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## **Mobile Libraries: The Past, the Present, the Future**

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Final Project: Traditional Essay  
Mobile Libraries: The Past, the Present, the Future

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LIS9704: Librarianship and Evolving Technologies

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For so long, a library's space was easy to imagine. A library is held within a physical space, with a circulation desk where librarians are ready to greet upon entry. There would be stacks of books, community posters along the walls, and activities held in one of the many rooms. In some libraries, there were computers and other digital devices that were available to loan. Whether one floor or two, a community library is easily imaginable with some thought or relinquishing of memory. This imagery, or something close to it, is what libraries were imagined as for generations. A physical space, with seats, and librarians there to help you if you so need it. As we move towards the future, libraries are straying away from that image and expanding into other formats. These formats may include online Reader's Advisory services, a presence on social media, virtual helplines for library-related inquiries, and mobile libraries.

Mobile libraries are not a new technology; however, they have evolved many times over since its original innovation. Mobile libraries as cited by Sung & Bamkin (2022) are defined as "a vehicle devised, equipped, and operated to provide as far as reasonably practical a service compared to a part-time library branch". Mobile libraries are sometimes commonly known as bookmobiles or book buses. Mobile libraries offer library services all over the world, appearing in many different shapes, sizes, and visual appearances. They also offer different services depending on the library. They provide frequent and long-term mobile services often for people living in rural communities. These services, as quoted by Sung & Bamkin (2022) "can act as social institutions, thereby promoting social inclusion and meeting social inclusion objectives. Mobile libraries can go to where the people are taking information and resources to places where they may be difficult to obtain in any other way." They often are an outreach or extended mobile branch of a pre-existing library. Mobile libraries can change the way society thinks and imagines libraries as, a service that now comes to the patron, instead of the patron reaching them. This is

an excellent and innovative way of thinking of libraries, and an expression that should be remembered when picturing future libraries. With equal access to information as an important value for librarians and a driving force for their role, librarians should reconsider how to better reach inaccessible populations. A better way to do so is to consider the evolving and emerging technologies that the mobile library has- and could have in the future.

The mobile library or the original innovation of the mobile library has existed since the 1850s' in England, where the service was offered by horse-drawn carriages (US National Archives, 2020). From there, the mobile library took many forms- on the battlefield during World War I where troops had books delivered by automobile (US National Archives, 2020). During World War II, jeeps, and trucks were converted into bookmobiles that distributed materials into the war zones (US National Archives, 2020). Following World War II, the US government wanted to create Information Centers that would “be a balanced reflection of American thought and life” (US National Archives, 2020) during the Cold War Era. These ‘Information Centers’ would “not only [served] as a source for accessing reading material, music, and films, but also as a place that provided opportunities for education and cultural enrichment in the form of exhibits, classes, lectures, and even concerts” (US National Archives, 2020). The bookmobiles of the Cold War Era in America were extensions of these ‘Information Centers’ culture beyond the physical location (US National Archives, 2020). In Canada, bookmobiles were also present, but their diminished funding in the 1970s, 80s, and 90s almost eliminated their existence (Kelly-Canning, 2014). The innovation of providing library services- or perhaps books as it was in the past, has been around for centuries. The Bookmobile is not an innovative technology that can go extinct. The re-emerging of it throughout history proves that it is a technology that is constantly worth considering, for the services it provides, and the strong

connection it has to fulfilling librarians' values and creating community. The mobile library is a technology that libraries should increasingly and frequently improve the better service communities that do not have access to a library's physical space. In an evolving digital age, mobile technologies can connect "to the same information sources to which a fixed desk computer may have access. It will allow you to replicate much of the support that you would offer through a fixed desk, while on the move" (Walsh, 2012, p.32). Andrew Walsh (2012) further speaks about the importance of mobile technologies in libraries saying:

The larger screen of a tablet computer, as compared to a phone or PDA, also enables you to show the questioner how to resolve their problem or search for information. It helps to move your roving staff from describing how to resolve a problem to demonstrating it on the spot, wherever they are asked the question (p.32).

With mobile technologies in libraries or outside of it, we no longer have to direct users to the library, we can bring the library to them (Walsh, 2012, pp.32-33). This statement directly defines what a mobile library's main function is. Bookmobiles, in whatever format they appear are important to libraries and society altogether because they curtail kids' screen time and get them to engage with their community, while also filling gaps in the public school system (Kelly-Canning, 2014). They also have a history of adapting to the changing environment, reappearing in different ways to service the current technological climate. They anticipate patrons' needs, reach residents that have socioeconomic, geographic, or other barriers, and offer flexible and timely ways to address needs (Kelly-Canning, 2014). Due to this, mobile libraries will be needed for years to come, however, they will frequently need to innovate to match the rapidly changing technological environment we are emersed within.

As previously mentioned, mobile libraries are also known as bookmobiles, but they also may appear as boats, vans, buses, RVs, or bikes. As their format can vary to match a library's budget, they are often used for outreach purposes. In Marc Lapointe's (2019) article, *Libraries- More than Brick and Mortar*, they write: "outreach programming or services are also an effective way of promoting the library to a wider community, and a way of reaching those who are either unable to utilize physical services (at a branch) or who are not traditional library users". Traditional bookmobiles are costly and are more expensive than other modes of transportation (Lapointe, 2019). Bikes are a great option for cost efficiency. In Vancouver, the North Vancouver City Library has a book bike. The book bike which looks closely like a three-wheeler can store approximately 100 books and has a Wi-Fi hotspot so that new patrons can join as members, or for tech-related questions (Lapointe, 2019). Besides the various modes of transportation that bookmobiles can appear in, Lapointe (2019) describes the key factors that must be included in bookmobiles, these include printing services, Wi-Fi hotspots, and a librarian. The printing service will allow libraries to generate some income while creating mobile access for printing. The Wi-Fi spot is beneficial for accessing technological resources and information while attracting users, and maybe new library patrons. The librarian will be the temporary 'face' of the library, they will represent an access point to the knowledge and resources the library has (Lapointe, 2019). They will be an unofficial advertisement for the library, creating an unparalleled replacement while also helping as many people as possible.

The bookmobile in whatever mode of transportation is suitable for the library it represents is the more present depiction of this innovative and creative technology. However, as they should, mobile libraries are shifting into different and newer formats. One of these new developments is WeChat. WeChat as defined by Wei & Yang (2017) is "a free application

program that provides an instant messaging service for intelligent terminals brought out by the Tencent Company on January 21, 2011” (p.198). In 2017, it was the most popular social application in China. WeChat is discussed in Wei & Yang’s 2017 article, WeChat Library: a new mode of mobile library service that was included in the Electronic Library. Their investigation with WeChat showed that 84.6 percent of the “985” universities opened WeChat libraries, which signified that the WeChat library has become one of the most important mobile service modes for Chinese university libraries (Wei & Yang, 2017, p.198). WeChat can support sending voice SMS, video, images, and texts together with group chatting, the application is suitable for most smartphones (Wei & Yang, 2017, p.199). WeChat is a mobile service platform that is developed and customized by a library based on the WeChat platform (Wei & Yang, 2017, p.200). As a mobile library, WeChat provides these services: “digital resource retrieval, OPAC retrieval, e-books, and a personal library” (Wei & Yang, 2017, p.200). It also includes resources like “resource discovery, OPAC retrieval (library OPAC catalogue retrieval), cloud reading, items borrowed, and book review center” (Wei & Yang, 2017, pp.201-202). One of the online columns on the digital interface also includes a ‘wisdom library column’ this column includes: “reservations of reading seats ( reserving a seat in the physical library), QR code access ( scanning a QR code to enter the access control management system of the library through the phone and without a library card), social services, and personal center ( personalized services, patron registration or binding of patron identity)” (Wei & Yang, 2017, pp.201-202). From the backend, librarians can edit and process images, text, video, and other multimedia resources, they can also create announcements from the library. Librarians can also receive voice messages from patrons and respond back. (Wei & Yang, 2017, p.201). WeChat is a completely different way of visualizing mobile libraries. it provides a digital interface for patrons to access their

library information, as well as manage library accounts, and other important functions. With the popularity of social media, WeChat fits in perfectly as it offers the use of open platforms and social software to build a library brand. As Wei & Yang (2017) quote “WeChat library meets the needs of most users seeking information on their mobile phones and relying on real-time interaction in this mobile internet era” (Wei & Yang, 2017, p.208). WeChat is a great technology for mobile phone users and patrons who are comfortable using technology to identify and fulfill their needs.

While using WeChat is a great option for social media users, it does not service all library patrons' needs. Sometimes, patrons cannot access their phones, mobile and technological devices, or an internet connection. For patrons that are in isolated or impoverished communities, The Ideas Box is an excellent technology for service to these communities. The Ideas Box is a tool that “expands access to information, education, and cultural resources to places that desperately need them- refugee and IDP camps, rural and isolated communities, and underserved urban spaces or indigenous communities around the world” (Libraries Without Borders, n.d.). The Ideas Box is “highly-durable, easy to set-up and energy independent” (Libraries Without Borders, n.d.). In about twenty minutes, users are serviced with access to a “satellite internet connection, digital servers, a power generator, 25 tablets and laptops, 6 HD cameras, 1 large HD screen, board games, arts and crafts materials, hardcover and paperback books, and a stage for music and theatre” (Libraries Without Borders, n.d.). Currently, the main projects of the Ideas Box are in “France (in under-resourced neighborhoods and rural areas), the United States (impoverished communities), Australia (Aboriginal communities), and Senegal (children in street situations)” (Libraries Without Borders, n.d.). In contrast the WeChat, the Ideas Box is a physical space that can serve those who do not usually have access to the library’s resources. The

Ideas Box is a convenient, efficient, and much-needed organization that helps those who need it. The Ideas Box and WeChat are both mobile libraries but in different formats. They each expand the library's mission and role of equal and equitable access to information. The mobile library as a technology is a constantly evolving and emerging technology that librarianship should continue to use presently, and into the future.

In the article *Social impact of mobile libraries on rural children in Taiwan*, authors Sung & Bamkin (2022) discuss the positive benefits of mobile libraries. In Taiwan, mobile libraries were offered by the Royal Thai Police to homeless children, in hopes that it would give these children positive and beneficial activities and help reduce the crime rate and child exploitation. The mobile libraries included book collections, educational services, and learning activities. In China, mobile libraries were placed within migrant family communities. The mobile libraries played an important role in providing equal and free access to reading resources (Sung & Bamkin, 2022). Sung & Bamkin (2022) also discuss the presence of mobile libraries in Haiti and Palestine. They include a study done by Lingel in 2018 where she found these results, “as mobile libraries are deeply invested in library and language... the Haitian mobile library carries books written in Creole which is the language of 95% of the population of Haiti. These are scarce and not easy to access as Creole was not a written language until the 1970s” (Sung & Bamkin, 2022). She further comments that “for Haitians, the circulation of texts in Creole reflects a commitment to indigenous identity” (Sung & Bamkin, 2022). There are numerous benefits to mobile libraries, one of which is the active and visible presence of a library branch. In going into communities, libraries are providing access to services where the community might not have had it, while also increasing the number of library patrons (Sung & Bamkin, 2022). Mobile libraries build communities, they provide a space where communities can gather to engage socially and to

access resources otherwise not had within their community. They can target certain age groups, children, youth, young adults, adults, and seniors. Mobile libraries can cater their resources to certain populations and age groups to better serve them and to increase user and non-readers participation. Mobile libraries are a traveling extension of what libraries value- they help break down barriers and obstacles and reach populations who do not otherwise have access to resources, technologies, or the internet. Due to this, mobile libraries are always a beneficial technology for libraries to use and engage with.

However, regardless of the numerous positive benefits of mobile libraries, there are also some drawbacks. One of the biggest problems of mobile libraries is staffing issues. Not only is there an issue with gathering staff to conduct the mobile libraries, but there are also librarians' attitudes to consider too. Rachel Bell and Anne Goulding conducted a study in Aotearoa, New Zealand. This study focused on mobile libraries and digital inclusion, they found issues with staffing. Bell & Goulding quoted this, "interviewees from two mobile libraries discussed challenges related to staff attitudes, interest, and familiarity with digital technology" (Bell & Goulding, 2022, p.1-). They also go on to discuss one interviewee's comment on being a solo operator, "you can't sit down and talk to someone for five or ten minutes or teach them how to get an email.[...] the fact that we're solo-operating, we can do those quick and dirty little queries, but we actually can't do anything more in-depth" (Bell & Goulding, 2022, p.1-). Similarly, Sung & Bamkin (2022) mention these difficulties with rural children and their bookmobiles in Taiwan, "issues with book loans; not enough activities provided; limitations on time and on space, and reluctant readers". Bookmobiles have limited capacities as well, they can only carry between one thousand to two thousand books at a time, and sometimes the selection is not great as the newer publications are loaned out first (Sung & Bamkin, 2022). Sometimes, if

the bookmobile is located at a children's public school, children only have their recess time to browse and loan out books- this always is not enough time for children to find the books they want or need (Sung & Bamkin, 2022). They may become rushed or anxious, and even overwhelmed. These emotions can cast a negative experience on children, and possibly even discourage them from further engagement or participation. Furthermore, some other drawbacks can simply be a lack of knowledge or an overwhelming fear of not knowing where to start when creating bookmobiles. One of the biggest obstacles when it comes to mobile services and technologies in mobile libraries is knowing where to begin, and what services to provide to patrons. Daniel Freeman (2011) delves deeper into this obstacle stating:

What types of smartphones do patrons have? What unique collections might patrons want to view through a mobile-friendly interface? Are patrons using apps? QR codes? Augmented reality? There are so many exciting technologies out there, but the focus ultimately has to be on where our patrons are and what we think they actually need and will use. And that requires surveying our population (Freeman, 2011).

While mobile libraries are an excellent technology in theory, in some places, it may be impossible to implement them. With staffing issues and attitudes, along with poor patron participation and usage, mobile libraries could be difficult to create. Also, mobile libraries require costs, that some libraries or organizations might not have. Furthermore, as Freeman suggests, developing planning and research on what to include might be difficult. However, even though these are the realistic drawbacks to mobile libraries, the positives outweigh the drawbacks. Mobile libraries are still an important, and crucial technology for libraries to innovate, create, and develop.

Mobile libraries as shown throughout this essay appear in many forms- they may appear as a bookmobile or a bike mobile, as a social software like WeChat, or as the Ideas Box. These are the present technologies for mobile libraries, but one may wonder about the future of this technology. Easton & Wells (2020) discuss mobile libraries within their article, and the cruciality of implementing them in refugee camps stating, “ to view libraries through a postcolonial lens and to practice our global citizenship, we found that library service to refugees in refugee camps is an important topic to discuss, we see the use of mobile libraries as a meaningful and flexible intervention in addressing the variety of information needs that refugees may have while in refugee camps” (pp.20-21). Furthermore, Sung & Bamkin (2022) discuss the impact their mobile libraries had on the children in Taiwan:

All 23 interviewees indicated that not only is it important to provide children in rural areas with access to mobile libraries but also that children would feel disappointed if there were none to visit. Findings reveal four areas of social impact that mobile libraries have had on children in rural areas: reading development; community connection; social spaces and equality of opportunities (Sung & Bamkin, 2022).

The reality is, is that the digital divide and access to information will always be an issue. Furthermore, mobile libraries will still be necessary. The future of mobile libraries is that I hope they become more popular and deemed more necessary. I hope that organizations like Idea Box spread, and libraries can reach all parts of the world- to create equal opportunities for all age groups. In the future, I hope mobile libraries evolve, to become more technologically advanced, easier to set up, and more cost-effective. Mobile libraries should also follow China’s example and innovate to more social software and platforms, reaching patrons and users that may never have used a library before. Mobile libraries have existed for decades and knowing this, I am

confident that they can evolve and change with the shifting technological landscape. Mobile libraries have served patrons well; in the past, present, and hopefully long into the future. It is a technology that libraries should embrace and use to uniquely fit their library needs. Mobile libraries have made an impact on the patrons they serve, and I believe will continue to do so into the future.

### Reflection

Technology and future technologies often overwhelm me. Learning about what the future will look like, although fascinating, can be hard for me to comprehend. Part of the reason why I chose this course was to expand my comfort zone and to challenge the fears and anxieties I have involving technology. The reason why I chose to focus on mobile libraries is that it is a technology that doesn't overwhelm me or is a technology that I can wrap my head around. Mobile libraries I believe have and will make a major impact. They will make an impact on the community it serves, the patrons who use it, and the librarians who are involved. Mobile libraries are a way libraries can outreach to communities that would otherwise not have library resources or technological devices. Mobile libraries should be considered important because they are a representation of what libraries value- equal and equitable access for all. It can be a way, as mentioned in this essay, to distract youth and young children from getting involved with criminal activities. It can also be a way to help the elderly and bring libraries to them instead of asking patrons to come to them. Having a physical space for libraries is great, but since the pandemic, I believe it is even more crucial now to reach populations outside of the physical space. There are many out there who need library resources, or who have never used them and might benefit from

libraries. Mobile libraries can now expand across social software, and maybe in the future can expand to apps. Maybe a library exists just as an app, instead of a physical space with an app. Through using an interface with social software, libraries can expand their audiences far and wide. In these mobile ways and formats, libraries are expanding information and equal access to many more populations than they already have - to help people have the resources they need and to shorten the digital divide.

The biggest barriers to mobile libraries are time, money, and staff. As this essay explains, not only is finding the financial resources to staff mobile libraries difficult, but the staff must be willing to do it. This might be an issue, also there is the problem of staff not knowing the different technologies that the mobile libraries can carry. If the library staff doesn't know how to operate them then they also can't help the patrons. Cost is another thing. The Ideas Box is an organization that survives on donations. Not all libraries have run non-profit organizations- which mean they must have the budget for it. Library budgets can be small as it is, and it might be hard for library staff to advocate for mobile libraries if there are other more pressing matters. As great of a technology as mobile libraries are- not all libraries can afford it, have enough staff or willing staff, nor do they have the time to organize, create, distribute, and operate mobile libraries.

When it came to the research aspect of the paper, I found there were either too many or too few sources. Often, I found that the literature review on the subject was slim. I didn't see a lot of research done in mobile libraries, and the research I found seemed to be repetitive and argued the same idea. Alternatively, there were many case studies done in different areas around the world- if I had more time, I would love to read into all the ways each country, region, or area

has responded to mobile libraries. I would love to research suggestions on where mobile libraries can go from here, and the impact they have had.

Going into this essay, I imagined the concept of mobile libraries to be more simplistic than it is. Mobile libraries are complex, with vastly different formats they can appear in. I did not have enough time to dive into the other ways libraries have mobilized. I would love to investigate it more when I have time. regardless, I found the research fascinating. I loved learning about the impacts mobile libraries have, and how we can shrink the digital and literacy divide with mobile libraries. I hope as a society, we move forward with research in the LIS field about mobile libraries. I hope we advocate for them and help build them within remote, rural, and refugee camps. Mobile libraries, I believe are a crucial technology that hopefully will be implemented more within library outreach programs in the future, or as standalone organizations. To conclude, I enjoyed my experience researching and learning about mobile libraries, and I hope more awareness and advocacy is given to this technology in the future.

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