# Use of "Kiosks" as a Self Service Tools in Libraries

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Abstract—The use of latest technologies in libraries is a must for every library to enhance the efficient services of that particular library. Information Kiosks have now become a common and popular tool in the automated and ultra modern libraries. Many libraries in USA, UK, Canada, New Zealand, China, Australia and Europe are using these information kiosks. However in India they are still not very common. But these kiosks have the potential that slowly they will become a significant alternative to circulation/information services in the library. The kiosk also have the potential that it can also make the services available even beyond its physical boundaries.

Keywords—Kiosk in Libraries; Self Service Technology; Kiosks; Self checkouts

#### I. Introduction

Technology is reshaping the world of libraries at an unimaginable speed. As the internet, Google, I-Phones, smart phones, tablets has made every information accessible within a fraction of seconds and that too without visiting the library. Even demands and expectations of new generation library users are also very high. Now the libraries have to change the old traditions and have to think of providing the facilities to the users without their personal presence [1].

The interactive information kiosks can be used in libraries to make the reference of the libraries highly effective. A kiosk is a Persian language word pronounced as KEE-ahsk. Earlier in Mughal architectures the Kiosks were a small circular open corridor or portico in any corner of the garden or on the roof of the palace [1]. In western countries kiosks are small booths or vendor shops on the roads and were opened from one side and used to sell small daily need things such as newspapers, magazines, cigarettes etc. [11].

In the world of Information and Communication Technology (ICT) kiosks are an electronic device or a computer terminal placed near common public areas these kiosks can store the data and its interactive features provide the relevant information to its users. Kiosks are usually self service stations where the common public gets the relevant information without any human assistance. Murray Lappe invented first self service kiosk when he was studying at university of Illinois. This kiosk was called "The Plato Hotline" and was used by the students and visitors to find

information on bus schedule, courses, maps, movies and directories etc.[9]

The first commercial kiosk was displayed in 1991 at Comdex. It was equipped with an internet connection. It was used for locating the missing children [9].

Now several countries across the globe has installed large number of kiosks for several different purposes. The United Kingdom has installed kiosks at a very large scale for the job seekers which helps them in finding employment. One such large scale installation of kiosks in UK is also in the field of health information services where it provides information to the socially excluded groups and this information is provided in six different languages: Chinese, Bengali, Urdu, Punjabi, English and French [4].

In USA the kiosk are even used in the immigration and the security department where the visitor registers for their entry and exits in the United States. The kiosks are very common in airports where most of the airlines use self checkin kiosk e.g. British Airways. In India the kiosks were widely installed during the Commonwealth Games for providing the information to the visitors [9].

#### II. LITERATURE REVIEW

While writing this article a large amount of academic, commercial and grey literature was explored. While using Internet searches some published and unpublished literature was also obtained. Extensive internet search was done using Knimbus and Google Scholar search engines. The general terms used while searching were "Kiosks" "Kiosk in Libraries" "Application of Kiosks in Libraries" "Information Kiosks" etc.

Rowely [6] describes multi-media kiosks concerning illustration a critical development in in-store advancement which have, until as it depended upon paper-built item catalogues and also promotional leaflets, with all of their specialist issues. Summers [16] recommends kiosks as the mobile shop which will be utilized by clients to request grocery things for direct delivery service, hybrid environments in which limited service delivery performs through kiosks, that would supplemented by human service operators who perform the other functions.

Connolly and Olsen [2]: innovation has changed the service sector drastically by adding valuable choices to complete exchanges. Rowley and Slack [5]: 21st century kiosks support various works including most of data promotion, interaction between consumer and user to help the customization of data and transactions. Schware [15] To bridge the virtual divide, many researchers and practitioners have advocated the usage of kiosks recognized variously as tele-facilities, kiosks, to points, community technology facilities and cyber-cafes. Fusionex [3]: a framework architect may incorporate the most current advanced multimedia innovation to provide more interactive self kiosk system.

Kiosk Components: Broadly speaking every kiosk has three major components: The Kiosk hardware, the kiosk software and the application. The Kiosk hardware is usually a touch screen computer terminal looking like ATM machines. Depending upon the specific requirements the material used may vary from sheet metal to thermoformed plastic. Kiosks are usually available in 7 feet in length and that can be used while standing on a bench or sitting on a chair. The size of the touch screen terminal and product design body may vary depending upon the special customized requirements or the manufacturing company's product and design [7].

Usually the self service information kiosks have the touch screen computer terminal only that is used to provide the information. Kiosks may have certain specifically added hardwares attached depending upon the purpose and utility of those kiosks. Such as: Telekiosks has a telephone and fax machines attached with it. The ATMs have money dispensing device. The Photo Kiosks have in-built cameras that allow users to print these pictures. The hardware of the kiosk may include trackball, push buttons, touch screen terminals, keyboards, card readers, pointing devices, magnetic stripes, scanners cameras, printers, dispenser and coin hoppers etc. [11].

The software of the Kiosk helps the users to use these self service technologies in an efficient and user friendly way. It is a set of programs and instructions which allows the user to surf between various choices options and help him to reach up to his desired information or query [12]. We can say the software and the application part of a kiosk are interrelated. As the application or purpose of the kiosk for which it is being used effects the type of the software to be used. The software of the kiosk makes the application part of the kiosk possible. According to the specific requirement or purpose of the kiosk the software is designed or customized to fit into the application. As software for the air ticketing or check in kiosk would be entirely different from a health information kiosk [7].

#### III. APPLICATION OF KIOSKS IN LIBRARIES

Today all the libraries of the world are using technologies for the ease of its users. The libraries and librarians are very much technology friendly and try to use the latest technology that could make the services of libraries more efficient. The uses of library automation, digital libraries, RFID solutions, latest security system, mobile technologies etc are the evidence which shows the use of latest technologies in libraries. To make its services more effective the libraries has now switched over to the self service technologies. The use of these self service technologies like kiosks highly reduces the staff workload and also save the previous time and energy of the library users [8]. The library kiosks are in largely in use in Europe and USA e.g. Fondren Library in RICE University, USA uses self checkout kiosks[14]. Contra Costa Country Library in California, USA installed self checkout kiosks and automated book dispensing machines in public transit stations in the year 2008. The Toronto Public Library, Canada also installed these machines in 2008. The Aukland Library, New Zealand installed such kiosks in 2012. So the library kiosks are very popular in all over the world [10].

#### IV. THINGS TO BE CONSIDERED

There are certain things which every library should kept in mind before installing such library kiosks. Keeping in mind of these certain points would really help the librarian to make the kiosks an efficient equipment or machine of the library.

- The design and look of the kiosk should be aesthetic and eye-catcher so that every new user should try to use this facility [13].
- The hardware or the material used should go in harmony with the other equipment of the library. As a Wooden Library kiosk would not suit in the library where all other furniture is of plastic.
- The placement of kiosk in library is also very important if it is newly installed. It should be placed near the entrance or at centrally located place so that people may try to use this self service technology.
- The instructions or the program used should be user friendly.
- The instructions should be in the commonly used language.
- All the devices that may be required must be attached.
   As if kiosk allows library card reading then the card reader either should be pre-installed in the kiosk or may be attached with it as an additional hardware.
- Catchy attractive animations or graphical messages could be used to make it more effective [1].

## V. ADVANTAGES OF USING LIBRARY KIOSKS

There are a number of advantages of using kiosks in libraries that is the reason the kiosks are becoming very popular in library community and libraries all over the world are using it to make their service more efficient and effective.

- Kiosks are self service stations hence reduce the extra burden and work load of staff.
- It reduces queues and waiting time at the library service desks.

- It remotely manages the library devices from one location.
- It's simple and intuitive design provides ease of use to users.
- It can be used within the library as well as outside the library at a common public place or common student area.
- It can be used for providing various library functions and information and at one point. Such as library catalogue, library maps, online library services, selfautomated registrations and self checkouts etc.
- Kiosks can also be used by even those library users who do not have access to computers at home or work.
- The kiosk can provide the 24X7 information facility.
- Those library users who do not have much computer literacy even they can use it.
- The use of kiosks also facilitates the sense of ownership and choice.
- An effective alternate to the reference desk.
- It makes the tractions fast with textual instructions and visuals.
- The multi language function can help user to use the instruction in any of the languages he is comfortable in using [10].

#### VI. CONCLUSION

Slowly and steadily the libraries in India are also moving towards the technologies using used in the western world. Now the librarians need to think out of the box. It is the time to extend the libraries outreach facilities so that more and more users can use the library facility. The facility of library service at doorstep or on the go with such type of kiosks would definitely increase the number of library users. Kiosks would continuously evaluate as a substitute of the mobile technology for the users on the move. Despite the awareness among the users would low about the potential benefits of the kiosk and service it could offer, hence the promotional strategies and awareness among the users about its user should also be created.

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