MOBILE APPLICATIONS ARE MAJOR PLAYERS IN THE WORLD OF E-COMMERCE

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Abstract: *The advance of mobile technologies have turned handheld devices a part of people's daily life, such as in communication and entertainment. E-commerce turned the entire world into a global marketplace. This paper presents an overview of uses of mobile applications in the field of e-commerce. In modern information and communication system, mobile application is one of the most concerned and rapidly developing areas. This paper focuses on the popurality of Android and types of mobile applications. This paper also describes that how individual mobile user and Indian e-commerce companies promote using mobile applications and the popularity of the mobile application.*

Keywords: *E-commerce, Mobile Technologies, Mobile Applications, Android.*

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INTRODUCTION

In the modern age of Information and communication system, people are used to computer and computer application. But Mobile Application Development is a new and rapidly growing sector. There is a global positive impact of mobile application [0909]. The growth of mobile phone market has generated a huge demand for various mobile applications. Numerous mobile phone applications are available that simplify various tasks for the users due to which there is an accelerated growth of software/application development for mobile devices.

Mobile application development is the course of action by which application software is designed and developed for hand-held devices like mobile phones, personal digital assistants, etc. Earlier mobile developers faced so many difficulties while writing applications as they had to build better, unique, competing and hybrid applications which would incorporate command tasks like messaging, contact list and calling in a user friendly manner.

From the technical point of view, the different mobile applications are able to run in different managed platforms like iPhone, BlackBerry, Android, Symbian, windows; also some virtual machine such as Java/J2ME, BREW, Flash Light, Silverlight. The launch of Android smartphones in the market brought a great revolution in Mobile Application Development. Android has turned out to be the cheap, flexible yet powerful new OS of the future, not just compared to iOS, but compared to Mac OSX, Linux and Windows as well.

According to application area, there are different categories of mobile applications:

1. **Communications**: Internet browsing, email IM client, Social Networking.

2. **Games**: Puzzle/ Strategy, Cards /Casino, Action/ Adventure.

3. **Multimedia**: Graphics /Image viewer, Presentations viewers, Video Players, Audio players.

4. **Productivity**: Calendars, Calculators, Diary, Notepad /Memo/Word Processors, Spreadsheets.

5. **Travel**: City guide, Currency converter, Translators, GPS/Maps, Itineraries / Schedules , Weather.

6. **Utilities**: Profile manager, Idle screen/Screen saver, Address book, Task manager, Call manager, File manager.

As more people are beginning to use smartphones for their daily online and offline activities, mobile apps are becoming increasingly important to determine consumer involvement. In fact, mobile apps are now becoming central to how people choose to interact with the online world. Statistics have revealed that a huge percentage of people use mobile apps everyday to search for information, stay in touch with friends and colleagues, shop for goods and perform a range of other functions.

WHY ANDROID IS POPULAR?

It's not only E-commerce which is aggressively promoting mobile app but literally everyone is jumping into Android world. The reasons for popularity of Android are the following:

1) Android gives a world-class platform for creating apps and games for android users everywhere, and as well as an open marketplace for distributing to them instantly i.e. Google Playe Store.

2) There are apps for all most any query that may be Health related or education based. Android is mobile friendly that is obvious, so customers keep it in their phone and every time the lock gets unlock it's there in front of you.

3) Android helps people to keep updated with all offers and sales or etc on their store.

4) Android phones can run many applications; it means anybody can browse, Face book while listened to the song.

5) There are various versions available of android. It gives freedom of development to develop new apps.

6) There are more than 300,000 Apps available for Android in the market. This itself proves that popularity of Android is increasing among the people in the world.

7) Android has encouraged innovation among the developers to innovate new applications from time to time for sustaining in competitive market.

TYPES OF MOBILE APPS:

Mobile Applications are compact software programs that perform a predefined function and are designed to work on handheld devices such as Smart Phones, tablets and feature phones. But all mobile applications are not the same. There are different categories of mobile apps:

1. Native App: Native apps live on the device and are accessed through icons on the device home screen. These are installed through an application store (such as Google Play or

Apple's App Store). Example include Reminders, facebook app, Twitter app, Gaming applications, etc.

2. Web App: Web apps are not real applications; they are really websites. These are stored on a remote server and delivered over the internet through a browser interface. Examples are popular social networks, online mobile games, email and chatting applications, etc.

3. Hybrid App: It combines elements of both native and web applications. Hybrid apps are often mentioned in the context of mobile computing.

WHY ARE INDIAN E-COMMERCE COMPANIES PROMOTING THEIR MOBILE DEVICES APPS SO AGGRESSIVELY?

Promoting the product is the target of every company. In India, number of user using mobile technology is much higher than number of users using proper computer or desktop. So more number of people will use the product, more will be customers, which leads to more number in terms of profit. People nowadays spend more time with their mobile. It is much quicker than using a web as it is always in hand. And of course, to capture the necessary data.

Mobile apps for ecommerce, also known as m-commerce apps, are powerful applications that are used by different online stores for providing their consumers with a more engaging shopping experience. These apps perform all the functions that are commonly attributed to a particular ecommerce store, such as display of products, handling online payments, confirming deliveries, etc. Having a well designed and functional app is crucial for business nowadays and ecommerce companies in India have significantly benefitted from investing in the development of iOS Apps and Android apps for ecommerce.

Particularly in India, most of the e-commerce websites e.g. Flipkart, Snapdeal, PayTM, Freecharge, OLX, Quickr have suddenly shifted their promotions to mobile apps (instead of general product marketing as earlier). They even offer discounts for mobile app users which are not applicable to desktop site users. Here are some of the ways in which m-commerce apps can help online stores to grow further:

1. Greater brand building scope

Mobile apps for ecommerce offer online stores to establish their brands in a more comprehensive way as consumers once starting to use an app will not remove it from his/her mobile unless something has gone majorly wrong. This allows ecommerce stores to

reach to their consumers directly and promote their business and products in a more intimate and effective manner. These apps can let consumers know all the latest updates of the shop and information about new products as and when they occur.

2. Cost effectiveness

Ecommerce apps allow businesses to promote their enterprise more effectively at far lesser costs. Moreover, apps are easier to build up and maintain than websites, and frequently offer far reaching results. The enhanced sales opportunities that come with apps also make it possible for companies to enjoy quicker stock clearance which in turn reduces the overall maintenance or stocking costs.

3. Helps to bring in new customers

Once a mobile ecommerce app is developed, it will always be available in the app store for the consumers to download and use. This will provide an online store with opportunities to develop new customer base at all times.

4. Enhanced sales opportunities

As mobile ecommerce apps come with efficient designs and easy functionalities, they provide users with a quality shopping experience. This in turn automatically increases the overall number of sales within a given period.

5. Having an edge over competitors

With a good app to support online store business, companies can expect to beat competition in a major way. A mobile ecommerce app can serve as an extremely potent tool to reach out to consumers and enhance business when used in a strategic manner. By always being there within a smartphone, it allows an ecommerce store to promote itself without being too loud.

WHY SOME APPS ARE FREE?

Some apps are distributed for free through app stores; the developers make money in a few ways:

- Some sell advertising space within the app. The app developers can earn money from the ads, so they distribute the app for free to reach as many users as possible.
- Some apps offer their basic versions for free. Their developers hope you'll like the app enough to upgrade to a paid version with more features.

- Some apps allow people to buy more features within the app itself. Usually, they are billed for these in-app purchases through the app store. Many devices have settings that allow them to block in-app purchases.

- Some apps are offered free to interest the consumers in a company's other products. These apps are a form of advertising.

IMPORTANCE OF MOBILE APPS

Mobile devices today are unchallengable in the daily lives of millions of people around the world. Mobile apps are providing solutions for businesses, healthcare, and education. Almost every aspect of a human life problem has a Mobile app. Ecommerce stores such as Flipkart, Amazon, Snapdeal and Jabong all have their very own mobile apps to engage customers in a more strong way than ever.

Fig: Smart Phone showing various Mobile Apps

- **Education**

The mobile, cellphone or smartphone is not just used for WhatsApp, Facebook or Angry Birds, it can be used in a multitude of ways from an educational perspective. Fulfilment of educational purposes is a major benefit of smartphones. Apps can help to achieve better performance in organizing, managing, and monitoring classroom activities.

Google Drive can even help teachers in sharing assignments, syllabuses, and reading materials through few taps and clicks. Using mobile apps for learning and teaching reduces paper usage and it is cost effective too. ITunes U is a useful app from Apple for teachers to create and add courses including essential components such as books, lectures, assignments

and quizzes.

Following are ways how smart phone apps are helpful for the students:

- Look-up information on Internet.

- Take notes and share lectures.

- Work on projects with classmates.

- Access online textbooks.

- Take videos of class presentations or experiments.

- Receive reminders and alerts.

- Communicate with teachers.

- Learn about school activities.

- Share relative links of videos, websites, etc. for a unit of study.

Daily Life

Technology is getting really advanced today and it is becoming an essential part of life. The smart phones are more likely to be the hand held computers for configuring the daily schedules, saving large documents, for watching videos, listening music, using internet, using world wide web, video conferencing and much more than a human mind can think. Today smart phones are the devices which provide all the facilities through various apps what a user need in his daily life, such as e-mail, notebook, Bluetooth, gaming panel, high resolution camera applications, Microsoft office suite, television and many other computerized applications.

In our daily life, smartphones are used for chatting, socialising, entertaining, informing, navigating, and many other activities. Many of the large virus protection companies such as McAfee have also released apps, and this particular Android one allows you to remotely lock and wipe data from your phone.

Business

Mobile apps give businesses the opportunity to interact with customers in real time with valuable information on location and other demographics through user profiles. Business clients can send push notifications to the user promoting new features or information about special offers and discounts.

For companies apps are another way to reach out customers, just like a website or an advertisement. An app can make people their business stand out, which will help them build

relationships with customers. Aside from promoting your brand, an app can also help you feature products and services. These app marketplaces have made easier for people to get any relevant information at their fingertips and stay connected to their work on-demand. Therefore mobile applications are increasingly playing a vital role in business with a larger customer-base as well as workforce relying on the convenience of access on-demand to information & solutions. Banks & Financial Institutions, Hotels & Restaurants, Ticketing Sites, Travel & Holiday Aggregators, etc. have found mobile apps to be a great way to increase visibility & sales for their respective businesses.

- **Shopping**

Ecommerce has become so popular and profitable nowadays because buyers have discovered a number of online shopping benefits since the beginning of the electronic commerce era. There are many advantages of online shopping; this is the reason why online stores are a growing business today. Online shopping includes buying clothes, gadgets, shoes, appliances, or even daily groceries. All goods are not available in the same shop so people are required to visit different shops to purchase different goods. Instead of moving one place to another they can purchase all the required goods sitting in their home by using a mobile app. Mobile apps help people to make a shopping at any time, any place, anywhere. In every smart phone, there are various mobile apps for online shopping purpose. There are various top motivators for shopping online which include cash back guarantee, cash on delivery, fast delivery, substantial Discounts, etc.

CONCLUSION

Mobile devices have now become the focal point in IT business. Technology is advancing day by day and people are more inclined towards smart phones, tablets or any other mobile devices. There are 85% smartphone in India out of total mobile phones. Study shows that mobiles are more preferred for ecommerce than traditional tools. Apps are becoming an emotionally important and integral part of people's daily lives. People are trying to use mobile device and mobile application instead of desktop sites for easy tasks. For many reasons, people want up-graded version of apps. New versions create interests among people; they experiment with it and express their reviews through internet. It is also a very productive way for an enterprise to create a relationship with their customers. In this paper, we have explained so many things about mobile applications and we expect this paper will

help other for further study in the era of mobile application.

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