IRSTI 03.29.00 https://doi.org/10.26577/JH.2021.v102.i3.04

Najibullah Akbari, Shirali Samimi*

Bamiyan University, Afghanistan, Bamiyan
*e-mail: a.alisamimi.s7@gmail.com

A BRIEF HISTORY OF TELECOMMUNICATION AND TRANSMITTING INFORMATION IN AFGHANISTAN

During the ancient time the important way for communicate between people was face to face and direct communications. Therefore all activities of communicate were limited with small community and they could not be aware from state of other countries and their neighbors of the direct methods. In the review of communications and the evolution between people were some progress from the beginning and expand connections of themselves through their various inventions. People did not have much ability to talk, interact and communicate with each other. But with the developing of different sciences and their integration with each other the possibility of human interaction has increased in modern era, nowadays we see their unlimited communication with each other that we are in the era of new technology, we have witnessing for the extensive communication of people that beings with each other that they can easily communicate everywhere of the world. In the present time all communication tools such as internet, mobile phone, satellite, cinema, television, radio are available for using of modern people, which they can communicate with each other and can see each other faces from every zone of the world. All these developments originate from the rich thinking and intelligence of humanity. In Afghanistan during the 20th century after civil war the communication was also comfortable for using by supporting of subordinating countries via installing of modern technology.

Key words: communication, satellite, data, post office, stamp, massages and television.

Наджибулла Акбари, Ширали Самими*

Бамиян университеті, Ауғанстан, Бамиян қ.
*e-mail: a.alisamimi.s7@gmail.com

Ауғанстандағы телекоммуникация мен ақпарат берудің қысқаша тарихы

Ежелгі уақытта адамдар арасындағы қарым-қатынастың маңызды тәсілі жеке және тікелей байланыс болды. Сондықтан барлық байланыс қызметі шағын қауымдастықпен шектелді және олар басқа елдердің Штаттарынан және олардың көршілерінен тікелей әдістер туралы біле алмады. Адамдар арасындағы байланыс пен эволюцияны шолуда басынан бастап біршама прогресс болды және олардың әртүрлі өнертабыстары арқылы өздерінің байланыстарын кеңейтті. Адамдар бір-бірімен сөйлесуге, өзара әрекеттесуге үлкен қабілетке ие болмады. Бірақ әртүрлі ғылымдардың дамуымен және олардың қазіргі дәуірде бір-бірімен интеграциялануымен адамдардың өзара әрекеттесу мүмкіндігі артты, қазіргі уақытта біз олардың бір-бірімен шексіз байланысын, жаңа технологиялар дәуірінде екенімізді көріп отырмыз, біз бір-бірімен байланысатын адамдардың кең қарым-қатынасына куә болып отырмыз. Олар бүкіл әлемде оңай сөйлесе алады. Қазіргі уақытта интернет, ұялы телефон, спутниктік теледидар, кино, теледидар, радио сияқты барлық байланыс құралдары қазіргі адамдар үшін қол жетімді, олар бір-бірімен сөйлесе алады және әлемнің кез келген нүктесінен бір-бірінің жүздерін көре алады. Барлық осы жетістіктер адамзаттың ақыл-парасаты мен ойлау жүйесінің жоғарылығынан туындайды. Азаматтық соғыстан кейінгі 20 ғасырда Ауғанстанда байланыс қазіргі заманғы технологияларды орнату арқылы бағынышты елдерді қолдай отырып қолдануға ыңғайлы болды.

Түйін сөздер: байланыс, спутник, деректер, пошта бөлімшесі, бренд және теледидар.

Наджибулла Акбари, Ширали Самими*

Бамианский университет, Афганистан, г. Бамиан,
* e-mail: a.alisamimi.s7@gmail.com

Краткая история телекоммуникаций и передачи информации в Афганистане

В древности важным способом связи между людьми было личное и прямое общение. Поэтому вся деятельность по общению ограничивалась небольшим сообществом, где они не могли быть осведомлены о иных прямых методах связи с соседними государствами. В обзоре

коммуникаций и эволюции между людьми с самого начала был достигнут некоторый прогресс и расширились связи посредством различных изобретений. У людей не было особых способностей разговаривать, взаимодействовать и общаться друг с другом на расстоянии. Но с развитием различных наук и их интеграцией друг с другом возможность человеческого взаимодействия увеличилась в современную эпоху, и в настоящее время мы не видим ограничений в общении друг с другом, так как мы живем в эпоху новых технологий. В настоящее время все средства связи, такие как Интернет, мобильный телефон, спутник, кино, телевидение, радио, доступны для использования современными людьми, которые могут общаться друг с другом, увидеть лица друг друга из любой точки мира. Все эти разработки происходят из богатого мышления и интеллекта человечества. В статье рассматривается история телекоммуникаций и передачи информации в Афганистане в XX-ом веке, после гражданской войны, когда возникли различные виды связи за счет развития современных технологий.

Ключевые слова: связь, спутник, данные, почтовое отделение, марка и телевидение.

Introduction

Communication has been considered as one of the most important issues for human beings from the ancient time to present era, people have played the role communications in face to face, during the ancient times they conveyed their self's messages by using drums and smoke to others. On that time humans were unaware from the environment of their outside area at their small community, and they imagined the whole world in their limited zone and small society. Thus, people have acquired spoken through consistent and continuous efforts to more communicate with their surroundings in the long distance and used it to establish better and more effective communications. Although, humans entered the collection of oral or spoken with different dialect that began from ancient time In the wide range of spoken and thought were more attention to has been paid for the contents of messages, humans have used their five senses to communicate with each other, but the dominant sense has been the sense of hearing, which was more appropriate in linguistic communication between people than other senses. However, humans were also faced to many difficulties in transmitting their messages and desires within the field of spoken and needed more advancement means of communication, which led to a great invention in Greece, around 700 B.C and it was the invention of alphabet, which it acted as a bridge that connected speech and writing with each other. Due to closeness and proximity of these two phenomena, humans were able to think for transmitting their thoughts and sending them to others. Underlying of this historical turning point is evolution of three thousand years oral tradition and non-alphabetic communications that has been identified as the beginning of qualitative transformation of human communications (Castells, 1942). The spread of literacy did not occur until centuries after the invention and expansion of the printing and paper industry.

Johannes Gutenberg's invention of printing, enabled the people and humans to achieve written communication in addition to direct communication. With the beginning of this stage, humans entered to the era of writing or the period of Gutenberg. At the second half of the 15th century, the printing industry rapidly developed, news and posts increased and it became possible to publish them, although this publication was not at one specific circle. The periodical press emerged in a half century and after the invention of the printing industry (Moyal, 1989). From the beginning of the 16th century, news in Afghanistan and their neighbor country became a real commodity and print media became the first new means of communication. The completion of printing method with lead animated letters in the late 15th and early 16th centuries had a great impact on the spread of new ideas and the advancement of science and technology. With the invention, development and completion of the printing industry and creation of suitable conditions, a great transformation was started. In the field of preparation and reproduction of vast possible arose for dissemination of information and human thoughts and development of human culture and human civilization (Aronson, 1977). As the growing of the population and spread of them across the global, needs for information and exchange were increased. People and Humans who once used endurance runners fast horses and mail pigeons to send their messages, the press, publishers and newspapers failed to meet their basic need which was the rapid exchange of information for long times. The invention electricity and the advent of telegraph by "Samuel Morse" humans enabled to transmit information over long distances for the first time at high speeds through simple codes (Claisse, 2000).

But the invention of telephone by Alexander Graham Bell and Thomas Watson was a great transformation in the field of transmitting information, making it possible for people and humans to communicate directly with each other's miles away and wirelessly (Bruce, 1973). Although this device had a great effect on increasing the speed of communication, but due to the use of wires, there were still limitation in communication. Humans were to build a device that could transmit information through space without the use of wire and at the speed of light, also cross all obstacles, until to the late nineteenth and early twentieth centuries, Guglielmo Marconi an Italian scientist built radio that spread news and information with surprising speed to distant places. The next step was the advent of television, which made events appear in the world as it happened. The spread of television after World War II and its aftermath made it a popular medium. In 1957, the Russians used Popov›s idea to make a connection outside the earth and sent their first satellite called Sputnik into orbit. The first radio program of Afghanistan was broadcast in 1928 during the reign of king Amanullah Khan, but the national television of country was established in 1978 at the end of Dawood Khan›s rule, which made great development in the following years. Upon entering Kabul, the Taliban shut down all private and state media, keeping only the national radio and television station was active in Afghanistan, naming it Radio Shariat and broadcasting news through it. With the introduction of computer into human life and the creation of the Internet, a great change took place in human life and a great revolution called the information revolution took place. The spread of floods like the computer in recent decades has brought about the most significant change in the knowledge system, from the invention of printing in the fifteenth century or even from the invention of calligraphy onwards. Along with this extraordinary change, the expansion of networks and media whose job is to transfer knowledge and its constituent elements, namely data and information (GIPI-AF, 2006).

Materials and methods

The purpose of the current article are investigation for people of ancient time to the modern era, that at the first time communication was face to face and defectively, that all activities of political ambassador, cultural economy, merchant and trader were with the courier and they can't manage their order and transit of their commodity from one center of the countries to the other center and their customers. The main goal of this research is in Afghanistan especially in the 21th century, we attempt to find some formal information and document of communication and telecommunication in Afghanistan by the supporter of this country that we gathered from books, articles and information of telecommunication and technology ministry of Afghanistan by some expert people that was educated in Pakistan, China, America and other neighbors countries and after 2001 when the civil war between Mujahidin and Taliban become finish, although peace came with new technology, the first network with name of Afghan wireless start its activation in 2002, after that other network like Roshan, Areeba now Mtn, Etisalat, Salaam and Afghan telecom activated in Afghanistan, between 20 – 50 percent people of Afghanistan have access to the communication and internet. All materials of this essay gathered by methods of analyses and resolution via system of library research.

Results and discussion

The History of communication and transmitting information

The background of communication and transmitting information is an important part of the extensive history of communication's science. The History is begins perhaps from the beginning of human's life; with use of smoke signals and drums. During the ancient times people and humans have attempted to move communication beyond the realm of earshot. In the early days, natives in African, American and parts of Asian used smoke signals and drums to establish relationship with each other's (Marvin, 1988). The history and advancement of communication which started from smoke signals and drums in the modern day new technology coming via internet, mobile and telephone systems has gone through many uprising and falling of it, it was invented and developed in many deferent times and deferent subsystems. Namely telegraph of semaphore system was built by "Claude Chappe" a French engineer weirdly in 1792 and it connect "Lille" and "Paris" cities by a line (Martin & De Singly, 2000). As opposed to Chappe's system which involved pulleys rotating beams of wood, Edelcrantiz's system relied only upon shutters and was therefore faster. However semaphore as a communication system suffered from the need for skilled operators and expensive towers often at intervals of only ten to thirty kilometers (Du Boff, 1980).

The first telecommunication system or semaphore systems which emerged in the 1790s in Europe. However, it was until the 1830s that electrical telecommunication system was created and started to appear (Swihart, 1995). The electrical communication, first conceived in the 1700s and realized in 1832 by Charles Wheatstone, William Cooke and Samuel Morse, by invention of an electrical and engineering communication device, which later named telegraph, but there was mentioned in more resources, just from Mr. Morse, as inventor of telegraph. Through the next century, advancements in the telephone, radio, television and today's internet, completely changed the way people communicate and interact with each other (See J, 1979).

The word telegraph is derived from the Greek words tele, meaning "distance", and graphene, meaning "to write". It came into use toward the end of the 18th century to describe an optical semaphore system developed in France (Hyde J, 1976). From the beginning of telegraphic systems, many of them have been used for transmitting information over centuries. The latest version of telegraph or electric telegraph which transmitted electric signals by means of a wired laid between stations, was developed in the early of 19th century. When Alessandro Volta an Italian physicist invented the battery in 1800, which reliably stored an electric current and allowed the current to be used in a controlled environment and after 20 years, Hans Christian Overstep a Danish physicist demonstrated the connection between electricity and magnetism by deflecting a magnetic needle, with experimenting with batteries and the principles of electromagnetism to develop electric telegraph that, for more than a hundred years was the principle means of transmitting information by wire or radio waves, although this successful system was basically limited to sending and receiving one message at once time (Du Boff, 1980).

This major limitation formed the context of, invention of the electric wire based telephone. According to Tom Farley, this system was invented at 10 March 1876 by Thomas Watson and Alexander Graham Bell, in Boston, Massachusetts, founded on electrical telegraph system (Moyal, 1989). It's a story when Bell and his colleagues were cooperating with Morse's group, to experimenting with electrical signals, on telegraph system to make acceptable that's related drawback and limitation, they achieved to a new device, which later named telephone. This electrical wire based telephone system was invented the 1870s by Alexander Graham Bell, based on his earlier telegraph. When they began experimenting on Morse's electrical telegraph, for that's improvement and removing some related problems. Therefore, Bell's extensive knowledge of the nature of sound and understanding of music enabled him to consider the possibility of transmitting multiple messages at over the same wire and at the same time. Bell research had been progressed and he proceeded with his work on the multiple telegraph (Swihart, 1995). On the same time Hubbard and Thomas Watson, a young electrician were working on a device that would transmit speech electrically, but Bell didn't share his idea with them and secretly met with Joseph Henry the respected director of the Smithsonian institution, who listened to Bell's ideas for a telephone and offered encouraging words. Spurred on by Henry's positive opinion, Bell and Watson continued their work and experimenting (Myer, 1995).

By June 1875, the goal of creating a device that would transmit speech electrically was about to be realized. They had proven that different tones would change the strength of the electric current in a wire. To achieve success, therefore, they needed only build a working transmitter with a membrane capable of varying electronic currents and a receiver that would reproduce these variations in audible frequencies (Hyde J, 1976). On 2 June 1875, Watson was experimenting on telegraph, and discovered sound be transmitted over a wire completely by accidents of sound and wire ingredients which used for connecting, sending and receiving points. On that time Mr. Watson was trying to remove the accident causes, Bell recounted the critical moment in his journal and finally become success to invent his own device which he shouted into that, the following sentence: "Mr. Watson, come here, I want to see you" that had been heard and understood to next side. The first telephone call had just been made like that. Bell patent his device, Watson fashioned and designed that, this device quickly began to spread to other sites (Bell, 1971).

First mechanically automated telephone with a switchboard began to work in 1891 and used in smaller communications for decades or the turning of the century in major cities and countries. The first commercial telephone services were set up in 1878 and 1879 on both sides of the Atlantic in the cities of New Haven and London. The first telephone switchboard was placed in service of New Haven, Connecticut, in early 1878, and demonstrated its greater efficiency over individual lines between each customer. The first use of telephone numbers and directories of telephone users appeared at about the same time (Aronson, 1977). The early development of the telephone was fraught with technical and financial

problems, but were solved soon. The technology grew quickly from this point, with inter-city lines being built and telephone exchanges in every major city of the United States by the mid-1880s (Fischer, 1992).

By 1904 there were over three million phones in the US, still connected by manual switchboard exchanges. By 1914, the U.S. was the world leader in tele density and had more than twice the tele density of Sweden, New Zealand, Switzerland, and Norway. The relatively good performance of the U.S. occurred despite competing telephone networks not interconnecting. For the next half-century, the network behind the telephone grew progressively larger and much more efficient, and after the rotary dial was added itself instrument changed little until touch-tone signaling started with replacing of the rotary dial in the 1960s (Claisse, 2000).

Within the hundred years and developing of this phenomenon, finally, in the mid – 1960s, the Scottish mathematician James Clerk Maxwell produced a pair of equations whose solution predicted electromagnetic waves propagating at the speed of light. It took 20 years to verify this prediction in the laboratory, and another 20 years for the first "mobile" application to take place early mobile telephone systems resembled at broadcast systems, in that powerful transmitters were used to cover a distance of 20-30 miles from a high tower or rooftop. The reuse of any channel for a different call required separations of more than 50 miles (Larry, 1999). After the 1960s, mobile systems evolved over time until they took on their present form.

We now take for granted that we can call anyone, anytime and anywhere, and have moved on to ask whether such a call would be safe while driving, or socially accepted in public places. The technology arena has also moved on from voice to wireless information. Yet the entire history of communication and especially mobile radio is barely so many years old.

History of Communication in Afghanistan

The Islamic Republic of Afghanistan is located in south western Asia and encompasses approximately 652,000 square kilometers. It is a landlocked plateau between Iran and Pakistan that also shares borders with China, Tajikistan, Turkmenistan, and Uzbekistan. The high mountains which are part of the Hindu Kush system, cover much of the country and small glaciers and year-round and also the snowfields are common in some part of the country. Afghanistan is one of the world's poorest and least developed nations, behalf of that the communication is also unreachable for knowledge of Afghans society. During the civil war in Afghanistan the roads, power, water, telecommunications, healthcare, and education have been disrupted or dysfunctional. One in five children dies before the age of 5, mostly of preventable diseases. Life expectancy is about 42 years for males and 43 for females. The literacy rate is 36 percent in urban areas (51 percent for males and 21 percent for females) and even lower in rural areas. Afghan society during civil war don't have access to modern technology and have much more problem, so the 32 percent of the children are in school, but only 3 percent of girls attend school, in some province such as Bamyan the percentage of girl student is higher than boy's student and in some province like south Afghanistan percentage of girl school is zero. Many schools for girls have been burned, and teachers and families of the girls that attend to school have been threatened or even murdered by insurgents (Wentz & Kramer, 2008). Until recently, the country lacked a functioning government as well as laws, regulations, and enforcement mechanisms. Poverty and unemployment remain widespread; currently about 40 percent of the population is unemployed. The lack of skilled workers and administrators is also a pressing problem for labor. The Afghan economy largely depends on growing poppies and producing illicit drugs. Ninety percent of the world's opium is derived from Afghanistan, which has raised concerns that the country is in danger of becoming a full-fledged Nation-state. A growing insurgency is fueled by the booming drug economy (Ibid).

Administratively, Afghanistan is divided into 34 provinces and some province right now in the era of internet and computer don't have access to the communication like Pamir and Wakhan in northeastern zone of Afghanistan, this country also divided into 365 districts. Kabul is the capital of Afghanistan and located in central of Afghanistan at an elevation of about 5,900 feet. The major economic centers are Kabul, Herat, Kandahar, Jalalabad, Khost, Mazar-e-Sharif, and Kunduz. The population of the country is around 35 million (NISPAA, 2011).

Telecommunication industry include TV, telephone, telegraph, Internet, fax, telex printer and so on. Transmission and acquisition devices include satellite, cable, receivers that operate on both log and digital input systems. Telecommunication equipment is much cheaper by cable, For example, two telephones or a computer or other cable electronic devices can talk for hours because the transmitting and receiving devices are in the devices themselves, but when talking by a mobile phone,

there is need for a satellite tower antenna and is very expensive (Ministry of Communications, 2003). In Afghanistan, 96 percent of telephone communications are by satellite. Which is the largest consumer income and capital flight. In today's world information is exchanged by cable systems, at stable locations such as homes and offices and at unstable locations, by mobile and satellite devices. Unlike, in Afghanistan, the landline telephones have remained stable and mobile telecommunications systems have developed (Wentz & Kramer, 2008).

Afghanistan took a steps in the world of electronic communications by installing a cordless telephone in 1898 at the Citadel in Kabul. The Ministry of Communications was established in Afghanistan In 1955. The small telephone system with a capacity of 25 lines was installed at the north of the citadel. Telegraphic services were another type of telecommunication facility that was established in 1914 in Afghanistan (Government of Afghanistan, 2010). The telegraph system with two-kilowatt power was installed primarily for military purposes in the Babur Garden. In 1919, several telephone systems (switchboards) with 50-lines and 100-lines, were installed the Post office in Shah-E-Do-Shamshirah (King of Two Swords). In the same year, 14 students were awarded scholarships to study wireless telegraphy abroad for the first time. In 1920, another British-made telegraph machine that was installed in Kabul, which was used until 1932 (Ibid).

Afghanistan became a member of the International Telegraph Union (ITU) in April 1928. (The name of International Telegraph Union was formed in 1865 and in 1932 its name was changed to the International Telecommunication Union). In 1930, seven telephone device stands and shortwave telegraphs were purchased from Marconi an Italian company, they installed and assembled in Kabul, Herat, Mazar-e-Sharif, Maimane and Khost (Baharustani, 2013). In late 1933, another system with a higher power antenna was purchased from the same company, installed and assembled at the Telegraph Central Repair in Kabul. In 1949 a stand of an automatic relay telephone with a capacity of 1300 lines was purchased from Bell Company and its cable network was completed in 1950. In 1953, another telephone device stand with a capacity of 5000 lines that was provided by Siemens Company, and after the completion of its network, launched in 1957. By providing of ancillary equipment from Siemens Company, the Ministry of Communications established telephone exchanges between Kabul and Mazar-e-Sharif and between Kabul and Kandahar in 1959 (Ibid). In 1961, a 1500-line device was purchased from Czechoslovakia and installed in Kabul. In the same year, a connection was established between Kabul and Kandahar. Kabul was also connected to Torkham commercial port, the northern part of country. At the same time, telecommunication services were provided using three-channel and 12-channel systems with a length of approximately 14,000 km of cable network throughout the country (Ibid).

International communications and transmitting information between some neighboring countries such as Pakistan, Iran and Turkey were conducted through Afghanistan. The total number of channels at that time was more than 120. Due to the growing demand for telephone services, a network development plan was launched in Kabul in 1964 (Poopal, 2008). According to that plan, 3,000 telephone lines were developed in Shirshah Mina, 3,000 telephone lines in new city of Kabul, 200 telephone lines in Pul-e-Charkhi and 5,000 telephone lines in the central area of Kabul. This network completely started its activities in 1969 (Ibid).

A 20-kilowatt radio transceiver station was installed in Kabul which connected Kabul with Paris via Radio waves. In late 1964, a ten-kilowatt radio transmitter and two receiver stations were provided by a Phelps company (Netherlands) and was used to provide communication with information transit centers in Paris, New Delhi, London and Moscow. In 1973, the Development Network project (the second telecommunication project) was set upped in Kabul with the technical advice of the International Telecommunication Union (Baharustani, 2013). By implementation of the third project, urban sub-automatic devices were installed in new city Kabul, Khair Khaneh and Makroryan. Procurement of network equipment through Siemens Company had activated 13,200 telephone lines in Kabul. Afghanistan became a member of the Asia-Pacific Telecommunication Association (APTA) during the year of 1979. In the mid-1970 foundation of telecommunications services, including telephone and telegraph, were available, at the districts level in Afghanistan. Although the telecommunications system was mostly limited to some parts of the government, and common people also had a little access to services. Unfortunately, from the year of 1980 to 2000, there were completely destroyed all the country's infrastructures and wealth, including the telecommunication systems. In the most parts of country, even essential telecommunication services were not available (Government of Afghanistan, 2010).

After 2001, the Ministry of Telecommunications and Information Technology was one of the first departments in Afghanistan to developed general strategies and policies for the telecommunications sector to enable companies and private departments for investing and operating in the field of telecommunications. Since that time the companies of Afghan Wireless, Roshan, MTN Group, Etisalat, and Telecom network have been active, and nowadays almost 80 percent of this country is covered by telecommunication networks (Poopal, 2008).

The Telecommunication Institute has been established recently within the Ministry of Telecommunications, which educates students at the bachelor's level. There are currently 40,000 students working and educating in telecommunications. There are currently more than 76.3 thousand landline telephones operating across the country. And so far, $ 1.5 billion has been invested by foreign countries in Afghanistan in the field of telecommunications. About 10% of the country's population (more than three millions) use Internet services, while in neighboring countries, this figure is 40 percent (Ibid).

Mobile phones which first made in 1983, by a man named Martin Cooper, were used only by merchants until 1991, and after 1992, the use of this device become public. The first model of a modern contemporary mobile phone was produced in2002, which the first being them Sony Ericsson T68i mobile phone. Then, in 2010 today's smartphones were introduced, which now play a very important role in human life, and not only use for communication, but also use in many aspects of life, and it has had a great impact on human life.

Conclusion

As we know that the humans are the bomblets creature in the livelihood of environmental studies by many reason that they are very curious and exploration for communicate with other society in the world, the relationship between the tribe, merchant, bourgeois and the nobles are connected from east to west and north to south by the knowledge and intellectual way to find successfully achievement. History of communication between society sometime have risen and sometime fallen by the method of people gathering and communicate during different period with the history event from the ancient time to now had some terminology and Significance for the next generation, but in Afghanistan there is no experience for the communication because of the civil war and there is no information for using of them. Although we find some sources till the year of 1918 in Afghanistan communication overshow via post office and the inauguration of communication related to the reign of Amir Amanullah khan in the year of 1919. The statistic bases of that in Afghanistan at the decade of 1970 estimated 28000 line of telephone was active in Afghanistan. After one decade it increased to 31000 line of telephone and more of them was settled in Kabul, political capital of Afghanistan. During the civil war in Afghanistan all base and foundation of technology was ruined, also the people had traveled to Pakistan, Iran and other countries. After the fallen of Taliban regime and the supporting of foreign countries the extension of communication starting again with new system such as mobile, phones and internet.

References

Afghanistan Ministry of Communications (2003), Telecommunications and internet policy. Kabul. www.moc.gov.af and www.trb.gov.af

Aronson, Sidney (1977). Bell's Electrical Toy. What's the Use?' The Sociology of Early Telephone Usage, in de sola Pool, I. (Ed.) The Social Impact of the Telephone. Cambridge: MIT Press, pp. 300-10.

Baharustani, Rahima. (2013) "Study of Afghan Telecom Industry". [Online]. Available: http://www.aisa.org.af/content/media/documents/study_of_afghan_telecom71120241744321315533255325.pdf [Accessed: 29 Apr. 2017].

Bell, (1971). High-Capacity Mobile telephone System Technical Report, Prepared by Bell Laboratories, included within FCC Docket 18262

Bruce Robert R. (1973). Alexander Graham Bell and the Conquest of Solitude, Boston 1973 37, 121

Castells Manuel (1942). The rise of the network society, Hasan Chawoshian, 1380

Claisse Gerard (2000). Identités Masculines et Féminines au Telephone. Des Rôles, des Pratiques des Perception Contrastés. Réseaux 18, no.103, pp.51-90

Du Boff R. B. (1980). Business demand and the development of the telegraph in the United States, 1844–1860. Business History Review, 54(04): 459-479.

Fischer Claude (1992). America Calling. A Social History of the Telephone to 1940. Berkley: University of California Press.

GIPI-AF (2006). Assessment Report. State of Telecommunications and Internet in Afghansitan. Internews Europe. January 2012 http://www.enternews.eu/news/gipi-afghanistab.

Government of the Islamic Republic of Afghanistan (2010). Telecommunication in Afghanistan, Kabul Process. “Kabul Process”. February 2012 http://www.kabulprocess.gov.af/.

Haddon Leslie (2004). Information and Communication Technologies in Everyday Life: A Concise Introduction and Research Guide. Oxford: Berg.

Hyde J. Edward (1976). The Phone Book: what The Telephone company would rather you not know, Henry Regenry Company, Chicago.

Larry Greenstein (1999). 100 Years of Radio, Speech at WINLAB Marconi Day Commemoration, Red Bank, NJ, September 30.

Martin, O. and De Singly, F (2000). ‘L›Évasion Amicable. L›Usage du Téléphone Familial par les Adolescents’, Réseaux 18, no.103: pp. 91-118.

Marvin Caroline (1988). When Old Technologies were New: Thinking about Communications in the Late Nineteenth Century. Oxford: Oxford University Press.

Moyal Ann (1989). The Feminine Culture of the Telephone. People, Patterns and Policy. Prometheus 7, no.1: pp. 5-31.

Myer Ralph .O (1995). Old Time Telephones!: Technology, Restoration and Repair, Tab Books, New York. 123 Excellent.

NISPAA (December 2011). ICT Collaboration Conference, “Presentation by NISPAA Representative”, Kabul, 11- 12. Presentation.

Poopal Karim (February 2008). Information and Communication Technology Strategy «ICTS», Information and Communication Sector in Afghanistan. December 2011.

See J. L. Heilbron (1979). For a discussion of electrical science before the discovery of the battery, Electricity in the 17th and 18th Centuries: A Study of Early Modern Physics (Berkeley: University of California Press).

Swihart Stanley (1995). Independents Show Bell the Way to Big-City Dial Service, Telecom History Issue 2 Spring, p94.

Wentz Larry, Kramer Frank, Starr Stuart (2008). Information and Communication Technologies for Reconstruction and Development. Afghanistan challenges and Opportunities, Center for Technology and National Security Policy, National Defense University, USA.