QR Code: Useful Application in Library Services

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ABSTRACT

Today users like a speed ,convenience, portability fast and easy navigation, Access information immediately without having a look for computer, Library apps have not to use the web browser .Mobile site offered all library services available regardless of the platform a patron is using, in a manner that easy to navigate and institutive to use. The QR Code Model-1and Model-2are the typical types of QR codes which are consider as main structure of QR Codes for the other types. Micro QR codes is a type which has main position is detection pattern an it has reduced the size of printing. IQR code is a QR code which is present in both square and rectangular so that can easily printed on cylindrical product to. Store more data to less space as comparers to regular one. SQRC is full forms as secure Quick Response Code hence it provided to reading restriction to it. Frame QR code are the QR code which has the canvas area for providing different shapes to QR codes and making in more attractive to users and customers.

KEYWORDS: QR Code, Library services, QR Code Generator

INTRODUCTION

Today's in the age, the use of Smart phone and Tablets. There is need of mobile based library services. due to the effect of use mobile base library services it very   important to adopt the and convert the all services of library on mobile based. Mobile technology has made dramatic changes in users way of accessing information. Open the door of every kind of learning. Mobile computing present a golden opportunity for libraries to provide service and connect with users any were any time any device our library is available on our phone. Practice bring our own device and access our library resources in high speed save the time. In the support of mobile the QR Code is very useful for using different users services in library.

What is QR Code?

The QR code is two-dimensional version of the barcode, known from product packing in the supermarket. Originally develop for process optimization in the logistics of the automotive industry, the QR Code has found its very way in to mobile marketing with the widespread adoption of smart phones "QR" stand for "Quick Response" which refers to the instant access to the information hidden in the Code. QR Code are gaining popularity because the technology is "open source " available for every one. Significant advantage of QR Codes over conventional barcodes are larger data capacity and high fault tolerance.

TYPES OF CODE USING IN THE LIBRARY SERVICES

1D Barcode

A barcode is a series of bar and spaces arrange according to a set of rules that determine how data is to be represented.

2D Barcode

Store data in non -linier fashion such codes known as two-Dimensional code.

QR Code (Quick response Code) is the type of 2D barcode they are sometimes referred as mobile code matrix code , any information can be converted in to coded information and access in present information quick or later. It can be decoded high speed any direction any position detection patterns.

Types of QR Codes

There are five different types of QR and Barcode Code , QR Code Model-1 Model-2 , Micro QR Code ,IQR Code, SQRC Code, and Frame QR Code

ANATOMY AND STRUCTURE OF QR CODES AND BARCODE

The black and white checkered pixel patterns appear at first glance to be a small crossword puzzle and seem to be compose at random. But if you look closely, certain structure to be identified. For the scanner to recognized is a QR code as such, the Code must always be square. A number of additional elements ensure that the information read correctly.

Barcode

QR Code

Linier Information	QR Code data Capacity	
Numbers only	Numeric only:-	Max. 7,089 characters
Maximum Capacity 20 Digits	Alphanumeric:-	Max. 4,296 characters
	Binary 8 Digits	Max. 2,953 Bytes
	Kanji, full- width kana	Max.1,817 characters
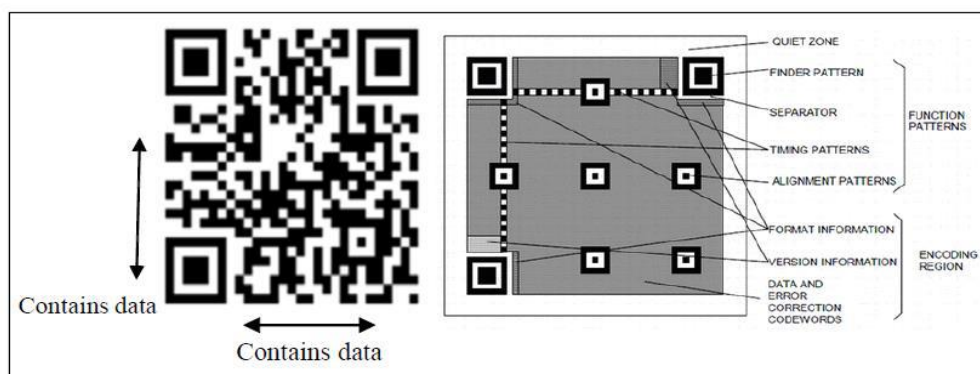
Figure 1: Structure of QR code
Source: Adopted from http://www.onbarcode.com/qr_code/.

How to Read QR Code

Mobile Smart Phone ➡ Mobile Camera ➡ QR Reader App ➡

Point The camera on QR Code ➡ Read / Browse the Content.
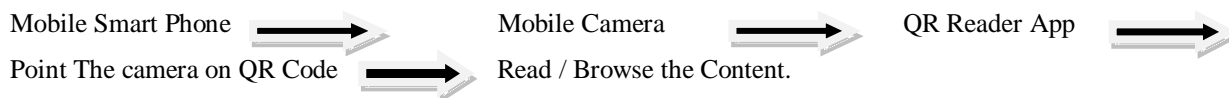
BENEFITS OF QR CODE

- It is Fast
- Store hug amount of data
- Use anywhere
- No Additional technology required
- Use the Information later
- Anyone can generate it.
- Increase the customer satisfaction
  Environment friendly & Save the paper

## GENERATE QR CODE IN FOLLOWING APPLICATIONS

Plain Text	Skypy Call	WiFi Login
Website URL ,	Telephone Number	SMS Message
Youtube Video,	Image file	Email Address
PDF File,	Google Map Location ,	Email Message
Tweeter	Facebook,	LinkedIn Contact details
Instagram,	App store	Download Digital Business Card
I-Tune Link	Dropbox	Paypal buy Now Link etc.

USE OF QR CODE IN LIBRARIES

- Library Audio Tour
- Group study room scheduler
- Marketing / promotional materials
- Linking from print to electronics journal holdings
- Providing an electronics alternative to physical books
- Promoting online audio –visual materials
- Embedding video help
- Bringing external resources in to the library
- Finding appropriate help
- Taking the catalogue record with you
- Seat reservation and WiFi proper utilization

QR CODE APPLICATION IN LIBRARIES

1) Scan the QR Code for our library websites and multi URL
2) Library SMS notification
3) Ask a Librarian SMS service is offering mobile patron the ability to text their question to the librarian
4) Mobile Number ,Website, Web OPAC. Video Library services
5) Scan and download article file. and Bibliographic Database.
6) E-Books and Newspaper clipping service , Question paper and study materials
7) Digital reference services and library handbook , Journal article for journal website link

Use of QR Codes in Library Services
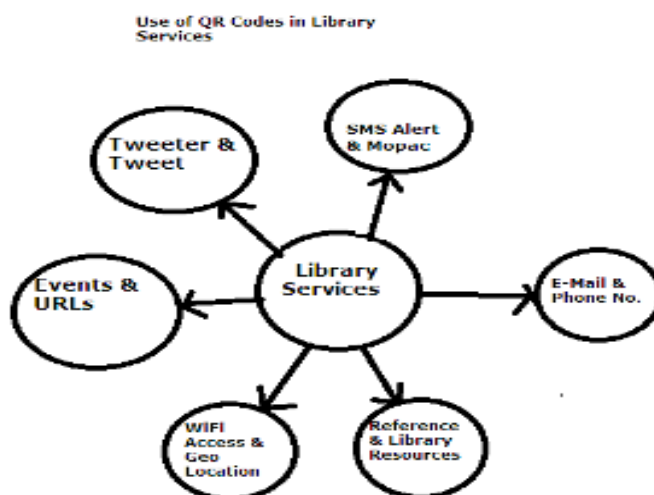
Scan the QR code of our Library Blogs (www.mfmlibrary.blogspot.com)
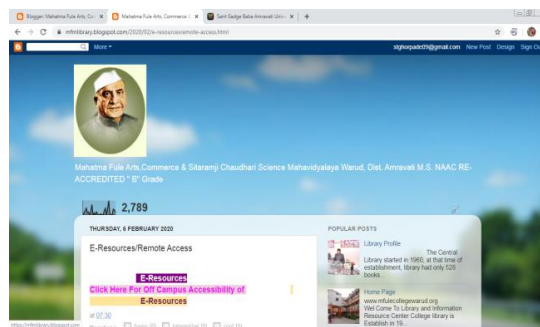
QR Code Generator

Steps for Creating QR Code

1) Navigate the specific QR Code generator or use your favorite search engine to find one.
2) Select the type of data you want to the QR code to encode.
3) Type or paste in the data requested by generator.
4) Generate the QR Code.

CONCLUSION

Libraries are known as a treasure house of knowledge by having its high quality and rich information resources which are freely available for users community. increase of mobile technology library shall implement mobile base QR code technology to connect with information resources. QR code technology is widely used as medium to deliver a message to end to end users. The QR codes are mainly used by libraries for the purpose of promoting their services. empowers users are downloading free QR Code readers to their mobile device not only accessing consumer discounts, special promotions, context and new product and services but are also using the freely available. Easy- to-use a app to generate their own QR Code in order to personalized items. Nowadays the QR code technology is widely used by many libraries for providing quickly access their resources.

REFERENCES

[1]Tahsin Hasan , Joomla Mobile Development Beginners Guide, Packet Publishing Limited 26/06/2012

[2] Jason Vaughan, 'Technological Innovation American Library Association; Vol;49 ,7th Edition   ISBN-9780838959046 Edn. 01/10/2013

[3] Chryl Ann Peltier-Davis, Cybrarian,s , "Web 2.0 A-Z Guide to social media tools and other resources: Information Today Inc. Publication 27/04/2015 ISBN- 9781573875127 , 336 Pages

[4] .Guido-Nocolosi, "Free Computer software-Computer network resource: Cambridge Scholar Publisher   1st Edition 01/12/2015, ISBN- 9781443883733, Page.176

[5] San Ling and Chaoping Xing ," Coding Theory: , Cambridge University Press Publication 12/02/2004/ ISBN,-9780521821919, Page 236

[6] Jason Vaughan," Library Technology Report: , Vol.49 Edn 7th American Library Association Publication, 01/10/2013, ISBN -9780838959046 Page 104