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"THE ETHICAL AND PRIVACY ISSUES REALTED WITH THE USE OF
WHATSAPP: A CASE STUDY IN ISLAMABAD"



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THE ETHICAL AND PRIVACY ISSUES REALTED WITH THE USE OF WHATSAPP: A CASE STUDY IN ISLAMABAD

ABSTRACT:

Privacy is considered the foremost human right all over the world, regardless of region, religion or culture. Now that the world has become a global village with the advancement in communication technology, privacy has become an endangered concept. People using the latest technology to communicate with each other are more prone to invasion of privacy through cyber-criminal activities. On acquisition of WhatsApp by Facebook in 2014, the privacy policy of WhatsApp came under fire as Facebook made changes that were unacceptable at every level of professional and moral ethics. Our aim is to explore and analyze the impact of the breach of privacy of WhatsApp users. We also conducted qualitative research to gauge the opinion of people through convenience quota sampling. For this, we conducted in-depth interviews with university students from Islamabad. The two variables that we worked on were Ethics and Privacy related to the use of WhatsApp. The results were quite unanimous regarding individual privacy as well as privacy policy of WhatsApp. The ambiguous policy statements that are present in their Terms and Conditions page is condemned by the participants vociferously. We have tried to recommend measures to take while using new technology. We have tried to assess the legal implications that are and that could be from legal point of view.

Key Words:

Facebook; WhatsApp; Privacy; Privacy policy; Ethics; End-to-end encryption; WhatsApp acquisition; Privacy breach; cyber-crime

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1 INTRODUCTION

Human being is a social animal. He thrives on the landscape of relationships with other around him, in communities and society. It has always been like that and will not change. The way of communication between individuals and groups of individuals is the only thing that has experienced changes over a period of time. People used a common place always, to gather and exchange their views, opinions and experiences. Under the trees, in pubs, cafes and clubs, all became places where people from all spheres of life, gathered. It still is commonplace in all parts of the world. It was easier for people to be social as well as keep their privacy at the same time. General definition of privacy according to The International Association of Privacy Professionals (IAPP) is: **Privacy** is the right to be let alone, or freedom from interference or intrusion. Information privacy is the right to have some control over how your personal information is collected and used. There are four kinds of privacy rights.

1. **Defensive privacy:** Kind of privacy in which financial losses are inflicted in case of its breach through phishing, conmen, identity theft or blackmailers.
2. **Human Rights privacy:** This kind is more deadly for its breach can cause physical damage in case of information gathered about your religious, cultural or political beliefs. This can become life threatening.
3. **Personal privacy:** This kind of privacy ensures your protection against intrusion and invasion of your personal space.
4. **Contextual privacy:** This type of privacy defines boundaries around you against unwanted intimacy and invasion of personal space where you become uncomfortable due to unwanted gaze or advances. (Christopher, 2015)

There is still one more kind that has become the biggest privacy issue of digital age; Information privacy. It can be defined as use of personal information present on Internet for any purpose, without the consent of its owner. This can be a subsidiary meaning of defensive privacy but it is somewhat different. This kind of privacy makes the data of the user which may include his phone number, credit card numbers and address and his or her general likings and disliking. By

using this data, unwanted advertisement messages and videos are forwarded to the user using his contacts and the sites they visit. This breach in privacy is the main privacy issue of today which has to some extent, overshadowed the rest.(Pallavi, Ganesh, July 2013)

They further stated that ground realities have changed tremendously with the introduction of technology. Digital communication has taken over the world especially; Social Network Sites (SNS) has changed the face of communications altogether. According to Wikipedia, a **social networking service** (also **social networking site**, **SNS** or **social media**) is an online platform that is used by people to build social networks or social relations with other people who share similar personal or career interests, activities, backgrounds or real-life connections. People are using these platforms to make new connections, increase their social circle and build their profile. SNS has eliminated distance between people of different cultural, religious and regional backgrounds. Information flow has switched lanes and have left road to super highway of Internet. People crave for knowledge and trends in other parts of the world and easy access to such information through Internet and Social Network Services has made it all the more easy.

According to Norman and Jamal (2006) people are living in the age of smart phones and their applications. They are connected to each other much strongly than ever before. Where it seems to be blessing to be connected and well informed than the generations before, it brought its share of pitfalls and disadvantages with it. Privacy of individual is one major issue that became focus of main concern. Privacy is every individual's basic right. It can't be revoked by any individual or government unless necessary for the greater good of the society. Information Privacy issue became center of debate in the last decade or so of Twentieth Century when people became wary of government's unwanted snooping and invasion of their privacy. Post 9/11 world brought greater problems with it as far as privacy of individual is concerned.

With the introduction of e-commerce in the world market, online shopping and business has bigger share of personal information being floated on the Internet. Now the focus of consumers' concerns has shifted from snooping government to the privacy invasion and misuse of personal information through Internet. This concern has had a major impact on e-commerce in quite an adverse manner. People mostly do not trust online shopping mechanism as it means entering personal data on Internet. This fear dictates their decision in a big way. There are people who are against tightening the noose around the sharing of data as, in their opinion this is affecting e-

commerce which is now a huge and lucrative market that can help small businesses to thrive and prosper and bring more revenue in. But the privacy policy breach and using the data of the users without their consent is an issue that cannot be ignored even if it means losing part of business investments. This is the point where many people have taken a strong stance, and rightly so. European Union and Switzerland has already passed a law for the protection of their citizens through Encryption of data. Similar legislations have also come under intense debates in United States as well to make privacy security mechanism more effective to remove consumers' concerns and expand e-commerce. (Norman and Jamal 2006)

1.1 HISTORY OF PRIVACY LAW

Work of Samuel Warren and Louis Brandeis in 1890, 'The Right to Privacy' is deemed the pioneering document with regards to consumers right to privacy. In their era, it was about print media and photographers invading the sanctity of private life and homes. Putting it in the right context, Samuel and Louis states and I quote:

"... and numerous mechanical devices threaten to make good the prediction that 'what is whispered in the closet shall be proclaimed from the house-tops,'"(Samuel, Louis 1890). This classic comparison still resonates in today's age, 125 years later and holds true for current situation. The way technology, especially Internet, has invaded our lifestyle and personal space is appalling. Privacy protection policy has ever since being pushed forward one way or another to protect the right to privacy of consumers. It has now entered digital era where, big data has taken the center stage and big data manipulation is the new kind of intrusion and invasion to one's privacy. It somewhat allowed Facebook CEO, Mark Zuckerberg to make audacious remark about the social networking trend as *Privacy is disappearing as a social norm.*(Maureen, Alexander, 2015) It is true that through social networking where everyone is sharing their pictures, dreams and aspirations; but this doesn't gives anyone the right to use their personal information and share it with a third party without the user's consent. It is the right of a human being just like the rights to life, liberty and freedom of speech. It has been included in International laws and all the individuals and companies are legally and ethically duty-bound to respect it and abide by it.

WhatsApp is one of the top most communications medium used by smart phone users. It offers Instant Messaging facility to its users without any cost, through Internet. It has revolutionized the messaging service and is way ahead of Short Messaging Service SMS introduced 20 years ago. People using Whatsapp can send instant messages to an individual or group of friends free of cost. You can share Multimedia files as well besides plain text messages. Just like any other application on Internet that uses personal information of its users, Whatsapp also uses the same information for various reasons. It is hence, implied that the privacy policy of Whatsapp should be formulated accordingly. In this study, we are going to discuss the ambiguities and disparities found in the privacy policy of Whatsapp.

There are various platforms people using these days to communicate their thoughts, aspirations and hobbies like, Facebook, Instagram, Twitter and LinkedIn etc. Trillions of users are using these Social sites. Technology of any kind has its perks but also brings its glitches with it. Same goes for the digital communication and networking. The biggest problem that the communication sector facing today is privacy. It has become almost impossible to use Social Networks and keep ones privacy secured at the same time. The compromise has to be made one way or another. This now has become a nuisance for the users of these sites and source of major concern for many. Once you type in your personal information into the Internet, it doesn't remain your sole property.

1.2 PROBLEM STATEMENT:

There is a serious underlying privacy and ethical issue which needs to be addressed and investigated which is the core purpose of this study.

1.3 PURPOSE OF THE STUDY:

The purpose of this study is to assess the ambiguities in WhatsApp's privacy policy and understanding the impact of these lapses in their policy on the users. Users are exposed to unwanted intrusion in their privacy through WhatsApp's sharing of user's data with third party. We are going to discuss the implications of such actions in the future on WhatsApp.

1.4 RESEARCH QUESTIONS

1. What is the awareness level of the target population about the privacy policy of WhatsApp?
2. What are the consequences of changes in privacy policy of WhatsApp after Facebook's acquisition, at users' end?
3. What are the ethical and legal issues associated with WhatsApp's privacy policy?

1.5 RESEARCH OBJECTIVES

1. To gauge general opinion about people's perception regarding privacy in general and privacy policy of WhatsApp in particular.
2. To understand and identify the impact of privacy breach on public, and their general reaction to the whole issue.
3. To evaluate the gravity of issue at hand and assess the corrective measures to be taken at individual as well as government level.

2 LITERATURE REVIEW

2.1 WHAT IS ENCRYPTION?

According to Margaret (2014) encryption is the mechanism of making plain text unintelligible so that it can't be used by a third party or unwanted entity. This coded script is called cipher text. The purpose of encryption is to provide protection to the users using Internet to transmit their data across to others. This is one of the tools used to provide protection to users' data that is deemed effective against prying individuals.

She further explains encryption is not something new. It's been in use for ages as a medium of coded messages used for sensitive information to be transmitted from one place to another to avoid enemies getting their hands on it. Encrypt is taken from Greek word Kryptos which means hidden secret. In ancient Egypt, this method was used by changing hieroglyphs to change the meaning. It was used by Spartans as well. Modern day coded messaging came during the world wars and now it has new role to play on the digital landscape where digital data moving across the Internet is being ciphered in order to protect the user's privacy. Nowadays, modems and SIM cards are using encryption and/or protocols like SSH and SSL/TLS to encrypt the moving data.

Encryption is not just limited to data transmitting through Internet. It has broadened its sphere and includes IoT, car locks and ATMs. All of this is deemed necessary in the light of the fact that with the advancement of technology, the hackers have also grown in sophistication. European Union has already passed law for Encryption of data concerning their citizens. It has already stirred a debate in other countries like US as well.(Margaret Rouse, Nov 2014)

2.2 WHAT IS WHATSAPP ENCRYPTION?

Ever since smart phones took over the communication industry by storm, messaging, text and Multimedia, has experienced surge of epic proportions, Henry (2017) claims that all this data is transmitted through the connection provided by the specific network provider you are using. These network providers provides you 3G and 4G connections and let you share the data. They encrypt the data transmitted but not all of it. The service providers however have nothing to do with the encryption of data on Apps like Facebook, Twitter and Facebook. They are just providing Internet to access these Apps. The encryption of data on WhatsApp is done by the App itself. It's called end-to-end Encryption.

He goes on to state that the end-to-end encryption is a very sophisticated and effective encryption model in which the App itself cannot read the data that is being transmitted on its interface. Only the sender and the recipient can read the text. The path is being encrypted from one end to the other. It took WhatsApp a long time to develop this complex code but all that time was worth it.

2.3 POST WHATSAPP-FACEBOOK MERGER SCENERIO

In February 2014, Facebook acquired WhatsApp, just like Instagram and other Social media portals (Shurti, 2014). This acquisition raised more problems rather than solving any. The biggest problem that has emerged with this union is the adverse effect on the privacy of WhatsApp users. Facebook has shown keen interest in diverting adverts towards the users of WhatsApp in order to bring business into this App which has been providing the Instant Messaging Services free of cost till now.

Facebook owner has faced lots of criticism according to Henry (2014), over the issue of policy discrepancies and illegal use of user's data to gain monetary benefits and jeopardizing the private information of thousands of WhatsApp users. The biggest reason for Facebook acquiring WhatsApp is quite logical and to be honest, very cunning. WhatsApp over the years, have become the fastest company in the history of mankind, users wise. It started gobbling up major market share of Facebook messaging and connection. This main concern compelled Facebook to

nip the problem from the bud, and hence they decided to acquire WhatsApp instead of letting it take the master share of Internet time.

Till the acquisition, WhatsApp had always been very particular about the privacy of its users. It was the only App that had used end-to-end encryption and made sure that the personal messages of the users remain personal. This scenario changed altogether with the Facebook acquiring WhatsApp. The new shift in policy came after merger and the reason was according to the blog post from 25th August, 2016 and I quote: *'to test ways for people to communicate with businesses in the months ahead'*. In accordance with the Facebook policies, WhatsApp allowed business messages transmission (Advert) to its users. WhatsApp used the following pretext to justify the updates in its privacy policy.

- Messages are from the companies that have to offer you something you are interested in.
- The things that we used to get through text messaging will be delivered to you through one platform.
- According to WhatsApp you will be seeing adverts from the companies you already know, not any new company will have access to you.
- The move which allows the sharing of phone numbers of WhatsApp users with Facebook has been justified by saying it will help them keep track of service usage and battle spam.

WhatsApp is very adamant still, on its claim of honoring the privacy of its users and claim that the personal messages of the users will still remain personal. It is further stated that your phone numbers are not shared or passed on to any advertisers (Natasha Lomas, September 2016).

Your digital identity is always at risk of hacker attacks and malpractices like phishing and impersonation. Aware and Obama (2009) state: Far too many users believe that their postings on the Internet are private between them and the recipient. The reality, however, is that once the statement is typed, it can be copied, saved and forwarded. In addition, the user no longer owns all the information posted to social networks. "So if you're using Gmail or Yahoo mail or Flickr or YouTube or belong to Facebook ... you've given up complete control of your personal information.'

The problem that is to be understood and needs to be addressed here is that when the new update came, they provided the option to agree with the new updates. If you didn't want to continue with the new update and didn't want to share your number with Facebook, there was option to opt out. If you had already agreed, within 30 days of agreeing, you had the option to change the decision. New users have to comply by the new settings. So there isn't much to offer from Facebook and Whatsapp as far as users' discretion is concerned. These inconsistencies in the policies now dictated by the Facebook have raised quite many eyebrows and needs to be addressed.

According to Natasha (2016) Germany has already taken action against this update and its consequences as Hamburg City DPA has stopped Facebook from using the data from WhatsApp for its new market-based policies. Facebook has disagreed against the ban and is appealing the decision. UK has also shown strong concerns over the breach of Privacy protection policies. According to Information Commissioner Elizabeth Denham:

“There’s a lot of anger out there. And again it goes back to promises, commitment, fairness and transparency. We have launched an investigation into the data-sharing, remembering that in 2014 when Facebook bought WhatsApp there was a commitment made that between the two companies they would not share information.”

This interview was held on 29th September, 2016 on BBC Radio 4 program. The latest update came from Information Commissioner of UK, Elizabeth Denham on 7th November, 2016 in a blog post in which she states that Facebook has rejected the idea and is unyielding on its data sharing policy. She has reported her concerns in clear statement.

“I had concerns that consumers weren’t being properly protected, and it’s fair to say the enquiries my team has made haven’t changed that view. I don’t think users have been given enough information about what Facebook plans to do with their information, and I don’t think WhatsApp has got valid consent from users to share the information. I also believe users should be given ongoing control over how their information is used, not just a 30 day window.”

ICO is working towards taking action against Facebook's persistence on sharing of users' data. The battle is on for conservation of users' rights of privacy and WhatsApp-Facebook nexus have a tough fight at their hands.(Pallavi I. Powale, 2013)

2.4 HOW TO STOP FACEBOOK FROM USING YOUR INFORMATION

If you had the knowledge about what was in store for you and you opted not to agree and you didn't press the agree button, you will not be affected by the change in policies. And if you did agree and within 30 days, you have opted out, you are safe. Now What about the rest of us who agreed and failed to bail out with in the 30 days window provided? This is the most disturbing fact about Facebook's high-handedness in the whole process.

Facebook has the history of changing policies according to Shurti, (2016), she asserts that this came as no surprise that the tall promises made by WhatsApp founders Jan Koum and Brian Actom were futile words of no consequence. On data sharing, WhatsApp stance is as quoted: *"We plan to share some information with Facebook and the Facebook family of companies that will allow us to coordinate more, such as to fight spam and abuse, and improve experiences across our services and those of Facebook and the Facebook family. For example, once you have accepted our updated Terms and Privacy Policy, we will share some of your account information with Facebook and the Facebook family of companies, like the phone number you verified when you registered with WhatsApp, as well as the last time you used our service."*

According to Naina (2016) Facebook is known for making the policies that benefit them rather than its users. Facebook fails to learn from its past mistakes like its India Campaign. Now with its \$19 billion acquisition, no wonder it is ready to make profit out of it at the expense of its users which have never been Facebook's primary concern considering its past behavior in this regard. During the high profile acquisition, all kinds of promises were hurled at the public about the autonomous nature of WhatsApp being kept and no data sharing is in the pipelines between the two social networks. But it's hardly two years passed and Facebook has shown its true colors and the real intention behind the acquisition. And to be honest, everyone deep in their hearts knew it was only matter of time considering Facebook's past record.

As stated by Michael (2014), the basis for this prolific acquisition was from the start, revenue generation. So when the deal was sealed, change in policies was always on the cards. There is another aspect to the acquisition that is not farfetched at all. Facebook was banned in China and hence, it lost its foot hold in a very lucrative market. WhatsApp not being that popular in China hasn't faced ban Michael (2014). Another benefit for Facebook out of this union comes in terms of getting its hand on the large share of market in China through another corridor. Number of WhatsApp users have hit 450 million mark and are anticipated to reach 1 billion soon. The diversion of market adverts towards WhatsApp users means large revenue earnings.

According to Chris (2014), to stay ahead of competition and to avoid being replaced by new innovative social network, Facebook made the decision for this acquisition. New generation to avoid parental interference, which became very pronounced as they also, became interested and active on this social portal, switched to WhatsApp for more privacy. Facebook couldn't just let that happen. So in a way, it is a very cunning decision and one has to give the devil its due by acknowledging business acumen of Mark Zuckerberg (Chris,2014).

Big data is a thing of present day communications advancement. Big data is being shared everyday amongst billions of people living across the globe. Handling this kind of data is very tedious job. With it, the issues of privacy, transparency, confidentiality and identity raise their head and you have to address these issues on the ethical as well as legal grounds. (O'Reilly Media, 2016) Large amount of data in form of text messages that is circling around the globe daily need to be secured from being shared or used without the user's consent. The social networks are morally obligated to respect its users' privacy and sharing of data should solely be done on users' discretion. European Union already legislated a law in this regard and has taken punitive actions against such outfits.

Facebook being one of them has proved time and again, to be very inconsistent in its policies and claims. WhatsApp now being its subsidiary has follow suite which came as a surprise for many as Co-Founder and CEO of WhatsApp has remained steadfast in his policy against commercializing his company and keep it free of advertisements. On the acquisition of WhatsApp by Facebook, WhatsApp claimed that it is going to keep its autonomous status and will not be sharing its data with its parent company. That promise took just two years to fall apart and the true nature of this merger came to the fore when Facebook stated its intentions of sharing

WhatsApp users' data and uses it for reasons that really serve Facebook's interests rather than its users. This immoral infringement of international policies regarding breach in users' privacy is committed by both companies with ratio being different for both. It's irrelevant now who did what as for now they are going to implement one policy that will govern both of them. So the disparities in their conduct and policies now make both answerable. The laws against infringements of privacy policy is intact, its implementation in this case however, is yet to be seen.

2.5 WHATSAPP'S VULNERABILITY FOR PROFILING USERS

According to Sebastian (2014) the WhatsApp Instant Messenger App [Wh14] has so far given a working and usable other option to the short messaging service (SMS). WhatsApp utilizes the web association of a cell phone to convey short messages without having to pay for it. This helped WhatsApp to emerge as one of the most successful instant messaging application. However, in the past WhatsApp was not able to provide its users with adequate security and privacy options. Despite of the fact that WhatsApp was using SSL protocol which can be used to encrypt data, up till 2011, the phone numbers and messages were transmitted unencrypted. This is just one situation whereas users were vulnerable to more harmful situation relating to their data and authentication. In a response to this finding, WhatsApp executed encryption of the transmitted information, between the WhatsApp customer and the servers, however the mobile phone number of the WhatsApp client was still transmitted as plaintext.

Hefurther explains that the assault depicted here, uses a known weakness in the WhatsApp messenger. The present usage of WhatsApp releases the PDA number, which can without much of a stretch be perused by utilizing a TCP sniffer, for example, Wireshark or TCP Dump. While the powerlessness of the spilled mobile phone number was at that point wrote about, adequate detail on when precisely this data is transmitted decoded was totally absent. Along these lines we led an investigation, demonstrating the states in which the WhatsApp messenger releases the mobile phone number, with a specific end goal to assess the practicality of recovering this basic piece of data. The test setup included both an iOS Version of WhatsApp (iOS 7.1), and the

android rendition (Android 2.11). The WhatsApp variant was 2.8.11. In the testing environment, a portable PC furnished with Wireshark was utilized, to investigate the subsequent movement. All gadgets were associated with a similar remote LAN get to point.

Sebastian(2014) adds further that Utilizing this setup, three distinct conditions of the WhatsApp application (on, sit without moving, off), and two states for the WLAN connector of the cell phones (on, off) were utilized. The states for the WhatsApp errand person application, alluded to the application running and as of now being opened by the client (on), the application running in foundation (sit out of gear), and the application not running by any stretch of the imagination (off), while on and off as states for the WLAN connector, allude to the WLAN connector of the cell phones being turned on and off. Tried mixes of these states are appeared in Figure 1. Amid the examination the state moves, which are delineated as lines in the graph, were tried, e.g. the application was turned on and the subsequent movement was examined. This test was directed with every single conceivable state, permitting the correct recognizable proof of the states, in which the mobile phone numbers are being spilled. These state moves are checked intense in the graph. The examination appeared, that the PDA number was not spilled with each WhatsApp message, but rather just when (1) WhatsApp was being turned on, or (2) the remote connector was being turned on. This yields a few confinements for the depicted assault, implying that the wireless number must be recovered, when the application of the casualty is not running, or the casualty ought not be associated with our utilized WLAN, before we begin the TCP sniffing. However, the effect of this limitation stays flawed, as e.g. WPA2 secured WLANs require any TCP sniffer to acquire the handshake of focused gadgets, before the aggressor can decode the caught movement. This implies, in WPA2 secured WLANs, the aggressor must sniff before the casualty interfaces with a similar get to point anyway. Knowing, when precisely to search for the wireless number, we are presently ready to utilize a TCP sniffer, to get this quality of the casualty. Keeping in mind the end goal to recognize the mobile phone number, we utilized TCP dump and standard expressions, to scan for numbers. Therefore TCP dump keeps running on a portable PC, dumping the caught activity of the WLAN into a document. This document is then being broke down by utilizing a short and straightforward python script, which is hunting the TCP dump for German phone numbers, utilizing a customary expression.

By utilizing this mix, it was helpfully conceivable to passively dump the traffic, while breaking down and finding the mobile phone numbers, after gathering. In this way, an aggressor can stay secured, e.g. by concealing the tablet with the TCP sniffer in a sack. The recognized PDA numbers were then parsed into a different record, permitting them easy access.(Sebastian, 2014)

2.6 LEGAL AND ETHICAL CONSIDERATIONS

WhatsApp Messenger is a proprietary, cross-platform, encrypted instant messaging client for smartphones. It uses the Internet to make voice calls, video calls; send text messages, documents, PDF files, images, GIF, videos, user location, audio files, phone contacts and voice notes to other users using standard cellular mobile numbers (Tom, 2014). It permits you to send and get images, video, audio and area based messages to people or gatherings of companions utilizing your prior data plan and at no cost says Karen and Rodrigo (2013). WhatsApp requires a portable web association with capacity and both sides must have the exclusive programming introduced on their cell phone. WhatsApp likewise gives extra social information to its users, e.g., contacts can see when their friends are on the web, when they are writing and when they last logged into the application. At last, WhatsApp gives conveyance notifications, highlighting when a message is sent and when it is delivered to the beneficiary's gadget (Karen and Rodrigo, 2013).

But there must be some way they are earning money otherwise how will it be running its operations and paying its bills. When Facebook acquired WhatsApp for approximately \$19 Billion back in February 2014 which is its largest acquisition makes you think how is it worth that much money and how are they making money? The short answer is \$1 at a time. In some countries, the app costs about \$1 to download; in others, the first year is free but, each subsequent year costs \$1. With over 700 million active users and about 1 million new users per day, yearly revenue can be estimated at \$700 million per year (Vanessa, 2015). But still this amount won't get them as much as they have paid for it which is a pretty hefty amount. So why was so much offered for WhatsApp? Because that is how much the app is worth to Facebook with 450 million users at the time of purchase, growth opportunity, future prospects, behavioral

data, contact lists, keeping the app out of the hands of competitors. All of these things have a price tag. And a hefty one, it appears (Ryan, 2014).

According to Samuel (2015) WhatsApp declared that it will begin to share information with its parent organization Facebook keeping in mind the end goal to attract adverts to the platform. Third party organizations will have the capacity to send targeted messages specifically to WhatsApp clients should they acknowledge the new terms and conditions. Facebook acquired WhatsApp in 2014 and it will now impart clients' telephone numbers to Facebook to provide commercial advertisements. It's a reasonable sign that Facebook will be monetizing its offering following a couple of years of giving a free service. It appears in the event that you pick in, Facebook will get data keeping in mind the end goal to better target you with adverts on the Facebook stage. It's a little however huge sign that the Facebook-possessed WhatsApp is conceding some of its security values (Henry, 2016). This doesn't come as a surprise as that is one of the reasons why Facebook initially bought WhatsApp in the first place as it was the fastest growing application user wise. WhatsApp has more than 900 million daily active users globally, of which 93 million live in Brazil. According to data from research firm Opinion Box, 86% of Brazilians have used WhatsApp, while other research points to more than 90%, making it the most used app in the country above Facebook.

Keeping this in mind the stats available WhatsApp is clearly doing opposite to what their CEO claimed and promised. Due to unfair policy change and deviation from original claim about the status of WhatsApp and refraining from data sharing between the two, Facebook has come under severe criticism from different sectors. The US Federal Trade Commission that sanctioned this acquisition received joint complaint from two consumer privacy groups. They have accused Facebook of unfair and deceptive practices. European Union which has already passed the law against misuse of its Citizens' data in any form has also communicated its concern about this shift in their policy. Similarly, The Electronic Privacy Information Center and the Center for Digital Democracy have also condemned the act which according to them violates an agency directive. Similarly in Canada there is a Federal legislation with name of Personal Information Protection and Electronic Documents Act (PIPEDA) which works as a watch dog regulating personal information in the private sector. PIPEDA makes sure personal information that is collected, used, and disclosed can only be done with consent of an individual to whom it belongs

and instructs every organization engaged in "commercial activities" obtaining that sort of data. Commercial activity is defined as "any particular transaction, act or conduct or any regular course of conduct that is of a commercial character, including the selling, bartering or leasing of donor, membership or fundraising lists (Domenic, 2006)

Facebook was obliged to ask its users permission for the usage of their personal data under the settlement of this acquisition with FTC, which the Facebook failed to honor. Now the agency has the power to impose fine for the violation of agreement (David and Stephanie, 2016). Fresh from battles with Apple Inc. and Google, European Union commissioner for competition Margrethe Vestager is quizzing Facebook Inc. approximately a U-turn over its use of WhatsApp client information just two years after EU watchdogs cleared the \$19 billion unconditional takeover. Vestager stated officers have been now "putting forward follow-up questions" about privacy-policy modifications announced so as to allow advertising on Facebook social network and Instagram photo-sharing web site draw on facts from WhatsApp. European Union cleared Facebook's WhatsApp acquisition in October 2014.

"That they didn't merge information wasn't the decisive element whilst the merger turned into authorized, however it turned into nonetheless part of the choice so consequently we're asking some follow-ups to discover what's going on," Vestager instructed Bloomberg information in Copenhagen. "What we're going to do with the solutions we get continues to be an open question. Vestager has targeted EU antitrust scrutiny on how massive technology companies use their market strength. Final month, she ordered Apple to pay 13 billion euros (\$14.6 billion) in again taxes to Ireland. She's formerly accused Google of abusing its role as the biggest seek engine to muscle into (Aoife and Peter, 2016).

2.7 PRIVACY ISSUES IN LIGHT OF CYBER LAW OF PAKISTAN: SHARIAH PERSPECTIVE

According to Federal Shariat court of Pakistan "Unless any element that is prohibited by Shariah is involved, a contract formation over the Internet or in cyberspace is completely legal. An agreement enforceable by law is a contract. In principle, a contract must include a proposal,

acceptance to the proposal and valid consideration”. This is the very first point of contract formation over internet in Shariah perspective. This clearly address 3 basic principles regarding any type of contract that one goes into over the internet that there everything must be well documented, accepted and the most important of all, it must be mutually conceived and agreed upon. For any contract agreement there is “price” involved which can be monetary or it can be in terms of an unwelcome experience or action or done as a condition of achieving an objective (Google). Which means one has to sacrifice or agree to something in order get their work done, but it is only right when there is no ambiguity as the it is written in the section 2.2.9 Another important feature with regard to validity of consideration under Shariah is that the contract formed has to be free from ‘gharar’ which is an Arabic word which is associated with deception, uncertainty and risk.

It is fascinating to take note of the purposes behind characterizing and securing protection around the world. In Central Europe, South America and South Africa security insurance is given to cure past treacheries; and Central and eastern European nations are either guaranteeing that laws are steady with pan-European laws or embracing laws with any expectation of joining the EU, while in Asia the reason is to advance E-commerce. The Constitution of Islamic Republic of Pakistan, 1973 under Article 14 in the chapter of Fundamental Rights, recognizes right of privacy as a fundamental right: “The dignity of man and, subject to law, the privacy of home, shall be inviolable”. Now that is a plausible statement since privacy of information and specifically that which is provided on internet must be protected and must only be used for a said purpose and not used for other purposes involving third party.

This however is very saddening to know that in Pakistan the reason for having such law involving data protection basically came from companies who have outsourced their work from the European states. This goes without saying that the European nations and the European union is pretty steadfast on ensuring data protection of their people and companies which has already been discussed when they questioned WhatsApp’s policies, however the right to privacy as accepted by Constitution of Pakistan, as well as the Pakistani law on Freedom of Information has very little or nothing to do with preserving the Islamic teachings but merely satisfy the European Union Directive 95/46.

2.8 PRIVACY ISSUES IN LIGHT OF PREVENTION OF ELECTRONIC CRIMES ACT, 2015

(b) "Access to program or information" implies access to any program or information held in any data frameworks if by making a data framework perform any function whereby a person-

- i. Alters, adjusts or eradicates the program or information or any viewpoint or ascribe identified with the program or information; or
- ii. Copies, exchanges or moves it to-
 - a. Any data framework, gadget or capacity medium other than that in which it is held; or
 - b. To an alternate area in a similar data framework, gadget or capacity medium in which it is held;

(y) "Unapproved" for the reasons for segment 3 should mean access of any sort by any individual to any data framework if-

- i. He is not himself qualified for control access of the specific kind or sort being referred to as for a data framework; and
- ii. He does not have assent of the individual qualified for concede such assent, for the specific kind or sort of access being referred to as for a data framework;

Given that entrance in practice of forces under segments 19, 21, 23, 30 and 48 might not be considered to be unapproved;

(z) "Unapproved" for the motivations behind area 4 should mean access of any sort by any individual to any program or information if -

- i. He is not himself qualified for control access of the specific kind or sort being referred to as for that program or information; and

- ii. He does not have assent of the individual qualified to give such authorization, for the specific kind or sort of access being referred to as for that program or information:

Given that entrance to program or information in practice of forces under segments 19, 21, 23, 30, 32 and 48 might not be esteemed to be unapproved;

(za) "Unapproved act" implies in connection to a data framework, a program or information, a demonstration where the individual doing the demonstration or making it be done __

- i. Is not the individual with the duty regarding the data framework;
- ii. Is not the individual who is qualified for figure out if the demonstration might be done.

In 2015, Prevention of Electronic Crime bill was passed in National Assembly. There are clauses present in the Bill that clearly describes the act of unauthorized access and usage of data of another user without his consent will be considered a crime which is punishable by law. They have described in detail about different ways of data usage and that usage of data without the consent of the owner is illegal.

In clauses (y)i and (y)ii, definition of misuse of data is clearly stated as the person either isn't entitled to the usage of the said data and/or doesn't have consent of the owner of the data. Clause (z) and its sub clauses also further elaborate the previous clause. It is quite clear and have no ambiguity in its statement.

So framework of law is there in Pakistan as well. Need of the hour is to implement these laws and show no leniency in its administration.

European Union has already passed Encryption Law protecting data of its citizens along with Switzerland. Germany has taken strong stand against data sharing without users' consent. UK has started taking this breach seriously and has forwarded formal complaint with the concerned parties. In US, this issue is being debated amongst the consumer rights watchdogs and other outfits.

3 RESEARCH METHODOLOGY

3.1 METHOD OF RESEARCH

We are conducting a primary research in this study. What we are studying here is already being explored on global scale. We are using new set of data and demographics in Islamabad Pakistan to explore the same topic again making it a primary research.

We have adopted the qualitative research methodology whereby we will try to measure the level of understanding of people in Islamabad regarding the privacy and ethical concerns related with the use of the famous messenger application WhatsApp.

3.2 NATURE OF RESEARCH

The nature of the study is exploratory. The purpose of the study is to explore the unidentified area, on which very less research has been done in Pakistan whereas globally this issues has been explored and talked about. This study is totally from the Pakistani perspective and to identify the user's point of view residing in Islamabad in particular. The exploratory study is qualitative in nature and involves interpretation of data collected from interviews and questionnaire. Qualitative research is the best method to understand complex nature of human experience. Moreover, ideally collected qualitative data are comprehensive, rich and are holistically analyzed and understood (Walker, Cooke & McAllister, 2008).

3.3 RESEARCH DESIGN

The method of research as explained above is qualitative and, which is the best method for this type of study. Qualitative research results into non-standardized data while Quantitative research generates standardized data (Saunders, Lewis & Thornhill, 2007). From marketing point of view, the research design is a blueprint or framework for conducting the research that explains the procedure required to gain the information required to solve or/ and structure the research problem (Malhotra, Agarwal, & Peterson 1996).

There are generally two major types of research design i.e. conclusive and exploratory. Just like this study the exploratory is used to explore the problem situation through ideas and insights into the problem. The tools used for data collection for this type of method are in-depth interviews, analyzing documents and texts, focus groups, and audio video recording (Silverman, 2006).

3.4 SAMPLING TECHNIQUE

The research would be conducted through in-depth interviews and the respondents will be selected through non-probability quota sampling technique. The basic criteria for the quota sampling selected here is education level and in that the respondents must be at least Undergrads. In this technique the sample generated is not random however; it can involve an element of being judgmental. The target population is individuals of Islamabad where the study is conducted.

3.5 SAMPLE SIZE

The sample size for this survey was 10 and it comprised of students from different universities of Islamabad. This included full time students and even students from executive batch who are working as well.

3.6 DATA COLLECTION

The method use for data collection in this research is in-depth interviews with the users of WhatsApp and also who are using Facebook. For this reason questionnaire are formed that are open ended. In-depth interview is conducted in qualitative method research to understand a small number of respondents to take their opinion on a specific topic (Mack, Cynthia, Macqueen, Guest, &Namey, 2005). It also helps to understand the real thinking of respondents. Through this research we tried to get the opinion, knowledge and feel about the privacy concerns related with the use of WhatsApp and the implications after the record breaking acquisition by its now parent company Facebook. Questions are not that difficult so that the users can easily understand and reply. The interviews are recorded and then transcript is formed and on that basis different themes are formed.

3.7 ETHICAL CONCERNS

Considering the sensitivity and importance; all ethical apprehensions have been addressed and made sure to be taken care of before starting the interview to the participants. The aim and purpose of the study was told to the respondents along with the basic theme of the research so that they have a clear idea of what it is all about. Their names and identity as discussed and promised will be kept confidential; reason is that they should not feel hesitant to openly share their views and comments. But they were told that the answers in relation to the context and interview taken would be shared only with the evaluator's report, as was the requirement.

4 ANALYSIS

4.1 THEMES

This chapter will analyze the data that was gathered from the in depth interviews. Themes were established on the respondent's answers, observations and knowledge from the in depth interviews and three significant themes have been recognized.

1. Awareness level of target population about the privacy policy of WhatsApp
2. Consequences of changes, in privacy policy of WhatsApp after Facebook's acquisition, at users' end
3. Stance of target population on the legal implications of duplicity of Facebook in its privacy policy

4.2 AWARENESS LEVEL OF TARGET POPULATION ABOUT THE PRIVACY POLICY OF WHATSAPP

This theme showcases the general awareness and notions about privacy among people who were chosen to be interviewed. It basically was devised to gauge general opinion about people's perception regarding privacy in general and Privacy Policy of WhatsApp in particular. We aim to get perspectives of different people who use latest technology about the privacy issues that arises with its usage.

4.2.1 FOR HOW LONG HAVE YOU BEEN USING WHATSAPP?

80% of the respondents to the interview said they started using WhatsApp as soon as they came to know about it or when their peers invited them to join. Only 20% were new users of

WhatsApp. They switched from other chatting portals as they found it much more effective and had wider coverage than any other portals in the business of telecommunications. So it came to them as an unpleasant surprise when they came to find out that they left their previous chatting portal for the company whose liaison with another social media has compromised their privacy.

A participant, who changed her phone from simple one to smart phone, was very vocal about her dismay. According to her, and I quote:

'I switched the phone and was really excited about using WhatsApp as a chatting and communicating medium. All my friends and family members are on this portal. When I came to know about the privacy issue, I was very disappointed. I am very apprehensive about my privacy and don't like my contact to be used without my permission.'

Another participant, whose family members lived abroad, responded as such:

'WhatsApp is a blessing as I can talk to my relatives through it without any charges. Similarly, we can share all kinds of multimedia files as well. My mother is happier to have this facility than anyone I know. We have been using this portal for almost five years now.'

4.2.2 WHAT DO YOU KNOW ABOUT PRIVACY?

When asked about this particular concept, turnout was almost perfect. 9 out of 10 people had general idea about concept of privacy. They had clear idea about where the line should be drawn as far as their personal information sharing is concerned. 5 out of 10 people were very vocal and thorough about their privacy and its value to them. Like one interviewee said, *'I am very particular and obsessed with my privacy. I don't want anyone prying on me. I don't share my cell number even with the sales persons in shopping malls as I don't want anyone other than the people I know to have my personal number.'* Others were well aware of privacy but were not very particular about the sharing of their personal information. Overall, people had very clear know-how about the concept of privacy.

4.2.3 WHAT DO YOU KNOW ABOUT PRIVACY POLICY OF WHATSAPP?

7 out of 10 people knew about the privacy policy of WhatsApp. They had general idea about the new update and change in policy of WhatsApp. 4 out of them knew about the discrepancies found in the Privacy policy statement of Facebook and WhatsApp alike. 5 out of them pressed Agreed button after the updated policy was placed forward for the users. Only 2 of them were able to change the option before 30 days window closed. The people, who failed to choose out of the agreement, when told about the 30 days window, were outraged. All of them thought it to be very unethical move on part of Facebook. One of them said, and I quote, 'If they really were that open towards giving us a choice, they really made little effort in making it available easily to general public most of whom, had no idea about this whole issue.' The debate during the interview attracted attention of people around the participants as well. The concern was unanimous about the divergences evident in the Privacy policy statements of both, Facebook and WhatsApp. Due to constraint of time and resources, further interviews couldn't be conducted, but general opinion was quite obvious and vocal. Majority showed their reservations about the discrepancies in Facebook and WhatsApp stance on the whole issue and their self-interested behavior about the whole thing.

ANALYSIS

After conducting these interviews with people who were students in colleges and universities and were well versed with the latest technology and avid users of WhatsApp and Facebook, their opinions on privacy issue were unanimous and were very clear and blunt. Almost everyone was very particular about their privacy. They were of the view that privacy is their top priority and they will not tolerate any compromise as far as their privacy is concerned. Similarly, a large percentage of participants knew about the privacy policy of WhatsApp and the changes in it after Facebook's acquisition. The way to deal with the discrepancies in Facebook's policies differed considering perspectives of people. Mostly people had shown their apprehension about the compromise of their privacy. Very nominal number of people didn't agree or were able to bail out of the deal by disagreeing to their new policy. Majority now, have

to go along with the new policy. But they have unanimous stance over this duplicity shown by both, WhatsApp and Facebook.

4.3 CONSEQUENCES OF CHANGES, IN PRIVACY POLICY OF WHATSAPP AFTER FACEBOOK'S ACQUISITION, AT USERS'S END

This theme is devised to understand and identify the impact of privacy breach on public and their general reaction to the whole issue. It is particularly formulated to investigate the severity of this issue and how much people take it seriously. It is to assess existing awareness about the duplicity in WhatsApp privacy policy and first hand opinion of WhatsApp users.

4.3.1 ARE YOU COMFORTABLE WITH GETTING MESSAGES FOR YOUR BANKING AND FLIGHT DETAILS USING INFO FROM WHATSAPP?

7 out of 10 sampled participants had shown their discomfort with the usage of their personal information to get these facilities without their prior permission. 3 out of them wanted these kinds of notifications from their banks or flight plans but directly from the concerned outfits rather than through Facebook or WhatsApp information gathering. 4 out of them conditionally agreed with provision of such facilities; condition being their contact number is not shared any further. According to one participant, this kind of advertisements forwarded to them through info collected from their numbers, becomes quite annoying. The need to have facilities through advancements of technology of communication is not lost on anyone, as the participants of the interview were really into latest technology and had in depth knowledge about new technology being introduced. But they were very wary of the lapses in the security measures of Facebook and WhatsApp with regard to users' personal information. Their primary concern was with the private information sharing with other parties without their consent.

4.3.2 WHICH ONE DO YOU PREFER, PRIVACY OR CONVENIENCE?

This question divided the participants equally on both ends. Half of the participants were the ones who loved the idea of using online facilities to the max, especially for shopping for their favorite goods from market without leaving the comfort of their homes. They don't think usage of their personal information by Facebook is such an alarming phenomenon as they already are on social media which is a global entity and they are not living isolated from the rest of the world so there is no need to create unnecessary hype about a problem that don't really exists. Half of the sample population was of opinion opposite to this approach. They were very mindful of their privacy and would rather forsake convenience than their privacy and sharing of their personal information with unknown users. Like, one of the participants had the view, that the recurrences of the ads that are related to their searches become very annoying and trying most of the times and it becomes unbearable.

'Without any provocation, when these ads come popping in your face, really ticks me off! I don't shop online at all. I want to go myself and ensure the quality of my purchase in person. So imagine my annoyance when these ads come popping on my face whenever I try to scroll down on Facebook.'

4.3.3 WERE YOU AWARE OF THE FACT THAT YOUR PRIVACY HAS BEEN COMPROMISED IN THE NAME OF CONVENIENCE?

4 out of 10 people answered in affirmative to this question. Rest of them had no idea about such unfortunate scheme of things. 3 out of them say they were told about it when it was too late to change their privacy settings. Almost all of them considered this as unethical conduct on part of Facebook and WhatsApp. 2 of them knew about the background of this deal between two social giants and how the compromise was made at users' expense. Rest of them, which made the larger part of the divide, had no idea about the real deal behind the whole thing. Shopping online and getting different facilities online has become very popular amongst people and this kind of collective knowledge about the things they love is always a welcome sight. But using this information to bring commercialization to WhatsApp without users' approval is condemned equivocally by all present. As one of them puts it:

'I love online shopping. It is convenient and through Internet, I can gather more information about my favorite brands and just order my pick. The hassle of wandering in bazaar is skipped easily. But when the same page start bombarding you with other things similar to ones you pick, can really be bothersome.'

ANALYSIS

The collective point of view of the participants of this qualitative research is very clear. After analyzing the whole data that was collected after interviewing learned population frequenting colleges and universities, it is quite clear that people are well aware of their rights of privacy. Higher percentage of people was deeply affected by this untoward turn of events since Facebook's acquisition of WhatsApp. 40% knew about the acquisition and the problems it brought with it. Even lesser percentage was able to bail out of the whole deal. People who want to enjoy convenience of online shopping have shown moderate concern pertaining to breach in privacy policy, but that percentage is quite low.

4.4 STANCE OF TARGET POPULATION ON THE LEGAL IMPLICATIONS OF DUPLICITY IN WHATSAPP'S PRIVACY POLICY

The third theme that we chose is to evaluate the seriousness of the compromise that has been made as far as privacy of WhatsApp users is concerned. The questions asked in this theme were aimed at gauging the general resolve of participants to protect and ensure the protection of their policy through punitive measures taken. It was also conducted to know about the opinion of people regarding what kind of measures that should be taken.

4.4.1 WILL YOU STILL BE WILLING TO USE THESE APPS AFTER KNOWING ABOUT THIS PRIVACY BREACH?

The answer to this questions got sheepish but resonating response in affirmative. Despite the fact that WhatsApp and Facebook have unethically breached the privacy of its users, people were

willing to use these Apps. According to them, getting the chance to connect with the loved ones without any charges is too precious a facility to condemn. According to one participant:

'Call charges that my brother had to pay in the past for making calls back home were phenomenal. But now with WhatsApp, we are talking all the time. So discontinuing its usage is unimaginable, at least for me.'

The most resounding reason for continuity of its usage was that there were many other pressing problems in front of Pakistanis to address so they don't think this is that much of any consequence considering current fragile economic situation of the country.

4.4.2 DO CYBER LAWS IN PAKISTAN NEED TO BE MORE AFFECTIVE TO ESTABLISH MECHANISM OF CHECK AND BALANCE ON PRIVACY BREACH?

This question was somehow met with more sarcasm than serious replies. People generally were very wary of the laws and their implementation rate in Pakistan. But still, 70% of the participants thought that it would be a positive step if taken by the government, although they were doubtful about government's commitment level. 30% of the participants had passive approach and considered it a futile effort just like any other laws passed in the country. As one participant puts it, *'There are people yearning for truth and justice for decades. Our laws are hardly implemented. So no matter how many affective laws are legislated, without proper implementation they are just pieces of papers.'* Participants had general idea about such laws being passed on international level such as EU and Germany.

4.4.3 WHAT WILL BE YOUR REACTION IF GOVERNMENT OF PAKISTAN BANS THE USAGE OF THESE APPS IN PAKISTAN AS PUNITIVE MEASURE AGAINST THEIR DUPLICITY?

Reaction to this question was resounding disapproval. 100% of the participants of this interview were against the ban. They were apprehensive about the breach of privacy rights, but they

thought banning the Apps altogether is not the answer. One of the participants suggested taking the middle way out of this problem. *'I think banning of the Apps is not the solution as it will deprive us of many facilities altogether. I think government should talk to the management of Facebook and WhatsApp and make them change their policy to cater to the security of users' privacy.'*

Participants were of the view that WhatsApp has revolutionized communication by providing it free of cost. It has made it possible and more convenient for them to talk to their loved ones, especially with those who are living abroad. Economic factor fared high in reaction to this question amongst the participants.

ANALYSIS

Overall reaction of participants to this theme was mixed. On one hand, they were wary of Facebook's duplicity. On the other, they didn't want to discontinue the usage of the Apps in question. They wanted laws to be implemented against such unethical behavior but didn't trust the system much with its implementation. The most resounding factor in this conversation came out to be economical benefits that WhatsApp has to offer to its users. They had this view, that companies should be disciplined by notifying them about users' concerns but banning the Apps altogether is not solution to the problem. In fact, in their view it would deprive the public of numerous facilities and features these Apps have to offer.

5 CONCLUSION & RECOMMENDATIONS

5.1 CONCLUSION

This study was conducted to bring forth, the disparities and inconsistencies in the privacy policy of WhatsApp and the adverse role of Facebook in this whole scheme of things. We have used two variables as the basis of our study; ethics and privacy. Keeping in view the kinds of reactions that our interviews attracted, the overall awareness about privacy and privacy related issues with WhatsApp and Facebook is evident. People are well aware of their privacy rights. Some are very vocal and possessive about them, others have moderate stance. Targeted population is avid user of WhatsApp and Facebook and is well aware of the privacy policy of these Apps and changes in their policy after the acquisition. Only nominal number of people either chose not to agree with the new policy or been able to bail out within 30 days of the update. They have shown general consensus on their concern over this breach of policy and they have shown categorical apprehension over it. There was a considerable percentage of people who wanted to avail these facilities of online shopping and getting notifications about latest deals on the offer; but they were apprehensive about their privacy security at the same time. Almost entire targeted population was of the view that ban on such Apps is not the solution and they would continue their usage despite the fact that their privacy has been compromised and they know about it. Economical factor came out as a strong reason behind their stance as the free of cost chatting and calling facility provided by WhatsApp makes it a necessity rather than a luxury nowadays. People wanted legal action to be taken against such unethical behavior but were not very sure about the commitment of the system to implement the law properly.

5.2 RECOMMENDATIONS

The basic aim behind conducting this qualitative research is to highlight the pertinence of ethics and privacy issues that WhatsApp's users have to face after the acquisition of WhatsApp. The recommendations are made in order to suggest and evaluate the future actions that can prevent any further abuse of consumer rights.

1. It is highly recommended that people should read the Terms and Conditions before installing or using any App or technology, especially the privacy policy to make sure your private information is in safe hands.
2. While doing online shopping, people should be very discreet about sharing their personal information on shopping website and avoid unknown domains.
3. Before agreeing on any provisions of any site, you should be very clear about what you are agreeing to. You may not be able to change your choice once you have agreed with their policy.
4. It is highly recommended to the Government of Pakistan to take necessary legislative actions against such duplicity taking after the concept of EU and Germany's legal framework against such high-handedness.
5. Sharia Law also encompasses this topic and have clear instructions on the privacy and ethical duties regarding the use of data belonging to the other users. So it is recommended that these laws are seriously and strictly implemented to help eradicate this illegal and unethical practice once and for all.

6 REFLECTIONS

I came to know about the breach of privacy policy by WhatsApp and their ambiguous policy statements last year. At first, I agreed to their Terms and Conditions just like others but was able to bail out of the deal in time. But most people couldn't. This irked me a lot and I studied this issue in detail, particularly the entire Privacy Policy of WhatsApp. Especially after Facebook's acquisition of WhatsApp, ambiguities in the Privacy Policy came as no surprise to me as I have witnessed the loopholes in their own Privacy Policy that they offer for their specific App users. This was unacceptable for me to know about this unethical practice and do nothing about it. It was a God sent opportunity when I was supposed to pick up a topic for my thesis. I found a perfect platform to share my knowledge with others and know about the opinions of others as well, on this pressing issue.

The only challenge that I had to face was during the sampling which took more time than anticipated. Limitations of resources prohibited me from conducted more comprehensive research but still, the one I was able to achieve amply sheds light on the gravity of this issue. It goes without saying that more research and attention is needed in addressing this issue which directly or indirectly, effects each and every one of us.

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APPENDEX A

QUESTIONNAIRE

- 1. For how long have you been using WhatsApp?**
- 2. What do you know about privacy?**
- 3. What do you know about Privacy policy of WhatsApp?**
- 4. Are you comfortable with getting messages for your banking and flight details using info from WhatsApp?**
- 5. Which one do you prefer, Privacy or Convenience?**
- 6. Were you aware of the fact that your privacy has been compromised in the name of convenience?**
- 7. Will you still be willing to use these Apps after knowing about this privacy breach?**
- 8. Do cyber laws in Pakistan need to be more affective to establish mechanism of check and balance on privacy breach?**
- 9. What will be your reaction if Government of Pakistan bans the usage of these Apps in Pakistan as punitive measure against their duplicity?**

APPENDIX B

PRIVACY POLICY OF WHATSAPP

Key Updates

Respect for your privacy is coded into our DNA. Since we started WhatsApp, we've built our Services with a set of strong privacy principles in mind. In our updated Terms and Privacy Policy you'll find:

- Information that is easier to understand. Our updated Terms and Privacy Policy are easier to understand and reflect new features such as WhatsApp Calling and WhatsApp for web and desktop.
- We joined Facebook in 2014. WhatsApp is now part of the Facebook family of companies. Our Privacy Policy explains how we work together to improve our services and offerings, like fighting spam across apps, making product suggestions, and showing relevant offers and ads on Facebook. Nothing you share on WhatsApp, including your messages, photos, and account information, will be shared onto Facebook or any of our other family of apps for others to see, and nothing you post on those apps will be shared on WhatsApp for others to see.
- Your messages are yours, and we can't read them. We've built privacy, end-to-end encryption, and other security features into WhatsApp. We don't store your messages once they've been delivered. When they are end-to-end encrypted, we and third parties can't read them.
- No third-party banner ads. We still do not allow third-party banner ads on WhatsApp.
- New ways to use WhatsApp. We will explore ways for you and businesses to communicate with each other using WhatsApp, such as through order, transaction, and appointment information, delivery and shipping notifications, product and service updates, and marketing. For example, you may receive flight status information for upcoming travel, a receipt for something you purchased, or a notification when a delivery

will be made. Messages you may receive containing marketing could include an offer for something that might interest you. We do not want you to have a spammy experience; as with all of your messages, you can manage these communications, and we will honor the choices you make.

- The choices you have. If you are an existing user, you can choose not to have your WhatsApp account information shared with Facebook to improve your Facebook ads and products experiences. Existing users who accept our updated Terms and Privacy Policy will have an additional 30 days to make this choice by going to Settings > Account.

Managing Your Information

If you would like to manage, change, limit, or delete your information, we allow you to do that through the following tools:

- Services Settings. You can change your Services settings to manage certain information available to other users. You can manage your contacts, groups, and broadcast lists, or use our block feature to manage the users with whom you communicate.
- Changing Your Mobile Phone Number, Profile Name and Picture, and Status Message. You must change your mobile phone number using our in-app change number feature and transfer your account to your new mobile phone number. You can also change your profile name, profile picture, and status message at any time.
- Deleting Your WhatsApp Account. You may delete your WhatsApp account at any time (including if you want to revoke your consent to our use of your information) using our in-app delete my account feature. When you delete your WhatsApp account, your undelivered messages are deleted from our servers as well as any of your other information we no longer need to operate and provide our Services. Be mindful that if you only delete our Services from your device without using our in-app delete my account feature, your information may be stored with us for a longer period. Please remember that when you delete your account, it does not affect the information other users have relating to you, such as their copy of the messages you sent them.

Law And Protection

We may collect, use, preserve, and share your information if we have a good-faith belief that it is reasonably necessary to: (a) respond pursuant to applicable law or regulations, to legal process, or to government requests; (b) enforce our Terms and any other applicable terms and policies, including for investigations of potential violations; (c) detect, investigate, prevent, and address fraud and other illegal activity, security, or technical issues; or (d) protect the rights, property, and safety of our users, WhatsApp, the Facebook family of companies, or others.

Our Global Operations

You agree to our information practices, including the collection, use, processing, and sharing of your information as described in this Privacy Policy, as well as the transfer and processing of your information to the United States and other countries globally where we have or use facilities, service providers, or partners, regardless of where you use our Services. You acknowledge that the laws, regulations, and standards of the country in which your information is stored or processed may be different from those of your own country.

Updates to Our Policy

We may amend or update our Privacy Policy. We will provide you notice of amendments to this Privacy Policy, as appropriate, and update the “Last Modified” date at the top of this Privacy Policy. Your continued use of our Services confirms your acceptance of our Privacy Policy, as amended. If you do not agree to our Privacy Policy, as amended, you must stop using our Services. Please review our Privacy Policy from time to time.

Privacy policy and user data

WhatsApp cares about your privacy. WhatsApp Privacy Policy describes our information (including message) practices, including the types of information we receive and collect from you and how we use and share this information. You agree to our data practices, including the collection, use, processing, and sharing of your information as described in our Privacy Policy,

as well as the transfer and processing of your information to the United States and other countries globally where we have or use facilities, service providers, or partners, regardless of where you use our Services. You acknowledge that the laws, regulations, and standards of the country in which your information is stored or processed may be different from those of your own country.

