

CHAPTER 1

INTRODUCTION

1.1 Internet: A boon

The internet has transformed the world of computer and communication with its unique power to connect with people from anywhere on the globe. Scholars believe that the earlier inventions like the telegraph, the telephone, the radio, and the computer had provided a platform for internet by integration of its capabilities. It has made world-wide broadcasting possible, eased up information dissemination and also function as a channel for collaboration and interaction between the people without any geographical barriers. It is considered one of the successful inventions in today's information and technological world. The impact of the internet is not only restricted to the technical field but also affected the whole world. The Internet's history is complex and involves many aspects - technological, organizational, and community. The technological aspects include the performance and functionality of the internet whereas the organizational aspects include the operation and management of the internet. The community aspect is a social aspect that builds a community of internet users who creates and expands the technology. Another aspect is the commercialization of the internet. (Leiner et al., 1997)

It is not wrong to say that the internet has broadened the horizon of communication and provided advanced facilities to its users in comparison to other media. Devices like mobile phones, computers, and laptops are required to access the internet. The users should have one of these devices and also the internet connections to access it. The growing need of internet at every sphere of life and increasing number of internet users are pressurizing the service providers like telecom companies and mobile phone as well as the computer manufacturing companies to provide internet access in budget-friendly prices. It has connected the whole world and eased up the everybody's life. It has given new prospects of expanding the knowledge of individuals and became a helping hand to internet users viz. students, professionals, businessmen etc. Students can learn new things on the internet. E-learning has become an emerging trend in higher education all over the world. Apart from e-learning, individuals can also consult experts like doctors, scientists, psychologist, agriculturist, astrologists and so on. Not only the learning and expertise, but the internet has also provided a platform for artists like writers, singers, actors to

showcase their skills and art. The Internet has a wide scope for its users to use it. Internet should be accessed used securely and safely to gain quality experiences. It is definitely a boon for the society but only if accessed and used properly.

1.2 Brief History of the Internet

The internet was first used in 1969 when a team of defence engineers at the University of Los Angeles-California (UCLA) sent the first instant message via computer to another team thousands of miles away at Stanford University. The first nod of ARPANET (Advance Research Project Agency Network) was set up by defence engineers in the UCLA. It was funded by the Department of Defence's Advance Research Projects Agency (DARPA) in order to connect the large computer systems to share software, information and storage space. In 1974 the term "Internet" first appeared in print by DARPA. It was the time when universities, science centers, and army installations started connecting through the internet. Later in the year 1983, The Domain Name System (DNS) was invented. It is a system that translates the domain names into IP (internet protocol) address. In 1985, The National Science Foundation (NSF) funded construction of Arpanet's biggest upgrade the NSFNET. It was a command hub of five supercomputers to serve as highways for all data traffic. NSFNET could transmit data at 56 kilobits per second. The 'World Wide Web' was made up by Tim Berners-Lee in 1990. He invented HTML and a text browser, as well as a hypertext graphical user interface (GUI) browser. Then he established the first successful communication between a Hypertext Transfer Protocol client and a server via the Internet. These led to the invention of Web pages. However, 1994, Jeff Bezos founded Amazon that brought the revolutionary world of e-commerce. In the year 1995 NSF stopped funding the Internet altogether and hence it became a complete self-sustaining industry (Intetics Inc., July 2014). This was the year when the Videsh Sanchar Nigam Limited, India launched internet in India. After a decade the social media revolution ignited with the launch of Facebook and Youtube. In India, people started using the internet over personal computers at their home and internet cafes. In 2007 the mobile technology hit the telecommunication world and by then the internet was available over wireless signals. Since 2008 mobile internet revolution had begun in India with GSM (2G), later the upgraded 3G data services were made available by private telecom companies in the year 2013-2015 and now the

4G data services are available at affordable prices. The following is the brief history of the internet at a glance-

Figure 1 History of the Internet

1969	A team of defence engineers at the University of Los Angeles-California (UCLA) sent the very first instant message through the computer to another team sitting thousands of miles away at Stanford University.
1974	The word “Internet” first appeared in print. Universities, science centers, and army installations got connected through the internet.
1983	The Domain Name System (DNS) was invented.
1985	The National Science Foundation (NSF) funded construction of the NSFNET. It was a command hub of five supercomputers to serve as highways for all data traffic. NSFNET could transmit data at 56 kilobits per second.
1990	Tim Berners-Lee invented HTML and a text browser, as well as a hypertext graphical user interface (GUI) browser. Web Pages came into existence. The term “World Wide Web.” was coined.
1991	Commercial enterprises were allowed to use the Internet for the first time.
1994	A whole new world of e-commerce was born with Amazon
1995	Internet became a completely self-sustaining industry. Java language was developed. Internet launched in India by VSNL.
1998	Google opened its first office
2004-2005	The social-media revolution had begun with the launch of Facebook (in December 2004) and YouTube (in the year 2005). By 2005 India had 200,000 cyber cafes to access the internet.
2006	“Cloud Computing” was introduced by Google.
2007	Internet was available through wireless technology. Mobile and smartphones technologies went commercial and grew rapidly.
2009	Mobile data traffic exceeded voice traffic every single month. “Check in” at locations all over the world started. WhatsApp was launched and brought the revolution in instant messaging.
2010	Registered domains number reached 200 million. Apple launches iPad. 4G wireless networks launched in the US. Instagram and Pinterest launched.
2013 – 15	Apple Watch was launched. Mobile Internet surpasses desktop. 3G Data Service made available in India.
2016	Reliance Jio launched 4G data service at affordable and lowest price.
2017	The rapid growth of Internet users with more than 481 million internet users by the end of 2017.

(Sharma, July 2016; Internet Society, 2015; Intetics Inc., July 2014)

1.3 Use of Internet For Different Purposes

The Internet is today one of the most important parts of our daily life. There are large numbers of things that can be done using the internet and so it is very important. Today internet is used for different purposes depending upon the requirement.

1.3.1 Communication

The most popular thing for which internet is used is to communicate with the people. It has allowed people to communicate not only through text but also through their voice and face to face via voice calling and video calling respectively. It has become very easy to contact the loved ones from any part of the world. Therefore it can be said that communication is the most precious gift from the internet to its users. People commonly use it for emailing, connecting through social networking sites like Facebook, Twitter, Instagram etc.

1.3.2 Education and Research

Education is one of the best things that the internet can provide. There are a number of books, reference books, online help centers, expert's views and other study oriented material on the internet that can make the learning process very easier as well as a fun learning experience. There are virtual classrooms from which one can learn the specific topic. There are a vast variety of tutorials available on the internet using which one can learn different topics easily anywhere-anytime. Education through the internet is the best use of it. Reviewing is the most important part of the research. With the help of the internet, researchers can avail the facility of reviewing publications and research papers online. There are different search engines, gateways, and e-libraries, which allow researchers to have access to research papers related to their concerned topic. Earlier it was really a difficult job for researchers to collect reviews but now with the blessing of the internet, it is just a click away. Through the internet, a researcher can also publish their research work so that common mass can avail its benefits.

1.3.3 E-Commerce

Apart from communication, education, and research, another important use of the internet is for the financial transaction. With the time and growth of internet financial transactions like

shopping, payment of bills viz. electricity, phone credit card etc., taxes, booking movie tickets, making reservation in railways, roadways or airways for travelling, booking of hotels, money transfer, loan payments, insurance premium payments etc. has become easy and quick for all of us. This feature of the internet enables people to purchase or sell items online easily. It has reduced the time and energy of human beings spent on shopping and other financial transactions.

1.3.4 Real-Time Updates

The Internet provides recent updates of everything happening around the world. With its feature to share the information, it allows its users to get a real-time update as well. Through this one can get news and other happenings that may be on-going in different parts of the world. There are numerous websites from where one can access real-time updates in every field viz. business, sports, finance, politics, entertainment, and others.

1.3.5 Getting Information about any topic

The Internet is huge information about any topic we need. it is very commonly used among people for searching for information about anything viz. any location, product, fashion, people, institute, hotel, animal or any unknown object or thing. It has information about almost everything we need. This may be helpful to people who are searching for it. People use the internet before buying any product to get its reviews. They even read reviews before going to watch any movie. It provides guidance to its users for anything which they review.

1.3.6 Advertising and Publicity

Similarly like publishing anything on the internet it is also easy to advertise any product on the internet. One can use the internet to advertise various products. There are so many internet users to whom one can advertise the product. The Internet has the facility of reaching different strata of audience accordingly, viz. one can advertise beauty products to women, sports products to players etc. One may use the multimedia capabilities of the internet to make available product specification sheets, audio files, images, and video clips of products. It is a very effective medium for distributing product catalogues. Internet publicity is most common these days, not only for business purposes but also for the social cause. The Internet provides a big platform to publicize any product, event, place etc

1.3.7 Carry out Online Surveys and Research

Traditional methods of performing surveys are often relatively slow and expensive compared to online surveys conducted on the Internet. It can be used for data collection, collecting reviews for research and data analysis as well. Internet saves the time of reaching out to big sample and collect data from them. Through the internet, it is possible for a researcher to sit at a place and collect data from different areas. On another hand, numerous journal and publications are available online which a researcher can access for review of the literature. Not only this, but he can also use it for analyzing the data which is collected for research. Different online tools are available which aid the researcher in completing his research.

1.3.8 Get Technical Support

There are various things for which one need technical support, viz. for repairing to recycling etc. The Internet has the variety of information regarding technical support for anything. For example in a student need some help to complete his assignment he can use the internet if a mother needs to find the specific recipe she can find it on the internet if someone needs to repair any device or machine even he can find support on the internet. There are different groups, forums platforms available on the internet to help or support people.

1.3.9 Obtain Feedback from Mass

The interactive nature of the internet allows everyone to give his or her opinion on a particular topic. There are discussion forums, social networking site, and micro networking site through which people give their feedback may be for the particular event, person or product. It has even become a convenient method for obtaining customer feedback. Almost on every website, there is "feedback" option to identify the satisfaction level of customers regarding the services/products provided. (Top10contributors, 2013)

1.4 Advantages of Using an Internet

The internet has become an important part of modern society. The varied usage of the internet by everybody had made it a necessity rather than a status symbol. The Government of India (GoI) has also focused upon the widespread of internet connectivity. The 'Smart City initiative' of GoI suggests the government's concern regarding the availability of internet connection to the citizens. Digitalization and IT connectivity are one of the core infrastructure elements of smart cities. This reflects that the availability of the internet to everyone has become the need of the hour. The Internet has affected the lives of its users with its advantages in many ways. There are different advantages of using the Internet which is as follows-

1.4.1 It has a Global Audience

The Internet has the capability of publishing the content immediately to the global audience. This feature makes the internet a very cost-effective medium to publish information for mass. One can communicate to audiences from the whole world at the same time through the internet.

1.4.2 It can be used any time conveniently

Internet users can use or have access to online content, anytime whenever they are free or they want to use. People use it for different purposes at different timing. The fact that the Internet is operational at all times makes it the most efficient business machine.

1.4.3 Relatively Inexpensive

If someone wants to publish some report, data or anything else on an electronic medium or print medium, it becomes quite expensive and complicated for him and these mediums also allow publishing it to the limited audience. But when it comes to publishing online, it is relatively inexpensive and convenient. At a very little cost of publishing, individuals can publish information to millions of internet users.

1.4.4 Multimedia Content

It has the capability to incorporate multimedia into web pages. This feature allows creating an attractive and unique communication package for everyone. For example, many websites use sounds and video clips to make the content easier and more interesting to browse. (Indonesian Virtual Company, 2007)

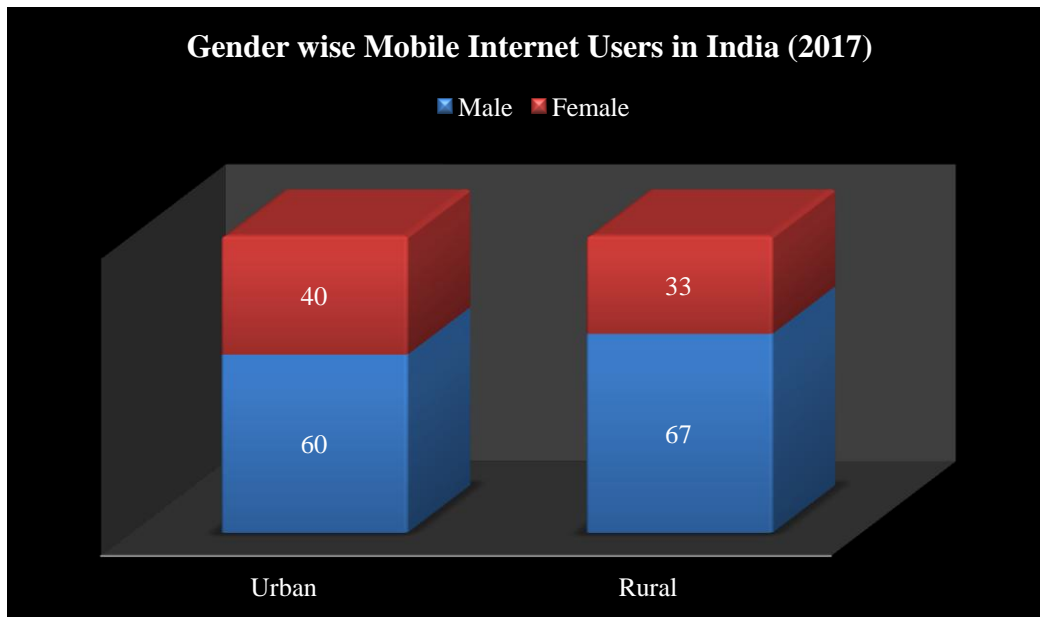
1.5 Internet Users in India

India is the second highest Internet user base with 481 million internet users and the number of internet users is expected to reach 500 million by June 2018. (Internet and Mobile Association of India (IAMAI) and India Market Research Bureau (IMRB) International 2017). The increase in a number of internet users has been seen every year. The IMAI and IMRB International (2014) found an increase in a number of internet users by 32% in past one year. The key findings of their market research survey were as follows:

- There were 278 million claimed internet users
- The number of active internet users was 213 million
- The claimed internet users in urban cities have grown by 29%
- There were 152 million active internet users in urban India,
- Compared to previous year, claimed internet users had increased by 39% in rural India to reach 101 Million in October 2014.
- There were 61 Million Active Internet Users in Rural India

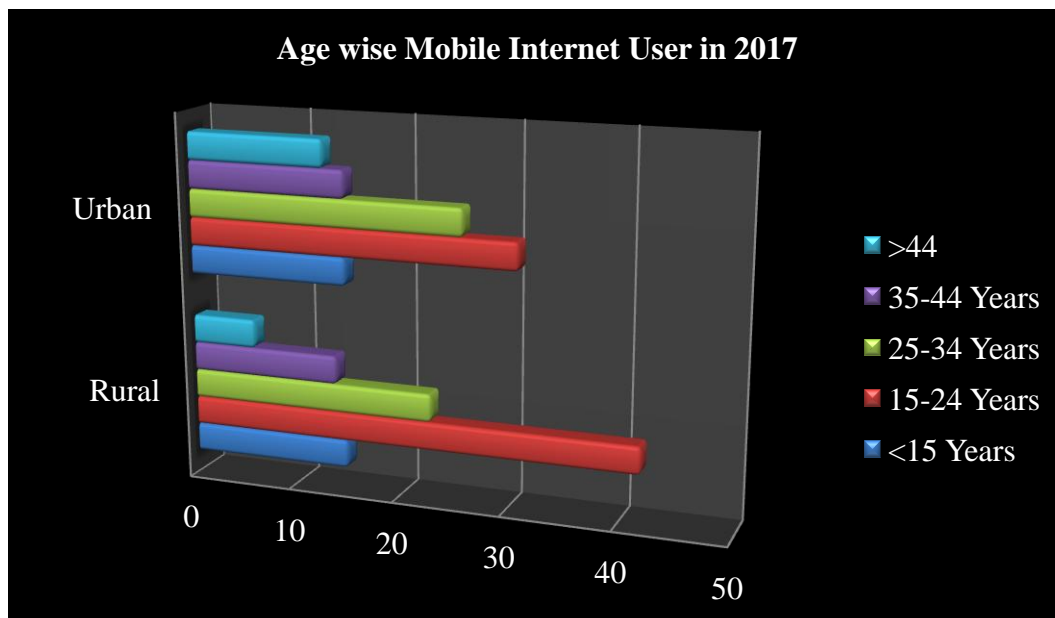
Another mobile internet report of IMAI and Kantar IMRB reported that One-third of the mobile internet users were female across both Urban and Rural India. It reported there were 40% female mobile internet users in urban areas and 33% rural areas in the year 2017 (IAMAI and Kantar IMRB 2017a)

Figure 2 Gender wise Mobile Internet Users in India



The report further reveals that mobile internet is predominantly used by youngsters. There were 46% of urban internet users and 57% of rural internet users who belonged to the age group of below 25. However, equal distribution of internet users was found for the age range of 35 to 44 in urban and rural areas.

Figure 3 Age wise Mobile Internet Users in India (2017)



This could be the reason for India to stand second among the highest smartphone user's country in the world with more than 300 million smartphone users. (Statista,2017)

In December 2017, the overall internet penetration in India was 35% of the total population. Internet penetration in Urban India was 64.84% in December 2017 as compared to 60.6% last December. In comparison, Rural Internet penetration has grown from 18% last December to 20.26% in December 2017. These figures highlight the digital divide that exists in urban and rural India. The population that is unreachable by internet in rural India still seems to be of 'giant size'. There were 281 Million (estimated) daily Internet users, out of which 62% of them access the internet daily in urban area, as compared to 53%, in rural India. However, internet user base is still male dominating with an estimated 143 million Female internet users i.e. 30% of Total Internet users. These gender gaps and digital divides can be overcome with digital literacy (IAMAI and IMRB, 2018). These statistics support the "Digital India initiative" of Government of India that has been initiated in the year 2014. It is a multi-facet programme to provide internet access to the country through infrastructure facilities for internet, e-governance and digital literacy as well as through enhancing electronic manufacturing capabilities.

1.6 Internet and Women

Internet especially Social Media has changed the communication paradigm, making it no longer difficult to reach the people beyond geographical boundaries. It has a variety of uses for each section of society. The Internet is a blessing to everyone if it is used in a better manner. All the sections of society i.e. men, women, children, the elderly have equal opportunities to learn, use or take advantage of the internet. It has the vast range of items that can also be helpful for women for maintaining their healthy lifestyle. The Internet allows its users to create or join online communities to share or get information, ideas, gain knowledge about any topic. Youtube, Blogs, Facebook, Twitter, Pinterest, Instagram are the most popular websites among internet users. According to the Women & Web Study Report June 2013 by Google India, there were total of 150 Million internet users in India and among them 60 million were women. The report also highlighted the use of the internet by the young affluent users (75%) aged between 15-34 years. Furthermore, it elaborated that half of the internet users agreed that internet surfing influenced their decision before purchasing a product. It also highlighted the fact that women buy baby products online. The interesting finding was that the eighty percent of them recommended their purchase to other women whereas one-fourth of them shared their online purchasing experience online. These findings highlight the use of the internet among Indian women. (cited in Yourstory,2018)

Hussain and Moin 2014 explored the main reasons for usage of internet among urban educated women. The urban educated women were using the internet to gather information for-

- Employment /Job Prospects in India and Abroad
- Research and Information
- Educational opportunities
- Career advancement facilities
- Beauty and Fashion, Hair care, Health & Lifestyle, Apparel and accessories
- Matrimonial Ads
- Art and Entertainment
- Social Support system for working women

Furthermore, they mentioned that the women from urban lower middle-class families gather information from internet mainly on -

- Employment /Job Prospects in India / self-locality
- Inexpensive childcare & Healthcare
- Educational facilities at their doorstep
- Dowry system, other legal rights like self-help, violence etc.
- Information about NGO's
- Legal provisions against Sexual harassment, Domestic Violence and Social injustice

Now a day's Internet has broadened its reach among people by taking them away from just using it for emails and chat rooms to alternative media. It has given a power to mass for speaking about their rights, sharing their views on a particular topic or event and showcase their abilities to the outside world. Not only this, but it also provided opportunities to learn different endless things online viz. languages, cuisines, art and craft and many more. Though it has expanded its reach in India Indian women are still lagging behind to use the Internet. The possible reasons for fewer women internet users in India may be lack of easy access to the

Internet, lack of knowledge on using internet and lack of awareness about its importance in their daily lives.

The Internet has been recognized as an effective tool to catalyze economic growth and also for developing the human resource. There are numerous internet tools that can be used to inform and educate women. The access to information may act as an active agent for the development of society. It can also be helpful in solving problems that women face in their daily life. The Internet is considered to be an effective agent of women's empowerment and development ranging from their health, lifestyle, and education and economic independence" (Hussain and Moin 2014)

Women's empowerment is focused on increasing their power to take control over decisions that shape their lives. For women who can access and use the Internet, it offers potential, especially in terms of improving health, to educate them, reducing poverty, improving governance, overcoming isolation, and providing a voice to them. However, there is a growing demand for the use of the Internet for women's empowerment, through increasing their access to health, nutrition, education and other human development opportunities, such as political participation. There is a need to make the women understand the importance and usage of the internet and how this medium can become an effective tool towards personal and social growth. It is also necessary to know that how much women depends on the internet and how it is helping them with their home management tasks. Therefore the following research questions need to be answered-

1. Why women are using the internet?
2. What type of gadgets women are using to access the internet?
3. What are the household responsibilities of women?
4. Who helps women in performing these household responsibilities?
5. What are those household responsibilities for which women depend on the internet?
6. To what extent internet help them in performing their household responsibilities?
7. Are they using the internet to an optimal level?
8. Is the Internet a tool for their empowerment?

9. Does it help them to live a better life?

10. Do they face any difficulty while using the internet? If yes; what are those difficulties?

1.7 Statement of the Problem

Keeping in the above-mentioned research questions a study was designed and titled as "Use of the Internet for Performance of Household Responsibilities by Married Women of Vadodara city"

1.8 Justification of the Study

During the post-independence period, the government and other development organization have focused on girl's education. In India, female's enrolment in higher education has been increased since independence. Earlier was the time when parents used to worry about girl's household responsibilities after their marriage. Therefore, girls were more engaged in household activities like cooking, cleaning, washing etc. before their marriage also. But today, the scenario has been changed. With the increased girl's enrollment in higher education, parents are more concerned about their professional training rather than household training. Nowadays, girls find it difficult to fulfil their household responsibilities after marriage because they give more focus on taking professional training over household training, Therefore, their dependency on media like print, television, and the internet had been increased to seek help for fulfilling their household responsibilities. Women's technology usage is also increasing these days. According to a report published by Internet and Mobile Association of India and Kantar IMRB (2017) in India, thirty percent of the internet users were women. The data showed that there was more than forty percent increase in figures of female internet users. (as cited in Economic Times, 2018)

A report by Telecom Regulatory Authority of India (TRAI) highlighted the considerable number of female internet users in India. TRAI 2015 report of West Zone, Gujarat mentioned that among the twenty-three thousand respondents, twenty-one percent were females and nearly equal numbers of respondents were using cellular data and broadband services to access the internet. Furthermore, it elaborated that the Business/Self-employed respondents (overall) were forty-two percent and sixteen percent were housewives. Remaining were from the category service, retire and students. This report reflected that women of Gujarat were using the internet. The present

research was an attempt to study the use of the internet by married women. It would be interesting to know how and to what extent the internet usage affects them. If we look into the researches carried out on women and internet these queries remain still unanswered. Hence, such a study was needed to get the answers to these questions.

Another reason for carrying out such a study was that the women share the most important place in society. They are considered as the vulnerable section of society. It is important to carry out researches related to women and their related fields. In the era where technology is expanding its wings, it becomes necessary to study its impact on women. Research studies have been carried out with the impact of the internet on other sections of society but very less data is present on women and their internet usage specifically for their household responsibilities. This makes it important to study and explore about women and their internet usage. The government of India has initiated "Digital India Project" in 2014 to integrate the government and people of India. The main objective of it is to ensure that the government services are made available to Indian citizens electronically by reducing paperwork. This initiative includes the creation of digital infrastructure, delivering services digitally and digital literacy. Google India and Tata Trust also initiated a project named "Internet Saathi" to support the Government of India's Digital India Project in 2015. This collaborative programme is aimed to empower women in rural India by enabling them to use the internet and use it in daily lives. In addition to this Google India has also launched an initiative named "Helping Women to Get Online" in 2013. In this initiative, a web portal was made available especially for women to empower them by enabling them to use the internet. These initiatives are showing the inclination of government and other leading corporate firms towards internet literacy and awareness.

This research had been undertaken to study the usage of the internet by women of the Vadodara city of Gujarat and to find out its influence on their routine household responsibilities. The present topic was selected because no such research has been carried out to study the influence of the internet on performing household responsibilities of women residing in the Vadodara city. There were no relevant and recent data available to find out how much women depends on the internet and what are those responsibilities which require internet access by women. In addition to this, the need was also felt to study the purposes for which women were using the internet and the problems they were facing while using the internet. These needs gave a scope to

carry out this research study. The internet has become one of the important socializing agents in our society. People are using it in every sphere of their life. Therefore it becomes necessary to study its usage and purpose of usage in our society, especially by women.

1.9 Justification of the study in the Department of Extension and Communication

In the department of extension and communication, different researches are being carried out related to different sections of the society, communication and its usage and impact by them. The present study on internet usage by women for households purposes is relevant in this department, as it encompasses both important categories viz. women and new media i.e. internet in it. This research will be an attempt to study the impact of the internet on women and their life. Therefore through this research, it will find out that how much women depends on the internet and what are the other sources she depends upon for fulfilling her household responsibilities.

The curriculum of the department also focuses on analyzing various communication media and study, its impact of people to know its benefits and hazards for society. It is always a matter of concern in this department to give an exposure to media's positive impact and try to reduce its negative impact on society with different action projects and researches. Different studies have been already carried out in this department on the impact of different media like television, computer, films, television, radio, newspaper, and new media with different sections of the society viz. children, women, elderly, students etc. The studies which included new media were delimited to the use of Facebook and WhatsApp. Some development communication researches carried out in the department included the study on development and checking the effectiveness of different communication aids for teaching. But no study has been carried out on internet usage by women in the department.

Moreover, the findings of the present study will provide a guideline for internet literacy among women of Gujarat. It will also be helpful in the production of different website and mobile applications to assist women in their household activities. This will reduce the problems which women are facing while using the internet. It will also highlight the usage of the internet by women which may be helpful to different GOs and NGOs working for women, e-marketers whose main customers are women. In light of the above discussion, it is important to study this

subject in the Department of Extension and Communication at the Faculty of Family and Community Sciences, the Maharaja Sayajirao University of Baroda, Vadodara.

1.10 Justification of the Sample

Women are the important part of the families. They are the creators; caretakers and strength of the family. Women are the one who bears most of the household responsibilities in the family (Luke, Xu, and Thampi (2014); Akanle, Adensina and Ogbimi (2016); Banerjee (2014); OECD (2014). Not only the homemakers but also the working women take the charge of household chores. Despite earning money and having the good professional background, working women do more household work than the man (Banarjee 2014; Lam, McHale and Crouter, 2012). Indian women spend 352 minutes on an average doing the daily unpaid household chores (World Economic Forum, 2014). However, in present time, family members have started giving attention and recognition to this unpaid effort of the women in the families. These unpaid household work commonly involves routine housework (cooking, cleaning of the house, laundry), shopping, care for household members, child care, adult care, care for non-household members, volunteering and travel related to household activities (OECD, 2014). The list of household chore is endless. It would not be wrong to assume that women expect to get some help from their family members to finish their household chores. The family members like husbands, mother in law and teen children help women in doing some of the household work. Although, financial status allows women to take paid help from maids and servants but yet women prefer to work on their own. The internet is one of the alternatives where they can expect the easy and quick solution for their problems related to the household chores. However, there is very less research data available on the use of the internet for household responsibilities by Indian women. It is always recommended by scholars to study each and every aspect of their life. Now in this information age, where the internet has become an important part of our life, it becomes more justifiable to study the usage and impact of the internet on women.

Although the number of women internet users is very less than man internet users, it is important to know that for what purposes women are using the internet and what is restricting them to not use it as much as men do. In this age of new media, it becomes important to make each section of the society internet literate, so that no one can be left out to use this gift of technology. As above given review suggest that in India, only one-third of the internet

population is comprised of women and also reflects the increased number of women internet users in recent years. This highlights the scope of increasing internet users in coming years. This gives a pathway to study the usage of the internet by women.

Another important factor to study this subject with women is lifelong learning. Lifelong learning is a very interesting and unique feature of the internet. Anybody can learn anything through the internet. There are virtual classrooms where one can attend the lecture according to his/her convenience. Married women also need to learn and update themselves in order to be with the current trend and successfully managing their household responsibilities. Looking into the participation of women in every area whether science and technology, media, politics, medicine or civil services, now it was noticeable that the level of empowerment had increased from past few decades viz. empowerment in terms of their education, political participation, social participation and so on. The use of ICT also provides a scope of empowerment. The present study highlighted the usage of the internet by women for their household purposes and also provided suggestions for increasing the qualitative and functional use of it. The study threw light upon the barriers in using internet by married women.

1.11 Justification of Variables

The present study had been undertaken to study the internet usage of married women for their household purposes. The household responsibilities of the married women were also documented in the present study. The following are the selected variables that had been studied under the present research-

a. Age

The internet usage of married women may vary according to their age group. The statistics regarding the existing internet users suggest that there were more number of young internet users i.e. less than thirty-five year old (74%) than the older internet users i.e. thirty-five years old and above (26%). However, the estimated figures of internet users in India suggest the increase in a number of older internet users (35 years old and above) by 2020. (Statista, 2018). These figures highlight that not only youth but the older adults are also using the internet. Age is an important factor that may affect the adoption of technology. Czaja et.al (2006) found that relationship

between age and adoption of technology is affected by cognitive abilities, computer self-efficacy, and computer anxiety. Ageing affects the cognitive skills that may inhibit the adoption of new technology. Age-related declines in cognition have important implications for technology access. Declines in working memory may make it difficult for older people to learn new concepts or skills or recall complex operational procedures. (Czaja and Chin, 2007) Although, internet usage may depend on the requirement of the user it can be expected that younger married women would be using it more than the other categories. It would be interesting to know the internet usage of married women from different age group.

Apart from the internet usage, the household responsibilities of married women may also differ in relation to their age. Recently married mothers may have more household responsibilities as they are at the beginning stage of the family. Those who are married since long may have grown up/ teenager children. Teenagers do not need as much care as young children do. Moreover, teenager children may also help their mothers in completing the household chores and therefore, reducing the burden of household responsibilities from their mother's shoulder. Hence, it would be interesting to know whether the household responsibilities of married women vary in relation with their age or not.

b. Educational Qualification

Education provides a better understanding of life. It leads humans to the path of knowledge. It helps in making decisions at any stage of life. Education enhances the technology adoption and diffusion. It is an important channel for technological advancement (Riddell and Song, 2012). There are research evidence that prove the positive effect of education on adoption of technology like regarding the use of the internet (Bucciarelli, Odoardi, & Muratore, 2010; Dev and Hossain, 1996). It can be expected that those having a high level of education may have high internet usage for their household responsibilities.

Those married women who had a higher level of educational qualification may engage service sector or business. That may lead them to have less household responsibilities in comparison to homemakers. However, those married women who had a lower level of educational qualification may be involved in household responsibilities before their marriage also. The reason behind this could be the time they got after finishing their senior secondary education. Therefore their

interest in doing household chores could be higher than those who had a high level of education and not involved in household chores before their marriage. It would be interesting to know the effect of educational level on the household responsibilities of married women.

c. Occupation

The present study aimed to explore the use of the internet by married women for their household responsibilities. Occupation being the important variable may affect the results of the study. Those married women who were working may struggle with the time to fulfil their household responsibilities than those who were homemakers. Office workload may increase the stress for household responsibilities. Hence it may be assumed that these working women would be taking help of internet to accomplish their goals related with their household responsibilities. Working women may not get much time to spend on household responsibilities. Therefore, it can be expected from them that they would be taking help from people viz family members and servants or from the Internet to fulfill their household responsibilities. There are research evidence available that showcase the use of the internet by working women for shopping. (Maniar and Khuraniya, 2016; Darji, 2014; Jain, 2014). However, shopping could be a part of household responsibilities. It would be interesting to explore the varied usage of the internet by married women for their household responsibilities in relation with their occupation.

The household responsibilities of married women may differ according to their occupation. The household responsibilities of women increase after becoming a mother. This may be the for most of the working women to choose to be a homemaker after having a child. Women tend to prioritize family over career when domestic help is hard to find and the employer does not provide childcare facilities and flexible work options Das and Zumbyte (2017). In some research studies, it was found that spouses of working women help them in doing household chores like child care, cooking and sometimes laundry also. The help from a spouse and other family members may reduce the household responsibilities of married women. However, the review of the literature suggests that both working women and homemakers perform most of the household chores. But, it would be interesting to study the household responsibilities of married women in relation to their occupation.

d. Type of Family

The family is the basic structure of a society wherein women play an important role. Women bear the most of the household responsibilities in comparison to the men (Luke, Xu and Thanmpi,2014; Banerjee 2014; OECD,2014) irrespective of their age, occupation and type of family. The household responsibilities of married women may vary according to their family structure. It can be assumed that married women who belonged to the joint family may have more household responsibilities than those who belonged to the nuclear family. However, this does not hinder the fact that there are more chances of sharing those responsibilities in joint families than the nuclear families. In the joint family structures, there are possibilities of getting the guidance of elders at each stage of life. Whereas, a woman from nuclear family may seek help from the internet due to the absence of elder family members. However, the type of family also affects the amount of free time that a woman gets after finishing the household tasks. The women who belonged to the nuclear family may get more free time in comparison to those who belonged to the joint family. This free time can be consumed in using the internet for various purposes. It can be expected that the higher the number of family members in the family the lesser the opportunity to spend time on the internet.

The family structure may influence the household responsibilities of any household. The type of family structure suggests the number of family members. The extended families and joint families will have more number of family members. It would not be wrong to assume that the more number of family members brings more household responsibilities for married women. Although, the more number of family members also suggest the division of household responsibilities in the family that may reduce the burden of the same on married women.

e. Monthly Family Income

Monthly family income describes the spending dynamics of the family. The family who belonged to high-income group may spend more money on internet recharge in order to use high-speed internet. The high-speed internet gives a hint of high use of the internet for different purposes. Kalmus, Realo, and Siibak (2011) supported that those who belonged to a higher

income group are more involved in the internet, thus spending more portion of their income on their daily internet (in Khan, Rehman and Qazi, 2016).

Joorabchi, Osman, and Hassan (2012) also found a positive and significant relationship between income and attitudes towards using the Internet. This suggests that the people who belong to higher income group may use the internet more for useful purposes and may have a positive attitude towards the internet. Khan, Rehman and Qazi, (2016) highlighted that people with higher income spend more on the internet.

For the household responsibilities also it can be assumed that the married women belong to the higher income group may have less household responsibilities. Their high income suggests their capacity to spend on the paid help available for domestic chores. This may lead them to have lesser household responsibilities in comparison to those who belong to the lower middle or middle-income groups.

f. Number of Children

Similarly to the type of family structure, more number of children may lead to lack of time to spend on the internet. Mother of a single child may spend more time on the internet in comparison to those who have two or more children. The married woman who has more number of children requires more time for their care. That may lead them to fatigue and hence lack of time for internet.

The household responsibilities of married women may also differ in relation with their number of children. Dunn et.al. (2009) found that children tend to perform more household tasks in families with an older sibling, and age of children affects the number of tasks a child perform. This supports the fact that more number of children in a family ensures more involvement of children in household responsibilities and hence, reducing the household responsibilities of mothers. It would be interesting to know, how a number of children affects the household responsibilities of married women.

g. Years of Marriage

Years of marriage determines the stage of the family life cycle. Those who were recently married would be on their initial stage of family life cycle. They might have younger child/children in comparison to those who are married since long. Those who were married since a long time would be on their expanding stage of family and may have adolescent child/children. It can be expected that younger children need more attention and time than the older children. Those who were recently married may have younger children and have more household responsibilities to perform. Therefore they might not get as much time to spend on the internet as those married women who were married since long. However, the young mother may lack in household management skills and hence their dependency on the internet may increase for performing their household responsibilities in comparison to others. The present study is focused on the use of the internet for household responsibilities, therefore; it would be interesting to know the use of internet among married women in relation with their years of marriage. For the similar reasons, their household responsibilities may also differ in relation with the years of marriage of the married woman.

h. Computer training

Computer training may provide confidence among the individual to adopt new technology such as the internet. In India, computer training became part of school education for more than two decades. Since then, the students have been trained or at least getting acquainted with the ICT. Such training help in learning new technology. The dependency on technology had provided platforms for computer training centers. There are private and public computer training centers who provide training for each section of the society. They offer various courses like basic computer training and advanced training. Using the internet is also a part of computer training. Those who had attended such type of training at school level or at any institute may show high internet usage. Lekopanye and Mogwe (2014) supported that early exposure of ICT like training at work or during higher education may help in ICT adoption in later life. Those who have good cognitive skills (Czaja et.al, 2006) and have better computer knowledge may use the internet more than those who lack in these skills. Higher internet usage for household responsibilities may be expected from those women who are trained in computer application.

i. Internet Usage

In the present study the variable ‘internet usage’ was determined by calculating the scores for the type of internet connection, expenditure on internet recharge, time spent on the internet, experience (in years) of using internet and frequency of using internet for different purposes. The higher score reflected the high internet usage whereas the low scores indicated low usage. Those married women who had heavy usage may reflect the high use of the internet for household responsibilities in comparison to those who had low internet usage.

j. Experience of using the internet

This variable reflected the impact of internet user’s experiences on their internet usage. The experiences were measured using a five points Likert scale (refer appendix 1). The high usage of internet for household responsibilities may be expected from those married women who had good experiences of using the internet.

These selected variables helped in finding out the cause and effect of usage of internet for the household responsibilities of married women of Vadodara city. The present study highlighted the extent of internet usage by married women for their household purposes in relation with the above discussed variables.

1.12 Objectives of the Study

1. To prepare the profile of selected married women using the internet of Vadodara city.
2. To study the internet usage pattern of selected married women of Vadodara city.
3. To study the difference in internet usage of selected married women of Vadodara city in terms of their internet usage pattern.
4. To study the purposes of using internet by selected married women of Vadodara city.
5. To study the differences in the purposes of using internet by selected married women of Vadodara city in relation with-
 - Age
 - Occupation
 - Educational qualification
 - Type of family

- Monthly family income
- Number of children
- Years of marriage

6. To study the time spent on the internet by selected married women of Vadodara city.

7. To study the difference in time spent on the internet by selected married women of Vadodara city in relation with-

- Age
- Occupation
- Educational qualification
- Type of family
- Monthly family income
- Number of children
- Years of marriage

8. To study the monthly monetary expenditure on internet recharge by selected married women of Vadodara city

9. To study the difference in monthly monetary expenditure on internet recharge by selected married women of Vadodara city in relation with-

- Age
- Educational qualification
- Occupation
- Type of family
- Monthly family income
- Number of children
- Years of marriage

10. To study the household responsibilities of selected married women of Vadodara city in relation with following aspects-

- Kitchen management

- Childcare
- Household management
- Financial management
- Socializing and entertainment
- Miscellaneous

11. To study the differences in household responsibilities of selected married women of Vadodara city in relation with following variables-

- Age
- Education
- Occupation
- Type of family
- Monthly family income
- Number of children
- Years of marriage

12. To study the usage of the internet by selected married women of Vadodara city for performing their household responsibilities in relation with the following aspects-

- Kitchen management
- Childcare
- Household management
- Financial management
- Socializing and Entertainment
- Miscellaneous responsibilities

13. To study the differences in the usage of internet for performing Kitchen Management related household responsibilities by selected married women of Vadodara city in relation with following variables-

- Age
- Occupation
- Educational qualification

- Type of family
- Monthly family income
- Number of children
- Years of marriage
- Computer training
- Internet Usage
- Experience of using the internet

14. To study the differences in the usage of internet for performing Childcare related household responsibilities by selected married women of Vadodara city in relation with following variables-

- Age
- Occupation
- Educational qualification
- Type of family
- Monthly family income
- Number of children
- Years of marriage
- Computer training
- Internet Usage
- Experience of using the internet

15. To study the differences in the usage of internet for performing Household Management related household responsibilities by selected married women of Vadodara city in relation with following variables-

- Age
- Occupation
- Educational qualification
- Type of family
- Monthly family income
- Number of children

- Years of marriage
- Computer training
- Internet Usage
- Experience of using the internet

16. To study the differences in the usage of internet for performing Financial Management related household responsibilities by selected married women of Vadodara city in relation with following variables-

- Age
- Occupation
- Educational qualification
- Type of family
- Monthly family income
- Number of children
- Years of marriage
- Computer training
- Internet Usage
- Experience of using the internet

17. To study the differences in the usage of internet for performing Socializing and entertainment related household responsibilities by selected married women of Vadodara city in relation with following variables-

- Age
- Occupation
- Educational qualification
- Type of family
- Monthly family income
- Number of children
- Years of marriage
- Computer training

- Internet Usage
- Experience of using the internet

18. To study the experiences of using internet by selected married women of Vadodara city while using the internet.

19. To study the problems faced by selected married women of Vadodara city while using the internet in relation to the following problems-

- Technical Problems
- Personal Problems.

20. To study the difference in overall problems faced by selected married women of Vadodara city while using the internet in relation to the following variables -

- Age
- Occupation
- Educational qualification
- Type of family
- Monthly family income
- Number of children
- Years of marriage
- Computer training
- Experience of using the internet

21. To study the difference in personal problems faced by selected married women of Vadodara city while using the internet in relation to the following variables -

- Age
- Occupation
- Educational qualification
- Type of family
- Monthly family income
- Number of children
- Years of marriage
- Computer training
- Experience of using the internet

22. To study the difference in technical problems faced by selected married women of Vadodara city while using the internet in relation to the following variables -
- Age
 - Occupation
 - Educational qualification
 - Type of family
 - Monthly family income
 - Number of children
 - Years of marriage
 - Computer training
 - Experience of using the internet
23. To seek suggestions from selected women for optimizing the usage of internet for performing their household responsibilities.

1.13 Null Hypotheses

1. There will be no significant differences in the internet usage of selected married women of Vadodara city in terms of their internet usage patterns in relation with selected variables.
2. There will be no significant differences in the purposes of using internet by selected married women of Vadodara city in relation with selected variables.
3. There will be no significant differences in time spent on the internet by selected married women of Vadodara city in relation with selected variables.
4. There will be no significant differences in monthly monetary expenditure on internet recharge by selected married women of Vadodara city in relation with selected variables.
5. There will be no significant differences in overall household responsibilities of selected married women of Vadodara city in relation with selected variables.
6. There will be no significant differences in kitchen management related household responsibilities of selected married women of Vadodara city in relation with selected variables.

7. There will be no significant differences in child care related household responsibilities of selected married women of Vadodara city in relation with selected variables.
8. There will be no significant differences in household management related household responsibilities of selected married women of Vadodara city in relation with selected variables.
9. There will be no significant differences in finance management related household responsibilities of selected married women of Vadodara city in relation with selected variables.
10. There will be no significant differences in socialization and entertainment related household responsibilities of selected married women of Vadodara city in relation with selected variables.
11. There will be no significant differences in usage of internet by selected married women of Vadodara city for performing their overall household responsibilities in relation with selected variables.
12. There will be no significant differences in usage of internet by selected married women of Vadodara city for performing their kitchen management related household responsibilities in relation with selected variables.
13. There will be no significant differences in usage of internet by selected married women of Vadodara city for performing their child care related household responsibilities in relation with selected variables.
14. There will be no significant differences in usage of internet by selected married women of Vadodara city for performing their household management related household responsibilities in relation with selected variables.
15. There will be no significant differences in usage of internet by selected married women of Vadodara city for performing their finance management related household responsibilities in relation with selected variables.
16. There will be no significant differences in usage of internet by selected married women of Vadodara city for performing their socializing and entertainment related household responsibilities in relation with selected variables.

17. There will be no significant differences in the overall problems faced by selected married women while using the internet in relation with selected variables.
18. There will be no significant differences in the personal problems faced by selected married women while using the internet in relation with selected variables.
19. There will be no significant differences in the technical problems faced by selected married women while using the internet in relation with selected variables.

1.14 Assumptions

1. Married women of Vadodara city use internet for various purposes.
2. Internet usage patterns of married women differ from one another.
3. Married women of Vadodara city have various household responsibilities to perform.
4. Married women of Vadodara city take help of internet to perform their household responsibilities.
5. Married women of Vadodara city do face problems while using the internet.

1.15 Delimitations

1. The study was delimited to-
 - Married Women having children
 - 350 women residing in Vadodara city.
2. The study was delimited to women's usage of the internet for household responsibilities related to kitchen management, childcare, finance management, household management and, socializing and entertainment.

1.16 Operational Definition

According to the present study, household responsibilities were kitchen management, child care, household management, financial management, socializing and entertainment related responsibilities performed by married women in their home. These household responsibilities include the following tasks-

- **Kitchen Management-** cooking, meal planning, grocery shopping, purchasing 'time and energy saving' equipment, kitchen cleaning, dishwashing and so on.

- **Child Care-** feeding children, managing their education and health-related issues, supervising homework, fostering moral values among them, buying clothes, toys and other things for them and so on.
- **Household Management-** cleaning, managing maids/servants, maintaining electrical equipment and gadgets at home and so on.
- **Financial Management-** managing the family budget, organizing insurance, payment of utility bills, purchasing electronic item/furniture or other required goods and so on.
- **Socializing and Entertainment-** organizing birthday parties, family tours, organizing dinner or lunch, communicating with relatives and family friends, organizing festivals and so on.
- **Miscellaneous-** taking care of elderly family members, purchasing clothes, medicines, and other things for elderly family members, maintaining garden and kitchen garden at home, taking care of pets.