9	0	0	221	100
Radio programs needs to be planned so to understanding of concepts.	102	46.2	90	40.7	23	10.4	6	2.7	0	0	221	100

On the questionnaire about your satisfaction, you'll find a total of four questions pertaining to your educational objectives. The fact that Cronbach's alpha has a value of 0.83 shows that there is an extraordinarily high degree of dependability between these items. The dependability of the components is evaluated using an alpha coefficient, which can have values ranging from five to one. The range of possible values is rather wide. According to Santos and Brito (2012), a rating of one indicates performance that is below average, while a rating of five indicates quality that is of the best conceivable degree.

**5.1. Gratifications Obtained for Radio**

An item on a questionnaire using a Likert scale that ranges from one to five points has been drafted to ascertain the extent to which students' educational requirements are met by listening to the radio. This item will be included in the survey. A score of five indicates that you Strongly Agree with something, while a score of one indicates that you Strongly Disagree with it.

Using a questionnaire that contained a set of four different variables, we were able to determine the findings of the gratifications that are met by the campus radio. These findings are shown here. The high score of 0.842 on Cronbach's Alpha, which assesses internal consistency and reliability, demonstrates that the level of reliability is very high. This can be seen by looking at the results.

**Table 2**

Statements	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Radio broadcast are helpful in exams preparation for me.	81	36.7	97	43.9	39	17.6	3	1.4	1	.5	221	100
Radio programs are helpful in the preparation of assignments and projects for me.	61	27.6	118	53.4	36	16.3	5	2.3	1	.5	221	100
Radio guides me in my academic problems.	76	34.4	102	46.2	35	15.8	5	2.3	3	1.4	221	100
Radio programs enhance my understanding of concepts.	75	33.9	101	45.5	36	16.3	5	2.3	4	1.8	221	100

Table 4 displays that more than half of respondents (43.9%) believe that students can benefit from listening to the radio while studying for examinations, with another 36.7% (N = 81) strongly agreeing with this statement. Of those asked, only 17.6% said they were neutral. Only three respondents (1.4% of the total) expressed disagreement, and none of them offered a substantial counterargument. As can be seen in the table above, the clear majority of respondents found the radio material helpful when working on school-related tasks. With respect to the usefulness of campus radio in assisting with academic preparation, N = 118 (53.4%) respondents agreed, N = 61 (27.6%) respondents strongly agreed, and N = 16.3% respondents were undecided. There were only 6 outright naysayers (2.8%). N = 102 agree and N = 76

strongly agree that campus radio guides students through academic obstacles, indicating that campus radio is helpful to more than 80% of respondents. 15.8% were on the fence about it. There are five dissenters, including three who strongly disagree with the declaration. Among the respondents, 101 (45.8%) agreed and 73 (33%) strongly agreed that campus radio can help students better understand difficult concepts. Only 4% of people polled were in total or partial disagreement. A disinterest rate of 16.3% was recorded.

**Table 3: Group Statistics**

	1-What is the name of your University?	N	Mean	Std. Deviation	Std. Error Mean
Education Obtained	A	115	16.522	2.9775	.2777
	B	106	16.226	2.3023	.2236

**Table 4: Independent Samples Test**

		Education Obtained Equal variances assumed	Education Obtained Equal variances not assumed
Levene's Test for Equality of Variances		3.507	
	Sig.	.062	
	t	.820	.828
	df	219	212.695
	Sig. (2-tailed)	.413	.408
t-test for Equality of Means	Mean Difference	.295	.295
	Std. Error Difference	.360	.357
	95% Confidence Interval of the Difference	Lower	-.415
		Upper	-.407
			1.005

According to the findings of the independent sample t-test, which compared the means of the variables, there is not a significant difference among the educational pleasure obtained from the radio and that obtained from other sources. The middle value is 16.522, while the overall average is 16.522. The p-value of 0.062 indicates that the hypothesis has not been supported, which is not significant at the 0.05 level. The mean difference is .295 and the t value is .820; the df is 219; the t test statistic is .820. As per the graphic presentation, the private sector university (which was marked by 2) satisfied the educational demands of the students to a somewhat greater extent than the public university (which was designated by 1).

H: When a listener has a greater need for informative programming, college radio is able to provide it.

**Table 5: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.540 <sup>a</sup>	.292	.288	2.255

a. Predictors: (Constant), EduSought      b. Dependent Variable: EduObtai

In this table, R number shows that there is a simple correlation and is 0.540, it is suggested that there exists a high degree of correlation. In the next column, the R<sup>2</sup> value shows that 29.2% of the results can be explained by educational content and the need for campus radio.

**Table 6: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	458.299	1	458.299	90.115	.000 <sup>b</sup>
	Residual	1113.774	219	5.086		
	Total	1572.072	220			

a. Dependent Variable: Edu Obtain      b. Predictors: (Constant), Edu Sought

This table illustrates that the regression model statistically supports the null hypothesis that radio more closely satisfies listeners' needs as they become more aware of their desire for content (p = 0.000 0.05). Given that the regression model's significance level is 0.05, this is the case.

## 6. Conclusion

It's encouraging that Radio Pakistan has started to adopt latest technology being used for dissemination of information world-wide. If the process of digitalization of analogue transmitters

to digital format completed with in due time than Radio Pakistan will be able to cope with the present challenges facing by radio Pakistan, in connection with dissemination of its programs to local level and worldwide. Apart from clear reception, Radio Pakistan would be able to target audience living in India, Iran, Bangladesh, Afghanistan, Center Asia and the Middle East using its world and external service. The people of south Punjab will be greatly benefited with digital migration of existing broadcasting system. The notion of deprivation by people of south Punjab that Government ignore them in in development project cases. Digital transmission is always considered a low-cost contrivance and would help to save considerable amount of energy.

### 6.1. Recommendation

- A UNESCO suggestion, "community radio," refers to stations that are run by, for, and about a specific community. Public service, commercial, and state-owned broadcasting are the three main categories under this umbrella term.
- To put it simply, radio is a charity. That doesn't mean the medium can't try to make money, though; doing so is often necessary to ensure radio's continued existence. Radio uses open access; therefore, unlike commercial radio, its primary objective is not profit-generating.
- While some radio stations rely entirely on volunteers, others supplement their volunteer workforce with paid staff. And the community makes sure everything runs smoothly. The communities it broadcasts to own the station equally. In most cases, local residents will vote to form a management committee to oversee the radio station.
- The material is regionally focused and useful to the local community.
- The needs of the residents must be considered. Unlike state-owned radio, community radio is based on the notion of local ownership.
- This opens up many potential applications for radio, from combating poverty and inequality to fostering health and sanitation.

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