Information Communication Technology in India – 'A study on Grass Root Informatics (GRI) and Community Radio as a supplement to Social Media'

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Abstract: Introduction: The global diffusion of the information and communications technology (ICT) and community radio provides developing countries the opportunity to reduce the economic gap between the developing and the developed countries. *Implications*: But there has been insurmountable shift in today's information and communication discourse. ICT and community radio is no more a mere tool for dissemination of information rather it has been useful in bringing mass revolutionary changes in the society, a very exciting example is CGNet Swara¹. Grass root or village level use of ICTs and community radio has become so much more acceptable than it was a decade back. Today with the insurgence of social media as a platform for information sharing there has been considerable amount of change in the concept of wellbeing which was limited to economic gap before. Today information gap is also considered to be a measurement criterion for validating the rift between the developing and the developing countries. *Objective:* This paper is an endeavour to explore into the areas of grass root informatics and how ICTs and community radio can be made a driving force towards bringing information closure within the community. Methodology: To fulfil this objective the researchers have taken two methodology approach of literature review and case study. Findings: The research provides us with some interesting answers which when evaluated can be seen as a synergy between ICT, radio and community. Community use ICT and new media and community radio provide information to the community therefore the functions being same provides more immediate communication and more effective communication possible. Implications: Grassroots informatics is the use of ICTs by community members to address local issues and enhance social, economic, and political engagement. It improves access to information, promotes community involvement in programming and decision-making, increases sustainability, youth engagement, and

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¹ CGnet Swara is an Indian voice-based online portal that allows people in the forests of Central Tribal India to report local news by making a phone call.

facilitates advocacy campaigns and social movements. Overall, it supports increased civic engagement, social justice, and sustainable development in community radio.

Keywords: Information Communication technology (ICT), Community Radio, Grass Root Informatics (CRI), CGNet Swara, Social Media

Introduction:

Community radio and social media are two effective modes of communication that play significant roles in the process of fostering the growth of communities and bringing about societal transformation (Pavarala & Malik, 2007). Community radio is a term that is used to describe radio stations that are run by and for the communities they serve, with an emphasis on local music, news, and other forms of content (Fraser & Estrada, 2001). On the other side, social media platforms enable users to connect with one another and share information, images, videos, and other content not just with their friends and family but also with a larger audience (Kaplan & Haenlein, 2010).

Community radio continues to be a significant source of information and entertainment for many communities, particularly those that are geographically isolated or located in rural areas, despite the fact that social media has become an essential component of contemporary life (Cullen, 2001). Community radio stations serve as a forum through which people of the community can make their opinions known, thereby facilitating their participation in public dialogue and the formulation of community policies (Manyozo, 2009). In this article, we investigate how community radio might serve as a complementary medium to social media in order to improve communication, foster community growth, and other similar goals.

Objective of the study

The study's goal is to determine whether there is a connection between community radio and ICT use, which in the interim aids in making community radio a powerful medium in the community.

The goal of the study is to better understand the community network programme CGNet Swara and develop arguments in favour of combining ICT and local radio to counteract the influence of social media on rural audiences.

Rationale of the Study

Community radio is a potent instrument for encouraging diversity in the media, and it is especially useful in this regard. It gives a platform for populations that are marginalised and underrepresented to share their stories, thoughts, and experiences with one another (Patil, 2014). This can serve to counterbalance the impacts of homogenising mainstream media and develop more understanding and empathy between various groups of people.

Community Empowerment Community radio is another medium that can be utilised in the process of community empowerment (Pavarala & Malik, 2007). Community radio has the potential to contribute to the development of a feeling of community and to the promotion of civic involvement by offering a forum for local voices and concerns (Fraser & Estrada, 2001). This has the potential to contribute to increased social cohesion as well as a heightened sense of regional identity. Accountability can be Improved Community radio has

the potential to be a very effective tool in the effort to improve the level of transparency and accountability in local government. Community radio can assist in holding local authorities responsible for their actions by reporting on local issues and providing a forum for citizens to share their opinions and concerns (Fraser & Estrada, 2001).

Studying community radio can also be a useful tool for researchers, which is why this topic is being covered here. It can help to find effective techniques for encouraging community development and social change, as well as provide insights into the ways in which the media and communication might alter the social and political dynamics of a given situation. Understanding the role of the media and communication in social and political dynamics, as well as identifying tactics for encouraging community development and social change, are both essential parts of a complete education, and studying community radio is an important part of that education. Community radio has the potential to play a significant part in the development of societies that are more democratic, inclusive, and diverse through the activities of fostering diversity, empowering communities, promoting accountability, and enhancing research.

Methodology

Qualitative Research Design: A qualitative research design is a research method that tries to explore and comprehend complex phenomena through the use of non-numerical data such as text, photos, and videos (Gelo et al., 2008). This type of data can be collected in a qualitative research study. Rather than concentrating on numerical measurements, it entails the collection and examination of data that provides a complete description of the phenomenon that is being examined. Investigating a wide variety of subjects, including social behaviour, beliefs, attitudes, and experiences, can be done through the use of qualitative research methods (Ritchie, 2003). In general, the qualitative research design offers a versatile and comprehensive method for investigating complicated phenomena that are difficult to measure or quantify (Yilmaz, 2013). Numerous academic disciplines, including anthropology, sociology, psychology, and education, make frequent use of it because of its ability to offer deep and nuanced insights about social behaviour, attitudes, and experiences.

Literature Review Method: A process of conducting research that entails reading and summarising all of the previous written material on a specific subject is called a literature review (Kitchenham, 2004). An analysis of academic materials, such as books, scholarly articles, and other publications connected to the subject of the research, is referred to as an analysis (Charnes et al., 1997). In addition to providing a comprehensive grasp of the research that has already been conducted in the field, finding gaps in the present body of knowledge, and drawing attention to major topics and controversies are some of the functions that a literature review provides. In addition to this, it can assist researchers in formulating their study topics, hypotheses, and technique. The first thing a researcher needs to do before beginning a literature review is to come up with a research question or topic of interest. After that, they explore various databases and other resources for papers and publications that are pertinent to the topic (Jesson et al., 2011). In order to evaluate the significance and quality of the studies, the researcher may examine both the abstracts and the complete texts of the studies. The information that has been obtained is subsequently synthesised by the researcher, who summarises the most important findings, concepts, and theories. In addition to this, they assess the overall quality of the studies, taking into account aspects such as the methodology,

sample size, and data processing. The literature review comes to a close with a synopsis of the most important issues as well as the research voids that remain (Leung et al., 2013). In addition to this, it lays the groundwork for creating research questions and hypotheses by pointing up possible new lines of inquiry that could be pursued in the future. Overall, a literature review is an important research tool because it enables researchers to comprehend the present level of knowledge on a topic, identify gaps in that information, and establish a research strategy that can contribute to the advancement of the area.

Theoretical Foundations

The term "community radio" refers to a certain kind of radio station that is typically operated on a not-for-profit basis and is managed both by and for a specific community (Cammaerts, 2009). Several hypotheses have been put up in an effort to explain the function of community radio as well as its significance, including the following:

The theory of participatory communication asserts that it is critical for members of a community to take an active role in the production and distribution of content for various forms of media. In the context of community radio, this denotes that members of the community are actively involved in the programming, production, management, and governance of the radio station in question (Howley, 2005).

Capital Social: According to one line of thought, community radio can play an important role in the growth of a community's social capital by serving as a conduit for communication, the dissemination of information, and the coordination of group efforts. Community radio has the potential to contribute to the development of a feeling of social cohesiveness and collective identity by providing its listeners with a forum in which they may express themselves and a channel through which they can communicate with one another (Chu & Yang, 2020)

Empowerment: This theory highlights the potential of community radio to empower oppressed groups by providing them with a forum to voice their ideas and to question prevailing narratives. Specifically, this theory focuses on the potential of community radio to empower women. Community radio can assist to counterbalance the influence of mainstream media and foster more social and political participation since it offers an alternate source of information and opinions (Pavarala & Malik, 2007).

Communication for Development: This idea focuses on the role that community radio plays in fostering social and economic development. Community radio has the potential to contribute to the overall improvement of the well-being of its listeners as well as the promotion of economic growth by way of the dissemination of information and education on a variety of subjects, including health, education, and agriculture (Servaes, 2007).

This theory highlights the ability of community radio to develop and preserve cultural identity within a community, and it focuses primarily on the concept of cultural identity. Community radio can contribute to the development of a stronger feeling of cultural heritage and identity within a community by airing music, stories, and other forms of cultural content that are pertinent to that community (Servaes, 2007).

In general, these hypotheses provide light on the myriad of ways in which community radio can contribute to the growth of a community on multiple fronts, including social, cultural, and economic levels. Community radio has the ability to play a significant part in the

emancipation of communities as well as the promotion of wider engagement in both social and political processes (Newman, 2014).

Advantages of Community Radio: In comparison to social media, community radio provides a number of distinct advantages. To begin, it is available to those who might not have access to the internet or who might not be able to purchase a smartphone or other type of digital device. This makes it accessible to people in a variety of situations (Tarafdar, 2015). This is of utmost significance in more rural and distant places, where internet connectivity may be spotty at best. Community radio also provides a more personal and regional approach to news and entertainment, which offers a distinct perspective that cannot be recreated on social media. This is one of the many benefits of listening to community radio. In addition, listeners can develop a sense of community and a sense of social connection through community radio, which is something that can be challenging to do through the use of social media (Tarafdar, 2015).

Advantages of social media: In comparison to community radio, social media provides a number of distinct advantages. To begin, it enables a bigger reach and a deeper level of involvement with the target audience. Users of social media platforms are able to connect with users located in various parts of the world, as well as share information and material with users located all over the world. Users of social media platforms are able to remark, like, and share content in real time, which contributes to the platform's overall more participatory nature (Kaplan & Haenlein, 2010). In addition, social media platforms offer an efficient method of crowdsourcing, which makes it possible for communities to cooperate and work together on a variety of projects and endeavours (Kietzmann et al., 2011).

The Synergy between Community Radio and social media: Community radio and social media can work together to complement and amplify one another's qualities if used in conjunction with one another (Wellman et al., 2011). Community radio stations, for instance, can utilise social media to broaden their audience engagement and increase the number of people they can contact. Community radio stations have the ability to grow their audiences by promoting their various programmes and projects on the many social media channels available to their target demographic. The feedback and input of the community can also be gathered through the use of social media, which enables community radio stations to adjust their programming to the specific interests and requirements of its listeners (Al-Hassan et al., 2011).

Community radio stations also have the ability to utilise social media in order to collect community news and information, which can then be used to inform the content that they produce (Stewart & Alexander, 2016). This establishes a feedback loop between the radio station and its listeners, so fostering a sense of ownership and participation on the part of the community. It is also possible to use social media to disseminate content that has been produced by community radio stations. This gives listeners the opportunity to interact with the content in novel and creative ways.

Findings

Community Radio and ICT: The use of information and communication technologies (ICT) has had a significant effect on both the day-to-day operations of community radio stations and their overall reach. Through the provision of tools for communication, content

development, and distribution, ICT has assisted in the broadening of the scope of community radio's reach as well as its impact (Manyozo, 2009). The following are some examples of how community radio and information and communications technology intersect:

Production of Digital Audio Recent developments in digital audio technology have led to a significant improvement in the overall quality of radio production (Hoeg & Lauterbach, 2003). As a result, the production of high-quality content by community radio stations has become both simpler and more cheap. This has also made it possible for stations to record and produce material remotely, which has opened the door to the inclusion of voices and opinions from all over the world.

Distribution Via the Internet: Because of advancements in information and communications technology, community radio is now able to reach a much wider audience. It is now possible for stations to transmit their programming over the internet, making it accessible to listeners located all over the world (Chapman et al., 2003). Because content can now be distributed online, it is much simpler for radio stations to work together and share programming with one another.

The capacity of community radio stations to engage in two-way communication with their audience members and to publicise the content they broadcast has been significantly augmented by the proliferation of social media platforms like Facebook and Twitter (Van Dijck & Poell, 2013). The use of social media offers radio stations with a forum in which they may exchange material, solicit comments, and cultivate relationships with their listeners.

Mobile technology: The capacity of community radio to reach listeners in remote or underserved places has substantially increased as a result of the proliferation of mobile phones. Mobile phones have made it feasible for listeners to tune in to radio programming while they are on the go. Additionally, mobile phones have made it possible for radio stations to collect feedback and interact with listeners in real time (Sharma, 2011).

Community Engagement: The use of information and communication technologies has significantly increased the capacity of community radio stations to interact with the communities they serve. Stations can now collect comments, content ideas, and content suggestions from their listeners by using digital platforms such as social media, email, and others (Kollock & Smith, 1999). This has assisted in making the programming that is broadcast on community radio more pertinent and sensitive to the requirements and pursuits of the community.

ICT has, in general, made it possible for community radio stations to connect with listeners located all over the world and to interact with their local communities in fresh and original ways. This has resulted in a significant expansion of the reach and effect of community radio.

Case Study

The community radio programme known as CGNet Swara was established in the year 2010 in the state of Chhattisgarh, which is located in the centre of India (Marathe et al., 2015). A mobile phone-based call-in service will be provided as part of this project with the intention of acting as a forum for rural and indigenous people to discuss current events, exchange information, and tell personal tales (Mudliar et al., 2012).

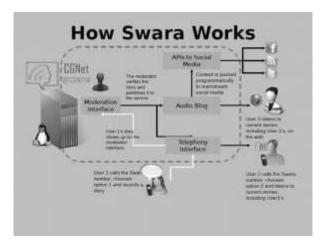


Figure 1- (CGNet Swara | Engineering for Change, 2001)

Figure 1 states that the call-in service offered by CGNet Swara gives users the opportunity to record messages in their native tongue and then distribute those recordings throughout the community. People who may not be able to read or write and who may not have access to other types of media are targeted to use this service because it is designed to be user-friendly for them. Additionally, CGNet Swara has a group of journalists who investigate the claims made in the messages and ensure that they are accurate before they are broadcast (Chadha & Steiner, 2015).

The communities that CGNet Swara serves have been significantly improved as a result of the network's efforts. CGNet Swara has contributed to the promotion of openness and accountability in local governance through the provision of a platform on which anyone can share information (Chadha & Steiner, 2015). As explained in Figure 2 this call-in service has been utilised to report on a variety of concerns, including police brutality, land conflicts, and instances of corruption. Rural and indigenous groups, who are frequently made to feel alienated by mainstream media, have also benefited from the project's efforts to establish a feeling of community among themselves (Mudliar et al., 2013).

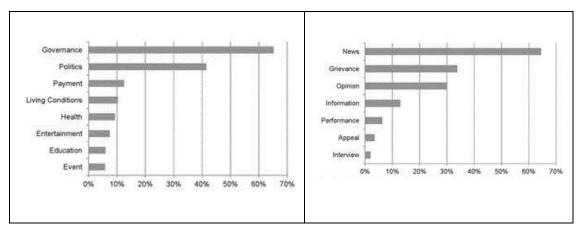


Figure 2- (Mudliar et al., 2013)

In addition to the call-in service that it provides, CGNet Swara has also developed an app for smartphones that enables users to access and exchange content in a manner that is both more engaging and friendly to users. Voice search and text-to-speech are two examples of the user-

friendly features built into this programme, which make it more accessible to users who may have literacy issues (Marathe et al., 2015).

The success of CGNet Swara has encouraged the creation of other programmes with a similar focus, both in other parts of India and elsewhere in the world. The project has also been met with obstacles, such as threats and harassment from local officials who may not like the transparency and accountability that CGNet Swara promotes. These issues have hindered the progress of the project. CGNet Swara has continued to grow and expand its reach, and it continues to be a compelling example of the potential for community radio to empower underprivileged groups and achieve social change. Despite these problems, CGNet Swara has continued to grow and expand its reach.

Discussions

Because community radio and social media are used for distinct goals and because they each have unique advantages and disadvantages, it is highly improbable that community radio could ever fully replace social media. The following is a list of significant distinctions between community radio and social media:

Reach: The reach of social media is significantly greater than that of community radio. Community radio stations often have a much smaller audience that is restricted to a certain geographical area, in contrast to social media platforms like Facebook and Twitter, which have millions of active users all over the world.

Interactivity is a key component of social media, which far outstrips that of community radio. Users are able to interact with the content on social media platforms in a variety of different ways, including liking, commenting, and sharing. On the other hand, community radio often only allows for one-way communication, meaning that listeners can only tune in to hear the content and do not actively participate in the production or dissemination of that programming.

Production of Content Unlike social media platforms, community radio stations often develop their own unique content, whereas user-generated content is what social media platforms rely on. Although community radio can be an effective method for delivering indepth coverage of local concerns, the real-time dissemination of news, opinions, and personal experiences is more effectively accomplished through the use of social media.

Operating costs for community radio stations are often higher than those for social media platforms. In order to function, community radio stations need specific equipment, personnel who have been properly trained, and a dedicated area, whereas users of social media only need a computer or smartphone to access their accounts.

Overall, community radio and social media both offer their own set of benefits as well as drawbacks, and the best way to take use of both is to use them in tandem with one another. Community radio has the potential to provide in-depth coverage of local issues and to facilitate community engagement. However, social media has the potential to help expand the reach of community radio programming and to connect listeners with other communities and perspectives from around the world.

Implications of Grassroot Informatics and Community Radio

In order to address neighbourhood issues and improve their social, economic, and political engagement, community members use information and communication technologies (ICTs). This practise is known as grassroots informatics. The consequences of grassroots informatics for community radio can be varied. Access to information is improved thanks to grassroots informatics, which makes it easier to gather, share, and exchange data. As a result, community radio stations may provide their listeners more thorough and pertinent news and programming.

More community involvement: Community radio stations can encourage community involvement in programming and decision-making processes by employing ICTs to interact with their listeners. Community members can create their own content and take part in the radio programme production with the aid of grassroots informatics. More sustainability: By promoting the growth of regional networks, alliances, and resources, grassroots informatics can assist community radio stations in becoming more sustainable. Community radio stations can broaden their audience and influence by utilising ICTs, which may help them draw funding and support.

Increasing youth engagement is possible with grassroots informatics since young people are frequently more tech-savvy than older members of the community. Community radio stations can draw new listeners and producers and provide content that is more appealing to younger audiences by utilising ICTs to engage with young people. Enhanced advocacy: By giving local residents the resources to gather, evaluate, and share knowledge about topics that are significant to them, grassroots informatics can facilitate the creation of advocacy campaigns and social movements.

Overall, community radio's use of grassroots informatics can support increased civic engagement, social justice, and sustainable development. Community radio stations can use ICTs to increase their dynamic and responsiveness to listener requirements, which can help to create more inclusive and democratic communities.

Conclusion

Community radio and social media are both essential means of communication in the modern world. While they each have their strengths and weaknesses, they can be used together to promote community development and engagement. Community radio stations can use social media to extend their reach and connect with a wider audience, while social media can be used to gather feedback and input from the community to inform the content and programming of community radio stations. Additionally, social media can be a useful tool for promoting community events and initiatives that are covered by community radio stations, further strengthening their impact and engagement with the community. Overall, integrating community radio and social media can lead to more effective and inclusive communication and community development.

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