

University Students' Perception on the Impact of 3G Mobile Broadband in Pakistan - A Survey

Syed Mubashir Ali¹, Tahseen Ahmed Jilani², Asfia Kidwai³, Habiba Noor,³ Rukhsana Shah³

¹College of Computer Science and Information Systems, Institute of Business Management, Karachi, Pakistan

²Department of Computer Science, University of Karachi, Karachi, Pakistan

³College of Economics and Social Development, Institute of Business Management, Karachi, Pakistan

ABSTRACT: *Recently, the 3G mobile broadband has been introduced in Pakistan. There has been a lot of hype and urge among the youth, especially university students regarding the usefulness of 3G mobile broadband. This study explores the perception of university in students in Pakistan regarding the impact of 3G mobile broadband. The study concluded that most students believed that the introduction of 3G has had a positive impact on the business economy as well as improved the use of technology in education. It was also revealed that overall it improves the way how people communicate.*

Keywords: *3G, Mobile Broadband in Pakistan, University Students, Information Systems, Technology in Education*

I. INTRODUCTION

Last two decades have seen an epidemic growth in the use of information technology. [2] Mobile and wireless communication has become the hot thing and most widely used technological innovation in today's global internet age. [3] Nowadays even small children have tablets and mobile phones with mobile broadband technology. [4] In Pakistan, the telecommunication operators very recently launched the high speed 3G mobile broadband. [5] The main idea of launching high speed 3G mobile broadband is to provide users more benefits and create more opportunities for the industries and government entities to expand their services to the benefit of the public and society. 3G has been introduced mostly in the urban areas of Pakistan as smart phones are mostly used in urban areas.[6] The majority of smart phone owners as well as 3G mobile broadband users are young educated professionals and students [7]This paper will provide university students' perception on the impact of 3G mobile broadband in Pakistan. Section 2 will explain the methodology including research design used for this research. Section 3 will provide with the analysis of the data. Section 4 will discuss the results of the data analysis. Section 5 will highlight the limitations of this research study. And finally last part will conclude the findings of this study.

II. METHODOLOGY

This study was conducted at Institute of Business Management (IoBM), Karachi. Both male and female students from College of Business Management, College of Computer Science and Information Systems, College of Economics and Social Development and College of Engineering and Sciences participated in this research study. A likert-scale questionnaire having 8 questions was developed to evaluate the students' perception regarding the impact of 3G mobile broadband in Pakistan. The questionnaire was distributed to 150 students in all the four colleges at IoBM out of which 122 usable surveys are being used for the evaluation. Convenience random sampling was used to select the survey respondents. Following was expected to be measured in order to know the perception of university students' regarding the impact of 3G mobile broadband

in Pakistan:

- Introduction of 3G can create more business opportunities.
- 3G mobile broadband is being used by the students to aid in their study.
- 3G mobile broadband improves the overall quality of life.

In order to evaluate the students perception on the impact of 3G mobile broadband, we set a standard that at least 70% of the students should answer the questions with agree and strongly agree. We selected the standard of 70% as was used in [1] which gave very satisfactory results while conducting research to evaluate the effectiveness of laptop usage in UAE university undergraduate teaching.

III. ANALYSIS OF DATA

3.1. DESCRIPTIVE ANALYSIS

This research focuses on the students' perception on the impact of 3G mobile broadband in Pakistan. A sample of 150 students was selected randomly but only 122 usable questionnaires were used for analysis. 41% respondents were male and 59% females. The students sample distribution by their disciplines is given in the table below:

Discipline	Sample	Percentage
Engineering	16	13.11
IT	16	13.11
Business	40	32.78
Accountancy	50	40.98
Total	122	100

3.2 SURVEY RESPONSES

In this part, we will show the students response to individual questions along with their percentages:

1. Introduction of 3G in Pakistan can help other businesses / industries in coming up with more innovative products and services.

Response	Frequency	Percentage
Strongly Agree	73	59.8
Agree	40	32.8
Neutral	9	7.4
Disagree	0	0
Strongly disagree	0	0
Total	122	100

The above table shows that 92.6% respondents either strongly agree or agree with the first question while only 7.4% had neutral opinion. None of the respondents disagreed to question 1.

2. The introduction of 3G technology will help in increasing the sales of Smart Phones in Pakistan.

Response	Frequency	Percentage
Strongly Agree	51	41.8
Agree	48	39.3
Neutral	22	18
Disagree	1	0.8
Strongly disagree	0	0
Total	122	100

The above table shows that 81.8% respondents either strongly agree or agree with the second question while only 0.8% either disagree or strongly disagree. 18% had neutral opinion.

3. 3G can help university students in utilizing their mobile devices including Smart Phones and Laptops for their studies.

Response	Frequency	Percentage
Strongly Agree	47	38.5
Agree	59	48.4
Neutral	12	9.8
Disagree	3	2.5
Strongly disagree	1	0.8
Total	122	100

The above table shows that 86.9% respondents either strongly agree or agree with the third question while only 3.3% either disagree or strongly disagree. 9.8% had neutral opinion.

3. I feel no significant difference in speed when i use 2G or 3G on my Smart Phone.

Response	Frequency	Percentage
Strongly Agree	19	15.6
Agree	21	17.2
Neutral	30	24.6
Disagree	40	32.8
Strongly disagree	12	9.8
Total	122	100

The above table shows that only 32.8% respondents either strongly agree or agree with the fourth question while 42.6% either disagree or strongly disagree. 24.6% had neutral opinion.

4. 3G packages are expensive than 2G.

Response	Frequency	Percentage
Strongly Agree	48	39.3
Agree	47	38.5
Neutral	17	13.9
Disagree	5	4.1
Strongly disagree	5	4.1
Total	122	100

The above table shows that 77.8% respondents either strongly agree or agree with the fifth question while only 8.2% either disagree or strongly disagree. 13.9% had neutral opinion.

5. 3G has replaced wired broadband internet at my home.

Response	Frequency	Percentage
Strongly Agree	21	17.2
Agree	26	21.3
Neutral	22	18
Disagree	29	23.8
Strongly disagree	24	19.7
Total	122	100

The above table shows that 38.5% respondents either strongly agree or agree with the sixth question while only 43.5% either disagree or strongly disagree. 18% had neutral opinion.

6. *I often use my 3G mobile data to search for some information during classroom lecture.*

Response	Frequency	Percentage
Strongly Agree	24	19.7
Agree	43	35.2
Neutral	30	24.6
Disagree	19	15.6
Strongly disagree	6	4.9
Total	122	100

The above table shows that 54.9% respondents either strongly agree or agree with the seventh question while only 20.5% either disagree or strongly disagree. 24.6% had neutral opinion.

7. *3G has improved the way I can communicate and stay in touch with family and friends using mobile devices.*

Response	Frequency	Percentage
Strongly Agree	29	23.8
Agree	54	44.3
Neutral	28	23
Disagree	7	5.7
Strongly disagree	4	3.3
Total	122	100

The above table shows that 68.1% respondents either strongly agree or agree with the eighth question while only 9% either disagree or strongly disagree. 23% had neutral opinion.

IV. FINDINGS AND DISCUSSION

After the analysis of the data collected it was found that majority of students being surveyed believe that the introduction of 3G will have positive impact as it will improve the sales of smart phones which will eventually generate more business opportunities. Moreover the question 1 of the survey also supports the previous statement as more than 90% respondents agreed or strongly agreed that the introduction of 3G can help businesses and industries in introducing more products and services.

The 2nd hypothesis was if the introduction of 3G may be helpful for university students in utilizing technology in their education purposes. For this hypothesis, questions 3 and 7 were used. Collectively more than 70% of the respondents agreed or strongly agreed and therefore we can say that 3G does help university students to aid in their learning. The third hypothesis was if the 3G mobile broadband improved the overall social life of the students. Although majority of the people responded that 3G has improved the ways they can communicate and stay in touch with family and friends but a number of students responded that they still prefer home broadband over mobile broadband for communication. We included some extra question for future research study.

V. LIMITATIONS

This study took a sample of only 150 students from a single university due to time and resource constraints. This research could have even more accurate and precise results by getting more responses from other universities that would have made the results more generalized. Data analysis was carried out using basic statistical methods of percentile and average. Other methods such as chi-square, ANOVA or some other statistical methods could have been used to get the analysis done from a different perspective and could generate different results.

VI. CONCLUSION

The introduction of 3G would have cost a lot for the telecommunication operators in Pakistan because of various technological cost as well as government taxation and licensing fees [6] but overall it creates a positive impact on the Pakistani society. University students who are usually the first ones to use smart phones and tablets, it was analyzed that the students believe that the introduction of 3G will generate more business opportunities along with improving the quality of social life and communication.

VII. ACKNOWLEDGEMENT

Authors would like to give special thanks to Dr. Ejaz Ahmed, Dean of College of Computer Science & Information Systems and Mrs. Sabina Mohsin, Executive Director, IoBM for funding this research study.

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