## TRANSFORMING PUBLIC LIBRARIES IN KENYA THROUGH TECHNOLOGY

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## Abstract

Availability of information resources through utilization of modern technology and strategic partnerships is a strategic objective for the Kenya National Library service (knls). In 2011, knls in partnership with Communication Authority of Kenya established eresource centres in 10 rural Libraries. In 2015, a further 46 eresource centres were established in 46 public libraries and in 2016, knls in partnership with Worldreader rollout an ereading programme with 3000 ereaders and 600,000 ebooks.

This paper presents a story of how knls through its public Library Network of 62 libraries is adopting technology to serve the community. Kenya National Library Service (knls) Board has adopted a holistic approach where equal attention is given to strengthening physical access to technologies, capacity building of library staff, provision of digital skills to library users and provision of relevant digital content in multiple forms.

Key words: Public Libraries, Technology, Access, Partnership, digital skills

### Introduction

Digital revolution has increasingly presented a challenge for public Libraries to address the changing Library usage patterns, library users' needs/expectations and increased demand for access to digital collection. The emerging trends in education/learning and ICT sector has introduced new methods and technologies that allow free and open access to information/learning, economical storage of information, new methods of acquisition of essential library materials and new means of knowledge sharing.

Universal access to ICTs has been identified by the Government of Kenya as a major objective of the Vision 2030 efforts It is expected that greater access to ICTs will contribute to economic growth by reducing transaction costs and increasing businesses efficiency, especially in the case of small service firms in rural areas; in addition, ICTs should contribute to improve educational standards and access to information. (Kenya Vision 2030).

A study conducted by the Research department of knls on Stakeholders' Perception on the future of Public Libraries found that providing Internet access, Information materials, library user education and computer /Tablets/ e-readers were among essential programmes and service needed in Public Libraries.

A survey of public perceptions of libraries in Africa commissioned by EIFL in 2010 reported that Computing and technology related resources in libraries are rated lowest on excellence and this was further emphasized by the poor rating of librarians' skills on the same.

Barriers to adoption of technologies in public libraries include lack of ICT infrastructure, digital literacy skills for librarians and library users, access to relevant content and inadequate resources to support ICT based programmes. The Kenya National Library Service has embarked on addressing these challenges so as to meet the demand for ICT related services in the Libraries.

## Methodology

The Kenya National Library Service manages 62 libraries in 33 counties in Kenya. Implementation of the ICT based programmes has been achieved through support from the Government and external partnerships. The projects implementation involved three key components:

a) Pilot phase:

This is the testing phase of the initiative and that informs the subsequent rollout of the project across the entire network. A selection of pilot Libraries was done using a set criterion that includes Geographical Location, size of the library and community needs. Successful implementation of the pilot phase led to a rollout of the projects in all Libraries.

Knls in partnership with the Communications Authority of Kenya (CA) established e-resource centres in 56 public libraries at a cost of Kshs. 200 Million. (USD 2m). The main objective of this initiative is to facilitate increased access to information, knowledge and communication services and enhance ICT skills and capacity building among communities for economic and social development.

Establishment of the eresource centres was started in 10 pilot libraries and was officially launched in 2013. In 2015, 46 additional eresource centres were established in 46 Libraries. Each centre is equipped with 10 computers, a printer, a photocopier, Internet connectivity and furniture.

Capacity building for staff was done for them to support library users in accessing information through the centres.

Introduction of ereaders commenced with a pilot phase in 2014 in 3 libraries. This was in partnership with an international non-profit organization Worldreader, that provides access to digital books via e-readers and mobile phones. In 2016, knls received 3000 ereaders with 600000 ebooks. The devices were distributed to 60 libraries. 120 Librarians (2 per Library) were trained on managing and facilitating use of e-readers. Each of the 3000 e-readers is preloaded with 200 books (100 African titles in Kiswahili and English) and has a capacity to hold up to 1500 books. For children, the titles primarily include storybooks and school curriculum books, and for adults, pleasure reading and informational books.

b) Staff training

Capacity building for staff starts at the onset of the project. At least 2 Librarians from the project sites are trained and inducted to the new programme. This ensures project ownership at the branch level and contributes to the successful implementation. Knls through support from partners has continuously built skills and capacity for Librarians through various programmes:

- In 2014-2015, EIFL Public Library Innovation Programme (EIFL-PLIP) training for 29 librarians to build public librarians' ICT competencies, and skills that support ICT adoption and creation of new library initiatives that are technology driven.
- In 2016 training for 60 librarians to build their capacity to manage and facilitate access to E-resources. The training has enhanced the ability of public librarians to support their communities in identifying and using relevant free and subscribed on-line resources.
- In 2016-2017, knls and Worldreader training for 120 Librarians on managing and facilitating use of e-readers.

## c) Sustainability

The projects were supported for 2 years by external partners while knls prepared to take over the projects after donors' exit. There is a risk in Libraries failing to sustain the projects since this requires ongoing investment in Hardware and software upgrades, Internet connectivity, Staff training and running ICT based programmes and services in Libraries. The projects sustainability was discussed and agreed upon during project inception. This ensured that knls was prepared to take up the responsibility of sustaining the programmes and services established in the libraries.

## Results

## E-resources Centres in Public Libraries

Establishment of eresource centers provided an entry point for knls to introduce new ICT based services. In addition, the e-resource centres have become information access points and ICT hubs for the community in rural areas. Statistics indicates that in 4 years over 170,000 library users have received training in basic ICT skills, while over 580,000 students and community members have accessed and used the ICT facilities in the e-resource centers. The centres have also provided opportunities to students who are advancing education through distance/e-learning. The centers have become community access points to important digital platforms including e-government services, e-marketing and e-health.

## Mobile Digital devices

The storage of information in digital devices is addressing the challenge of space and books wear and tear. Some mobile devices have a capacity to carry up to 1,500 e-books. In addition, the lifespan of the devices which is approximated at 5 years is much higher as compared to that for popular physical books. Portability of the devices has made it easier for librarians to serve the persons with disabilities especially those that are not able to visit the physical libraries.

Availability of mobile devices has contributed to an increase in Library usage especially for young readers. More than 600,000 digital books from Worldreader's local and international publishing partners are now available to Kenyan communities through the libraries.

## Assistive Technologies for Visually Impaired Persons (VIPs)

Technology has enabled Knls libraries to serve diverse clientele including the physically challenged. Nairobi Area Library has acquired a software to convert books into braille and Audio books. The audio books are accessible through the

Audio Navigators. So far, the library has copied 80 textbooks and storybooks into both braille and video formats, which are placed in the special area for blind and visually impaired patrons in the library and access through the mobile library service. The books are accessible to over 500 blind and visually impaired children at schools, homes and social centers. This project has enhanced the level of information access for people living with disabilities.

#### Digital Literacy training and online learning for Library Users

Technology in libraries is providing access to online learning. Online learning presents an opportunity for students who cannot afford tuition fees to pursue relevant courses free of charge or at a highly subsidized cost. In 2016, Knls, EIFL and Peer 2 Peer University (P2PU) launched a pilot project on blended learning in Libraries through Learning Circles. Learning Circles are lightly-facilitated study groups for learners who wish to take online courses, together. The learners meet in the library once a week for 6-8 weeks, work together through an online course with the support of a librarian. Learning Circles serve to enhance digital skills, increase learner confidence, and create a support group for learning - far more than just the delivery of content that is the focus of most online learning platforms.

The project has adopted the 'learning circle' model that was pioneered by Peer 2 Peer University and Chicago Public Library in 2015. The main goal of the project is to build the capacity of Public Libraries as community hubs that support online learning, increase the relevance of libraries in the digital age and provide access to knowledge for library patrons. In one year, 246 learners had enrolled and completed online courses. The project has now been rolled out to 15 Libraries.

# Access to online tutorials for children: Mathwhizz Digital Learning in Nakuru Library

KNLS in partnership with EIFL and Bookwaves Digital Learning (Kenya) is promoting access to online learning opportunities to more than 600 primary school children (classes 1 to 8) in Nakuru through Maths-Whizz software, an online virtual Maths tutor that provides highly interactive Maths lessons and quizzes. The project changed children's attitudes to learning numbers and improved children's performance in mathematics.

#### Learn My Way-online learning platform

Since 2017, Knls and Good Things Foundation-UK are in partnership to pilot a project on digital and social inclusion for people through Kenya libraries. Good Things Foundation is a UK Charity working to help socially excluded people improve their lives through digital literacy and has developed a model that enables and supports people to gain basic digital skills through an online learning platform, "Learn My Way". Learn My Way provides basic digital skills training for people with little or no previous experience of the internet. The curriculum

offers simple and interactive learning content on a range of digital skills for the 21<sup>st</sup> century such as Using a Touchscreen and Online Safety.

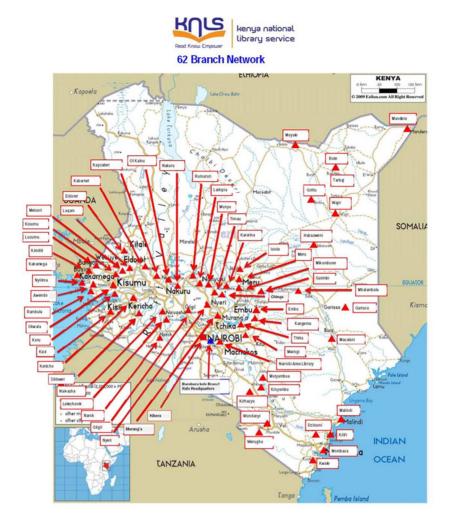
The project is now in the pilot stage and it is focusing on helping library staff and users gain basic digital skills through the blended model Good Things Foundation has created. This blended model combines the use of the Learn My Way platform together with tools and trainings for personal support for learners. In 6 months, a total of 270 learners have enrolled on the platform.

#### **Capacity Building for Librarians**

#### Partnership Development

The role of partners in transformation of Libraries cannot be underestimated. Technology related programmes is an expensive venture that requires a pool of resources. Knls has developed successful partnerships that have led to purchase and installation of ICT hardware and software, internet connectivity and capacity building for staff. Knls continues to nurture relationship with strategic partners so as to ensure that project objectives are met.

#### Figure 1. knls Libra



#### Recommendations

Public libraries should be prepared to invest in technology and embrace ICT as a means for enhancing information access and general services. The annual budget allocation for Libraries is way too low to support these programmes. This calls for Library leaders to intensify lobbying for Governments to increase budgets to support library services. In addition, Libraries should embrace partnerships with

like-minded institutions to supplement the available resources and seek support for programmes.

Transformation of library facilities into ICT hubs has led to more opportunities for ICT-based services and programmes. This development comes with the need for staff to upgrade their ICT skills to maximize utilization of the resources and to support new programmes. In addition, some of the Library users have little or no experience in using Technology and require constant support from Librarians. Trained Librarians are able to help library users to utilize available technology to the maximum.

## Conclusion

Integration of Technology in Library Services has proven to be a worthy value addition to the quality of services and programmes delivered to the community. In addition, it has created an opportunity for Librarians to increase their capacity to use technology for operations and for community service.

The use of modern technology in public libraries has contributed to an improved reading culture especially for children and youth. Availability of digital content in various formats has provided free and open access to information and knowledge for Library patrons. The Libraries have registered an increase in library attendance. Youth and adults who are not interested in reading physical books are showing a renewed interest in the library due to the new ICT-based services and programmes available. Strong partnerships have been developed between libraries, development partners, schools, parents and other local institutions.

Sustainability of the ICT based programmes will require a commitment by Governments and other stakeholders for resources, capacity building and friendly policies that will enable public libraries participate in Digital transformation of communities.

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