



Introduction



CHAPTER -1

INTRODUCTION

1.1 Theoretical Background

Information, Communication and Technology (ICT) has been considered key factors in socio-economic development and vital, even in most developing countries. Access to relevant information and knowledge improves efficiency and productivity; increases access to market opportunities; and improved government performance.

Mobile phones, a notable advancement over the telecommunication technology of the past, are becoming a context of the modern life. Mobile phone (also known as cell phones or wireless phones) services introduced in 1995 along with pager services, in short span of time has emerged as one of the most important media of information communication and is now used as initial step in the budding global economy. Mobiles are more improvement over radio/TV as it provides two-way communication and can be used for text as well as voice modes. Mobile phones have become a basic need compared to fashion accessory and other facilities.

From the supply point of view as well, establishing mobile masts is comparatively less expensive to serve masses especially in remote rural areas as compared to land line telephones and enhances social services delivery. India's telecommunication network is the second largest in the world based on the total number of telephone users (both fixed and mobile phone). It has one of the lowest call tariffs in the world and has the world's third-largest Internet user-base.

Unprecedented coverage of mobiles services, enhanced networking, facility of reciprocal communication, convenience and cost reduction proven very useful enhancing communication and information in many sectors. Mobile communication that enables the individuals to talk anytime from anyplace, is currently witnessing a completely new social phenomenon. With revolutionary changes in transportation and job opportunities, myriad people staying away from urban centers, operate from various administration, business and education centers.

1.2 Impact of Mobile Phone

The mobile telephone is no longer just an audio communication tool but capable of providing additional integrated implications. There are many follow-on and social benefits of mobile phone use. These usages of Mobile Phone on lives of people have been summarized in the following text -

- **Easy Communication:** It is easy to interact with anyone, from anywhere, at any time, with more portability, needing no contact with wire or anything else. It also improved communication skills for sensible users.
- **Continued Communication:** These devises can be used on the go as long as there is network. Stay connected to people staying away within approach at any time have clearly made it easier to communicate.
- **Entertainment:** Allowing people to play games, listen to music, watch movies, make video calls and so on by existence of Smartphone has widened the horizon of entertainment activities.
- **Useful in Studies:** The mobile phones effectively fill the gap between individuals and institutions by easy and effective sharing of information and knowledge and argued to be an appropriate device for educational delivery.

It can be deployed in schools in the so called developing countries to facilitate informal out-of-school environment learning to further complement formal schooling. Now a days there is no need to store notes. Downloading form gadgets provide access to knowledge and interception.

- **Useful in Business:** Cost of running a business is reduced resulting in enhanced entrepreneurship and even small new start ups can be induced. By reducing information asymmetries, market inefficiencies and substituting transportation people can offer services to distant consumers from the comfort of their own premises.
- **Always Connected:** With a mobile phone, a person is connected to the internet throughout. One can receive and send emails, browse websites, download games and videos, book flight tickets, money transfer to banks, search for directions for unfamiliar places, check friends on social media and many more.
- **Aide in Emergency Situations:** Nothing more than a cell phone comes to great help when there is a mishap or any emergency. One can even set alarm for waking up, reminder for important tasks.
- **Use for Advertisement:** Companies finds it a good medium to advertise products; reach the costumers. One can simultaneously discuss some urgent matters or provide directions while involved in some other urgent work.
- **Role in Economy:** From the industry and national economy point of view, communication companies are flourishing with market capital in thousands of millions.

Although there are several benefits of mobile telephones but like all technologies there are some limitations too, summarized as follows-

- **Constant Interruption-** People are always on phones receiving calls, checking out their friends on various sites, email, chatting, listening to music which makes it impossible to avoid unwanted interruption even when at home or on vacation.
- **Possibility of Privacy Leak-** Having all information on device is very convenient but it also increases possibility of someone else accessing phone, or unauthorized access, hijack email and social media accounts using phone for malicious reasons.
- **Distraction-** The mobile phone can also disturb meeting or class and distract the attention and waste precious time. Conversing on a phone or temptation to pick a call when driving could easily cause accidents.
- **Affect Real Interaction-** Socializing reduced to interacting on social platforms take away people from the real life activities and hardly interacting with real people may cause breakdown of relationships and families.
- **Decrease in Privacy-** While it is safer to keep phone when away from home but that also leaves people open to get call from anyone knows the phone number and people feel like having less privacy than before.
- **Bad Impact on Studies-** Most of the times students play games, chat and talk to their friends on mobile phones which inversely affects their studies resulting in fallen grades.
- **Health Issues-** Apart from accidents, excessive use of mobile phones by various biophysical mechanisms have wide verity of health hazard. For example, increases anxiety, sleep loss, accidents, loss of hearing, risk of cancer and effect on brain etc.

1.3 Mobile Phones in Rural India:

The habits of social relationships and communication have always been different in rural and urban areas as spread of innovation and technology to rural and outlying areas has always lagged behind. In the era of landline phones people had to walk a long distance before finding a telephone to contact family members and sometimes it was also not feasible due to many limitations. But mobile phone invent bridged this gap. Mobile phones are the success story of bridging the rural digital divide acting as agents of social mobilization through improved communication.

Availability of many low pricing cheap handset models with basic features and emergence of secondary markets for used devices (whose prices are even lower), offer affordability and choice made them within reach for even very low income people. Many innovative ways like sharing of phones through SIM cards, payments for air time through micro-pre payment and small amount top-up cards increased rapid adoption of mobile phone.

Given the unprecedented growth of affordability and coverage of mobile telephony services mobile phones have proven its usefulness in many sectors. Additional capabilities have further increased its versatility. For example, with the Internet now accessible over mobile phones, it is easier for people without the traditional internet connection to access inter-networked services. It is also able to run software that support visuals and voiceovers. As an affordable and accessible means of communication, rural communities are realizing the potential of mobile telephony to create economic opportunities and strengthen social networks (Parmar et. al 2015).

Several areas have been identified where mobiles can affect rural communities – micro commerce, education, information, healthcare, governance, finance and transport. After the Government of India opened up the sector, with increasing tele-density, competition and urge to boost subscriber base, mobile operators are exploring the rural India markets with greater interest.

The last five years have seen an accelerated adoption to the mobile technology as the most easily accessible and ubiquitous communications device in rural areas. According to Telecom Regulatory Authority of India (TRAI), there has been rise of 18 percent in the use of mobile by rural subscribers. It involves application of innovative ways to use information and communication technologies in the rural area. Telecommunication is an emerging field focusing on the empowerment of agricultural and rural development in India. Different livelihood functions include mediated agricultural extension, market information systems, virtual markets, financial services and direct livelihood support to increasing the income and awareness.

These benefits are amplified by the fact that in countries with high rural population densities, like India, there are unique possibilities of mobile phone providing a direct global communication channel to rural communities, extending the impact of the established rural media, such as rural radio, making local content available. Coupled by proper regulations, logistics and co-ordination more efficient mobile phone services could lead to an improved digital education process surely making the human life much easier and cozy. Following are some of the application areas of mobile phones for rural people-

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- **Mobile phone in education:** In education, mobile phones have come up with the concept of m-learning. Mobile learning is a sort of learning that takes place when the learner is not at a fixed, planned location, and takes benefit of the learning opportunities offered by mobile technologies. These provide two way advantage; on one hand improving access to education while maintaining the quality of education delivered, and two by facilitating new learning; alternative learning processes and instructional methods. Moreover for the individual learner, mobile technology is much less cost-prohibitive than other technologies like personal computers and broadband connections.
 - **Mobile phone in family relationships:** Adoption of mobile phones may reproduce some traditional and also cultural power relations in families. It offers a way to keep in touch with new and old friends, to organize and maintain their social networks and offers a mini biography of each user's life in positive ways. People use mobile phone for maintaining social networks and coordinating family activities and more often to keep an eye on their children.
 - **Mobile technology for health care:** Healthcare applications of mobile phones are instantly gaining popularity over last few years. With the increasing penetration of mobile networks in remote rural villages in India, mobile phones are becoming an important tool for improving doctor-patient interaction and efficiency of its delivery process of primary health care, for a low cost, high reach service. In addition, mobile technologies offer

significant opportunities for improving the back-office operations of government to share information sharing of patient laboratory results.

- **Mobile technology for agriculture:** Several studies have identified opportunities for using mobile phones in the agriculture sector and to promote rural development. Telecommunication in agriculture is an emerging field mediated agricultural extension, market information systems, virtual markets, financial services and direct livelihood support. Mobile telecommunication is a substantial driver of economic growth providing accurate, timely, relevant information and services to the farmers particularly around market data and financial services, thereby facilitating an environment for more remunerative agriculture. Today's mobile phone, initially started out as simple device of numbers which people used for emergencies, besides texting and voice capabilities, most phones offer tools such as an address book, a variety of ring tones, a camera, an alarm clock, a calendar, and perhaps an MP3 player or radio. Smart (3G or 4G) phones have Internet access and video capabilities, apps for information, entertainment, translation etcetera has permeated across cultural groups, economic strata, and age cohorts.
- **Limitations of mobile phone use:** However, some of the negative impacts include cyber bullying, negotiated changing freedoms and intrusion in lives. Other problems, of course, some technological-barriers like English-digits, comparatively difficult readability and operationally hinder its progress of adoption. Social system, norms, needs, family structure, business,

occupational and education level, the caste, class, education-literacy and even gender are the basic elements work in the acceptance to mobile phone.

1.4 Mobile Addiction Behaviors:

There is no doubt about the positive uses of mobile phone today. People keep mobile phones all the time and use them to organize and manage every moment of their live, from work to free time which sometimes take form of addiction. Addicted people waste their large part of time in unnecessary interaction, playing games, video, messaging, get disturbed if they could not pick phone and feel isolation and loneliness. Nomophobia (a psychological syndrome in which without access to mobile phone a person is afraid of or being out of mobile phone contact for some reasons such as absence of signal or running out of minutes or battery power) .

Addiction is evident when this obsession disrupts the more important things in life, like personal relationships, schooling, or jobs. Shy and low self-esteem people are more likely to become cellular addicts, spent more money and time on mobile phone use and more vulnerable to have negative emotions, sleep disorders and mental disorders (Bhardwaj et al. 2015). These addicts distract from realities, have worries and fears, feeling of depression and can have a counterproductive effect. The longer time they spend online, the higher their stress levels will be. Psychiatrists even consider very much internet chatting to be an Obsessive-Compulsive Disorder. Use of phone while driving may lead to serious accidents.

1.5 Statement of the Problem:

Over the last two three decades, mobile phones become the dominant form of telecommunications technology. It is now well recognized that ICT based capture, processing, storage, organization and presentation of data and information facilitates a freer flow of information affecting all facets of modern life including mobile information systems, mobile payments, mobile commerce, mobile television and mobile government. Mobile phones are not just restricted to communication but have started playing major role in areas of social development, increasing quality of life, providing education, aiding financial inclusion, supporting law enforcement and in increasing social awareness.

Given this context, an urgent need was felt to understand mobile phone usage patterns, their socioeconomic impact and the challenges faced in rural India. This in turn enabling a deeper understanding of the sociological effects related to the uptake of mobile telephony and reinvention of uses. This fact motivated the researchers to take up this study “**Mobile Phone Usage among Indian Rural Families and its Impact on Family and Social Relations**”.

Study was planned to bring forth how rural families are benefited by the use of mobile phones, what factors influence mobile phone uses among rural masses.

1.6 Objectives of the Study

The primary purpose of this study was the assessment of the major causes that drive rural residents to desire mobile telephony access and the pattern of their use. Major concern of research was how rural people communicate via mobile phone, what factors account for differences in these usages and how use of mobile

phone affect family and social relation in positive and negative way. Main objectives of the study were as follows-

1. To investigate mobile phone use among rural families
2. To study age and gender wise use pattern of mobile phones
3. To find out various mobile phone usages
4. To study positive impact of mobile phone use on family and social relations
5. To study negative impact of mobile phone use on family and social relations
6. To study perceived potential of the mobile phone use in sustainable rural development

1.7 Relevance of the Study and Likely Outcomes:

Mobile phone serves as a productive tool (provides productive services for business owners when they use the phone to transact business in the form of completing an order or a bid for a stock), a gatherer and disseminator of information (it removes economic boundary which enables the user to reach business partners or customers) and a tool to create network opportunities (Roldan and Wong 2008).

However there are still many challenges in finding verifiable, replicable data of mobile phones impacts on rural livelihoods. There are very few in- depth studies carried out in India to document exposure of rural households to mobile telephony , opportunities offered and factors influencing the adoption of mobile phone technology which constituted the main objective of this research.

It was also presumed that if different rural segments are systematically studied and analyzed, organizations willing to enter the emerging rural market will be able to promote their products and services in a much better manner, leading to

capacity building, long-term asset accumulation, customer satisfaction and in an increased market size furthermore to provide policy implications and develop programme for the use of technology to promote global growth.

1.8 Delimitations of the Study:

1. The study was delimited to villages of Muzaffarnagar and Saharanpur district of Uttar Pradesh, India.
2. Families having at least one mobile user were included in the study
3. Every family was taken as a case and any one member of the family was selected to respond.
4. The respondents below 14 years and above 60 years were not included in the study