

# Chapter 1

## Emerging Technologies as a Panacea for Sustainable Provision of Library Services in Nigeria

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### ABSTRACT

*The sustainability of library services is the contemporary trend within the library global ecosystem in which emerging technologies like artificial intelligence, blockchain technology, gamification, augmented reality, etc. are amply harnessed. These technologies have been adopted and are being used for the sustainable provision of library services in developed countries. But in a developing country like Nigeria, there are myriads challenges that are mitigating its adoption and use. The chapter discussed the sustainable library service delivery process driven by emerging technologies and situated the five laws of library science within the discourse to show its relevance in this era. The study revealed a lacuna that librarians are not evolving at the desirable pace of infusing emerging technologies into the nitty-gritty of service delivery. Therefore, the study recommends a change in disposition to these technologies, which are enablers and not a threat to librarians.*

### INTRODUCTION

The provision and delivery of services are focal responsibilities of the library right from pre-recorded history which has gone through different facets but the fact remains that users play a fundamental role in this discourse of service provision. Bakare (2022) affirmed that Librarianship as a discipline has gone through different developmental phases of ensuring that library services are provided for clienteles across generations without any constraint and this shows its indispensability in all aspects of human endeavor.

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our. Thus, the user-centric principles on which the 21<sup>st</sup>-century library service delivery is hinged have redefined the library landscape to seek out ways of ensuring the sustainability of the services provided to library clientele.

Whilst user-centrism is core in the value chain of library service delivery in this era of digital connectivity, librarians are left with no choice but to seek out ways and techniques through which library services are not hampered in any way. This is known as the sustainability of the library service delivery process as it is not inhibited by time, location, and space due to the ubiquitous nature of Emerging Technologies (EMTs) that drives these services. Mollenkamp (2022) defined sustainability as the capability to sustain or support a course unceasingly over time. The implication of this is that the traditional form of face-to-face (F2F) service delivery is not sustainable as library services end when the library hours are over; sustaining the services after closure is not feasible as users are mandated to leave the library building at the closure hour; room for support to students after the closing hour is equally not there as librarians have to close for the day too. Users are then left at their mercy amidst the information glut due to the incapacitated nature of the traditional form of library service delivery.

Emerging technologies (EMTs) have thus come to the rescue as Baro and Godfree (2015) as cited in Bakare (2018) emphasised that EMTs like Social Media Technologies (SMTs) have provided a veritable opportunity for innovative service delivery which transcends the physical domain of the library and capture a broader audience. Innovativeness and dynamism to human interactions are core to EMTs such as Artificial intelligence (AI), Big data analytics, Social Media Technologies (SMTs), Blockchain technology (BTCT), Gamification, Augmented Reality, Data visualization, etc. which Moyer (2019) defined as breakthrough technologies that are likely to change our lives. Within the library domain, Decker (2015) averred these technologies as new technologies, or new uses of existing technologies, that will impact the library environment in all ramifications. And in the truest sense of it, it is having a meaningful impact that is unimaginable to library service delivery.

Most of these technologies have been adopted and used for the provision of sustainable library service delivery in developed countries. Howbeit, libraries within the Nigerian ecosystem are good in mouthing adoption in addition to the usage of these technologies but its applicability to the sustainability of the library services is most times a mirage. It is high time librarians realise that if their attitude does not change to embrace these technologies, there is the reality of being bypassed, obsolete, and left behind to redundancy as the tide of contemporary trends in librarianship keeps evolving (Collins & Quan-Haase, 2012; Tella & Ajani, 2022). It is on this premise that this chapter examines EMTs as a panacea for sustainable provision of service delivery in Nigeria.

## **EMERGING TECHNOLOGIES (EMTs) IN CONTEMPORARY LIBRARIES**

Contemporary times have witnessed an influx of EMTs that are redefining the social landscape of service delivery of which the library is not an exception. The 4<sup>th</sup> Industrial Revolution (4<sup>th</sup>IR) ushered in emerging technological trends such as Artificial Intelligence (AI), Robotics, Library Book Vending Machine (LBVM), Social Media Technologies (SMTs), Mobile Technologies, Big Data, Data Visualization, Blockchain Technology (BCT), Internet of Things (IoT), Augmented Reality (AR), etc. for sustainable service delivery across the globe to a varying degree.

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