

EMPOWERING RURAL COMMUNITIES: THE IMPACT OF MOBILE LIBRARIES ON ACCESS TO EDUCATION AND LITERATURE IN REMOTE AREAS

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Abstract: Access to educational resources and opportunities for the individual's growth is often limited in rural areas around the world. An innovative step that brings books, digital resources, and various educational programs directly to remote regions has been brought in the form of Mobile Libraries, thus transcending the geographical barriers.

Mobile Libraries can be considered as a form of Librarianship in which library staff transports the information to every user's doorstep through the efficient use of technology. Mobile Libraries can be seen as a tool which is complementing the work of traditional libraries. It provides the needed support to the traditional Libraries.

This paper signifies the affect of Mobile Libraries on the communities in the rural areas, aiming on their role in enhancing literacy rates, promoting a learning which is lifelong, and fostering the development of the community. Through case studies and statistical data, it depicts the positive effects of Mobile Libraries on educational outcomes, economic prospects, and social cohesion in rural areas.

Keywords: The National Education Policy 2020, traditional Libraries, Digital learning, technology

1.0 Introduction :

Education to large majority of the rural population is dependent on government – run or government – aided schools and on non – governmental organisation. The National Educational Policy 2020 has brought the digital learning as an alternative to the traditional classroom model of learning.

In past years, libraries are not only limited to physical one but have shifted to mobile Libraries reaching to people living in rural Areas. Animals such as ox, donkeys, elephants and camels were used to transport books to rural areas. Then, after some time, buses, cars, trains, boats were being used for the same. But now, the trend has shifted and books are available on libraries on mobile phones.

Mobile Libraries are the services in which learning material is available 24 *7 on mobile devices. Apps in mobile are emerging technology that is seen to have an impact on libraries as well. There are many library vendors who are in process of or have already launched their apps.

The Covid-19 Pandemic has brought a shift from traditional learning to digital learning. While students from better-off families made an easy switch to digital learning, students from not such families couldn't make a switch to digital learning due to lack of technology or due to the reason that they were not supported by their parents.

There are many Hurdles that are faced by the rural students in availing Digital learning , which include Financial issues, Lack of advanced learning resources, Lack of support from family, Lack of technological knowledge etc.

However, Mobile Libraries promote engagement of community and literacy among them.

2.0 The Mobile Library Initiative: A Historical Overview

A horse-drawn "Perambulating Library" from England in the 1850s is the earliest known example of a mobile library. The United States' first instance of such a method of distributing reading material was in Washington County, Maryland, in 1905.

"Bookmobiles" are mobile libraries that are powered by motors. Currently, bookmobiles are used to deliver literature to a variety of customers in American schools, nursing homes, hospitals, and jails. Informational resources can be transported all over the world via boats, bicycles, horses, burros, elephants, and even hot air balloons. Since their collections can be modified to meet the demands of their target audience, mobile libraries are often quite versatile. Although they frequently operate in remote and rural locations, they also operate in cities where citizens may find it challenging to get to physical libraries.

During World War II, jeeps and trucks were converted into bookmobiles that distributed materials in the war zones.

The Works Progress Administration (WPA) supported bookmobile initiatives during the 1930s, as well as the WPA's own Pack Horse Library Initiative, which distributed books to rural Kentuckians.

The United States government launched a complex campaign to increase its influence on the world stage in the years following World War II. The employment of cultural diplomacy, a notion that emphasised the role of culture in moulding a nation's image and promoting its ideals abroad, was essential to this strategy. According to the U.S. State Department, this type of diplomacy was not only seen as a component of public diplomacy but also its mainstay.

The conclusion of World War II was a turning point in history because it put the United States in a position of unheard-of worldwide prominence. In 1947, the United States launched the Marshall Plan, also known as the European Recovery Programme, as Europe was in ruins.

This ambitious project provided financial assistance and resources to European nations in an effort to rebuild war-torn Europe and stop the rise of communism. In this setting, cultural diplomacy was extremely important.

The Marshall Plan and the subsequent enactment of the Smith-Mundt Act in 1948 are implied to have a direct relationship, according to Matt Armstrong, a renowned expert in the field of public diplomacy. This law, officially known as the United States Information and Educational Exchange Act, had a significant impact on how information and culture were spread around the world. In essence, it was a response to the necessity for the United States to resist Soviet propaganda's rising effect.ⁱ

The United States Information Service (USIS) was largely responsible for managing cultural diplomacy initiatives. The United States Information Service (USIS), which served as the "cultural arm" of the United States Information Agency (USIA), was in charge of this. The Office of War Information (OWI), from which the USIA derived, had officials who were increasingly cognizant of the influence that psychological warfare and propaganda had on public opinion. The Smith-Mundt Act, which attempted to control the dissemination of knowledge and cultural products overseas, was passed as a result of this awareness.

An Information Center's library served as the centre of gravity and was a crucial part of the USIS's efforts in cultural diplomacy. The resources offered in these libraries were carefully chosen to create a balanced portrayal of American philosophy and life under the direction of the USIA. These libraries were important locations to access books, music, and films.

. But they were as more than just archives of knowledge; they also served as venues for instruction and acculturation.

Exhibits, classes, lectures, and even concerts were among the many opportunities that information centres provided for the community. These events served as a forum for cross-cultural dialogue and promoted a better knowledge of American culture and society. The United States sought to enhance its reputation as a country that valued education, democracy, and cultural variety by providing such programmes.

In conclusion, the years after World War II saw a fundamental change in American foreign policy, characterised by the deliberate application of cultural diplomacy to check the Soviet Union's growing global influence. The Smith-Mundt Act's passage and the creation of Information Centres were crucial components of this strategy.

The activities in these centres sought to further cultural diplomacy, but they also aimed to refute myths from other countries and Soviet authorities that the United States was primarily industrial and had no interest in culture.

The bookmobile increased the reach of an information center's cultural offerings. Bookmobile activity was notably popular in Germany and Austria, according to the textual and visual data that is now accessible. By 1957, there were a total of 22 of these motorised mobile libraries operating in rural Germany. At least within Germany, these bookmobiles also had music, records, and sometimes films with a projector that were viewed in whichever populated places the bookmobile found itself in.ⁱⁱ

3.0 National Policy On Digital Library

Recommendations for development of Digital Libraries were given by The National Task Force on IT and Software Development (2003). The recommendations were related to development of pilot project on Digital Library, conservation of enormous wealth of traditional knowledge of India, Digitisation of Theses and Dissertations written in India and copyright protection.

3.1 Digital Library Initiative in India

Digital Library of India was launched formally by the then President of India Dr. A.P.J. Abdul Kalam on 8th September 2003 to conserve the cultural heritage and vast knowledge of India. This Project is aided by Ministry of

Communication and Information Technology working under Government of India and coordinated by Indian Institute of Science situated in the city of Bangalore.

Vigyan Prasar Digital Library The Website link of this library is as follows:

<http://www.vigyanprasar.gov.in/digilib/>

It is an autonomous organisation established in 1989 for spreading knowledge on Science and Technology by the Department of Science and Technology, Government of India.

3.2 NCERT Online Text Books NCERT was established by Government of India in 1961 as an autonomous organisation to assist and to render advise to the Central Government in implementation of policies. NCERT came up with a national portal in 2005 where school textbooks based on NCERT curriculum are available for free.ⁱⁱⁱ

3.3 Challenges In Rural Education And Literature Access

The challenges that are faced in Rural Education and accessibility of Literature to them are as follows:^{iv}

3.1 Financial issues: Most of the People living in rural areas don't earn as much as the people in the urban areas do. More than one-fourth of the population who resides in the rural areas is below the poverty line. They don't earn sufficient to fill their bellies. The poor conditions in which they live force them to make their children work for earnings at a very early age and thus taking them far away from the education. According to the reports published by the NITI Aayog, Rural areas have witnessed the decline in poverty from 32.59% to 19.28%. But, the figures are still so high. Education in rural areas can't be accessed by the poor people until their financial issues or concerns will get resolved.

3.2 Lack of Faculty and Infrastructural Facilities: Various concerns that jointly impede child's full-fledged development deteriorate the educational environment in rural areas. The obvious absence of faculty and infrastructure can be addressed as one of the most urgent issue. The fundamental educational resources that their urban counterparts take for granted are frequently absent from these rural towns. Modern computers, well-stocked labs, well-equipped classrooms, and playgrounds are all in short supply. The quality of education that children receive is strongly impacted by this lack of basic resources.

Furthermore, it is only sometimes possible to find skilled instructors. Education standards have fallen dramatically as a result of frequently absent or underqualified teachers. Students lose interest in going to school as a result because they do not recognise the value of a flawed educational system.

3.3 Gender inequality: It's a sad reality that the Indian society still faces the stigma of Gender inequality. Females are discriminated against the males and are not provided the same opportunity to avail the education as the males get. They are not allowed to attend the classes in the schools. They are disallowed to pursue higher education and better employment opportunities.

3.4 Digital Dividend : Most of the people in rural areas are not aware of the advanced technology which is the major reason that they don't have access to various resources which can be subscribed for free.

4.0 Mobile Libraries : Design And Implementation

Creating and implementing a mobile library entails several important processes, whether it contains real or digital resources:^v

4.1 Needs Assessment: Determine the requirements of your intended market. Do they want printed books, electronic books, audiobooks, or other resources? What are their requirements and preferences?

4.2 Content Selection: Compile a selection of resources that are tailored to the needs and interests of your audience. Secure e-book and digital resource licences for digital libraries.

4.3. Technology Stack: Select the platform for your mobile library's technology. Think about creating iOS and Android mobile apps or a responsive website for greater accessibility.

4.4 Designing the user interface (UI) Design a user-friendly and intuitive interface. Pay close attention to the search function, customising options (such user profiles and bookmarks), and simplicity of navigation.

4.5 Content Management System (CMS): Use a CMS to efficiently organise and manage the content in your library. For digital resources, this involves version control, metadata, and categorization.

4.6 Authentication and Security: Put secure user authentication and data protection mechanisms in place, especially if you're dealing with personal data or money.

4.7 Offline Access: Take into account giving users who might not always have an internet connection offline access to some content.

4.8 Search and Recommendation Algorithms: Create effective recommendation algorithms and search capability to aid users in finding material.

4.9 If you intend to charge for some resources, integrate payment gateways. To encourage user interaction and sharing, take into account integrating with social media networks.

4.10 Feedback and Support: Provide customer support channels and feedback methods to handle consumer inquiries.

4.11 Accessibility: Make sure your mobile library complies with accessibility standards and guidelines so that people with impairments can use it.

4.12 Testing and Quality Assurance: Before releasing the mobile library, thoroughly check it for errors, usability problems, and security holes.

4.13 Launch the mobile library and market it through a variety of channels, such as app stores, social media, and collaborations with nearby libraries or educational institutions. 13.

4.14 User Engagement: Keep in touch with people to get their opinions, update the information, and improve the user experience.

4.15 Use analytics tools to acquire information on user behaviour that will help you choose and improve future content.

4.16 Maintenance and Updates: Continually update the mobile library to correct errors, include new functionality, and increase the collection

4.17 Legal and Copyright Compliance: Especially with digital libraries, be sure you have the required licences and permissions for the content you supply.

4.18 Obtain funds for continuing maintenance, content sourcing, and marketing initiatives.

4.19 Create a sense of community among your users by hosting online forums, chat rooms, or events that are linked to the library's subject matter.

4.20 Feedback Loop: Continually collect user input to refine and advance the mobile library over time.

5.0 Impact Assessment: Empowering The Rural Communities

Mobile libraries can have a significant impact on empowering rural communities.^{vi}

Here, are some crucial points to consider in assessing their impact :

5.1 Access to Information : Mobile libraries give rural communities with access to books, educational accoutrements , and information they may not have had else. This can empower individual with knowledge and chops to ameliorate their lives.

5.2 Education : They support formal and informal education. Children can have books for academy, and grown-ups can pursue lifelong literacy. This can lead to better rates of literacy and better openings for the community.

5.3 Community structure : Mobile libraries frequently serve as community capitals, fostering a sense of belonging and connection among residents. This can lead to stronger social bonds and collaboration within the community.

5.4 Digital knowledge : Numerous mobile libraries offer an opportunity of digital learning, helping rural residents develop digital knowledge. This is utmost important in this ultramodern world.

5.5 Profitable commission : Access to information can empower individualities to start small businesses, learn about agrarian practices, or access job openings, thereby perfecting the profitable prospects of the community.

5.6 Cultural Preservation : Mobile libraries can save and promote original culture and heritage by offering knowledge applicable to the community's history and traditions.

5.7 Health Education: Mobile libraries can give health- related accoutrements and promote health education, contributing to better healthcare issues in rural areas.

5.8 Transportation Challenges : Assessing the impact should consider the challenges related to the mobility of these libraries, similar as energy costs, conservation, and access to remote areas.

5.9 Community Feedback : Gathering feedback from the rural community members themselves is pivotal in assessing the impact. It helps in understanding their specific requirements and how the mobile library has met or can more address those requirements.

5.10 Long- Term Sustainability : To ensure continued commission, it's essential to estimate the long- term sustainability of mobile library programs, including backing sources and community involvement.

6.0 Challenges And Future Prospects

The Challenges with the initiative of mobile library are :

6.1 Digital Transformation: The challenge for mobile libraries is to adapt to digital formats like eBooks and online resources while continuing to offer conventional printed items.

6.2 Connectivity: The availability of online materials might be hampered by the lack of stable network connections and access to the internet, particularly in distant places.

6.3 Funding: Finding money for mobile library operations, such as upkeep on the vehicles, employee wages, and material purchasing, can be very difficult. **Technological Infrastructure:** Updating and maintaining technology, such as e-readers and mobile library management systems, demands money and knowledge.

6.4 Outreach: It can be difficult to reach underserved groups, such as individuals who are disabled or have restricted mobility.^{vii}

7.0 Future Prospects:

7.1 Digital Integration: Mobile libraries will keep integrating digital content and continue to provide a larger variety of resources that are available on smartphones and tablets.

7.2 Outreach and Inclusivity: Mobile libraries can extend their reach to serve a wider range of communities, including elderly and marginalised populations.

7.3 Community Engagement: They can play a bigger role by encouraging community collaborations and holding activities like book clubs, author visits, and educational programmes.

7.4 Sustainability: Mobile libraries can become more sustainable by adopting eco-friendly practises like solar electricity or the use of electric cars.

7.5 Data Analytics: Using data analytics can help you customise collections to the interests of the community and increase service effectiveness.

7.6 Virtual reality (VR) and augmented reality (AR) technology can improve learning chances and produce immersive reading experiences.

7.7 Collaboration: The reach and impact of mobile libraries can be increased by working together with local businesses, universities, and educational institutions.

7.8 Support in numerous languages: By providing content in different languages, you can serve a variety of populations.

7.9 Personalization: Mobile libraries can offer personalised reading recommendations and services using AI and machine learning.

7.10 Accessibility: Making mobile libraries technologically and in terms of materials accessible to people with impairments is essential for future inclusivity.

8.0 Conclusion

Mobile libraries are essential tools for strengthening rural communities because they provide a vital source of knowledge and information to locals who frequently lack convenient access to educational resources. We will delve into the varied ways that mobile libraries empower rural communities in this thorough investigation, looking at the advantages they bring to education, community development, and personal development.

The cornerstone of progress is education, and mobile libraries act as stimuli for learning in isolated rural areas. The lack of physical libraries in many rural locations makes it difficult for locals to obtain books and educational resources. By providing a wide selection of books, e-books, and educational resources directly to these communities, mobile libraries close this gap.

The promotion of literacy is one of the main ways mobile libraries empower rural areas. Illiteracy rates may be greater in areas with less access to traditional libraries. By making reading materials available to people of all ages, mobile libraries contribute to the solution to this problem. From an early age, children can acquire the fundamentals of reading, while adults can raise their literacy levels through self-directed learning.

Mobile libraries also promote a reading and lifelong learning culture. They give residents the chance to study different topics and genres as well as the delight of reading. This not only broadens people's knowledge but also inspires them to read voraciously, which can have a significant impact on personal growth.

Mobile libraries promote literacy and education while also fostering community growth. Economic difficulties are a common occurrence in rural areas, and having access to education can be a potent weapon for overcoming these difficulties. With the help of mobile libraries, people can learn the skills necessary to launch their own businesses, get work, or advance in their current professions. These libraries also include materials on entrepreneurship, job skills, and vocational training.

Mobile libraries can also serve as centres for civic involvement. They offer locals a space to congregate where they may share ideas, take part in conversations, and go to workshops and lectures. As a result, rural communities' social structures are strengthened, and a sense of community and civic engagement are encouraged.

Furthermore, mobile libraries frequently use technology to enhance their offerings. This can involve having access to the internet, e-books, and online educational resources. These services are essential for rural areas to stay connected and obtain current information in an increasingly digital environment. Mobile libraries help people develop their digital literacy, giving them the tools they need to traverse the internet and take use of its possibilities for both personal and professional development.

Expanding one's horizons also gives people more power thanks to mobile libraries. Residents can learn about many viewpoints, cultures, and ideas through books and other resources.

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