



## **IEK ELIBRARY STRATEGY**

### **1.0 INTRODUCTION**

This paper covers briefly the need for an elibrary as well as briefly highlighting the strategy that IEK needs to adopt to fast tract the development and implementation of the elibrary. This is a low hanging fruit that can be easily and effectively harvested without any further delay. In addition to hosting the general engineering information, such an elibrary is envisaged to also host local, indigenous knowledge: archived and modern.

### **2.0 JUSTIFICATION**

Formal definition of an elibrary: also called a digital library, digital repository, or digital collection, is an online database of digital objects that can include text, still images, audio, video, digital documents, or other digital media formats. Objects can consist of digitized content like print or photographs, as well as originally produced digital content like word processor files or social media posts. In addition to storing content, digital libraries provide means for organizing, searching, and retrieving the content contained in the collection.

There's a lot of engineering information that is archived by both public and private institutions in Kenya. Access to such information is a tall order since it is preserved in media that is not taking advantage of modern digital technologies. Many engineers do not even know that such information exists. An elibrary that shall have offer both free and premium access will consolidate this information and make it easily available to engineers and the general public.

### **3.0 OBJECTIVE OF THE PAPER**

The key objective of this paper is to present the need for IEK to fast tract the implementation of an elibrary platform that shall act as the central source of dissemination of engineering information and knowledge in Kenya. This impact can be created by focusing on:

1. Establishing the e-library, a repository of standard and best practices.
2. Partnering with Engineering Books / Online Journal Publishers to provide access to subsidized books / Journals for members of IEK.

### **3.1 Establishing the e-library, a repository of standard and best practices**

This shall be achieved by:

1. Liaising with all government bodies dealing with engineering matters to publish their work through the e-library exclusively.
2. Liaising with Kenya Bureau of Standards (KEBS) to share or sell Kenyan engineering/manufacturing standards so that they can be accessed online through IEK portal for free by registered members, and for others to buy.
3. Liaising with KEBS to develop standards in areas where we haven't. In this case, we can use and modify the British, European standards to suit our conditions and environment. Indian Standards have been developed this way.
4. Linking engineering related university publications to the IEK Library. Collaborate with universities for this. All papers published through IEK conferences to be made available through the library.
5. Liaising with global engineering standards bodies to provide subsidized access to these standards through the IEK library, such as IEEE standards, IEC Standards, etc.

### **3.2 Partner with Engineering Books / Online Journal Publishers to provide access to subsidized books / Journals for members of IEK.**

This shall be accomplished by:

1. Linking up with leading engineering journal publishers to provide access to subsidized journals and books, such Elsevier, IEEE Journals.
2. Availing engineering articles, conference papers, journal papers, and engineering magazines in Kenya through the elibrary.

## **4.0 POSSIBLE SOURCES THE ELIBRARY MATERIALS**

### **4.1 Legacy Materials-Documents:**

- These includes old manuscripts, maps, and slides, audio, video and other print media, with engineering related information in Kenya. These may include engineering related legislation/Gazettes, Acts, Codes, Periodicals, Magazine/Newspaper articles. Such old/legacy materials will be scanned/digitized in cases where digital copies are currently unavailable.

### **4.2 New Digital Materials:**

- These shall include any new digital content published that's related to engineering. Past professional engineer interview reports to also be published online for others to access, training reports, Professional Interview Preparation (PIP) seminars documents and videos,
- The IEK Elibrary portal shall also have links to useful archives and on-line tutorials or other information resources available in the internet related to engineering.
- There are many high quality, free, engineering resources available online, they only need a good team to curate and compile them for easy access by engineers.

## **5.0 COST ESTIMATE FOR THE ELIBRARY**

It is expected that there will be a cost incurred in setting up the elibrary and equipping it with the necessary information. Initial cost to hire a developer/consultant who shall help integrate the elibrary with the existing website is estimated at KSh.500, 000. Thereafter the IEK secretariat may be engaged to maintain the platform by the continually uploading resources as soon as they are acquired.

### **5.1 SAMPLE OPENSOURCE TOOLS THAT MAY BE USED TO DEVELOP THE LIBRARY:**

1. Greenstone Digital Library software: Greenstone is a suite of software for building and distributing digital library collections. It is not a digital library but a tool for building digital libraries. It is an open-source system (free) for the construction and presentation of information collections. <http://www.greenstone.org/> , examples: <http://www.greenstone.org/examples>
2. OpenBiblio: OpenBiblio is an open source Integrated Library System. The software is popular with small and rural libraries worldwide. <http://obiblio.sourceforge.net/>
3. EPrints: EPrints is a free and open-source software package for building open access repositories that are compliant with the Open Archives Initiative Protocol. <https://www.eprints.org/uk/>

4. Open Journal Systems: Open Journal Systems is an open-source software for the management of peer-reviewed academic journals, and is created by the Public Knowledge Project, released under the GNU General Public License. This can be used to manage our journals.

## **6.0 POSSIBLE REVENUE MODELS**

Possible sources of income include:

1. Selling premium materials as individual products to the engineering fraternity. This shall need integration of payment gateways with the elibrary platform.
2. Offering premium subscriptions whereby members with valid subscriptions can access all the resources.
3. Adding elibrary subscription as part of the annual fee charged by IEK/EBK.

## **7.0 ACTION POINTS BY IEK COUNCIL (or PRAC COMMITTEE)**

1. IEK to establish an editorial board consisting of members representing all the engineering disciplines (electrical, mechanical, civil/structural, telecommunications, etc.) to help in selection of books, articles, and documents that shall be uploaded to the website. The editorial board could be mandated to do this for a particular duration of time, say 1 year, 2 years depending on the council's decision.
2. IEK to organize through the secretariat to reach out to all engineering entities, manufacturing firms, public entities whose work is engineering in nature to donate their archived documents, white papers, for use and access at the IEK Elibrary.
3. Through the IEK webmaster, create a subdomain and portal, [elibrary.iekenya.org](http://elibrary.iekenya.org) or [iekenya.org/elibrary](http://iekenya.org/elibrary) to host the elibrary.
4. IEK to engage the current webmaster or someone else to integrate the elibrary system/portal with the existing website.

## **8.0 CONCLUSION**

In order to facilitate achievement of IEK's strategic objective of establishing a **knowledge center for engineering infrastructure (e-library)** thereby positioning IEK as the central and main source of information and knowledge on engineering matters; it is important that the elibrary implementation be fast tracked. The elibrary will be a useful source of information to the engineer and the public in Kenya. In

addition, it will act as source of revenue through sale of premium subscriptions to the members or the general public. The value created will be felt by the society as a whole.