

# Instant messaging mobile apps computer science essay

[Technology](#), [Computer](#)



Mobile Instant messaging is the technology that allows instant messaging services to be accessed from a portable device, ranging from standard mobile phones to smartphones. It is done two ways [1]:

Embedded clients - tailored IM client for every specific device.

Clientless platform - a browser-based application that does not need to download any software to the handset and enables all users and all devices from any network to connect to their Internet IM service, ideally.

With newer app-frenzy smartphones entering the market almost every day and data packs getting cheaper, SMS is increasingly being replaced by such live messaging apps for text communication, as well as multi-media sharing. The combination of presence awareness and real-time messaging offered by instant messaging systems has proved to be the source of such applications in the Internet, gathering hundreds of millions of users. The recent ban and subsequent restrictions on bulk SMS has left many furious, especially youngsters who rely on it to stay connected with friends and family. Instant Messaging mobile applications rely on the internet and are otherwise free of cost. Thus, even while travelling, if one can manage to access any internet connection, be it Wi-Fi or 3G, one can stay connected to people through the means of these web based applications and can escape the heavy roaming rates.

These apps contain a lot of features and offers that have attracted more and more users. For the purpose of this report, we have used the following apps -

Whatsapp, Viber, Hike, BBM, and Google+ Messenger and on popular mobile platforms – iOS, Android, Symbian, BlackBerry OS, Windows OS.

## 2. Application Specifications

This section contains tabulated specifications and features of the above mentioned apps.

Table 2. 1: Technical Specifications of BBM, Whatsapp, Hike, Viber and Google + Messenger [2]

Table 2. 2 : Comparison of features present in BBM, Whatsapp, Hike, Viber and Google + Messenger [3].

## 3. Application Review

In this section we explore the applications used by us and provide our experiences with these apps.

### 3. 1. BlackBerry Messenger (BBM)

It is an application downloaded exclusively to BlackBerry units. It allows blackberry users to SMS/chat/share multimedia files all across the globe (as long as both have access to the internet) with each other. Hence, long distance calls cost much lesser in BBM.

Personal Experience: We Used BBM on BlackBerry Bold. BBM is pre-installed on BlackBerry devices. Group communication isn't limited to just messages, it can be used to share photos, lists, videos, etc. It requires a separate

BlackBerry pin/barcode of user you want to add to your contact list is required. Auto-sync feature (with phonebook contacts) found in popular IM apps these days is missing. Its biggest drawback, however, is that its communication is only BlackBerry to BlackBerry.

### 3. 2. Whatsapp

It is a cross platform messaging service similar to BBM. It automatically scans your phone's contacts to find friends using the service.

Personal Experience: We Used Whatsapp on Sony Ericsson XPERIA Neo V, Samsung Galaxy Note 2, Samsung Omnia W, Nokia 5233, iPhone 3GS & 4S, BlackBerry Bold. It has a clean User Interface. If used specifically for messaging, Whatsapp is most recommended (as per survey conducted as well). Notifications in other applications (Viber) are not consistent. File sharing is quick. From our experience, it is the only app that worked consistently well on all the platforms/devices. The app hardly ever crashes. It costs \$0.99 on iOS platform, \$0.99 per year on Android after initial 7 month free trial. Though, most users haven't yet been charged even after 1-2 years of use. One would like to use the app simultaneously on various devices like tab, PC and phone, which is not possible as it can be used only on one platform at a time. Same is the case for Hike and Viber. Whatsapp doesn't notify if an existing contact joins Whatsapp, it simply adds them to the favorites tab [4].

### 3. 3. Hike

Hike is a peer-to-peer (P2P) messaging app that uses both data and SMS to

deliver messages. One of its key features is that those who don't have Hike on their phones can receive an IM as an SMS. You can also respond to it but have to pay normal SMS charges for that. Hike offers 100 free SMSes within India, after which the normal SMS charges will apply. This is the key differentiator since other apps (like WhatsApp) don't offer this.

Personal Experience: Used Hike on Sony Ericsson XPERIA Neo V, Samsung Galaxy Note 2, Samsung Omnia W, Nokia 5233, iPhone 3GS, BlackBerry Bold.

The most striking feature of Hike is its UI. It has a soothing white and blue combination and is simple to use. On Android platform, we were not able to play .mov files sent by iPhone users. It requires universal file format.

Emoticon were not completely compatible on various platforms, especially, iPhones. Android Hike app was unable to open the correct image at times from a clicked thumbnail. For Android, the app works only on v2. 2 or later.

### 3. 4. Viber

This application supports free VOIP calls on your phone. It allows users to make free calls, send free messages and photo messages to other Viber users. Viber includes text, picture and video messaging across all platforms, with voice calling available only to iPhone, Android and Nokia's Windows Phone.

Personal Experience: Used Viber on Sony Ericsson XPERIA Neo V, Samsung Galaxy Note 2, Samsung Omnia W, Nokia 5233, iPhone 3GS, BlackBerry Bold.

Voice quality deteriorates with time. Its best performance was obtained on iOS platform, and poorest on Symbian OS. Video and audio files cannot be

shared, though voice calls among viber users are allowed. The most recent, stable version of the app allows location sharing. Skype mobile a better option as it covers almost all features present in Viber (except automatic contacts import) and provides better voice quality [5].

### 3. 5. Google + Messenger

Google offers video chatting on computers and mobile devices with front-facing cameras via Google+ Hangouts. It contains all the basic features of voice and video call along screen reversal option similar to Skype Mobile. It can also bridge the technological divide by letting Android and iPhone users digitally hang out. Video quality is solid and clean.

Personal Experience: It automatically synchs with your Google plus network. Image sharing is allowed while video sharing hasn't yet been enabled. Video quality is better than Skype Mobile.

### 4. Survey Analysis

We conducted a survey of 67 students of IIIT-D to find out which was the most popular IM mobile app used. (Refer to Appendix for graphical analysis of the survey)

The following were the results of the survey:

The results revealed Whatsapp to be the clear winner among the apps surveyed.

It got the highest rating across all mobile platforms.

Its file-sharing and automatic phonebook contacts synchronization were the most liked features.

People generally tend to use this app as it is more commonly used by their friends and contacts.

## 5. Conclusion

IM Mobile Apps have become the most prominent tools of communication and entertainment these days especially among youngsters. SMS is increasingly being replaced by such live messaging apps for text communication, as well as multi-media sharing due to decreased data pack rates, restriction on bulk SMS, increased appreciation for real time messaging and decreased cost expenditure especially for long distance communication.

From Table 2. 2 we conclude that Google+ Messenger is the most feature rich application, mainly due to its excellent voice and video call capabilities. The survey results reveal that Whatsapp is the most popular mobile application. While, most of these apps integrated quite well with the popular Mobile Operating Systems, Whatsapp was most compatible among all applications while BBM being restricted to BlackBerry OS is at the other extreme. Android and iOS showed better compatibility with most of the apps while Symbian was least compatible. Whatsapp proved to be most reliable as it hardly crashes, while Viber proved to be least reliable as the application often tends to hang.

## 6. References

[1] [http://en.wikipedia.org/wiki/Mobile\\_instant\\_messaging](http://en.wikipedia.org/wiki/Mobile_instant_messaging)

[2] <http://en.wikipedia.org/wiki/WhatsApp>

<http://en.wikipedia.org/wiki/Viber>

[http://en.wikipedia.org/wiki/BlackBerry\\_Messenger](http://en.wikipedia.org/wiki/BlackBerry_Messenger)

[http://en.wikipedia.org/wiki/Google\\_Talk#Mobile\\_device\\_compatibility](http://en.wikipedia.org/wiki/Google_Talk#Mobile_device_compatibility)

[3] [http://www.guardian.co.](http://www.guardian.co.uk/technology/shortcuts/2012/dec/04/whatsapp-new-text-messaging)

[uk/technology/shortcuts/2012/dec/04/whatsapp-new-text-messaging](http://www.guardian.co.uk/technology/shortcuts/2012/dec/04/whatsapp-new-text-messaging)

<http://developer.blackberry.com/devzone/blackberryworld/bbm/>

<http://firstteck.blogspot.in/2013/01/hike-for-android-update-128-bit-ssl.html>

<http://www.brighthub.com/mobile/iphone/reviews/86901.aspx>

[4] <http://thomas.do/post/22506567966/viber-vs-whatsapp>

[5] <http://dailyappblogger.com/viber-review-ios/>

<https://assignbuster.com/instant-messaging-mobile-apps-computer-science-essay/>