# Significance of Public Priorities from Telecommunication to Cellular Communication in Pakistan

Muhammad Nawaz Tunio<sup>1\*</sup>, Qazi Muhammad Moinuddin Abro<sup>2</sup>, Pir Irfan Shah Rashdi<sup>3</sup>

- Centre for Biosaline Agriculture, Sindh Agriculture University, Tandojam, Sindh, Pakistan
- 2. Mehran University Institute of Science, Technology & Development (MUISTD), Mehran University of Engineering and Technology, Jamshoro, Pakistan
- 3. Mehran University Institute of Science, Technology & Development (MUISTD), Mehran University of Engineering and Technology, Jamshoro, Pakistan
  - \*E-mail of the corresponding author: mntunio@sau.edu.pk & mntunio@gmail.com

#### Abstract

1.

Telecommunication is permanent source of communication all around the world as it has multidimensional social significances to use. In comparison with rest of world, Pakistan has been pursuing the global trends to avail the latest technology to upgrade the efficiency of individuals and institutions. Thus, cellular communication has taken place very rapidly in Pakistan and has left behind the telecommunication. Purpose of this study is to explore the reasons of shifting of public priorities from telecommunication to cellular communication so rapid in rural and urban areas of Pakistan.

Keywords: Cellular Communication, ICT, Information, Entertainment.

# 1. Introduction and background

Telecommunication is an uninterruptable, secure and reliable mode of communication. Having several qualities, there are many aspects from whih telecommunication failed to compete cellular communication. Cellular communication offers many interesting things to capture the market (Holmström, *et. al.*, 2011).

Cellular communication is most viable among the users due to its mobilility and affordability. Electronic devices provide varsatile opportunities of liberal communication among the people of different passion and discipline (Di Pietro and Gianluigi, 2002). Emmerging technology has global push up for market drive and global competition (Pitta, *et. al.*, 2007).

Electronic devics have eroded the traditional services of telecommunication due to its innovative style. Through its rapid grasp on the users, digital technology has earned credit to tranform the society from traditional to knowledge based (White and Lauria, 1995).

Global periorties have made provision for the ICT in Pakistan, as rapid merger of ICT has become engine of the growth in the Pakistan. Limitations of telecommunication have offerd opportunities to electronic devices to play role of virtual communication (Qureshi, 1998).

# 2. Priorities for cellular communication

Information Communication Technology (ICT) has gained momentum by filling the gaps of communication and information sgaring through cellular communication in the Pakistan and all aroud the world. Telecommunication is beyond the access of every common man but electronic devices are affordable for all to purchase and use for personal and professional network (Zaidi, 2003).

Flow of information has become rapid with the innovations of new technology and frequent use among the massses. Wireless communication has become tool of globlization and has much contributed in social, political and economic integration of different societies and people (Zahra, *et. al.*, 2008).

Cellular communicatio is a key challenege for the telecommunication which drives people's priorties, interest and attention towards its fascinating features. Cellular communication provides liberal mode of communication and cost effective (Haroon, 2004).

The cellular phone subscriber base went up to 48.5 million (Pakistan Telecommunication Authority 2007) and the fixed-line/ Wireless Local Loop (WLL) subscriber base went up to about 5.6 million lines, or 3.5 per cent of the population. Such priorities of technology infrastructure to support Pakistan's vision of becoming an Information Society (Masood and Malik, 2008).

This is a positive behavior of the society to extend the interest to global network through cellular communication and through cellular communication, virtual societies have taken place where social transactions occurs disregard to any parameter which can resist the communication (Tunio, *et. al.*, 2013).

# 2.1. Objectives

- Reasons of switching people fom telecommunication to cellular communication
- People's motives for the communication
- Benefits of cellular communication

# 3. Methodology

In order to accomplish the objectives of this study, the data were collected through various sources. Primarily, the structured interviews have been conducted from users of various networks, for their opinion on this issue. Furthermore, to extract true picture of significance of the issue, secondary information was gathered through different websites of the selected networks in Pakistan. Therefore, the different websites are considered as vital source to understand the public priorities for the cellular communication.

#### 4. Results and discussion

#### 4.1 Recent last six month's Cellular Subscription

Months	Mobilink	Ufone	Zong	Telenor	Warid	Total
Oct-12	36,388,770	24,072,203	17,951,385	30,428,972	12,761,009	121,602,339
Nov-12	36,600,076	24,314,561	18,930,012	30,809,667	12,942,886	123,597,202
Dec-12	36,141,241	23,809,099	18,700,507	30,564,465	12,731,050	121,946,362
Jan-13	35,922,299	23,553,444	18,567,308	30,175,322	12,600,847	120,819,220
Feb-13	36,011,288	23,345,258	18,659,009	30,423,114	12,524,160	120,962,829
Mar-13	36,316,427	23,609,365	18,822,169	30,841,111	12,538,645	122,127,717

#### Figure No. 1

This table shows the rate of subscription of major five networks in Pakistan during recent last six months. This shows different figure in every month of each network. Every network has smart ratio of the subscribers as in the month of October 2012, Moblink has 36,388,770 subscribers, Ufone has 24,072,203 subscribers, Zong has 17,951,385 subscribers, Telenor has 30,428,972 subscribers, and Warid has 12,761,009 subscribers.

In the month of November 2012, Moblink has 36,600,076 subscribers, Ufone has 24,314,561 subscribers, Zong has 18,930,012 subscribers, Telenor has 30,809,667 subscribers, and Warid has 12,942,886 subscribers.

In the month of December 2012, Moblink has 36,141,241 subscribers, Ufone has 23,809,099 subscribers, Zong has 18,700,507 subscribers, Telenor has 30,564,465 subscribers, and Warid has 12,731,050 subscribers.

In the month of January 2013, Moblink has 35,922,299 subscribers, Ufone has 23,553,444 subscribers, Zong has 18,567,308 subscribers, Telenor has 30,175,322 subscribers, and Warid has 12,600,847 subscribers.

In the month of February 2013, Moblink has 36,011,288 subscribers, Ufone has 23,345,258 subscribers, Zong has 18,659,009 subscribers, Telenor has 30,423,114 subscribers, and Warid has 12,524,160 subscribers.

In the month of March 2013, Moblink has 36,316,427 subscribers, Ufone has 23,609,365 subscribers, Zong has 18,822,169 subscribers, Telenor has 30,841,111 subscribers, and Warid has 12,538,645 subscribers.

# 4.2 Evaluation of each communication network





It can be generally observed that there is high rate of purchase of the cellular connections among the people. This rate justifies the importance of cellular communication among the people. Due to high rate of subscription of connections, the cellular mobile industry has tremendous growth in Pakistan. Figure No. 2 shows different

percentage of Moblink, Ufone, Zong and Telenor in the months of October, November, December, January, February and March.



Figure No. 3

As last six months subscription shows that in the November and December subscription of the cellular connections was increased rapidly up to 70% and from October 2012 to March 2013 it remained in balance up to 68.5% and in the months of February and January 2013 it reduced to 68%.

# 5. **Respective features of the individual network**

#### 5.1 Mobilink

Mobilink the market leader in Pakistan's cellular communication remains at the top. Entrance of new companies into the cellular scene did not hurt the growth of Mobilink's

Subscribers and even could not force them to slash their tariff to such a low level which other cellular companies had to.

# 5.2 Ufone

Ufone had a postpaid package that was 'the lowest'. Though the package can still be purchased, Ufone is no more advertising this package in their current campaigns. With the name of 'Unique' package, this one is not even mentioned on Ufone's website now. 50

Paisa per minute in peak time and 25 Paisa per minute at off-peak time are very attractive

for those who have large call volumes. The problem starts when the rate differs while calling on other networks. Ufone's customer service has improved a lot as now users do not have to wait for such a long time when they dial 333 from their cell phones which is Ufone's customer service number. "I didn't believe when my call got entertained within 10 seconds at Ufone customer service number, they have improved their customer support a lot" applause by a Ufone postpaid subscriber.

# 5.3 Warid Telecom

Warid Telecom is liked by many as their simple airtime attracts new users and keeps the old ones happy and satisfied. 'I don't have to calculate Warid's tariff as I get what they say, no difference on any network' comments a Warid subscriber in Islamabad. Although Paktel now offers 'per second billing', Warid Telecom's 30 second billing is also very much magnetic to its subscribers. Paktel and Warid Telecom are only companies offering billing in seconds; the other networks charge you for a minute even if you talk for 5 seconds.

# 5.4 Telenor

Telenor which came with a big bang to Pakistan in 2005, widely advertised the company as a European one and assured of introduction of European standards to Pakistan. They had an edge over Warid Telecom as Telenor launched before Warid. With over 200 destinations now, Telenor has become a mature cellular company in Pakistan. Telenor's MMS deal with all GSM companies except Paktel is also a great plus to Telenor's subscribers. With these deals, Telenor's subscribers can send MMS to any of these networks without any interconnect charges. Telenor's packages are not that much appreciated but their 'value added services' have a worth. "I love Telenor's GPRS for its speed and reliability", claims a young Telenor subscriber with a cool GPRS enabled phone.

# 6. Determinants of cellular communication

6.1 **Mobility:** Mobility of cellular communication is a major factor that attracts most of users. As people want freedom of expression and secrecy of everything, therefore, they do not want to be bound on wired

telecommunication for the exchange of information, ideas, expressions and their personal and non-personal issues.

**6.2 Multitask:** Second interesting parameter is multitasking of cellular devices. Besides communication, users can enjoy music, games, and other facilities like call conferencing, texting and voice message. These things fascinate people towards cellular communication.

**6.3 Purchase/sell:** Third major important factor is purchase and sell of the cellular devices is very easy and affordable. Cellular devices are available on different rates in the market and user can buy a device of his interest and choice, according to his financial capacity.

**6.4** Network: Fourth most favorable and favorite factor is network for the cellular communication. There is variety of networks avail for the users, like Telenor, Ufone, Moblink, Warid, etc. these all networks offer different packages of talk and text.

**6.5 Bill payment:** last factor is bill payment. There is option for the users for the bill payment, they can recharge the amount either how much they need to talk or how much they can afford to recharge.

7. **Conclusion:** Pakistan being a developing country, she has rich market of the cellular communication. As, in the modern world, communication has become mandatory for every common men and women, so in the Pakistan everybody prefers to communicate in his own pattern.

#### References

Holmström, J., Rajamäki, J., Hult, T. (2011) The future solutions and technologies of public safety communications - DSiP traffic engineering solution for secure multichannel communication. International Journal of Communications. Issue 3, Volume 5, 2011

Di Pietro, R., Gianluigi Me (2002) Military secure communications over public cellular network infrastructure. MILCOM 2002. Proceedings (Volume:1) ISBN: 0-7803-7625-0, 7-10 Oct. 2002

Pitta, D. C., Levineb, N., Yanc, X. (2007) Touching stones to cross the river: Evolving telecommunication policy priorities in contemporary China. Journal of Contemporary China Volume 5, Issue 13, pages 347-365.

White, H. M. Jr., Lauria, R. (1995) Impact of New Communication Technologies on International Telecommunication Law and Policy: Cyberspace and the Restructuring of the International Telecommunication Union. Cal. W. L. Rev. Volum 32, Number 1. (1995-1996)

Qureshi, S. K. (1998) Regulatory issues in Pakistan Telecommunication. The Pakistan develoment Review. 37: 4 Part II (Winter 1998) pp. 37:4 873-882.

Zaidi, M. (2003) Exploring the depth and breadth of the digital divide in developing countries. The case of Pakistan. CAIS/ACSI 2003 [online available] http://cais-acsi.ca/proceedings/2003/Zaidi\_2003.pdf

Zahra, k., Azim., P., Mahmood, A. (2008) Telecommunication Infrastructure Development and Economic Growth: A Panel Data Approach. The Pakistan Development Review > Vol. 47, No. 4, Winter 2008

Haroon, Y. (2004) Pakistan's Mobile Cellular Policy: Comparative Analysis of Policy Approaches for Telecom Competition. Institute of Communication Technologies (ICT) Working Paper No. YH-001-2004. Available at SSRN: http://ssrn.com/abstract=650022 or http://dx.doi.org/10.2139/ssrn.650022

Masood, J. and Malik, S. (2008) Pakistan. Digital Review of Asia Pacific 2007-2008 '.pk' Pakistan.

Tunio, M. N., Rashdi, P. I. S., Muhammad, Q., Abro, M., Sartaj, S., & Tunio, S. P. (2013) Social Impact of Virtual Communication on Nascent Society of Pakistan. IOSR Journal Of Humanities And Social Science (IOSR-JHSS) Volume 10, Issue 5 (May. - Jun. 2013), PP 68-74, e-ISSN: 2279-0837, p-ISSN: 2279-0845.

#### First A. Author Biography

Muhammad Nawaz Tunio has done MS in Science & Technology Policy from Mehran University Institute of Science, Technology & Development (MUISTD), Mehran University of Engineering & Technology, Jamshoro, Sindh, Pakistan. Mr. Tunio also holds MPA Degree (from University of Sindh, Jamshoro, 2007) & Diploma in IT (from IMSA Hyderabad, 2006). He was born in 3 Feb1984 at a village Mureed Tunio (District Dadu, Taluka Mehar, Sindh, Pakistan). He has qualified GAT General 2013  $2^{nd}$  time, Conducted by National Testing Service (NTS) Pakistan. Mr. Tunio is standby candidate for the admission in PhD program in Science and Technology Policy in same institute for the session 2013/14.. He has a good Job experience as a Computer Operator at Sindh Agriculture University Tandojam under the running mega project of Centre for Bio-Saline Agriculture (CBSA) since 24-04-2009. Furthermore, He has attained Internship in General Banking at Habib Bank Limited, Hyderabad, 20 June 2007 to 31 July 2007, and training programs like Research Design and Management (RDM) workshop at Mehran University Institute of Science and Technology Development, MUET Jamshoro. Date January 14 – 15, 2011, Presentation Skills and Personal Grooming at NRSP-Institute of Rural Management, Jamshoro, Date Oct 28, 2010, Orientation Training Workshop (OTW 79) BBSYDP at Institute of Rural Management (IRM) Islamabad. Date July 27 – August 10, 2009. He has presented four research papers in an

international conferences held in Pakistan. He has five academic paper publications in international journals available on Google Scholar as well. He can be accessed at mntunio@gmail.com or by +92-333-2945004.

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage: <u>http://www.iiste.org</u>

# CALL FOR JOURNAL PAPERS

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. There's no deadline for submission. **Prospective authors of IISTE journals can find the submission instruction on the following page:** <u>http://www.iiste.org/journals/</u> The IISTE editorial team promises to the review and publish all the qualified submissions in a **fast** manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

# **MORE RESOURCES**

Book publication information: <u>http://www.iiste.org/book/</u>

Recent conferences: <u>http://www.iiste.org/conference/</u>

# **IISTE Knowledge Sharing Partners**

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library, NewJour, Google Scholar

