



*Summary, Conclusion
and Suggestions*



CHAPTER 5

SUMMARY, CONCLUSION AND SUGGESTIONS

This chapter deals with summarized research procedure, findings and conclusion drawn on the basis of data analysis and interpretation and suggestions deduced based on results and focused groups discussions held with respondents.

Part 1: Summary

Mobile phones are one of the manifestations of communication technology and also considered as an integral part of everyday relations. Mobile phone is a small portable communication device, which does not require the use of electricity, landlines and employs wireless cellular technology to send and receive phone signals. In addition to calls, mobile phones also provide the wide variety of other services such as text messaging, MMS, email, internet access, short-range wireless communication (Infrared, Bluetooth), business applications, gaming, watching videos and advanced operating system and superior computing capabilities.

The beginning of mobile phone has changed the way people interact across the world. mobile phones have started playing important role in areas of social development, growing quality of life, providing education, aiding financial inclusion, supporting law enforcement and in increasing social knowledge. Mobile phones are speeding up ways in which people get, exchange, and or manipulate information and enable them to focus and extract useful and up-to-date information from various networks which may be substantial driver of economic growth. Mobile phones are becoming progressively more important to agro-based entrepreneurs as

an infrastructural device for improving efficiency of agriculture markets, promoting investment, and contributing to empowerment.

It is now well recognized that information communication technology based capture, processing, storage, organization and presentation of data and information may facilitate a freer flow of information between governments and people. These interfaces between them need to be feasibly ascertained.

However, there is still lack of information, and we still face many challenges in finding verifiable data on of mobile phones impacts on rural livelihoods. There are very few in-depth studies which have been carried out in India to document exposure of rural households to mobile telephony, opportunities offered and factors influencing the adoption of mobile technology.

It was 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 using, leading to capacity building, long-term asset accumulation, customer satisfaction and in an increased market size. Against this backdrop study titled **“Mobile Phone Usage among Indian Rural Families and its Impact on Family and Social Relations”** was undertaken.

How rural families are benefited by the use of mobile phones, what factors influence mobile phone uses in family communication, awareness of the mobile technology benefits among rural masses, understanding of the sociological effects

related to the uptake of mobile telephony in positive and negative way and reinvention of uses constituted the main objectives of the research.

Research approach: Descriptive research design was used for the study. Survey was used to conduct the research. The study was conducted in two districts; Muzaffarnagar and Saharanpur of Uttar Pradesh. Families using at least one mobile phone were selected for study. Multistage purposive technique was used for sample selection so to include respondents from different age and gender selecting. Sample comprised of 1200 respondents (equal number of males and females) of different age groups; adolescence, young adult and middle aged. The respondents below 14 years and above 60 years were not included in the study.

Semi structured questionnaire was developed for the study which included background and other family information about phone users, mobile phone use pattern and positive/negative impact and limitations of mobile phone use in rural families including economic, technological, socio-cultural and infrastructural barriers.

Part 2: Findings and Conclusions of the study:

The major findings of the study were as follows:

Demographic profile of the phone users:

- Majority of the respondents (71%) belonged to nuclear families. Mostly 2- 4 member families (60%) or 5 to 7 member families (37.5%). 2.5% were large families with Eight or more members.

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- In majority of the families there were more than one mobile phone owners (85%).
 - Mobile phones were recent addition in rural families as 48% of the respondents were using mobile phone for only 2-5 years and only 20% families reported to own mobile phones for more than five years but not more than eight years.
 - More males than females had mobile phones.
 - Mobile phone use was more among educated people as about sixty percent user were educated up to secondary and above.
 - Nokia was the most preferred brand followed by Samsung.
 - Chinese phones were also very popular in rural area (14.12%).
 - Airtel was the preferred network followed by Idea and, BSNL was the least preferred one.
 - Occupational profile of the rural sample indicated that most of the adolescents; male as well as female respondents, were students (61% males and 87% females). Majority of young adults and middle aged respondents especially males were engaged in farming and small trading activities for their livelihood, whereas 26-27 per cent adult males were engaged in government or private jobs.
 - Majority of respondents spend less than Rs.100-200 monthly on mobile. In general adolescents spend lesser than young adults and middle aged. Monthly expenditure of young adults on mobile phones was highest. But when compared for gender differences monthly expenditure of females on mobile phone was less than males in all the three age groups.

Mobile phone use pattern:

- As far as number of phones/ SIM cards use in different age groups is concerned, higher proportion of young adults group had more than one phones/SIM cards as compared to other two groups but this was more among males as compared to female respondents in all the three age groups.
- Around 1 out of 8 respondents reported to use more than one network; highest among young adults followed by adolescents and more among males than females in all the age groups.
- In general (18%) males and around (6%) females keep changing their SIM cards and switch to different networks as per the given offers; phenomenon observed more in adolescents.
- It was found that first priority of providing cell phones is given to male members and mostly to head of the family rather than females in all the age group respondents. Only 1 out of 3 purchased their mobile phone, that also more by middle aged or young adult groups than adolescents.
- It was also observed that buying behaviour differs with age and gender. Preference for design/style was shown more by males of all three age groups and highest among adolescent group. Cent per cent respondents in the study admitted to use mobile phone for conversation; receiving and making calls.
- A large number of respondents (70.9%) use message sending services on mobile phone. A general phenomenon was observed that most of the usages were highest among adolescents followed by young adults group (except alarm clock) and minimum among middle aged group. Same is true for male respondents as compared to their female counterparts (except massaging).

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- Regarding time spent on phone usages per day, there was difference between male and female respondents in all age groups. It was also found that more young adult females spend six and more hours on mobile phone use. Invariably adolescents spend more time on their phones followed by young adults.
 - Most of the middle aged respondents prefer to keep their mobile phone on silent mode during rest time or while in office or study. Although adults agree that they preferred phone on silent mode when there are special guest at home, during office or study time and during rest time. Whereas in case of adolescents it was reported that they usually keep their phone on silent mode in their home apart from study time and some urgent work.

Mobile phone usages:

- Majority of respondents used the mobile phone for socialization; to contact friends and family members 100% respondents mentioned that mobile phone enables easy communication with close family members and friends as well as those from distant places, particularly for women whose spouses are working in far-off places.
- 75% of respondents were using mobile phones for health services. Whereas about 65%, 56% and 48.5% respondents reported to use mobile phone for education, agriculture, and economic purposes respectively and low percent respondents use the mobile phone new technology for SMS Services can transmit weather, news, sports update and stock quotes to the phones users.
- 98% respondents mentioned that they used phone to ask for condition of a sick person, Out of those respondents reported to use mobile phones for

educational purposes 94% used in obtaining information about educational institutes, fees, and admission procedure ,examination results as well as to find out tutorial and counseling services. 56% of respondents using their mobile phones for agriculture purpose at various stages of the agricultural cycle to get information about seeds, land, water, manure and agricultural programmes. People also used mobile phones to discuss prices with buyers and crosscheck prices for their produce to reduce information asymmetries. Those mentioned new technologies for example reported voice messaging, instant messaging to be in contact with individual or group at the same time.

Use of internet:

Respondents (36%) used internet on mobile phone for entertainment, 73% for seeking information (especially on fashion, politics, sports, movie stars, current affairs and their profession of interest), language translation, and dictionary. Facebook was also used to send greetings, daily wishes, funny messages, sharing poetry, jokes, chatting with different groups and video calling. Sending/ receiving messages were also reported by respondents; mostly to friends (85%), family members (40%). Whats App, IMO, Hike, Jio Chat, were some of the apps used for messaging. The result also revealed that rural respondents in the study mainly download song, games, pictures, wallpapers, and sometimes news, those reported to upload preferred pictures, songs, movies, videos, games and share wallpapers.

Problems faced, Issues of argument and don't use mobile phone situations:

Rural respondents reported to face problems of charging (75%), and network issue. More than half of the respondents (54.5%) had arguments for issues like not

picking calls when important, followed by (50.5%) argument about purchasing a new mobile. Although 73% respondents avoid use of the mobile phone during urgent work in office and home, 65% respondents avoid use of the mobile phone while driving.

Positive impact of mobile phone use:

- Mobile phones have created a "phone culture" among women by enabling their access to communication tools from which they might otherwise be excluded.
- About 93% of respondents admitted that their way of talking has improved since they have opted for mobile phones. The mobile phone has immensely improved communication with family members and helped reduce fears and anxieties. There are a number of ways that mobile services promote cohesion in families and society, when family members are away for long periods for study or work, abroad either temporarily or permanently.
- Respondents iterated that mobile phones removed feeling of loneliness. People feel confident and less anxious while going out of their homes due to regular contact with family and friends, to maintain healthy relations with their old friends and family members living far away. Mobile phones helped to get socialized with people when it was not possible to meet them in person and helped in building up social network and social relationships; although reducing cost of travelling.
- The Village Phones have proven their immense potential in boosting income of poor households in rural areas, promoting health care, development of agri-business. By relaying. Group discussions revealed that adolescents and

young adults can access internet on mobile phones while on the go and get knowledge of any topic and the business people can keep updated with the market up and downs, can stay in touch with their employees and clients

- Mobile services dramatically improve access to emergency services, which would otherwise only be available the wealthy. It also allows families to stay in touch with each other in the event of natural disasters, communicate with relief providers and obtain information that will allow timely spread of information, early warnings and better disaster management.

Negative impact of mobile phone use:

- Increased expenses on phones; be it purchasing of mobile hand set or recharging for talk time or net connectivity. Majority of fifty-six per cent respondents reported that they have to compromise other expenditures to meet out mobile expenses.
- Respondents reported that they are not able to work properly or face difficulty while working due to mobile phones.
- Wastage of time and money in discussing useless topics was also a major hack of using mobile phones as reported by respondents.
- Increased anxiety, sleep loss, accidents, loss of hearing, risk of cancer and effect on brain were some of the negative impacts of mobile phone reported by respondents (41%).
- While survey it has been noticed that about forty-eight per cent people reported that they missed many social events and activities because of being on mobile phone.

- Habit of lying with people was also reported as one of the negative impacts of mobile phone. .
- Major negative impact reported was either Having conflict with family members spending less time with family members, distance between family members and less interaction with other people were some of the other negative impacts.

Conclusion:

It can be concluded from the above findings that mobile phones have penetrated in the life of rural people and spreading on a fast pace. Although primarily bought for the sole purpose of communication mobile phones are being used for texting, music, recreation, games and others features of phone and also for internet.

Mobile phone use and various usages in rural area show variance with reference to age, sex, education, occupation and such other factors. Due to economic constraints rural people spend minimum amount for recharging the mobile phone , keep on changing SIM card and network according to available cheapest schemes .and unable to purchase next generation phones sets due to high cost. Mostly mobile phones are used for conversing with friends and family members

The mobile phones, used in the right perception, benefits not only go to the concerned individual but the benefits will go all the people who directly or indirectly related with the individual. Access to rapid two-way communications through

mobile phone is itself an important constituent of rural people perceive their quality of life.

Respondents are aware of some mobile phone use for business purpose, agriculture and farming related information to get more crop production, education and extension, supply research, and financial implication like money transfer, instant payment, online purchasing, payment on delivery .

Of the various problems encountered in use of mobile phone in rural areas are that of power failure, network failure, call failure, limited area of coverage, internet connectivity of network, language, unwanted calls and low awareness.

Benefits derivable for mobile phone use are social connectivity and networks. Being in contact with faraway people, limiting need to travel long distances, quick access to educational, vocational and health information, any time and any where exchange information, effective disaster management. Most of the respondents are using mobile phone for socialization and business purpose by either calling or texting the message to the respective persons. At the same time some of the farmers are also contacting the agricultural call centers for clarifying their doubts while cultivating their fields.

Some of the negative impacts drawn were increases in expenses, no social life, habit of lying, disturbed work life, wasting time in useless discussions.

Many addiction behaviors like need of mobile phone all the time, stress due to high mobile phone bill, anxiety, stress, or insecurity whenever without cell phone, unable to sleep without phone at night, always searching for new offer on mobile

and feel the ringtone even when the phone is not ringing and teased by their friends for excessive use of mobile phone were reported in rural respondents.

Part 3 : Suggestions and recommendations:

The influence of mobile technology on rural lives is vast and increasing day by day. Current study provides the scopes in determining where and how mobile phone applicability can be taken into day to day use facilitating fast, reliable, and affordable means of communication and information exchange. The sensitization and intervention programmers are the real need of the hour to control the ill effects of social net working sites on rural lives. There is a need to initiate awareness campaigns to provide information regarding the impact of mobile phones.

Rural marketing cannot succeed if the strategies and action plan are merely extension to urban marketing strategies and plans. In order to make the most of the untapped rural market in India, companies need to understand the dynamics of rural consumers to formulate marketing strategies specifically for rural consumers. Here are some of the suggestions based on research findings, observations of the researcher and group discussion proceedings ,for companies, service providers and others responsible and interested in rural upliftment –

Suggestions for companies, service providers and other government and NGOs:

- There is a need of accelerated development to improve availability, accessibility and connectivity, modernized network to improve reliability and operational efficiency and improved quality of service, reduced operational costs and enhanced customer satisfaction. This research

recommends applicable stakeholders increase investment in strategies in facilitating rural communities' access to mobile phone facilities as this is expected to reduce their vulnerability to external shocks and progress on their livelihood activities.

- There is a growing market for mobile phone charging services in rural areas. Also networks of prepaid card distributors, repair services and accessories are valid entrepreneur opportunities. Choice of service provider is affected by the facilitating factors such as network coverage, service quality, easy availability of subscriptions and bill payment centers.
- Information, knowledge and education can be considered core building blocks of social empowerment. Mobile phone adoption enables direct access to education. Content and exercises can be delivered via SMS/ texts or apps to the recipient, who may otherwise not be able to access any education due to the distance to the nearest institution. People can access information through online journals, online dictionaries, newsgroups etc.
- There is need to educate the mobile phone users on better and diverse use of the mobile phone technology. The study revealed that many people are not aware of the different services they could access from their cell phones other than SMS, receiving and making calls. It is important to explain the people benefits of technology and also important to explain the crimes committed in the technology. The changing scenarios have been demanding professionals at various levels to adapt new ways of education and training. ICT can play a major role in women empowerment if they are provided employment opportunities at the village level after providing their suitable training.

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- The privilege of obtaining timely health information and services at a lowest cost irrespective of the class and place can be important. Empowered with various health apps or free motivational and wellness related health apps, the rural people may stay healthy. In resources limited settings programmes and spreading voice messages to control contagious disease can be used to improve health practices.
 - The study recommends that in order to benefit optimally from mobile phones, the subsistence farmers must transit to market-oriented farming and use mobile phones at higher levels for geared building capacity of farming households through education and enhance earning potentials through adoption of modern practices and technologies. This would be probable if government and non-governmental organizations create knowledge of mobile phone applications to support rural livelihood and make available supporting infrastructure that can help to mainstream and integrate mobile phones use into rural livelihood activities.
 - Illiteracy leads to an inability to identify brand differences and read the basic text on packages. Companies give their products shorter names in the local languages and significance of their brands by pictures and endorsement by local stars to increase awareness about different programs, function of phone and other intricacies.
 - Cheaper access to knowledge and information is a must. Value –added phone, plus services, such as, voice mail, electronic mail, video text and audio- video conferencing for better exploitation of the network, better means of connectivity with others, productivity in terms of saving money and increasing profits, and a sense of enjoyment influence the perceived usefulness to improve economic production capacity in the settings where the poor live.

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- Accurate and timely information on modernized agriculture practices to improve yields, processing, marketing, sales and storage of the produced harvests is essential; for making right decision. Government should provide up to date global and local information, for example, weather forecasts and regional recordings of crop diseases and pests on local mobile phone network.
 - There is a need to provide the technology platform to improve communication among the farmers for aggregate crop information and to access market information. Market Information Services are information systems used in gathering, analyzing and disseminating information about prices and other information relevant to farmers, animal owners, traders, processors and others involved in handling products. M-learning is accessible from virtually anywhere and collaborative; sharing is almost instantaneous reception of instant feedback and tips.
 - There is a very wide range of potential related governance services which can be delivered and communicated via mobile phones, including services relating to health care, agriculture, education, employment, transportation law and order, tax, judicial and legal systems, etc.
 - Mobile telephony improves commercial supply chains in developing countries. IFFCO is a recent example which is using mobile technology in its supply chain. With its roots in cooperative, IFFCO's production is supply driven and not demand driven. Finally, mobile act as best solution for their requirements. Moreover, through IKSL, they are providing services to farming regarding the use and availability of fertilizers, which enhance their

supply system and farmers become capable to get the product at negotiated rates.

Recommendations for further study:

- Future research related to social networking sites usage may provide a more in-depth information in several ways. Researchers could build upon this study with a larger participant group either to confirm or to repudiate the results. In addition, imitation of this study with multiple interviews per participant may establish a more consistent and reliable data set.
- Researchers can utilize the results of this study to develop create a theory surrounding the effects of social networking sites and reason for use.
- It would be better to analyze deeply the inclusion of barriers towards sustainability of mobile phones in making of rural India.
- Furthermore investigations can be made to determine how the challenges identified by respondents may affect business activities so to include people that do not use mobile.
- Socio-economic determinants of mobile phone utilization for sustainable livelihood can be investigated.
- Health hazards of mobile phone use can be studied in detail.
- Researches need to be carried out in making the electronic mobile transfer and storage of personal data fraud free with minimal issues while exchange of information and transactions.

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- Longitudinal studies are necessary to better understand the effects of chronic mobile phone use problems, identify critical periods and efforts required for adjustment on time.
 - A better understanding of risk factors for mobile use could provide insights for intervention.
 - Not all people are equally vulnerable to the neither negative effects nor are they equally likely to exhibit internalizing versus externalizing problems, research should consider biological, psychological and contextual factors that may effect people in different ways.