

Enhancing Core Competencies of Entrepreneurial Librarians in Post-Covid-19 Nigeria

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Abstract

This study examined the core competencies needed by entrepreneurial librarians in post COVID-19 era in mitigating the impact of the global health pandemic on libraries. The study explored new digital skills that can enhance service delivery by librarians as well as technologies such as 3D printing, cloud printing, storage of large dataset, virtual reality, code club, delivery of digital content and provision of kinetic bikes as emerging library services. The Theory of Social Change was used as framework for analysis while exploratory research design was adopted using case study approach to draw lessons from five (5) libraries in (3) three different countries on service delivery. Data collection was mainly through secondary sources, particularly from books, journal articles, electronic newsletters and websites of the libraries that were surveyed. Content analysis was used to interpret the secondary data which were tabulated to explain how entrepreneurial librarians deployed new services in response to COVID-19 pandemic. The study found out that libraries who deployed digital technologies and trained their staff in service delivery effectively respond to the global pandemic. Recommendations were made on how Nigerian libraries can expand their services, especially in relation to staff training and introduction of new technologies in library services.

Keywords: Core competencies, Entrepreneurial librarians, Post Covid-19, Nigeria

Introduction

Prior to the outbreak of coronavirus, digital technologies have pushed academic and public libraries to transform their operations in the areas of digital collections, resource sharing and service delivery. While considerable gains have been made in developed countries over transformation of libraries (Shereen et al., 2020a), developing countries including Nigeria lags behind in inter-library lending, digitisation of resources, equipment acquisition and manpower development. Efforts to introduce National Union Catalogue in 1963 as well as National Union List of Serials in 1977 have failed to yield positive results in transforming libraries in Nigeria (Abubakar, 2007). Yet, the sudden outbreak of coronavirus disease in 2019 and closure of libraries amid the pandemic have further detached library users from library services. This is a serious issue that throws open a number of questions. How can libraries in Nigeria transform their services in post-COVID era? What are the new skills required from professional librarians to adjust to the new-normal? How can libraries deliver entrepreneurial services outside of their formal functions? What management model should libraries pursue to enhance the core competencies of their staff in post-COVID 19 era?

Overview of Covid-19 Pandemic

Coronavirus, according to Shereen et al. (2020) is a transmittable disease linked to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Reports have shown that COVID-19 spread through dissemination of droplets from infected person who coughs, sneezes or vomit (World Health Organisation, 2020a). When people who are uninfected come in contact with such droplets, they get infected. In most cases, people who get infected with COVID-19

suffer mild respiratory sicknesses such as fever, dry cough and tiredness (Spinelli and Pellino, 2020). COVID-19, however could be fatal especially for older people with medical challenges such as diabetes, cancer and cardiovascular diseases. For some people, COVID-19 remains a critical health problem as the virus attacks their immune system leading to difficulty in breathing, loss of speech and sometimes, death.

The COVID-19 first broke out in 2019 at Wuhan, a transportation hub in China where it infected over 70,000 individuals and killed about 1800 within 50 days (National Health Commission, 2020). By January 30, 2020, the World Health Organisation (2020b) declared that the virus had spread to 18 countries with a total 7834 (7736 in China) confirmed cases and 170 deaths (all in China). The first index case was reported in Nigeria on the 27th of February, 2020 by the Federal Ministry of Health (Nigeria Centre for Disease Control, 2020). By 11th of March, 2020, Director-General, Dr.Tedros Adhanom Ghebreyesus of the WHO declared COVID-19 as a global pandemic (Cucinotta and Vanelli, 2020). Governments and private institutions were advised to shut down all activities and placed travel restrictions from other countries (Chinazzi et al., 2020). This was due to the spike in the number of confirmed cases which reached 14.5 million by the middle of July 2020 with about 606,000 deaths and 8.13 million recoveries (Johns Hopkins University, 2020). The Nigerian government took COVID-19 as a matter of national emergency and placed parts of the country such as Lagos, Ogun and Abuja on full lockdown while others were placed on partial lockdown. Libraries, like other institutions were affected. Politicians and economists have hinted that countries of the world are more likely to face severe recession with reduced funding to public institutions including libraries. Hence, librarians must improve upon their core competencies to survive in a post-COVID-19 world.

Theory of Social Change and Emerging Library Services

Literature on theories of social change point towards leading scholars such as Auguste Comte, Karl Marx, Emile Durkheim and more recently, Parsons Talcott, Goffman Erving and Bourdieu Pierre (Michalski, 2018; Snowden, 2019; Taylor, 2019). These theorists developed sociological ideas used in explaining the outcome of an event, an epidemic, a conflict, a natural disaster, a technological change or cultural diffusion. Among the popular theories were Structural Functionalism, Evolutionary Theory and Conflict Theory. In this study, Structural Functional Theory was adopted as framework for analysing how COVID-19 disrupted societies and continue to jeopardise library operations due to continued closure of schools and public institutions. Structural Functional Theorists such as Herbert Spencer, Robert Merton and others have argued that the human society is complex with different social institutions, structure and functions (Michalski, 2018). This functionalist approach provides a clear explanation that the world is connected as a system whereby an epidemic attack on the health sector causes instability in other sectors. Such instability is necessary to create stronger stability of the system. Thus, all social institutions in a post-COVID-19 world must adjust to social change so as to achieve stronger stability in the new world. Although, Conflict Theory explains social change from a more realistic perspective by pointing out that conflicting interests between two or more powers drive change in the society, however the claim cannot be substantiated in relation to COVID-19 as there are no legal/scientific evidences that COVID-19 was a chemical weapon (Oriola and Knight, 2020). Hence, structural functionalism is considered as the appropriate framework in analysing the impact of COVID-19 on change in library services.

Overview of Library Services in Post-COVID-19 Era

Internet Hotspot Lending Services

Internet hotspot refers to a physical location where people can access the Internet, typically using Wi-Fi, via a wireless local area network (WLAN) with a router connected to an Internet service provider. Most people refer to these locations as “Wi-Fi hotspots” or “Wi-Fi connections.” Simply put, hotspots are the physical places where users can wirelessly connect their mobile devices, such as smartphones and tablets, to the Internet.(Whitacre, 2019). Prior to the outbreak of COVID-19, both academic and public libraries have included provision of Internet services to their users. But scholars have identified common problems that face Internet service provision in these libraries. Ukachi (2012) conducted a study on the utilisation of MTN Foundation’s Digital Library Project in Nigerian universities. It was observed that 96.7% of the 812 respondents complained of low bandwidth while 64.9% had limited access to computer terminals. Similar findings have been made by Justina et al., (2016) on the users' perception of Internet services at the University of Nigeria, Nsukka where the respondents expressed dissatisfaction with the library facilities such as storage lockers, toilets, Internet facilities, instructional facilities as well as poor attitude of library staff. Therefore, the researchers are of the opinion that entering the post COVID-19 phase under this unstable conditions would be a herculean task. Therefore, it is expected that librarians will have to take up the role of entrepreneurs and partner with large corporations to expand Internet services in their environments. In particular, all categories of librarians will have to receive technological training to enhance their skills in provision of services that were outside the traditional library services.

3D Printing Services

Three-dimensional (3D) printing or additive manufacturing is generally regarded as an emerging technology is gaining wide popularity due to their usage in printing face masks during the global pandemic (Clifton et al., 2020). The 3D printers make use of computer-aided design (CAD) to generate objects through composite materials and plastics. John and Schwartz (2019) gave an overview of the utility of 3D printers in different industries. According to them, 3D printers could be used to create turbine blades and fuel nozzles in the aerospace industry; implants and prostheses in healthcare, weapon replacement in the military, jewellery, artwork, footwear, clothes and other continual models in education. The evolution of 3D printing dates back to the works of Johannes F Gottwald in 1971; Hideo Kadama in 1981; Bill Masters in 1984; Charles Hull in 1992; Benjamin S. Cook and others from 2010 (Herron, 2019a). Among the list of libraries that first deployed 3D printing for learning, teaching, and research was DeLaMare Science & Engineering Library at the University of Nevada, USA. In 2012, the library incorporated its 3D printers (Z Printer 450, UPrint SE Plus and LulzBot TAZ 4) into the normal library space which allowed users to get their works printed with ease (Harrington, 2019). The adoption of 3D printers by libraries has expanded since 2012 and has grown to become part of a functional library in the 21st century. While libraries in Nigeria are still at the proposal stage of implementing 3D printing services (Okpala, 2016), many libraries across the world have made it part of their core services. In fact, during the COVID-19 pandemic, many libraries in the US, Canada, Australia and United Kingdom printed personal protective equipment for medical personnel and went on to create a community of entrepreneurs during the COVID-19 pandemic.

Research Methodology

This study explored the core competencies needed by entrepreneurial librarians in a post COVID-19 era. As an exploratory research, case study approach was used to draw lessons from five (5) libraries in (3) three different countries on library service delivery. Data collection was mainly through secondary sources, particularly from books, journal articles, electronic newsletters and websites of the libraries that were understudied. The instrument of analysis was thematic and were tabulated to provide focused content analysis of the data.

Case Studies

Table 1: Case Study of Indianapolis Public Library on Hotspot Lending Programme

Library	Indianapolis Public Library, United States of America
New Library Service	Internet Hotspot Lending Programme with Library Card
Attached Services	Unlimited eBook and Video Streaming with Library card Home delivery of books even during COVID-19 pandemic
Core Competency Displayed	Technological skills: Staff were trained on the use of Internet technology
Benefit to the People	<ol style="list-style-type: none"> 1. Support people to read eBooks and watch new movies 2. Children were able to learn new programming skills 3. Small businesses owners gained access to resources that could help them overcome the negative financial impact of COVID19
Benefits to the Library	Increase in the number of subscribers to library cards. The library allowed new library users to register and get a library card online. The requirements were for the new subscribers to be over 18 years. They were asked to have valid phone number with email and live in Marion County, Indiana. Library cards come with borrowing and service fees.

Compiled by the researchers from (Amanda, 2020; Indianapolis Public Library, 2020; Provence et al., 2020).

In table 1 above, library services offered by Indianapolis Public Library continued virtually despite the lockdown as a result of the pandemic. Many library users were able to subscribe to the hotspot provided by the library (Fallows, 2020). This provided new opportunities for librarians to learn technological skills needed to serve library users in the 21st century. In order to provide such new services, librarians will have to enter into partnership with large corporations such as Google, Microsoft, MTN, etc to offer hotspot lending services to the general public. Access to special content such as digital documentaries, movies and electronic books were included with the hotspot lending services. As seen in Indianapolis Public Library, the rate of users increased which enabled the library to generate new funds even during the pandemic.

Table 2: Case Study of Riverina Regional Library on Mobile Library Service

Library	Riverina Regional Library, Australia
New Library Service	Mobile Library Service and Free WiFi
Attached Services	<ol style="list-style-type: none"> 1. Home delivery of over 450 items per day 2. Operation of Mobile Library where patrons could visit and make use of free computer, free WiFi, borrow books, magazines, movies and audiobooks 3. Offered subscription to history databases including Ancestry.com
Core Competency Displayed	Inter-personal communication skills
Benefit to the People	<ol style="list-style-type: none"> 1. Free WiFi and computers enabled patrons to explore other electronic library services. 2. More people signed up for the Mobile Library during COVID-19 and has been integrated as part of the library services 3. School teachers planned digital literacy training and activities
Benefits to the Library	<ol style="list-style-type: none"> 1. Created awareness for enhanced library services. 2. New patrons were signed up at mobile locations. 3. Library services were provided to new users in remote places

Compiled by the researchers from (Akbari, 2019; Mansouri & SoleymaniAsl, 2019; Riverina Regional Library, 2020)

In table 2 above, a case study was drawn from Australia where many libraries including the Riverina Regional Library which provided WiFi services to members of the community to enable teachers and children engage in literacy programmes during the COVID-19 pandemic. While awareness of other library services was created, it also opened new opportunities for the librarians to reach out to library patrons and Mobile Library users about the digital and physical home delivery of library items. Facebook pages and YouTube links were made available for daily sessions of Story time. For the communities that the library served, it bridged the gap in digital divide and helped individuals with learning opportunities. These lending programmes perform a critical role. In addition to providing basic broadband access to low-income residents, they allow patrons to access free e-books and other digital library resources, and they enabled users to complete online job applications and perform other critical web-based processes at home.

Table 3: Case Study of Libraries on 3D Printing Service

Libraries	<ol style="list-style-type: none"> 1. J. Willard Marriott Library, University of Utah, United States 2. Toronto Public Library, Canada 3. Milton Public Library in Ontario, Canada
New Library Service	3D Printing Service
Attached Services	<ol style="list-style-type: none"> 1. Printing of Personal protective by librarians at J. Willard Marriott Library, University of Utah, United States infor doctors and medical personnel to combat the deadly coronavirus. 2. Toronto Pubic Library established a new lending service which was loaning of 3d Printers to medical centres towards the production of medical equipment 3. The Marriott Library Creative Spaces expanded the opportunities for users regarding 3D printing.
Core Competency Displayed	<ol style="list-style-type: none"> 1. 3D Maker skills with reference to creating prototypes, identifying products and making use of new 3D printers 2. Collaborative skills
Benefit to the People	<ol style="list-style-type: none"> 1. Mitigate against the spread of COVID-19 2. Used by medical personnel in to overcome shortage of PPE during COVID-19 3. General School teachers planned digital literacy training and activities
Benefit to the Library	Rebranded libraries as technology driven and live savers during global pandemic

Compiled by the researchers (Herron, 2019b; Marriott Library, 2020; Milton Public Library, 2020; Toronto Public Library, 2020)

In table 3 above, a case study was drawn from J. Willard Marriott Library, University of Utah, United States; Toronto Public Library, Canada, and Milton Public Library in Ontario, Canada. These libraries which introduced as well as expanded their 3D printing services to print out essential products such as the Personal Protective Equipment duing the COVID-19 pandemic. For Toronto Pubic Library, a new lending service was introduced which allowed third party users such as hospitals to get loan of 3d Printers in the mass production of medical equipment. For the Marriott Library, 3D printing services were made available to the general public most of who ordered printing of their items through the online channel provided by the Library. Small business owners were able to go into production of home gadgets through virtual processes. The designs were developed by the customers and forwarded to the mail of the Library which processes the 3D printing and deliver the final production to the owner. These were new services that emerged in libraries across the world during the COVID-19 pandemic.

Conclusion

Academic libraries in Nigeria traditionally provide services for students and lecturers while reaching out to researchers from other institutions. For public libraries, they provide services to the general public including those who are outside academic community. But closure of libraries due to COVID-19 has affected library operations and their functions. While efforts are being made by the Nigerian government to develop financial instruments to mitigate against the harmful effect of COVID-19 on the people, public institutions have to complement these efforts through deployment of new services. In Europe and America, libraries are transforming their services as measures to combat the pandemic. As students and teachers work from home, libraries responded by deploying digital resources that enabled homeworking for millions of people within the shortest time (American Library Association, 2020). In a survey conducted by the Public Library Association (PLA) across the United States, it was observed that 98.0% of public libraries were physically closed but expanded their services to thousands of library users online (Szalusk, 2020). Library services are changing and therefore, it has become the 'new normal' to see libraries come up with new services in post-COVID 19 phase that are not conventional.

Recommendations

Based on the conclusion, the study therefore, makes the following recommendations:

1. Notwithstanding the Covid-19 crises, there is need for librarians to continually research for new ideas and develop modern technologies in library services. This will greatly grow their entrepreneurial skills and improve their competencies.
2. As members of the public get acclimatised with the realities of the 'new normal', there is need for libraries to invest in capacity building of the library staff as this will not only create entrepreneurship readiness, but also maximise productivity strength of these librarians and provide an increasing workforce development and assistance.
3. With the setting in of post Covid-19, governments at all levels, organisations and individual donors are hereby encouraged to, from time to time, give necessary financial support and adequate sponsorship, especially to libraries in the country, as this will not only create sustenance but also enable them serve the growing population of entrepreneurs better.
4. Librarians should engage in life-changing entrepreneurial projects like creating small business resources in order to assist the public, especially at this critical pandemic time to start-up and grow their own businesses.
5. Libraries should formulate and implement plans that will guide entrepreneurship projects in the country, especially, in the post Covid-19 era.

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