

A Study on Role of ICT Based Telecom Services for Telecom Users

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Abstract: This study depicts the various role/applications/ or uses of ICT for the telecom users from household sector. The study is conceptual in nature and based on the information gathered from various reports of telecom industries, online data about the ICT and telecom sector and the websites of various telecom companies. Researcher has highlighted the increased role of ICT base telecom services for the telecom users and have also discussed that how these services have made the life of a common man easy, smooth and helped in cost and time saving.

Keywords: Information & Communication, Telecom, Household Sector, Payment, Wireless, Technology and Users.

I. INTRODUCTION

Information and communication technology is extension of Information technology which includes telephone lines, wireless signals, computers including enterprise software, middleware, storage and audio visual systems with the help of which user can store, transmit, receive and edit information. There are various roles which ICT plays for telecom users as defined below:

1. Information

ICT is one of the most important tool for disseminating information and knowledge about just everything and anything. It is very important tools for the students, Professors, Researchers and common people in the modern world. There are various search engines and apps such as Google which are used in daily life to get answers to any queries, soliciting information about products and services available, rates of various products and their availability and so on. All data is available which can be of immense use for the researchers as well. For students' ICT is a ready tool to get information about job openings in various companies for which earlier they had to purchase employment news and other magazines. That was not only a costly option but also there were chances of missing some opportunity as well. Moreover, sending Applications and posting them along with resume against each advertisement was not only costly but time consuming also Now all the jobs are advertised online which can not only be assessed at any point of time but also application for same can be sent online. This saves a lot of time and money both for advertisers and the aspirants. Same hold true for the various scholarship schemes available which can be easily accessed by the aspirant. Now there are no chance of missing some information and moreover all information whether regarding job or scholarship are available at one source only. Even students can pursue distant and online education courses through this which was not possible before and attending the traditional classrooms was the only option. This has also helped a lot the students who wish to apply for education and scholarship in universities of other countries. Not only all Information about the various foreign universities, their admission criterion, fees, scholarship availability etc. is available on line but even the application submission and fees deposition can be done online. Further aspirants applying for job or scholarship or admission in any other city or country can get all the information about that place with regards to social behaviours, lifestyles, cost of living, accommodation facilities and so on using ICT applications which have made the life very easy as they can take an informed decision.

Another aspect of ICT being used productively for information dissemination is in the case of farmers and fishermen as now they are able to get advance information about the weather condition which is very beneficial for them. In India more than 50% of the cultivable land is not irrigated and most of that is owned by marginal farmers who cannot afford tube wells. Such farmers depend on the rainfall only not only for irrigation but for sowing of crops as well. By getting the accurate information about timing of rainfall they can plan their sowing time. Additionally, they get advanced information regarding impending calamities such as storm and hailstorm which gives them time to take precautionary measures in order to save their crops from severe damage. For example, if they get information that a hailstorm is about to come and the reaping season is near they can prepone this activity by a few days and save the crops. In the same way for fishermen going out in the high sea, getting timely information regarding storms and high tides is a matter of life and death. A lot of precious lives have been saved due to advanced availability of information regarding any natural calamity. Moreover, ICT applications are being used for communicating information regarding the best practices in agriculture and fishery apart from the various subsidies and government support to these sectors. Even for the

common people ICT applications are a source of information regarding various Government scheme and policies. Government keeps on announcing various welfare and subsidy schemes for the poor people. It would have been a gigantic and expensive task to inform the probable beneficiaries about the available schemes through other means like newspapers etc. As the information about these are readily available more and more people are able to take the benefit of same thereby having a positive effect on the economy of a country. Not only that but this is an effective medium of communicating the various achievements of the Government to masses thereby building a positive perception about the government which is very important in a democratic country like India where people are elected based on the votes of people. So far convenience is concerned people can now make use of apps such as IRCTC etc. to book tickets on line and check the status of ticket. All the passport and visa offices are connected online and now there is no need for the people to visit these offices repeatedly to get their passports and Visas. Most of the activities related to application and verification happens online and just one visit serves the purpose. Same hold true for Adhaar cards, driving license, Gas connections etc. as well. Even for the security agencies this is proving very useful as not only information about various antisocial and terror groups are available on line but also they can share information with public and caution them beforehand regarding any perceived threat or any activity which might have an adverse effect on law and order situation. Thus ICT has touched each and every aspect of our life so far information sharing is concerned and people cannot imagine a life without this now.

2. Awareness

During last couple of decades, world has witnessed an incredible development in ICT in terms of its reach and penetration amongst the masses making it part of everyday life. Thus ICT has made a huge impact on the lives of general public and people are more aware of what's happening around them and across the world. One field where it has been widely used across nations is disaster management. The underdeveloped countries are more prone to calamities may be natural or medical type. All governments have been using ICT tools to increase awareness of the general public regarding disaster management i.e. what they should do in case they meet some disaster such as flood, earthquake and so on thereby saving many precious lives. Awareness about medical issues has also significantly increased due to effective use of ICT tools especially in the case of pregnancy and child care related problems. Some examples regarding use of ICT for increase awareness regarding medical issue is polio drops campaign, Anti malaria and leprosy drive and so on. Moreover, there are many apps which are increasingly being used by general public as well as government and political parties to not only express their views on various social, political matters of national and international importance but also provide them the opportunity to exchange their thoughts and views on various current issues with others. It is said that "the tyranny of a king in oligarchy is not as dangerous as the apathy of a citizen in democracy". For a democracy to be successful it is important that the electorate is well aware of the various social and political developments happening around so that they can take an informed decision and exercise their vote judiciously. Also for a democracy to be vibrant it is important that people are able to raise their issues freely and enter into a healthy debate with others. ICT provides various platforms such as Facebook, twitter, Instagram to name a few where people can exchange ideas freely resulting into the public becoming more aware and conscious about what's happening around them. Also now the people are more aware about the working of financial markets thanks to ICT and this is evident from the increasing share of Retail investors in the stock market. This in turn not only has helped in the financial gains for the investors but also contributed towards a healthy growth of economy. Best part is that people can take the investment decisions wisely as they are aware not only about how the stock exchange in India is moving but are also updated about the stock exchanges in other countries such as NASDAQ, Tokyo stock exchange, New York stock exchange etc. which definitely has a bearing on Indian stock exchange. So the investment in stocks has come a long way from the times when IPO's were announced through newspaper and brokers and the application involved a cumbersome manual process to apply and invest money finally to get the share certificates which were in physical form and susceptible to damage. ICT has not only made it possible to apply online for shares and debentures of various companies but also to store the certificates in digital form. Also the investors can apply for a particular company after doing a detailed study of same since all the information is available online. Same holds true for investing in various Insurance schemes and fixed deposits. Banks have been a major contributor in increasing the awareness about financial markets by providing various tools in their websites where the customers can get all the required information and can also participate by purchasing and selling of shares, debentures etc.

ICT has contributed in increasing the social awareness about the conditions and needs of the underprivileged and the NGO's who are working to alleviate them. Nearly all the NGO's have their website through which they increase the public awareness regarding their objectives, the cause they are working on, their activities, achievement in past along with recommendations. Public on the other hand can seek more information from them in case of any queries regarding their genuineness and also can get the feedback about their performance from other people through the various apps available online. Thus on the one hand general public is now fully aware that the contributions they are making is going in the right hands while on the other side the NGO's contribution base has expanded tremendously reducing their dependency on Govt funds. The

most benefitted NGO's as a result of raised public awareness through ICT tools are those NGO's who were working in the hinterlands and had no way of making the public in the urban areas aware about their activities. Hence gone are the days when NGO's survival depended merely only on the contributions made by the Govt or by the promoters themselves. Now general public is donating generously to these NGO's as they are fully aware that what the causes various NGO's are working upon are. Accordingly, they make donations in the cause they are interested in such as Child education, Blind Schools, Cow protection, Organic farming, rural education, health sector, women empowerment and so on. Finally, in broader context strong NGO's are a bane for the society as they help improve the social status of the underprivileged and enable them to move up the financial ladder by providing them medical facilities, basic and higher Education, knowledge about various government schemes, improving farm yields and so on. This in turn helps improve the overall economy of the nation. Finally, the tools used for increasing the awareness are many such as Websites, Mobile SMS, Emails, Facebook etc.

3. Entertainment

Entertainment has been given an altogether new dimension by ICT by not only increasing the availability of entertainment sources but also the variety of same. There was a time when the only sources of entertainment were mainly; Radio and Doordarshan which used to go live for only a certain period of time in the morning and evening. Those were the times when people used to wait for a full week to watch music and movie on the TV sets as one only movie and one music programme (Chitrahaar for 3 minutes) were aired in 7 days. The only time people got slightly more recreation was election time when 2-3 movies were aired. The only thing which one used to get daily was the News but that too for a fixed time every day. Moreover, it had a limited reach even in urban population and in rural areas it was an ultimate luxury Radio though had more channels but the variety was limited. Everything changed with the advent and advancement of information and communication technologies. This change has not been a small one but it has been a sea change not only in terms of no of Channels and variety available but in terms of reception clarity and technology involved. ICT has provided Customers the facility to view 24X7 and 365 days a week a number of Channels dedicated to news only in English, Hindi and also Regional languages. And the best part is that it's not only limited to just news. Be it music, movies, entertainment programmes, adventure and science, all are available 24X7 during the entire year not through one Channel but across multiple Channels. Apart from this there are dedicated channels for Sports, which are not only entertaining and provide knowledge about various games played across the world but also motivates the young generation to take these sports as a profession, thereby leading to not only a healthy life but also contributing to the Nation's glory.

Last but not the least how can one forget the children? For them there are a no of Channels devoted to Cartoon films and online games. And it is a never ending list. In terms of technology from the antennae set on the roofs of the house to cable networks users are presently using satellite reception through disks and enjoying the reception clarity of HD Channels. Also if they spend little more 3D screens are available to have a virtual world experience. Moreover, if a person really wants to go out and watch a movie at cinema the tickets can be booked for same on any of the apps available such as "Book my show.com" or the user can directly go to the website of cinema hall and book ticket there.

Talking about contribution of ICT to entertainment in the Modern world it is not limited to only TV channels but then there is the ever popular Facebook. Whether one is a child, young or old everybody is hooked on face book now a day. This has become a very effective tool of connecting people across the world where they not only share their memories in the form of images and memoirs but has also become a very strong platform for having debate on social and political issues. Many issues of social concerns have been raised on this platform so that it reaches the right person and necessary countermeasures are taken by the people in power. Off late it has been observed that political parties using this medium to propagate their school of thought and impacting the public perception. Not only they propagate their philosophy but also use the media to counter their opponents. Recent years have witnessed many political campaigns fought very vigorously on the Facebook. These campaigns not only increase our awareness but also very entertaining to watch with people having political bend of mind. Such has been the dramatic results that today nearly all Parties have a dedicated cell who is devoted to this channel only.

Another ICT advancement which has really contributed to entertainment Industry is Internet which is increasingly being utilised by children as well as adults to play online games and download latest movies. Then there is Youtube which is another ICT innovation where a person can not only watch movies, songs and cartoon pictures but can also load his own movies and songs. Many an aspiring stars and musicians can be seen here presenting their own Channels.

Then there are Digital cameras which have revolutionised the hobby of photography. There are several photo editing soft wares which allow the images to be edited and manipulated. From digital cameras the photos can be directly downloaded to a computer or stored in chip or alternately processed for printing.

Last but not the least another innovation in ICT which has given entertainment a new dimension is the availability of smart phones at affordable prices and the decreasing cost of high speed internet. Now utility of

the smart phones as a communication tool has become a basic factor as it is increasingly being used for entertainment by the users be it watching a movie or song on you tube or playing online games and operating the Facebook. Apart from this there is lot of computer games available for personal computers or dedicated games consoles. An individual can play against the computer. Against other player using the same console or against other players using an internet connection. Thus it can be concluded that information and communication technologies have brought about a revolution in the entertainment industry with the advancements such as You tube, Facebook, smart phones, high speed internet, satellite signals reception and so on.

4. E-Repository

E Repository means a central location to store and maintain data. Either this place can be used to distribute the stored data by using internet to various users or the user can be given a right to access this data directly without utilising the network for same. In an industrial context with the fast growth which is happening managing of ever increasing data has become a complex task. Managing of data includes safe storing, retrieving and mining of relevant data to put it in optimum use in a cost effective way in order to analyse a situation or for the enhancement of products, services/processes in future. Now this Data can consist of anything from books, records, documents, files, reports, lab results, communication and so on which are source of information. It is important to keep data safely as that is not only a record of history but also is used for analysis to solve the future expected problems and challenges.

However, it is very cumbersome and complex to keep records manually and even more difficult to retrieve them as it consumes lot of energy and time. Moreover, it requires a lot of space to keep it and additional cost is to be borne in order to ensure its safety. However, with the advent of ICT tools such as computers, digital libraries, email, Internet and so on this activity has become very simple and manageable. ICT provides the tools to store the in formations safely and makes it possible that information is disseminated easily. Moreover, a large amount of information and data can be stored in a small pen drive eliminating the need of additional storage space and manpower to ensure its safety. Moreover, data stored in digital form is not prone to deterioration. As a result, employees by adopting latest ICT technologies are able to do better record keeping and thereby become more effective and efficient in performing their tasks. This results in the overall productivity enhancement not only for the employees but the organisations as well. Thus availability of information and communication technologies helps in maintaining adequate and accurate records and making it available with ease. This helps in a myriad of important activities such as national planning, financial budgeting, Product development, Research and effective implementation of various tasks. The common devices where this data can be stored are hard disks, floppies, pen drives, CD ROMs etc.

Another important tool which is commonly used is Google calendar which utilises internet for online management of time and task by utilising the calendar via web browser. Users can create as many calendars and can be used for sending messages through emails, SMS etc., using the web browser regarding the scheduled activities and reminders as well. Google drive as the name suggests is another innovation made by Google for storage and synchronisation of files and data. It allows users to store file on their servers, synchronise files across devices and share files. In addition to the website Google drive offers apps with offline capabilities as well which are compatible with computers, Android Smartphone and tablets. Google drive consists of Google docs, sheets and slides, an office suite utilising which a group of users can make changes in documents, excel sheets, presentations, drawing etc., while interacting with each other. The files thus revised and worked upon remain saved in Google drive. It also offers privacy settings so that the user can decide whether he wants to share files with others or want to make them public. In case he wishes to share a file he may or may not offer the option of editing the file to the person with whom he is sharing same.

Another application of ICT is in cloud technology which covers a wide range of resources that a service provider delivers to customers via the Internet. These services are available to customers on payment basis. The advantage to the customer is that he can avail the services without worrying about software licences and supporting server and network infrastructure. This cloud based technology also helps organisations in accessing software, storing, computing and use of other IT infrastructure elements without having the responsibility of their maintenance and up gradation. Then there are digital lockers such as Dig locker service extended by Government. Citizens can store certain official documents on the cloud which is a replacement of the traditional lockers and people can store their educational certificates, PAN Cards, driving license, vehicle ownership documents in the IGM storage space provided therein. The only prerequisite for getting password for Digi locker is availability of adhaar card. Apart from Government most of the banks have started providing similar facility to their customers through net banking, Tata memorial hospital uses same to keep medical documents and test reports of their cancer patients. An access of same thru user ID and password is provided to patients as well so that they can share the reports with other hospitals and take second opinion. Apart from these many online repository services are available such as Demat Accounts provided by various banks where one can store his Share and mutual fund certificates in digital form and can also do transactions in them. Thus it can be said that information and communication technology has enhanced the variety and accessibility of data and services

to break the barrier of location and time. Also ICT is influencing all aspects of life including E Repository especially because the changes are happening at a very fast pace churning out a lot of data.

5. Time and Cost

It's an old saying that "time is money" and that way Information and communication technology has saved a lot of money both directly and indirectly. Earlier if somebody had to purchase a Product he had to visit various shops providing the product. Also every shop had many variants of the Products catering to his needs which added further to the complexity. Next step used to be making a comparative chart for value of money each of the Product and its variant offered. Even after this exercise the customer used to talk to various people in his circle to take their recommendation and after finally zeroing down on the product he used to visit the shop again for making the final purchase. Carrying cash with him especially in case of high value Products used to be a risky proposition. This was a real time consuming exercise and required a lot of energy apart from travelling expenses, Information and communication technologies which has made it possible to do all these exercises from the comfort of his home or Office with the help of internet utilising any of the E Commerce sites available such as flip kart, Amazon to name few where he can see all the Products supplied by various companies. Not only that but these sites offer the facility of features and price comparison along with Customer reviews. Hence the Customer is able to take an informed decision.

Moreover, every site provides a payment gateway through which customer can make online payment using Internet Banking and the Product is couriered to home. Customer if wishes can avail the facility of making payment on receiving the Product which is called Cash on delivery (COD). So the ICT technology eradicates completely the hassles of withdrawing cash from bank and then taking it to the shop for making payment for the Product which in itself was a risky proposition especially in case of high value goods. Same way earlier getting a railway or flight ticket or for the matter even a movie ticket used to be a full one-day job – going to the Railway station early in the morning, looking for a place to park the vehicle checking berth availability from the enquiry counter, standing in the other row of ticket booking counter, and sometimes come back empty handed due to unavailability of the tickets or because the booking time closed. Now all these things can be managed online. Customer can log in to the railway site i.e. IRCTC where he can not only check the ticket availability of different classes in various trains on different dates, book tickets, make online payment and get a printout of ticket but can also check the PNR status as well. Now days this IRCTC site provides many other additional facilities such as booking bedding, Meals and even airline tickets can be booked from this site. Further high speed internet connectivity and GPS system has made it possible to have the live running status of a train. Some of the common apps for this are Ixigo, NTES, Rail yatri, Indian railways etc. Same way every Airlines offer online booking at their sites and additionally there are many site such as "Make my trip.com" where a person can book a ticket after comparing the fares being offered by various airline for a given sector. Same holds true for movie tickets as well. Interesting part is that various sites offer some discounts or cash back offers to encourage online booking and using the various payment aps such as paytm etc.

Information and communication technologies have revolutionised even the services provide by Indian post offices which is one of the oldest and biggest public sector and considered to be the backbone of country's communication. They have opened an E Commerce portal by the name "E Post Office" which is like a virtual post office providing various services such as Electronic Money Order (EMO), Instant money order (IMO) Old stamps sale for collection, various information, shipment tracking, searching for Pin Code and also customer feedback and complaints. In future this portal plans to offer not only "post products/services" but "no postal" as well. One of the greatest competitive edges of Indian Post Department is its reach to the remotest areas of the country which they have successfully exploited by partnering up with various E Commerce portals for delivering both pre-paid as well as cash on delivery consignments to tier II towns and in the rural heartland. All these activities are going to save a lot of time and cost both at the customer end as well as the department end.

Similarly, earlier it was a very complex process to file the Income tax returns as all the calculation regarding Income, expenses, standard deduction and tax saving schemes was to be done manually followed by filling up the form. After that again one had to stand in lines to deposit the form. At the same time, it was a difficult task for the tax authorities to collect all the returns, scrutinise them, send confirmation and process refunds. Now with the help of information and communication technologies it has become possible to file E returns online and since the data is in digital form it has become easy for the tax authorities to process same thereby expediting the notices as well as refunds. This has not only made the entire exercise simple and cost effective but has also increased the revenues due to tax payers base expanding thanks to easier filing of tax returns. The impact of Information and communication technologies can also be seen in the online facilities for getting Passport, visas and Adhaar Cards as well

6. Digital Payment

Digital payment as the name indicates is the type of payment transactions which are done through digital modes. In this both the sender and receiver of the payment use digital modes for the transaction i.e. the transactions happen online without using any hard cash. Hence it is fast and convenient way of making payments since the money transaction happens between the account of payer and payee without having the need

to go to bank for cash withdrawal or deposit. It offers many advantages such as convenience and ease of transaction, more secured as compared to cash transaction, promotes transparency and accountability, decreases the size of grey market and helps businesses grow their customer base far beyond the limitation of their immediate geographic area. Embracing digital payment systems will fast track the movement towards cashless culture and economy. This presents huge opportunity especially for small and medium businesses as it will help them reduce the cost of doing business. There are various modes of digital payments such as Debit/Credit cards used in conjunction with POS machines, ATM's as well as online, unified payment interface (UPI) which identifies the user using the phone as a tool along with bank account, E-wallets etc. ICT has also helped in not only making the transactions cash free but at the same time also ensured that the details like bank accounts are stored securely and easily retrieved while making payments.

- a) **UPI or unified payment interface** is a system of payment which uses mobile apps to make fund transfers between two accounts. Registering for mobile banking is required for using UPI apps and currently is available for android phones only. For start using it the user has to download any of the UPI apps which are available and there are lot many such as BHIM, SBI UPI app, HDFC UPI app, iMobile, PhonePe. Further it is not necessary to use app of only that bank where one has account but the user has the freedom to use any app as per his wish. The only problem faced with them is in case of unstable internet connection.
- b) **AEPS or Adhaar based digital payment service** is another digital payment method which just requires the Adhaar No to transfer the money from the payers account to the payees account. It can also be used for withdrawing or depositing cash. User can start using this after registering his adhaar no with the bank account which in any case he has to do for KYC compliance. This payment mode can also be used with POS machines and is completely free. Best part is that just needs the finger prints of the user as a password and nothing else making it the most secured payment mode.
- c) **USSD banking** is another digital payment system which uses mobile phone for fund transfer from one account to other and the advantage which this system offers is that it is not necessary to have an android phone for using this app as was the case with UPI mode of digital payment. Even Internet connection is not required. This service can be used for a wide range of operations irrespective of whether they come in financial or Non-financial domain such as balance enquiry, money transactions, changing MPIN and getting MMID. This mode uses the registered mobile no of the user to connect with his bank account through the server of the telecom operator. It has a transaction limit of Rs 5000/day per customer and some transaction fees is also there. To initiate this user needs to dial *99# with his registered mobile no to transfer funds, know account balance or request mini statement.
- d) **Debit and credit cards:** Next are debit and credit cards which are most widely used digital payment modes through which nearly all the banking transactions are possible. Debit cards are issued by the bank to the customers who have an account in their branches while issuance of credit card does not have any such requirement and can be issued to anybody after conducting his financial check. Then there are some prepaid cards also such as Rupay Debit card use for digital payment. While in the case of debit card the user can only use that amount which is available in his bank account but in case of credit card he is provided the authority to withdraw or use money as per his limit defined.
- e) **E wallet** is another digital; payment mode which has more functionalities and is digital version of our leather wallets. Digital wallet allows an individual to make electronic transactions utilising the money kept in it. It can be used to recharge phones, make payments and transferring money while getting cash back in his transactions. There are numerous types of E Wallets available to users in India such as State Bank buddy, ICICI pockets, free charge, Paytm etc. However, the limitation with E Wallets is that it is more suitable if the user wants to transfer money to wallet of another person rather than his bank account. Another concern is that it is a bit risky as it does not require any password so if the phone is not locked somebody else can also use this money. Some other examples of digital money are Ola Money, PayPal, Paytm money, Mobikwik etc.

7. Safety and Security

ICT has contributed immensely in ensuring the safety and security of telecom users. There is not a single gamut of telecom where it has not played a role as explained below in various cases.

- 1) **Vehicle tracking system:** Vehicle tracking system is a management information service for individuals and industries across various verticals that addresses issues and offers solution for day to day operations. This system takes care off and provides solution to a very critical need of the organisations to integrate their field service operations with the enterprise operations by optimum utilisation of their assets which are distributed over a geographical area for example Lorries and Trucks. Vehicle tracking system provides the organisation the exact location of their movable assets at any point of time. By locating and reporting geographical information it allows organisations to centrally manage the various resources moving in the field so as to derive maximum utility and productivity. It helps improve emergency response for an individual vehicle or an entire fleet as well. It not only reports vehicle condition, driver behaviour, detour from planned route but also offers remote control facility. Thus organisations gain the ability to track stolen vehicle. Analysis of

excess speed, harsh braking and acceleration by driver enables them to plan corrective measures thereby reducing chances of accidents.

- 2) **GPS service on mobiles:** This is a great safety feature for women which have become a priority for Government considering the increasing cases of crimes against women. In this case she has to quickly press the panic button on her phone. A Police patrol vehicle in the vicinity tracks her location through the Phone's GPS system and reaches the location in minutes thereby saving the girls from any untoward incident. It has been recently announced by Communication and Information minister that all mobile phones sold in India will have an inbuilt GPS along with a panic button henceforth to identify the user's location. Apart from this there are many apps which can be downloaded on smart phones to be used in the time of distress such as safetypin, Raksha, Himmat by Delhi police, Smart 24x7, Shake to safety and so on.
- 3) **Mobile tracking system:** Mobile phone tracking is the system which enables to locate the exact position or location of a mobile phone where it is being used currently immaterial of whether the person using it in a given location or moving from one place to another. This tracking can be done in 2 ways – Either based on the transfer of radio signals between towers of mobile operator and the phone or through the GPS installed in the phone itself. Thus it can effectively reduce the chances of theft and stealing of mobiles.
- 4) **E Alerts on mobile for banking transactions:** This service helps the user get an SMS on his/her registered mobile number whenever he makes a banking transaction like credit, debit, cheque return etc. Thus it helps in securing bank accounts by alerting the account users as soon as the transaction takes place.
- 5) **Women helpline and Emergency numbers:** What's app is one of the most popular apps which has connected people across the world. This technology is at the same time also being used for the Safety and security of people especially women. Police in many states have dedicated one WhatsApp number, especially for registering complaints. The complaint registered here is then passed on the concerned police station. At the same time Police of many states have launched apps through which women can contact the nearest police station for help/Like Bhopal Police have launched "WSafety" the purpose of which is to help women when they encounter a risky situation. This enables women to send a SOS text messages to their parents and guardians when they are in danger. Also at the same time another message goes to cops who can immediately respond and ensure their safety. One special feature with this app is that it will work even when there is no mobile data or internet connectivity. This app stores the woman's name and number and in case of emergency as soon as she presses the danger button the app. message automatically goes mentioning her location to police and 2 other family or Guardian whose numbers have to be fed beforehand.
- 6) **E Alerts on Online Accounts:** ICT is also used in making online transactions safe with the help of SMS and E mail alerts. In case a person is using Mobile banking then he can receive alerts via notifications to his mobile device. Such alerts are sent in case of suspicious or unauthorised log ins, when a deposit has cleared, credit card has reached predefined limit, in case of low balance and so on.
- 7) **Adhaar linking with Mobile No:** Earlier some people used to get multiple sim cards from different providers by submitting fake documents as original were not required. This practice was prone to security threats and terrorist activities. By linking of Adhaar with mobile numbers the fraudulent and illegal activities have reduced to a great extent.

II. CONCLUSION

ICT has greatly impacted the way people interact with each other across the globe and conduct their social and personal lives utilising various ICT tools such as texting, instant messaging apart from voice call and video calls over WhatsApp and skype. Text based computer communication imparts a level playing field to those who have speech or social problems. Now people can, not only talk to their near and dear ones across the globe at nominal cost but can also have a face to face talk as well. This facility is actually a boon for those whose children have gone abroad in pursuit of education or jobs. Further ICT tools such as E Commerce and Internet Banking enable people to order any item from home and conducting banking transactions respectively from the comfort of home or office. Without spending a fortune one can have a virtual tour of all the tourist destinations across the globe. Students have been making best use of apps such as WhatsApp group to interact amongst themselves and get answers to their queries about what is being taught in the class. Also they plan get together and picnics by collaborating through this app, now a day, even Teachers encourage students to make such WhatsApp groups and are also part of it themselves.

Thus we can see that ICT in telecom has not only brought countries and people closer to each other but also helped businesses in optimising cost while providing them to expand to otherwise geographically difficult places to access. In short it can be said that the world has transformed into a Global village due to advancement and innovation in ICT based telecom.

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