ROLE OF LIBRARIES IN DIGITISATION DURING COVID-19 PANDEMIC

NAGSEN BANSOD
G. S. College of Commerce, Wardha, India
librariangscc@gmail.com

ABSTRACT

The paper deals with the use of digitisation techniques use by library professional in order to provide the learning resources to the students and faculty. The library professional are already aware about the digitisation techniques. The library professional take too much interest in providing the resources during the Covid-19 Pandemic and for this they used the digitisation technique for the same. A review has been taken by the author about the digitisation process by library professionals and the initiative taken by the government also discussed here.

I. INTRODUCTION

The present time is of Covid-19 Pandemic. Covid-19 has made a vast impact on every sector of life. It has made drastic changes in our life in present days. According to World Health Organisation, Covid-19 is disease caused by Corona Virus. The first case of Covid-19 was found in the Wuhan city of China on 13th December 2019. The first death caused by Covid-19 occurred in china on 11th Januray2020. In the month of February 2020 the World Health Organisation made recognition of the disease and named as Covid-19 (Corona Virus Disease-2019). The disease spread very fast around the world and on 11th March 2020 world Health Organisation declared Covid-19 as a pandemic disease.

In India, the first patient of Covid-19 appeared on 30th January 2020 in the Kerala. The first death due to Covid-19 occurred on 12th March 2020. The patient was travelled from the Wuhan city of China. Due to spread of Covid-19 pandemic World Health Organisation advised to maintain the social distance as precautionary measure from the infection to each other. In order to control the infection of Covid-19 Pandemic the situation of lockdown carried out the all over the world. In India also the lockdown was declared in order to control the situation caused by Covid-19 to avoid the infections.

The lockdown affected the every sector of life, and so in case of education also. The Government order to close all academic institutions and postponed all the classes and exams. In such a situation it becomes very difficult to conduct the classes physically and the lockdown caused the hurdle among the academics. The government asked to work from home without going to office or colleges. The situation was totally confusing and all were in tension how to tackle with present pandemic situation. It was really a challenge for the educational institutions to how to overcome this problem. But, ICT helped to overcome the problem and made it possible to conduct online classes, and all the academic institutions started to go online and to provide the online classes. The effective use of communication and network technology such as internet and communication devices, mobile, laptops, computers, digital cameras etc. made it possible. The academic institutions were using the various platforms for online learning such as zoom. Google meet, Cisco Webex, Microsoft teams etc. The channels like YouTube, Facebook were also used to support the online learning platforms. The instant messaging apps like telegram and whatsapp also used for the communication and to provide the alert and information about the online learning.

The problem of learning was solved so far by using the online platforms, but the problem of study material was not solved because the libraries of the academic institutions were also closed. The libraries play an important role and help to provide the study material for teaching and learning. Hence in order to solve this problem many academic libraries and library professionals came forward to provide the access to digital contents via there library websites and other platforms. The ready reference material in digital contents can be made easily accessible to the teachers and learners but what about the other material which was in physical form and important for teaching and learning remained unanswered. In order to fulfil their requirement the library professionals create the digital contents with the due respect legal issues of IPR and copyright, they digitised the material and disseminate the same and for that library professionals develop certain portals and update their websites.

The library professional are very much aware about the issues of Intellectual Property Rights, the Copyright act and its legal bindings. Hence they do only those things which are permissible and acceptable by the IPR and copyright act. The material owned by the institutions individuals having their own copyright and open access was no problem.

Hence in order to overcome the problem the digitisation of material (conversion into digital format) as per the requirement, not whole book but few pages, not whole journal but a single paper, and the self-prepared notes by the faculty were digitised and made available to the students for studying at their homes.

II. DIGITISATION

Digitisation is the process of Converting the physical data content in to digital format which is machine readable such as, computer, laptop, Smartphone etc. In the process of digitisation the data is converted into digital format (0,1) with the help of digital technology and stored on storage media. Such data is portable, machine readable, printable, viewable, sharable and downloadable for use.

III. REQUIREMENT FOR DIGITISATION

In the present era the minimum hardware and software for the digitisation is generally available in most of the libraries, The following Hardware and Software are required for digitisation:

1) Hardware required for digitisation

  A. *Computer system*: A computer system is must and which easily available at all libraries. Computer system plays an important role in digitising, storing and disseminating the document.

  B. *Scanner*: Scanner is the devices, which converts the text, picture, and images into machine readable, viewable format. Now a day's generally the scanners or all in one printer includes the scanner.

  C. *Digital camera*: Digital camera is a device, which captures text, images in very sharp, clear and converts it into machine readable, viewable format. The digital camera also works as scanner, but scanner is used only for plane documents. When use of scanner is not possible then the digital camera is used. The digital camera is also available in most of the institutes or nowadays Smartphone with high megapixel cameras are also available at cheaper price that can fulfil our minimum requirement.

2) Software required for digitisation

  A. *Image processing software*: Generally image processing software is provided with the scanner. Today much free Image processing software is available on internet. These softwares can be used for image processing. The very easy software may be selected for use. The softwares such as GIMP, InPixio, Fotor, Paint.Net etc. are freely available on the web.

  B. *File Compression software*: today many file compression software are available on the internet with the help of that digital files can be compressed. Some of the best free software includes WinZip, WinRAR, Ashampoo Zip Free, 7Zip and PeaZip.

  C. *OCR Software*: generally OCR software is provided with scanner, if not available can use the freely available software on the internet. The freely usable software are Free OCR, Microsoft One Note, Simple OCR, Boxoft Free OCR etc.

V. STEPS IN DIGITISING AND SHARING OF DOCUMENT

1) Selection of the documents

The important, most required, usable, damage due to more use or handling such document must be given priority while selecting the documents for digitisation.

2) Scanning (Conversion)

The documents are scanned using the scanner for digitising. Before scanning the document must be check carefully to avoid the efforts of duplication. It is necessary to check whether the pages are in serial number, misplaced or torn. The documents must be plain and clear for scanning otherwise use digital cameras to capture the document. Document must be placed suitably while scanning.

3) Making readable and searchable (Information Retrieval)

After scanning, in order to make the documents readable and searchable it is necessary to apply OCR to the document. The scanned document is passed through the OCR software, text are detected, corrected and are made searchable.

4) Conversion into digital format (Digitisation)

Before saving the document it necessary to select a specific format for saving whether it is in html form, plain text, and .doc form generally it is in pdf format. The most preferred format is the pdf for because it is widely used and popular among the all. It is also searchable and portable. While saving the digital document it is necessary to compress it to save the space and for that file compression software is used.

5) Creating Metadata

The metadata is necessary to for searching and to provide the correct information about the document, hence metadata, index is created with the help of information provided in the document or as per, bibliographic details. Generally Dublin Core Metadata format is used for long term use.

6) Storing of the digital document (Digital Preservation)

After digitising the document, location of the document for storing must be select carefully in order to avoid damage to the document or file corrupt. Preferably save on the hard disk or any storage media such as HDD, SSD, CD-DVD or any storage media. Now a day the trend in libraries is about to creation of the institutional repository or digital repository hence it can be saved to it. The various repository software or digital library software such as Dspace, eprints, Greenstone etc. are used for developing the institutional repository or digital library.

7) Dissemination of the digital document

As earlier stated the digitised documents are stored in digital storage media. Sometimes they are stored on library servers and also on cloud. Hence the access of these resources is depending upon the location of the resources. In a small library the documents are also stored in Google drive and link of the same is provided to the library resources home page. As stated above, the Institutional repositories/ Digital Repository or Digital Library are the most suitable for disseminating these digitised documents to the users. Hence the libraries which developed the same can store, preserve their digital documents in it and make accessible anytime, anywhere using internet.

VI. ROLE OF DIGITISATION IN COVID-19 PANDEMIC SITUATION

Digitisation is not new for library professional. But the Role of digitisation is different in the Covid-19 pandemic situation. When the physically libraries are closed, classes are going online. In such a situation where the library stands, in the regular teaching learning process the libraries were functioning in order to provide library services, study material to support for teaching and learning. Now the lockdown is everywhere, the College and libraries are closed. The question is how to provide the library resources online while the learning is through online mode.

The resources which are subscribed by the library have provided the online access remotely; hence the users are able to access these standard resources from their places. These resources are standard, limited and specifically in English. The users of library are from different mediums such as Marathi and Hindi along with English, hence they required the material in their selected medium for preparing the exam or for study. The student required notes and related material from their teachers and from library.

The library professionals came up with the solution of digitising of teachers notes and other related material in order to support the online learning. The library professionals collected the notes, digitised them and made accessible by uploading it in the cloud, sharing the resources link on the library website. In addition to this, the students are asked to submit their requirement and these requirements are fulfilled by digitising the content and made available on the library site, provided them using e-mail ID and shared in their whatsapp group. The library professional took the advantage of digitisation in such a pandemic situation to provide the library services tactfully.

VII. DIGITISATION OF CONTENT: AN INITATIVE BY GOVERNMENT

The government has taken an initiative by digitising the content and made available on digital platform through online mode. These digital initiatives by government are very fruitful during present Covid-19 pandemic situation. Some of the Major initiatives by government are enumerated below:

A.   *SWAYAM[1]*

SWAYAM is an acronym for 'Study Webs of Active Learning for Young Aspiring Mind'. This is an integrated platform which offers online course from high school to postgraduate level. These courses are free of cost and available online, these are very useful for student, teachers, non-teachers and public. Anyone can enroll to Swayam course. These courses are MOOC (Massive open Online Courses) prepared and content developed by the eminent persons in the field. These courses include the multimedia material in the form of text, video and PowerPoint presentation with self-assessment tests. Swayam include variety of courses in Arts, Commerce, Humanities, Science, Engineering, Technology and other interdisciplinary field. The basic purpose of Swayam courses is to provide qualitative and best educational resources to all.

B.   *National Digital Library (NDL)[2]*

NDL is project of Ministry of Education, Government of India under NMEICT hosted managed and maintained by IIT, Kharagpur. This National Digital Library provides the digital resources in a single window. The NDL provides a variety of digital resources. It covers almost resources in every field of learning and research. The important feature of NDL is that it provides the digital resources in various formats including multimedia. The variety of digital resources includes Books, Audio Books, audio Lectures, Video lectures, Presentations, Simulations, Question Papers, and solution.

C.   *e-PG Pathshala[3]*

e-PG Pathshala is developed by Inflibnet with the support from the Ministry of Education under National Mission on Education through ICT (NME-ICT). It provides high quality interactive contents based on curriculum in various subjects. The resources are the text material, video lectures and papers based on the curriculum. It is very helpful for the students to understand the subject.

IX. CONCLUSION

The librarian are always adopted the ICT for the library services. The library professionals always work for the digitisation of scholarly content and also work for the preservation and dissemination of it.

The library professional have already developed the digital contents using digitisation techniques. Here now in such a pandemic situation of Covid-19 the professionals use the digitisation technique to provide the resources to its user by digitising it using the minimum available equipment. This could be happened due to the digitisation techniques, hence digitisation play an important role in the present Covid-19 pandemic situation in order to provide the library service in online mode. So the role of digitisation is important in present situation.

REFERENCES

[1]   (2021) Swayam website [online] available at https://swayam.gov.in/

[2]   (2021) National Digital Library website [online] available at https://ndl.iitkgp.ac.in/

[3]   (2021) ePg Pathshala website [online] available at https://epgp.inflibnet.ac.in/