

# Usage and Awareness of Mobile Applications and Technologies by LIS Professional in Library Services: Special Reference to North-West Part of Madhya Pradesh

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## Abstract

*This study examines the usage and awareness of mobile applications and technologies by LIS professional in library services: Special Reference to North-West part of Madhya Pradesh, India. A well-structured 345 questionnaires were distributed among the LIS professional in library services to find out the usage and awareness of mobile applications and technologies. Out of which 298 responses were received from LIS professionals from various north-west part of Madhya Pradesh. The present study demonstrates and elaborates the various aspects of usage and awareness of mobile applications and technologies among LIS professionals of north-west part of Madhya Pradesh, India, The questionnaire covers user's awareness about ICT, instant messaging and communication, use of on social network sites for library services, any application for online reading and reference services, applications for use by organization, productivity and their work and comfort ability in using mobile applications, apps for Navigation or Mapping. Findings and suggestions of the survey are given at the end of the article.*

**Keywords:** LIS Professionals, Mobile Applications and Technologies, Smart Phones, Madhya Pradesh, India.

## 1. Introduction

Today smart phones/ Mobile apps are a model of nanotechnology. They are widely used in not only in communication but also in entertainment, education, information technology etc. A mobile app is a computer program designed to run on smartphones or mobile device, like a tablet or music player and access directly. Smartphone or Apps are usually available through application distribution platforms, which began appearing in 2008 and are typically operated by the owner of the mobile operating system, such as the Apple App Store, Google Play Store, Windows Phone Store and BlackBerry App World.

On June 29, 2007, when Steve Jobs introduced his new technology of Apple company called as iPhone,

has forever altered the people's life by using internet services. This is one of the best technologies by introduced by Steve Jobs in world market of mobile technologies. In year 2010 in Worldwide Developer Conference, Steve Jobs presented iPhone 4 with latest improvement. Unfortunately, on 5 October 2011, the inventor of who see the future of technology through his vision was passed away. Anytime when we are using smartphones and Mobile applications, we think if Steve Jobs present in this time, what he may think, what he will do creatively with Mobile applications or smartphones, undoubtedly he might had made this better, interactive or more creatively useable for house wife to working professional.

First time when we purchase a smartphones, we were really excited to use internet and other entertainment facilities on smartphones like checking email, downloading various apps, chatting, updat-



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ing our shelves with social networking sites etc. and all of thing that we were seeing and based on desktop or laptops. We had decided for searching new apps which are useful for Library & Information Science Professionals. Library of Congress provides a mobile application that is prepared for the iPhone users which gives a virtual tour of Library of Congress that mirrors the main reading room, the great hall, the bible collection, Thomas Jefferson's Library, etc.

The mobile application market has seen explosive growth in recent years, with Apple's App Store boasting more than 400,000 applications and Google's Android Market also having well above 150,000 applications. According to a recent study, the mobile application market will reach \$17.5 billion by 2012. By then, the number of mobile application downloads will have also grown to nearly 50 billion from just over 7 billion in 2009. Mobile Internet users in India are expected to hit 165 million by March 2015, up from the present 87 million mobile surfers, according to a recent survey (The Hindu, January 2, 2013).

## 2. About Madhya Pradesh

The State of Madhya Pradesh is centrally located and is often called as the "Heart of India". The State is home to a rich cultural heritage and has practically everything; innumerable monuments, large plateau, spectacular mountain ranges, meandering rivers and miles and miles of dense forests offering a unique and exciting panorama of wildlife in sylvan surroundings. Madhya Pradesh is the second largest State of India, thus the ICT has a vital & challenging role to play in streamlining the governance. The State is fast emerging as one of the major destinations for the IT industry with lot of activity on e-Governance picked up in recent years.

Madhya Pradesh came into existence on November 1, 1956. Madhya Pradesh, in its present form, came into existence on November 1, 2000 following its bifurcation to create a new state of Chhattisgarh. The undivided Madhya Pradesh was founded on November 1, 1956. Madhya Pradesh, because of its central location in India, has remained a crucible of historical currents from North, South, East and West.

## 3. Objectives of the Study

The objectives of the present study are:

- 3.1. To know the usage and awareness of mobile applications and technologies by LIS professional;
- 3.2. To know the usefulness of mobile applications and technologies in library;
- 3.3. To identify the purpose of usage of mobile application, nature and type of mobile applications required by LIS professionals;
- 3.4. To identify the different apps which are useful for the library services;
- 3.5. To identify the problems are being faced by the LIS Professionals while using the mobile technologies;
- 3.6. To find out the user satisfaction while using mobile applications and technologies among LIS professional; and
- 3.7. To suggest measure for popularization of usage and awareness of mobile applications and technologies by LIS professional for library services.

## 4. Methodology

In the present study, questionnaire method was used for data collection that seeks to explore the usage

and awareness of mobile applications and technologies by LIS professional in library services with special reference to North-West/selected cities of Madhya Pradesh, India. The data collected are the situation of information about the views of LIS professional. There were 298 approved replies are available LIS professional in library services with special Reference to North- West/selected cities of Madhya Pradesh, India. The questionnaire comprises 21 questions with an option to express any comments regarding usages and awareness. Due to the small number of respondents involved the entire population was used as the sample for the study. 345 questionnaires were distributed among the LIS professionals, 298 questionnaires were received back from the respondents. The breakdown of the population is as illustrated in below.

**Table 1: Demographic Details**

S. No.	City	Responses	Percentage
1	Indore	100	34
2	Bhopal	105	35
3	Jabalpur	59	20
4	Gwalior	19	6
5	Ujjain	12	4
6	Ratlam	03	1

**Table 2: Gender wise Details**

S.no.	Gender	Responses	Percentage
1	Male	184	62
2	Female	114	38

**Table 3: Designation wise details of LIS Professionals**

S.no	Designation	Response	Percentage
1	Librarian	157	58
2	Assistant Librarian	49	18
3	Library Assistant & other`	64	24

## 5. Data Analysis

The findings of the study are summarized and presented here with are tables provided.

**Table 4: Awareness about Smartphone and Mobile Applications**

S.no	Awareness	Responses	Percentage
1	Yes	298	100
2	No	0	0

The above table shows that 100% respondents were aware about the Smartphone and mobile applications.

**Table 5: Awareness about know to use or own Smartphones and Mobile Applications**

S.no	Awareness	Responses	Percentage
1	Yes	270	91
2	No	28	9

(Multiple choices permitted)

The analysis reveals that majority 91% of users were using or owning the Smartphones and mobile applications and 9% were not using or owning them.

After evaluating the above query, now, we have a 270 Responses to evaluate.

**Table 6: Use of Kind of Smartphone's Operating System**

S.no	Kind of Smartphone's/ Operating system	Responses	Percentage
1	Android	234	87
2	iPhone	11	4
3	Blackberry	25	9
4	Window OS	0	0
5	If other please Specify		

(Multiple choices permitted)

The analysis reveals that majority 87% of users were using android operating system, followed by 9% of users were using blackberry phones. Further followed by 4% of users were using i-phones.

**Table 7: Approximate hours per day spending on using Smartphones**

S.no	Spending Hours	Responses	Percentage
1	Less than 1 hour	26	10
2	1-2 hour	33	12
3	2-3 hour	44	16
4	3-4 hour	27	10
5	4+ hour	140	52

(Multiple choices permitted)

In order to assess the experience of using smartphones, the time spend on using smartphones has been classified into 5 different categories from the table 7, the LIS professionals has 10% users who use smartphones less than one hour, followed by 12% who use 1-2 hours and 16% users who use 2-3 hours, 10% users who use 3-4 hours and 52% who are using more than 4+ hours. Thus, it is shown that most of the library professionals are using smartphones and mobile technologies more than 4 hours.

**Table 8: Using your Smart Phones during Working hours**

S.no.	Awareness	Responses	Percentage
1	Yes	205	76
2	No	65	24

The above table shows that users are using smartphones during working hours are 76%, while 24% LIS professionals not using it during working hours.

**Table 9: How often LIS Professionals using Smartphone to help you with your professional work (Library) (rate on scale of 0 to 10)**

S.no	Scale	Responses	Percentage
1	0	35	12.9
2	1	26	9.6
3	2	22	8.1
4	3	8	2.9
5	4	19	7
6	5	56	20.7
7	6	29	10.7
8	7	13	4.8
9	8	62	22.9
10	9	0	0
11	10	0	0

The above table analysis shows that majority of LIS professionals state claims that smartphones are very helpful in performing their professional work.

**Table 10: Do you use your smartphone as a primary number?**

S.no		Responses	Percentage
1	Yes	252	93
2	No	18	7

The data shows that majority of the professionals are using smartphones with their primary number. It shows that they perform all their majority communication at office.

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**Table 11: Number of new applications installed in on smartphones (other than pre-installed applications)**

S.no	No. of new applications	Responses	Percentage
1	Less than 5	44	16
2	5 to 10	19	7
3	10 to 15	178	66
4	15 to 20	23	9
5	20 +	6	2

In order to assess the experience and awareness of using new applications, the number of new applications has been classified into 5 different categories from the table 11, the LIS community has 16% users who use downloaded less than 5 new apps, followed by 7% who downloaded 5-10 new apps, 66% users who downloaded 10-15 new apps (it is most number of apps downloaded by the library professionals), 9% users who downloaded 15-20 new apps and 2% users who downloaded 20 or more new apps.

#### Favourite Application you use Most of Time?

Participants were analysed and found that following apps were used frequently and related to social network, internet surfing, picture editing, and news.

The name of the apps are given below:

- ▶▶ Facebook
- ▶▶ Whatsapp
- ▶▶ Picsart
- ▶▶ Bloomberg
- ▶▶ Ajtak
- ▶▶ UC Browser
- ▶▶ Hike
- ▶▶ Gmail
- ▶▶ Google Search
- ▶▶ Google Map

**Table 13: Finding new apps through:**

S.no	Discover new apps from	Responses	Percentage
1	Searching the App store	197	73
2	Recommendation by Friend /family	43	16
3	i-Tunes, etc.	11	5
4	Television advertisements	19	7
5	Apps Promoting other apps	0	0
6	Magazine advertisements.	0	0
7	Other	0	0

(Multiple choices permitted)

The above table reveals that 73% of users find new apps through Apps Store, a facility given in smartphones, 16% of users find new apps through recommendation by friends or family members, while 7% of users find new apps through television advertisements. Only 5% of users find new apps through i-Tunes, an app of Apple i-phone.

**Table 14: Have you Downloaded a New App to your Phone in the past week?**

S.no		Response	Percentage
1	Yes	270	100
2	No	0	0

If yes, how many apps?

S.no	No. of apps Downloaded	Response	Percentage
1	0	0	0
2	1	0	0
3	2	0	0
4	3	0	0
5	4	19	7
6	5	2	1
7	5+	249	92

The above table shows that all of the library professionals downloaded new apps last week. Majority of library professionals downloaded more than 4 new apps last week. Thus, it clearly shows that all of the library professionals are regularly updating their smartphones and keep updating themselves with future development.

**Table 15: Do you have any Email Account?**

S.no		Response	Percentage
1	Yes	270	100
2	No	0	0

If yes, Do you frequently use your email account on your smartphone/ application?

S.no	Response	Percentage
1	Yes	184 68
2	No	86 32

The above table depicts that all of the respondents have their own email account, while a nearly 68% reveals that they accessing their email account on smartphone/application and rest 32% are not accessing.

**Table 16: For what purpose mostly do you use you smart phone/applications? Give the rating from 5 to 1**

Here, 5= mostly useable, 4= frequently useable, 3= use able, 2 = evenly, 1 = never useable

S.no	Purpose for using Apps	5	4	3	2	1
1	Texting	270	0	0	0	0
2	Games	207	28	2	33	0
3	Weather	0	0	0	12	258
4	Social networking	270	0	0	0	0
5	Music	138	40	69	29	0
6	Productivity (Calculator, Calendar, memo's etc.)	24	146	26	32	42
7	News	4	0	0	0	266
8	Sports	263	3	4	0	0
9	Shopping	22	28	138	38	44
10	Video/Movies	270	0	0	0	0
11	Surfing the web	270	0	0	0	0

(Multiple choices permitted)

The above table reveals that majority of LIS professionals find smartphones/applications most usable for texting, playing games, watching video/movies and surfing the web, only few professionals found smartphones for frequently usable for Productivity

(Calculator, Calendar, memo's etc.), while some LIS professionals find usable for Shopping and Music and some users find smartphones for evenly usable for Weather, Games, Music and Shopping. Followed by some users who never find Weather and News usable on smartphones/applications.

**Table 17: Do you use any app for navigation or mapping?**

S.no	Response	Percentage
1	Yes	176 65
2	No	94 35

If yes please specify the name Google Maps and iTrack for i-Phones for Navigation or mapping.

The above table focuses that 65% of the LIS professionals are using Google Maps and iTrack for i-Phones for Navigation or mapping but the rest of them are not using any app for Navigation or mapping.

**Table 18: Application used for instant Messaging and Communication**

S.no	Application for instant messaging	Responses	Percentage
1	What's app	192	71
2	We Chat	18	7
3	Chat on	0	0
4	Line	22	8
5	Google Talk/Hangout	0	0
6	Skype	0	0
7	Facebook Messenger	38	14
8	If Other please Specify name	0	0

(Multiple choices permitted)

The above table reveals that 71% of users are using Whatsapp for instant messaging and communica-

tion, while 14% users are using Facebook Messenger app. Followed by 8% using Line, whereas 7% users are using We Chat app for instant messaging and communication.

**Table 19: Have any profile on social network sites (Like, Facebook, Twitter, etc.)**

S.no		Response	Percentage
1	Yes	270	100
2	No	0	0

If yes, which social networking media is used the most to stay in touch with others on smartphone application

S.no	Social Network	Response	Percentage
1	Facebook	270	
2	Twitter	0	
3	Linked in	0	
4	Tumblr	0	
5	Flicker	0	
6	Instagram	0	
7	If other please specify	0	

The above table shows that entire LIS professionals have their profile on Facebook and using it as social networking media on smartphone application to remain in touch with other fellow professionals and users.

**Table 20: Use of any smartphone application(s) for organization, productivity and work**

S.no.	Apps for organization, productivity and Work	Responses	Percentage
1	Outliner	0	
2	Boxnet	0	
3	Pages	0	
4	I napkin	0	
5	Dictionary	0	

6	Wikipanion	0	
7	Osfoora HD	0	
8	Drop box	0	
9	Quick office	0	
10	Adobe reader	0	
11	World book this day in history	0	
12	Offline pages	0	
13	I annotate	0	
14	If any other please specify the name		

(Multiple choices permitted)

The above table reveals that none of responders is using above mentioned applications on smartphones.

**Table 21: Do you feel comfortable in using mobile applications for personnel or professional life?**

S.no		Response	Percentage
1	Yes	243	90
2	No	27	10

The above table depicts that 90% of the respondents are feeling comfortable in using Smartphone applications for personnel and professional life while 10% are not feeling comfortable in using Smartphone applications.

## 6. Analysis

The following important analysis can be revealed:

Majority of the respondents have awareness about usage and awareness of mobile applications and technologies by LIS professional in library services.

6.1. All the LIS professionals who are surveyed are aware about usage of mobile applications and technologies.

6.2. 270 users own the smartphones and using mobile applications and its technologies.

6.3. Majority of the users using Android smartphones, followed by Blackberry and i-Phone operating system

6.4. Most of the user are devoting a lot of time on usage of smartphones and performing their professional work on it

6.5. It was also found that new applications are frequently downloaded on smartphone on the basis of requirements for library services

6.6. A majority of the users are searching and downloading the new apps through App Store or by recommendation or through advertisements in media

6.7. A majority of the users are having email account installed on the smartphones

6.8. It was noticed that smartphones are also used for instant messaging (whatsapp, Facebook Messenger), social networking (Facebook), gaming, sports, watching video/movies and surfing the web by the respondents

6.9. A large majority of users were satisfied and feeling comfortable with the use of mobile technologies and for personal and professional life.

## 7. Suggestions

The following important suggestion can be focuses:

7.1. Mobile library services provides away to reach out to mobile users and increase library's relevance to users day-today lives

7.2. Libraries like any other kind of organizations, must now make their services - not just for catalogs- available on number of array of services

7.3. LIS professionals should explore new areas of implementation of mobile technology in more effective way to promote and integrate them into the design of future library services in a cost efficient manner.

7.4. Libraries can make new apps for disseminating its services in more advances way such as SMS alerts services, Virtual video/audio tours, New title arrival service, Ask librarian, etc.

7.5. LIS professionals should learn about the Open source platforms and its application for future of application of mobile technology

7.6. Android and other platforms are also easy to understand and it is very useful for library services.

7.7. Libraries can reach the remote users effectively by adopting of mobile technology in its services.

## 8. Conclusion

In this paper, we analyze and studied the smartphone application usage among the LIS professionals of north-part of Madhya Pradesh. Application of mobile technology in library services is the need of the hour. It is generally assumed that the LIS professionals are variably tends to possess information and expertise towards advancement of new technologies and makes an attempt to keep abreast of the latest information. The present study does not fully substantiate that.

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