QR Code and Useful Applications in Libraries

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Abstract - This article deals with QR code and useful applications in libraries as a emerging technology in the present scenario of libraries hand trend access resources with simple a scan of a code are known as a treasure house of knowledge by having its high quality and rich information resources which are freely provided for academic user community. It is also covers how to generate as well as as decode QR code through various online available that are free and easy to use. This article also explains the all possible implementation of QR code in library services with a briefing of all its advantages as well as limitations.

Keywords; QR Code, Marketing library services, ICT, Bar code, QR code Reader etc.

Introduction

Today QR code are in the early stage and will take some time to grasp the world to shift as a whole to the digital world.As internet has become a part of everybody live in the same way QR code will also become a necessity to access any particular information.The libraries should take a step to implement it various areas and encourage there users to go through that as they are implemented to make users lives easier. It offers new ways for communicating and exchanging of information and knowledge, with the help of ICT tools are affecting revolutionary steps to changing in the way information stored, retrieved and dissemination for automating their activities, creating dynamic website with useful features context, easily accessible links etc. They are striving hard to cater the information needs of its patrons by providing point of need assistance with just-in-time virtual and physical spaces. In this connection, QR code is a new technology which helps libraries to affordably connect its patron by context-sensitive without visually assaulting them. This technology has the potential to connect patrons to information about its materials and services.

What is QR Code?

A QR (Quick Response) code is a type of two-dimensional bar code appears as a small white square with black geometric shapes in which data are encoded based on the position and combination of the black spots read by smart phones\androids with camera. They are sometimes referred to as mobile codes. Even otherwise we can term it as a matrix barcode readable by smart phones with the help of mobile cameras. QR codes can hold much more information than a regular barcode. The information encoded in a QR code can be a URL, a phone number, an SMS message, a V-card, or any text. They are referred to as QR because they allow the contents to be decoded at high speed.

Specimen of QR code and Barcode

QR code   Bar Code

Thus, a QR code essentially pictographic hyperlinks that can be embedded in the physical environment. It links the physical world (poster, printout, room , physical object) to the electronic and facilitates communication adding significant value by improving accessibility to information. In reality QR code printed on physical materials like poster, handouts or on any object it will divert to the content in electronic form or allows user to communicate in electronically.

History of QR Code

QR code is developed as on improvement to the existing barcodes for application in inventory management by Toyota subsidiary Denso Wave in 1994. Since its introduction, the QR code has gained wide acceptance in such diverse industries such as manufacturing, ware housing and logistics, retailing, health care, life senses, transportation and office automation etc.

Now with the explosive growth of smart phones, the QR code is also being used in mobile marketing as a fast and effective way of connecting with customers and providing end user content. Now a days, libraries are also adopting this technology very rapidly in the present scenario.

In the western countries like UK, USA, Japan and now in India also using QR codes to cater most crucial user demand for access to information to mobile phones.

Features of of QR Code

High capacity encoding data

QR code is capable of handling several dozen to several hundred times more information compared to conventional barcodes which are capable of storing a approximately 20 digits.

Small printout size

QR code carries information both horizontally and vertically . Hence QR code can hold the same amount of data contained in a barcode in only one-tenth the space of it.

Damage resistant

QR code has error correction capability. Data can be restored even if the symbol is partially damaged. A maximum 30% of code word can be restored.

Readable can any direction in 360 degrees

QR code is omni directional i.e. capable of 360 degree, high speed reading it accomplishes this task through position detection patterns located at the 3 corners of the symbol, This position detection pattern guarantee stable high speed reading.

Structured app end feature

A QR code can be divided in to multiple data areas. One data symbol can be divided in to sixteen symbols allowing printing in a narrow area.

Benefits of QR Code
- It's fast
- Store huge amount of data
- Use anywhere
- No specific skill is required
- No additional technology is required
- Use the Information later
- Anyone can generate it
- Increased customer satisfaction

Application of QR Code Technology in Libraries

They are free and easy to use as well as embed many types of media. Once you write a code you can also change the appearance to include a picture or logo within the QR code. The usage of library sites are increased as the user don't need to type long URLs. The use of quick response (QR) codes in libraries is just beginning to evolve, with a varied and vast feature. They have been effectively used in library to do deliver information appropriate to the context and location of the user. Library exhibits that include a QR code link to songs, videos, Web sites, surveys, contests, etc. Codes in the library stacks/end caps or magazine/journal areas that point to online electronic holdings of print materials or related subject guides. Some of the important activities, QR codes are applied in libraries are as follows:
- Link to website
- Link to library e- resources
- Easy access to previous year question papers
- Library Audio Tour
- Group study room scheduler
- Marketing /promotional material
- Linking from print to electronic journals holdings
- Providing an electronic alternative to physical books
- Promoting online audio visual materials
- Embedding video help
- Bringing rxternal resources into library
- Finding appropriate help
- Taking the catalogue record with you
- Seat reservations Wi-fi proper utilization

Benefits of QR Code Applications to Library Services
- User Friendly
- Personalized service
- Ability to access Information
- Time Savings
- User Participation
- Location awareness
- Limitless access

Generate QR Codes for...
- Website URL
- YouTube Video
- Image File
- PDF File
- Google Maps Location
- Twitter
- Facebook
- LinkedIn
- Instagram
- App store Download
- iTunes Link
- Dropbox
- Plain text
- Telephone Number
- Skype call
- SMS Messages
- E-Mail Address
- E-Mail Messages
- Contact Details
- Digital Business Card
- Attendance Tracking
- Wi-fi login
- Paypal buy now link

Use of QR Codes in Library Services
- SMS Alert and MOPAC
- E-mail and phone numbers
- Reference and Library Resources
- Wi-Fi access and Geo-location
- Events and URLs
- Twitter and tweets

Advantages of QR Codes
- Sharing
- Users love mobile Phones
- Interactive and Simple to use
- High Data Capacity
- Variety of Data
- Small Printout

Limitations of QR Code Application

- User Awareness
- Abuse of Technology
- Installation on Smartphone's

Conclusion

Today's world barcode have become quite trendy because of their reading speed accuracy and better functionality. Because of the gaining importance and popularity of QR code, its implementation to libraries is wrathful. It is the power and capacity of the modern technologies that helps every reader to get the information. In the present technology-rich age, library users are becoming tech-savvy. They are continually looking for finding the ways to use technology to simplify their information gathering methods. Hence libraries are needed to be flexible in changing and adapting new technologies in its activities and services to create value added services. Libraries value their relevance as the gate way to information. QR code technology is easy to implement, free to use and growing in popularity. Incorporating them in to library services publicity and marketing campaigns, or around the library building or on the website offers users a more interactive learning experience.

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