

# A Study on consumersatisfaction of selectedusersof Vadodaracity towards WhatsApp Application

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**Abstract:** Purpose – The purpose of this paper is to present a concise status of WhatsApp application for the users and thereby provide a basis for further scholarly enhancement and insights for practitioners.

Design/methodology/approach – This study takes in consideration the primary as well as secondary sources. The researchers have designed the non-disguised structured questionnaires.

Findings – Reasons for why and when to pursue marketing moves for WhatsApp, key success factors for implementing marketing strategies and the potential problem areas are identified. Avenues for advancing knowledge about WhatsApp are discussed.

Research limitations/implications – Practitioners benefit from this comprehensive review of findings and insights from previous research as well as the primary data collection through questionnaire. Scholars benefit from this review, as it summarizes and identifies key areas for future research towards WhatsApp.

Originality/value – There has bevery few scholarly article assessing the status of consumersatisfaction towards WhatsApp Application.

**Key Words:** WhatsApp, Marketing strategy, Consumer Behavior

**Paper type:** Primarydata-based research Paper

## 1. INTRODUCTION:

### 1.1 MobileApplications

Mobile applications have been gaining rising popularity due to the advances in mobile technologies and the large increase in the number of mobile users. Consequently, several app distribution platforms, which provide a new way of developing, downloading, and updating software applications in modern mobile devices, have recently emerged.

A mobile application is software designed to run on smart phones, tablets, computers and other mobile devices. They are usually available through application distribution platforms which 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.

### 1.2 Instant Messaging

Instant Messaging has become the killer app on mobile as smart phone adoption has grown across the globe and the Indian scene is no exception. Three out of every four smart phone user in India is now high on mobile chatting making the market a lucrative one for chat app companies.

WhatsApp reigns supreme amongst mobile chat apps with about 76% of smart phone users in India using it to text each other, revealed a recent study on smart phone usage in India by Informate Mobile Intelligence.

### 1.3 Different Social Messenger Applications

- **WhatsApp:** WhatsApp Messenger is a freeware and cross-platform instant messaging and Voice over IP service. The application allows the sending of text messages and voice calls, as well as video calls, images and other media, documents, and user location. The client software is available for Android, Blackberry OS, Blackberry 10, iOS, Nokia-Series 40, Symbian (S60), and Windows Phone.
- **Facebook Messenger:** Facebook Messenger is a FREE mobile messaging app used for instant messaging, sharing photos, videos, audio recordings and for group chats. The app, which is free to download, can be used to communicate with your friends on Facebook and with your phone contacts. The main functions of messenger are instant messaging, photo/video sharing, group chats, ability to record voice messages, live video chats/video calling.
- **BBM (BlackBerry Messenger) :** BlackBerry Messenger is a proprietary Internet-based instant messenger and video telephony application included on BlackBerry devices that allows messaging (and video calls for BlackBerry 10 smart phones ) between BlackBerry users. It was developed by the manufacturer of the Blackberry, BlackBerry Limited (formerly known as Research In Motion (RIM)). Messages sent via BlackBerry

Messenger are sent over internet and use the BlackBerry PIN system, so communication was only possible between BlackBerry devices until 2013. BBM was officially released on iOS and Android on 21<sup>st</sup> October 2013.

- **Viber** : Viber is a proprietary cross-platform instant messaging Voice-Over-Internet Protocol application for smart phones developed by Viber media. In addition to text messages users can exchange images, video and audio media messages. The client software is available for Mac OS, Android, BlackBerry OS, iOS, Series 40, Symbian, Bada, Windows phone and Microsoft Windows. Viber works on 3G/4G and Wi-Fi networks. It first requires installation on a phone in order to work on a desktop operating system environment. Viber reached 200 million users as of May 7, 2013.

#### **1.4 Social Messenger War:**

A survey of 3759 Android and iOS Smart Phone owners in the US, Brazil, South Africa, India, China carried out by mobile market research company On Device Research, reveals that Facebook Messenger no longer leads in social messaging

- WhatsApp has overtaken Facebook as the leading social messaging service on mobile, according to a research by On Device.
- A survey found that 44 per cent use WhatsApp at least once a week, whereas just 35 per cent use Facebook messenger.
- The report also confirmed that social messaging apps – including WeChat, Twitter, BBM and Skype – are the dominant way in which people communicate on their phone.
- It found that 86 per cent use social messaging daily, while 73 per cent use their phones for voice calls, 75 per cent use SMS messages, and 60 per cent use email.
- Social messaging app use in at least once a week; in US, Brazil, China, South Africa, Indian Smartphone

## **2. INTRODUCTION TO WHATSAPP**

- WhatsApp was founded by Brian Acton and Jan Koum in the year 2009, both of them previously worked in Yahoo!
- WhatsApp Messenger is a proprietary, cross-platform instant messaging service for smart phones without having to pay for SMS. In addition to text messaging, users can send each other images, video and audio media messages as well as their location using integrated mapping features.
- Koum named the app "WhatsApp" to sound like "what's up".
- On February 24, 2009, Koum incorporated WhatsApp Inc. in California.
- The client was created by WhatsApp Inc., based in Mountain View, California which was acquired by Facebook in February 2014 approximately US\$ 19.3 billion.
- By February 2016, WhatsApp had a user base of over one billion, making it the most popular messaging application at the time.
- WhatsApp has grown in world's countries, including Brazil, India and large parts of Europe.

## **3. HISTORY:**

An invention by 'two guys with an experience of 20 years at Yahoo! Inc.' as per the official website, WhatsApp stirred hard the broth BlackBerry (BB) had tried to, but could only cater to BlackBerry users, in the form of BB Messenger. No wonder, the success of WhatsApp is much greater (in terms of number of users) compared to BlackBerry Messenger. It is supported by many platforms – Windows, BlackBerry, Android etc. It has even managed to enter the territory of Apple, which is otherwise difficult to cross for a non-Apple-made application.

'What's up', the on-going homonym pun, somehow makes it easier for the youth to connect with WhatsApp (Intelligent naming).

From being a multi-purpose, user-friendly, connectivity application to allowing sharing of not only messages but also images, audio files and videos, WhatsApp is a rage. The reason is pretty obvious – From downloading it to using it, WhatsApp is free!

But then WhatsApp does cost you something. It demands an internet connection, on the smartphone handset, to be in use. Just out of curiosity, THE RESEARCHERS wonder then why should one not be as crazy about using G-talk or Yahoo messenger or AOL as well. Some of us must have heard of the 'kik' application which followed in the footsteps of WhatsApp and was a declared success. Why, all of these are free too, with the internet connection? That makes them as well equipped as WhatsApp.

## **4. TECHNICAL:**

WhatsApp uses a customized version of the open standard Extensible Messaging and Presence Protocol (XMPP). Upon installation, it creates a user account using one's phone number as the username (Jabber ID: [phone number]@s.whatsapp.net). WhatsApp software automatically compares all the phone numbers from the device's address book with its central database of WhatsApp users to automatically add contacts to the user's WhatsApp contact list.

Previously the Android and S40 versions used an MD5-hashed, reversed-version of the phone's IME THE RESEARCHERS as password, while the iOS version used the phone's Wi-Fi The researchers MAC address instead of IMEI. A 2012 update now generates a random password on the server side. WhatsApp is supported on most Android, BlackBerry, iPhone, Nokia, and Windows Smart Phones. All Android phones running the Android 2.1 and above, all BlackBerry devices running OS 4.7 and later, including BlackBerry 10, and all iPhones running iOS 4.3 and later. Multimedia messages are sent by uploading the image, audio or video to be sent to an HTTP server and then sending a link to the content along with its Base64 encoded thumbnail (if applicable).

## 5. PRIVACY:

A major privacy and security problem has been the subject of a joint Canadian-Dutch government investigation. The primary concern was that WhatsApp required users to upload their mobile phone's entire address book to WhatsApp servers so that WhatsApp could discover who, among the users' contacts, is available via WhatsApp. While this is a fast and convenient way to quickly find and connect the user with contacts who are also using WhatsApp, it means that their address book was then mirrored on the WhatsApp servers, including contact information for contacts who are not using WhatsApp. This information was stored in hashed, though not salted form and without "additional" identifying information such as a name, although the stored identifying information is sufficient to identify every contact. On March 31, 2013, the telecommunications authority in Saudi Arabia, the Communications and Information Technology Commission (CITC), issued a statement regarding possible measures against WhatsApp, among other applications, unless the service providers took serious steps to comply with monitoring and privacy regulations. One of the drawbacks of WhatsApp is that the user does not need to send a friend request to send messages to another user. However, users can block numbers on WhatsApp.

## 6. WHY USE WHATSAPP? – IT'S ADVANTAGES:

**6.1 No Hidden Cost:** Once download the application, can use it to chat as much as one want. Send a million messages a day for free! WhatsApp uses Internet connection: 3G/EDGE or Wi-Fi The researchers when available. First year FREE! (\$0.99 USD/year after).

**6.2 Multimedia:** Send Video, Images, and Voice notes to friends and contacts. The plethora of cool and funky emoticons offered by WhatsApp.

**6.3 No need to add buddies:** Adding a friend on WhatsApp is simple. Your contacts who already have WhatsApp Messenger on his/her smart phone will be automatically displayed and connected to you via WhatsApp.

**6.4 No need to Login/Logout:** WhatsApp doesn't require any 'Sign-in' or 'Log out'. No more confusion about getting logged off from another computer or device. With push notifications WhatsApp is ALWAYS ON and ALWAYS CONNECTED.

**6.5 Group Chat:** Enjoy group conversations with one's contacts. → No International Charges: just like there is no added cost to send an international email, there is any cost to send WhatsApp messages internationally. Chat with friends all over the world as long as they have WhatsApp Messenger installed and avoid those pesky international SMS costs.

**6.6 Say no to PINs and Usernames:** Why even bother having to remember yet another PIN or username? WhatsApp works with phone number, just like SMS would, and integrates flawlessly with existing phone address book.

**6.7 Offline Messages:** Even if someone miss push notifications or turn off phone, WhatsApp will save messages offline until retrieve them during the next application use. → And Much More: Share location, Exchange contacts, Custom wallpaper, Custom notification sounds, Landscape mode, Precise message time stamps, Email chat history, Broadcast messages and MMS to many contacts at once and much much more!

There can be a lot more than these. For some, it's the ease of clicking the WhatsApp icon, going to the chat with a friend and seeing when was the last time he/she was seen online on the app. For others, it's the cool way in which one can update his/her status without really bothering everyone on his/her friend list to become aware of the same by a pop-up in their respective profile ( A friend's status can be known only by going to 'View profile').

The telecom industry did not take long to realize that 'Conference call' was a much needed value added service. Hence, accepting the customer demands, WhatsApp too added a fascinating feature of 'Group Chat' in Feb 2011. Not only is it easy to create a group on WhatsApp, it is equally easy to quit the group too.

WhatsApp has constantly been adding more and more handsets to its kitty over the time and informing users of the same through its website and blog.

But fame is a double-edged sword. And so it happens that there has been a rumor taking some rounds; recently there was a hoax about WhatsApp charging a fee for its usage to the users whose screen logo did not turn red.

## 6.8 Acquisition : A \$19 billion bet by Facebook

On February 19, 2014, Facebook announced it would be acquiring WhatsApp for US\$19 billion. It will pay \$4 billion in cash, \$12 billion in Facebook shares and an additional \$3 billion in restricted stock units to be granted to

WhatsApp's founders, Jan Koum, Brian Acton, and employees that will vest over four years subsequent to closing. The transaction is the largest purchase of a company backed by venture capitalists ever. The deal happened only months after a venture capital financing round valued the business at almost \$1.5 billion.

At a keynote presentation at the Mobile World Congress in Barcelona in February 2014, Facebook CEO Mark Zuckerberg said that Facebook's acquisition of WhatsApp was closely related to the Internet.org vision. According to a TechCrunch article, Zuckerberg's vision for Internet.org was as follows: "The idea, he said, is to develop a group of basic internet services that would be free of charge to use — "a 911 for the internet." These could be a social networking service like Facebook, a messaging service, maybe search and other things like weather. Providing a bundle of these free of charge to users will work like a gateway drug of sorts — users who may be able to afford data services and phones these days just don't see the point of why they would pay for those data services. This would give them some context for why they are important, and that will lead them to paying for more services like this — or so the hope goes."

### **6.9 Popularity of WhatsApp in India :**

According to recent reports, WhatsApp's active user base has more than doubled to 430 million active users from nearly 200 million users in August 2013 and now handles around 50 billion messages (sent and received) daily. So in the industry it is believed that with such an accelerating growth volume, the cross-platform messaging platform may soon overtake the SMS!

On its growing popularity, users have cited different reasons such as its ease of use, great speed offered by the application and multiple device compatibility. Still others feel that the technology offers a cost effective way of sharing things with people in any part of the world.

- WhatsApp has been the top driver for smart phone penetration in India.
- The big appeal of this instant-messaging app that works across all smart phones was that it was nearly free - barring the low cost of a basic mobile data plan - unlike SMS text. WhatsApp did to SMS what Skype did to international phone calls.
- WhatsApp now packs in more features, while remaining clean, fast, simple. It's the preferred way to share multimedia now -- pictures, audio and video. MMS -- a version of SMS once used for multimedia -- is dead.
- Its most popular feature today is its handling of groups. That one thing takes it into the realm of social media.
- Tata Docomo too has joined hands with WhatsApp developers and launched exclusive WhatsApp data packs to offer unlimited WhatsApp usage to its subscribers for less than 20. "We have seen a decrease of about 20 per cent in SMS traffic in the recent past after our subscribers started to use mobile application like WhatsApp," the spokesperson for a telecom company said.

### **7. LITERATURE REVIEW:**

- Literature review for this paper was covered on Social Media and students performance.
- Social media has become a growing phenomenon with many and varied definitions in public and academic use. Any activities where humans share stories and influence others can be considered social networking Nicholson, (2011). Social networking or media is a great forum for discussing mutual topics of interest, and perhaps even meeting or renewing acquaintances with other humans virtually. According to Greenwald (2009) and Deloitte (2009), 55% of employees visit a social media site at least once a week.

### **8. SOCIAL MEDIA:**

- Social media can be defined as forms of electronic communication through which users interact among people in which they create, freely share, exchange and discuss information, ideas, personal messages, and other content about each other and their lives using a multimedia mix of personal words, pictures, videos and audio, utilising online platforms while they are connected to the Internet Cox & Rethman, (2011).
- Since their appearance, social media have changed different aspects of people's lives. Social media that were emerged by the rise of Web 2.0 technologies are characterised by several significant features such as user-generated content, online identity creation and relational networking Margo, (2012). According to Smith (2010), "Social media sites are virtual platforms for interactivity and information exchange ... where issues are debated and defined ... Social media users collaborate in content creation ..., are proactive in searching information ..., and value control in social media participation (p. 330)".
- Social media are also defined as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of user generated content" Kaplan & Heanlein, (2010, p.61).
- To consider some context of the ubiquitous nature of social media, Nielsen (2010) argues that social media accounts for nearly one-quarter of all internet activity, and LinkedIn has over 80 million professionals in over 200 countries. Other platforms such as Facebook, Twitter, MySpace and YouTube are available for everyone; it



was traditionally created to connect with individuals from all over the world to include employees, friends and families. However, as the number of users increase to millions, organizations are also trying to connect with employees more so than ever. Social Media has changed the way people around the globe communicate with one another. However social networking has existed right from the onset of humanity. The concept of social networking has evolved, much like other innovations, and is becoming increasingly sophisticated with advancements in technology Edosomwan, Prakasan, Kouame, Watson, & Seymour, (2011).

- Currently, there are hundreds of SNSs that can draw millions of people, with diverse technological affordances. Social network sites are web based services that enable individuals to construct a semi-profile within a bounded system, articulate a list of other users with whom they share connection with, views and go through their list of connections and those made by others within the system, although the nature and nomenclature of these connections has variation Boyd and Ellison, (2007). The ability of making it possible to meet new friends is not the major characteristics of social networking sites, but solely because the social network can be made evident due to the possibility it had been made eloquent. The outcome of these relationships of individuals that would ideally not have met each other is made possible. Although it's not the real aim, and most times new connections are usually between —latent ties Hay, (2006), they already knew each other physically. On larger perspectives, on social network sites, members are not online with the intention of discovering new acquaintances but to interact with old friends which already exist on their list. To put in more words, the social networking as an important coordinating property of these sites is titled—Social Network Sites William et al, (2009).

#### **9. USAGE OF WHATSAPP BY STUDENTS:**

- Social Networking Site is a communication tool for members. This kind of platform was designed as a way for friends, family, or strangers to have discussions and interaction or be in contact with each other. It allows members to explore new opportunities and experiences. Social Networking Sites allow students to express themselves, communicate, and collect profiles that highlight their talents and experience.
- Students are increasingly utilizing these social networks for friends' news feeds, personal updates, events and activities, notes, and messages. According to an extensive study by the Office of Communications (Ofcom) of the United Kingdom, almost half (49%) of children aged 8-17 who used the Internet had set up their own profiles on a social networking site Ofcom, (2008a); Dowdall, (2009).
- Positive perceptions obtained from users of social networking sites i.e. effective learning which has resulted in an easy learning climate among students Mazer, et al., (2010). In another study conducted by Keenan and Shirii, (2009) they explored how social networking sites encourage friendliness through the use of Facebook, Twitter and LinkedIn. The study concluded that numerous approaches can be used to encourage amiability among students which leads to a positive effect from SNSs user's point of view. In a study conducted by Mazer et al., (2007) concluded that Facebook networking site is used by students more frequently and also faculty members. Recent data obtained from Facebook through their spokesperson, showed that approximately 297,000 users are university faculty members, although there are pros and cons in each case.

#### **10.ACADEMICPERFORMANCE:**

- Tuckman (1975) defined performance as the apparent demonstration of understanding, concepts, skills, ideas and knowledge of a person and proposed that grades clearly depict the performance of a student. Hence, their academic performance must be managed efficiently keeping in view all the factors that can positively or negatively affect their educational performance. He proposed that internet is advantageous to both students and teachers if used as a tool of knowledge creation and dissemination. In addition, academic performance defined by Kobal and Musek, (2001) refers to the numerical scores of a student's knowledge, representing the degree of a student's adaptation to school work and the educational system.
- Social media, Internet-based tools that promote collaboration and information sharing Junco, Helbergert, & Loken, (2011), can be used in academic settings to promote student engagement and facilitate better student learning Kabilan, Ahmad, & Abidin, (2010). Because student engagement represents the time and effort that students invest in collaborative and educational activities Kuh, (2001), it is often linked with the achievement of positive student learning outcomes, such as critical thinking and individual student development Carini, Kuh, & Klein, (2006); Kuh, (1993).
- In the study conducted by Englander et al., (2010), he observed that students spend more time using SNSs for other purposes apart from educational use, thus affecting their academic performance. In another study Nalwa and Anand, (2003), shows that students like to use internet for their own responsibilities and this affects their academic performance. This study is further elaborated by Karpinski, (2009) where they stated that SNSs users had lower grade rankings than students who never engage in social interactions. However there are general benefits associated with users of SNSs. Roblyer et al., (2010) explained that SNSs are sources of communication

among students and lecturers in their respective faculties. Furthermore, Kolek and Saunders, (2008) resolved that users of SNSs who are students have no effect whatsoever with their academic performance.

- Despite the fact that a relatively large number of SNS including Facebook was initially created for learning purposes, there is some evidence that most SNS users show almost no attitudes towards finding academic information de Villiers, (2010, p. 175). Thus, it is possible that students are spending their time on visiting SNS instead of doing their course requirements. For example, a survey conducted by de Villiers (ibid) has shown that only an insignificant number of students (9 out of 200) who are studying at the University of South Africa
- Claimed that they were using Facebook for academic purposes. Even though more than a half of the respondents had a Facebook account (105 students), only 5% of them were involved in the learning process with the help of SNSAs Kuppaswamy and Shankar (2010) explained that the social networks grabs the total attention and concentration of the students and diverts it towards non educational, unethical and inappropriate actions such as useless chatting, time killing by random searching and not doing their jobs.
- Though there are negative perceptions about the possible effects of SNS on students' academic performance, some studies showed that students found it quite appropriate for a teacher to use Facebook, and for teachers and students to socialize by this means Baran, (2010). Students also believed that such tools could allow them to share knowledge in formal education contexts. Churchill's study (2009) showed that the use of weblogs or "blogs" (social publishing) in education facilitated a useful learning atmosphere.
- While we agree with most of the writers on both negative and positive impact of social media and academic performance, our aim was to broaden the scope of thinking of decision makers to reflect on the realities and to create and maintain a system that can change students' attitude that will promote quality image and improve upon performance in our tertiary institutions. It analyses a form of behaviour in the institutions, such that the understanding of which could contribute to the implementation of values and mission for practitioners to adopt in the interaction of students.
- After a critical review of various literatures on social media, The researchers could identify that there are gaps in knowledge as far as the negative effect of the use of "WhatsApp" and student's performance especially, in tertiary institutions in Ghana is concerned, and that merits a closer investigation. This research also demonstrates the improvement in this area in some way, filling in gaps and adding to knowledge in and understanding of this particular field.
- Preceding researches had matched that WhatsApp offers an easier and simpler way of communication than voice calls amongst the people who hail from different age groups and especially the students.
- WhatsApp application was more adjustable in meanwhile diverse segments relatively its ease of usage and accessibility, efficacy, authenticity, and cost-effective has very greatly persuaded the students.
- They now have been using it for variety of their purposes and spend the larger amount of their time particularly by weekends, in exchanging their own updates and they partly obtain the social media sites for exchanging their academic stuffs, even they are able to be deemed in the data stored and in terms of their clandestine.
- Students surf WhatsApp to tell their areas, information concerning their course and secret information sharing etc.
- In today's digital-cum- technology age, Students are involved in surfing the internet based their social networking sites like WhatsApp, Facebook, Twitter, LinkedIn and many more.
- They can be called dependant on their social media sites in terms of their entertainment, communication and especially educational activities.
- They are highly inclined to the use of their individual social media in that they easily access to the smart phones, iPad, tablets, iPhones, BlackBerry, and laptops connected to the internet. With the passage of time, social media usage is increasing among the students.
- Observation has been expressed that there are many of the purposes behind the users' approach to use social media, socialisation is some users' purpose, and whereas rest of the number of users surf it for their academic purpose in regarding fulfillment of classroom activities such as learning and teaching.
- Yeboah Solomon Tawiah assessed that WhatsApp voice call is most preferred by the students. It happens more important to them and they have concluded that voice call is a preferred choice among students than text messaging.
- Other studies also have found out that many universities and higher institutions have recently started using WhatsApp via their Smartphone in order to develop their communication through different forums, discussions and information sharing, for instance, text messaging, mobile social network and web based learning.

## **11. RATIONALE OF THE STUDY:**

### **11.1 Statement Of The Problem :**

- Now the social networking sites have billions or even uncountable users across the globe. The sites has made the world as a global village where all and sundry has an easy access to their neighbors in getting in touch with one another.
- Social networking sites, now, has named the world with integrated vehicle one. The advancement in technology has carried a tremendous popularity and growth in social networking sites which have derived the concerns within communication experts, school authorities and socio-psychological researchers towards the advantages and heavy risks to which undergraduates are facing, as they make them busy in online social networking to fill their information and social needs rather than they reach one another physically and have one to one communication.
- Pouring further the light over the dangers of social networking sites on verbal communication into their users, Sherry Turkle (2012), the founder and director of the MIT initiative on technology and self, has argued that the easiness towards the social networking sites provides the users with access to communicate with one another can detriment their interpersonal communication.
- Also, social networking sites have enabled people to see one another as objects before them. Moreover, addiction of surfing social networking sites can generate the thoughts of loneliness and can also grows the feelings of insensitivity to disconnection, according to John J. Cacioppo, a neuroscientist at the University of Chicago (Cacioppo, 2009).
- This study is concerning the trend of use of the sites, especially WhatsApp, what placement, period, routine and times the people prefer for using the WhatsApp.

### **11.2 Objectives:**

- To measure how many customers are satisfied with WhatsApp.
- To know current market scenarios of WhatsApp.
- To know customer behavior on WhatsApp.
- To know usage pattern of WhatsApp.
- To find out key success features of WhatsApp

### **12.METHODOLOGY:**

#### **12.1 Research Design Used :**

Conclusive Research Design

↓

Descriptive Research Design

↓

Cross-sectional Design

↓

Single Cross-sectional Design

Conclusive research design is more formal and structured than the exploratory design. It is use to test the hypotheses and examine the relationship. Descriptive research design is the part of the conclusive design and it describes the market characteristics or functions. It describes the characteristics of relevant groups such as consumers, organizations etc. The collection of the information from the sample population is drawn only once so it is cross sectional design.

#### **12.2 Sampling Methodology**

**Target Population:** Age group 15 to 45

**Sampling Method:** Non-probability; Convenience sampling method.

In non-probability sampling technique the chances of selection of all elements of population are not equal and convenience sampling method means sample drawn at the convenience of the interviewer people tend to makes the selection at familiar location and choose respondents who are like themselves.

**Sample Size:** 73 respondents

#### **12.3 Data Collection Methods**

**Primary Data**

Questionnaire

**Research Area**

Vadodara, Gujarat, India.

### **Data Analysis:**

Out of the 73 respondent 90.4% i.e. 66 respondents have a compatible android device to use WhatsApp and 9.6% i.e. 7 respondents do not have a compatible android device to use WhatsApp.

Which means that majority of the people in this era of technology hold a compatible devices to use WhatsApp and other applications.

Almost all of the respondents have a working internet connection which implies that if people can afford an android device they will get suitable data connection for their smart phones.

We can see from the data analysis majority of the respondents i.e. 58.9% of respondents use WhatsApp as their basic application for communication.

And 37% of the people use WhatsApp to communicate with a certain group of people only.

Only a few of the respondents use WhatsApp as a means of communication with their colleagues. This means that people use WhatsApp as their basic communication means and prefer Social messaging Apps for staying in touch with people from their phone. From the data analysis we can see that the feature of WhatsApp that people use the most is text messaging. Through this we can interpret that to communicate these days people prefer texting rather than calling/video calling.

The second most used feature is the group messages and conversations, video calling is the third most used feature and voice calling is the last. WhatsApp provides many different features, we can see in the above chart that 37% of the respondent's favourite feature is the file attachment feature.

19.2% respondents like the feature of unlimited free chats, 17.8% of the respondents like the privacy feature which allows hiding the last seen and choosing your audience for the updated status and also end to end encryption.

13.7% of the respondents like the feature of voice and video calling and 8.2% of the people like the feature of smileys. All-most every features of WhatsApp impresses respondents, but major feature which impresses respondent is sharing (e.g. video, audio, Photo, Status etc) because it allows users to send media instantly

We can see from the data analysis that more than 50% of the respondents use WhatsApp for 2 hours per day. 38.4% of respondents use WhatsApp for 5-6 hours a day which implies that they are very much active on WhatsApp and are available on the application. And there are only a few respondents who check their WhatsApp only once a day which means that most of the people use WhatsApp for 2 or more hours per day.

We can see from the data analysis that more than 50% of the respondents rated the application at 4 which means that they are satisfied with the application and its feature overall. While only 4.1% of the respondents rated the application less than 3, which implies that most of the users of WhatsApp are satisfied with it and only a few of them are dissatisfied or less satisfied with the application.

More than 50% of the respondents rated the voice/video calling as 3 which means that the feature gives an average performance. 31.5% of respondents rated the feature as 4 and 4.1% of the total respondents rated it as 5. Only 9.6% of respondents rated the feature less than 3 which means that the feature of voice/video calling gives an average performance.

Most of the respondents have rated the messaging feature of the application as 4 or 5 i.e. 45.25 and 46.6%. Only 8.2% of respondents have rated the messaging feature of the application less than 4. This implies that the messaging feature of the application WhatsApp gives the best performance and most of the people are satisfied with it.

Almost 50% of the respondents have rated WhatsApp's privacy feature as 4, 31.5% rated it as 5. 15.1% of people rated it as 3 and 5.5% of respondents rated it less than 3, which means that the privacy feature also works well. This implies that the privacy feature of the WhatsApp application gives a good performance and most of the people are satisfied with it. 91.8% of respondents agree that WhatsApp is the easiest way of instant messaging which makes WhatsApp the most used application around the globe.

### **13.FINDINGS:**

- According to survey, The researchers have found that around 87.7% people prefer Social messaging Apps for staying in touch with people from their phone. Whereas SMS & Email are less preferred now a day. So WhatsApp has overtaken traditional SMS.
- Almost 95% people use WhatsApp, so this shows that WhatsApp is most popular amongst chat applications like Facebook, WeChat.
- The features like Groups chatting, easy Sharing (e.g. Video, audio, Photo, Status etc.) and User Friendly Interface of WhatsApp have earned very much customer satisfaction, and these three features are becoming a brand identity of the WhatsApp Messenger.
- Most respondent who use WhatsApp are most satisfied with messaging feature as well as the group chats. Users are also satisfied with the voice/video calling feature and agree that they work well. The respondents are also very much satisfied with the privacy feature that is provided by the application WhatsApp.
- Satisfaction level of WhatsApp is high but it should focus on adding some new and attractive features in order to stay ahead in competition



- Few respondents say that company should allow sharing the photos, and videos of any size i.e. large file size should be allowed to send through WhatsApp.
- Peoples now a day are giving more preference to Privacy in internet. So, Social Messengers should look after the privacy of people and give good & safe social connectivity options.
- We also saw that with the increase in technology and availability of resources mostly everyone in this generation has a compatible device to use applications and also has internet connectivity to the phone.
- Due to the above stated reason, people are generally active on WhatsApp and use WhatsApp more than 2 hours per day.
- The popularity of WhatsApp has been increasing day by day. As per the findings of 'Connected Life' -- a global study of the digital attitudes and behaviors of 60,500 internet users across 50 countries, 55% are on instant messaging every day.
- In India, Facebook continues its dominance for social networking platforms with 51% of the users while WhatsApp is the most popular for instant messaging app with 56% of users, TNS said in a statement.
- People suggested that the video quality the resolution should be improved and the disturbances caused should be removed. Also the quality of the voice calls should be improved.
- Future message system was suggested by many users in the personal interviews that messages could be sent on a particular set time which would help at many occasions such as wishing on birthdays, anniversaries.

#### **14.SIGNIFICANCE OF THE STUDY:**

- The research attempts to study the user satisfaction on WhatsApp in Vadodara, specifically with reference to the individuals in Vadodara.
- The purpose of this study is to determine the consumer satisfaction of WhatsApp service
- The study reveals the importance of the features that WhatsApp provides in our regular life and how it makes daily tasks easy.
- The study on this project helped me to know the current market scenarios of WhatsApp and also variety of services that it offers to the users.
- The study helped us know whether what do users expect more from WhatsApp, also improvements are expected regarding the application features.

#### **15.LIMITATIONS:**

Following are some of the limitations of the study:

- THE RESEARCHERS considered Vadodara region only because of limited time.
- As the quantitative research was conducted using online surveys, there was minimal control over the composition of the respondents in total sample.
- Another limitation of the study is that, Findings of the study are based on the assumption that the respondents have given correct information.
- Respondent Bias was one of the major limitations of research, and there might not be perfect positive response from all the respondents.
- Limitation of this study will be that respondents who are going to be get as samples come for from different kinds of families with having their different financial backgrounds. They, hence, have different capabilities in getting technological devices such as laptops, I-pads and even smart phones as well. Students from well-being families have better access as compare to that of those who are from worse off families to internet and more various gadgets and therefore are able to do more online than those of their contemporary families.

#### **16.CONCLUSION:**

Now a day, Social media, since a good deal of time, has rapidly been entering into every sphere of life. It has now variety of shapes (Twitter, Facebook, Email, Yahoo, LinkedIn and WhatsApp) to work at the different platforms like Banks, Schools, colleges, hospitals and universities. People are now using these different social media tools for their variety of purposes. On every platform mentioned above, these tools have different usage frequency. Thus, the study was aimed at knowing the WhatsApp use, time spent on WhatsApp, favorite feature of people and satisfaction level towards WhatsApp.

From the research THE RESEARCHERS came to know about the important conclusion regarding the customer satisfaction of WhatsApp. WhatsApp has been in market for quite some time and is being used by most and offers functionality like text based messaging and files transfers. WhatsApp is clearly emerging as an alternate for SMS and MMS messaging. Demographic ratio does not affect the usage of WhatsApp. The word of mouth has given great advantage to aware the customers about the products. With increasing Smartphone market WhatsApp has captured the market but company has to keep innovating to maintain the satisfactory level of existing customers.

Because with given enough time WeChat, Line are a capable product and in the future they hold the potential to overtake WhatsApp, unless some new innovations is adopted by the world leader in messengers.

Questionnaire was sent to people and THE RESEARCHERS got response of 73 respondents which is considered as the sample size. After getting the response the analysis and interpretation of the data was done and conclusions and findings were made. People gave suggestions and put their views on what they expect more from WhatsApp. And thus the motive of the research was fulfilled.

## REFERENCES:

1. *WhatsApp Inc.* (4 August 2017). "WhatsApp Messenger". *APKMirror. Android Police*. Retrieved 27 October 2017.
2. *WhatsApp Inc.* "WhatsApp Messenger". *Windows Store. Microsoft*. Retrieved 7 August 2017.
3. *WhatsApp Inc.* "WhatsApp for Nokia S60". *whatsapp.com. WhatsApp Inc.* Retrieved 4 April 2017.
4. *WhatsApp Inc.* (26 June 2017). "WhatsApp Messenger". *BlackBerry World. BlackBerry*. Retrieved 7 August 2017.
5. "WhatsApp Messenger APKs - APKMirror". *APKMirror*. Retrieved March 17, 2018.
6. "WhatsApp Beta – Windows Apps on Microsoft Store". *Microsoft Store*. Retrieved March 8, 2018.
7. *Ainsley O'Connell (February 21, 2014)*. "Inside Erlang, The Rare Programming Language Behind WhatsApp's Success". *fastcompany.com*. Retrieved December 20, 2017.
8. "WhatsApp.com Traffic Statistics". *Alexa, Inc. October 8, 2017*. Retrieved December 10, 2017.
9. *Metz, Cade (15 September 2015)*. "Why WhatsApp Only Needs 50 Engineers for Its 900M Users". *Wired. Condé Nast*. Retrieved 2 August 2016.
10. *abcdefghijklmnop Parmy Olsen (February 2, 2014)*. "Exclusive: The Rags-To-Riches Tale Of How Jan Koum Built WhatsApp Into Facebook's New \$19 Billion Baby". *Forbes*. Retrieved January 14, 2015.
11. "WhatsApp 2.0 is submitted - WhatsApp Blog". Retrieved June 5, 2016.
12. "Three-quarters of WhatsApp users are on Android, 22% on iOS (study)". *Venturebeat.com*. Retrieved June 5, 2016.
13. "5 years of WeChat". Retrieved June 5, 2016.
14. "Snapchat". Retrieved June 5, 2016.
15. *Schellevis, Joost (January 12, 2012)*. "What's app status: van Anderen os nog steeds te wijzigen" (in Dutch). *Tweakers*. Retrieved January 12, 2012.
16. *rvdm (January 12, 2012)*. "How What's app net works". *Wire trip*. Retrieved April 7, 2013.
17. "Are my messages secure?". *WhatsApp(FAQ). Zendesk. August 15, 2012*. Retrieved January 29, 2013.
18. "PrivCo". *Privco.com*. Retrieved May 30, 2016.
19. "The Granddaddy Of Messaging Apps, WhatsApp, Finally Goes For A Subscription Model on iOS". *Techcrunch.com*. Retrieved June 8, 2016.
20. "WhatsApp, the Internet Messenger, to Become Free". *The New York Times*. Retrieved August 28, 2016.

## WEB REFERENCES:

- <http://www.WhatsApp.com/>
- <http://en.wikipedia.org/wiki/WhatsApp>
- <http://www.frost.com/c/10392/blog/blog-display.do?id=3313452>
- <http://in.news.yahoo.com/WhatsApp-19-billion-bet-facebook-050220867.html>