

VoIP: A Technological Gift for the Third World

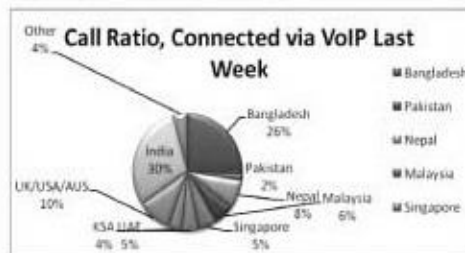
Perspective: Bangladesh

■ Prof. Mirza Golam Rashed ■ Md. Mizanur Rahman Bhuiyan ■ Md. Billal Hossain

After experiencing the tests of the age of stone, agriculture and industrial revolution now human civilization is walking through an era which we call the era of 'Information and Communication Technology' though a large part of this globe is deprived of the grace of this age. A major part of the people especially in the underdeveloped countries are still in the dark and missing the light of information and communication and this crisis is directly subject to their financial circumstances. In this connection the inventors have always put their maximum effort to give birth to some tool or technology which is within the reach of this huge number of technology deprived people. VoIP is a technology, which has arrived as a gift for low earning people of the underdeveloped world as a tool of communication. Bangladesh, being a third world country, where only 1.03 million customers were tagged with landline telecom services at the end of April 2010 [Ref: www.digitalbangladesh.gov.bd/blog.php?ID=102] can be a highly prospective place for this technology as it has been already proved as very popular for its extremely cheap rate and the capacity of fulfilling the thirst of people in terms of quality of service.

In this article we have tried to present the popularity of VoIP in Bangladesh, its quality of service and the financial aspects from the users' side. To address these points, we have analyzed the VoIP traffics of two Saudi Arabia based companies named Nirban Voice and Digital Voice and organized the analysis in the form of some case studies.

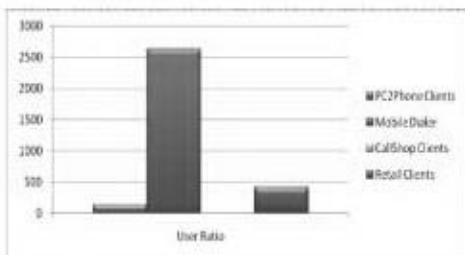
Country Wise Traffic Volume



The diagram shows the position of Bangladesh in using VoIP among ten countries and the percentage ratio makes the sense that maximum call goes to India and the second highest number of calls amazingly goes to Bangladesh. This graph gives a very clear reflection of the popularity of VoIP among Bangladeshis people which can be a key issue for the decision makers.

End User Ratio

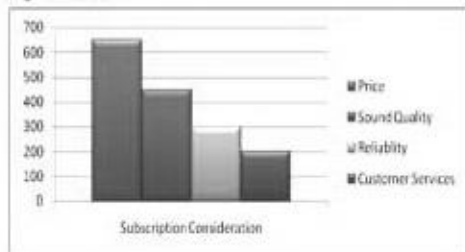
Here the user ratio chart shows that out of 3204 subscriber of Digital Voice Ltd. 4.6% uses their PC2Phone Clients, while as the highest number of people (82%) uses Mobile Dialer and the lowest is the Call Shop Users and lastly 418 subscribers are retail clients. This result gives a clear indication of a good



prospect of VoIP in Bangladesh as the percentage of mobile phone users is increasing radically in Bangladesh.

Issues Considered by the End Users (Before subscription)

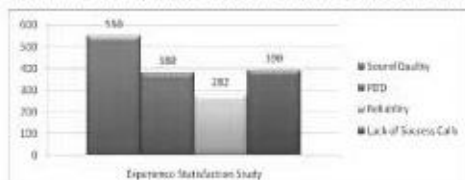
In this survey 50% of the total users are randomly selected and questioned to know what are the issues those come first in their mind when they subscribe a service and the survey result is given below.



Result shows that 40.6% of the subscribers first bring the consideration of pricing and accordingly less priority to sound quality (28%), reliability (19%) and lastly 12.5% users for customer services. So, it is clear that highest number of people is concerned about the users is price and the good thing is the key strength of VoIP is its extremely low price.

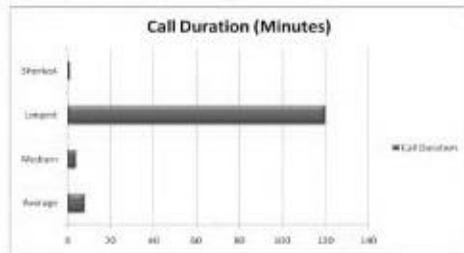
Subscribers' Satisfaction Issues (After subscription)

The same number of randomly selected users has been asked about their satisfaction level on some of their considered issues.



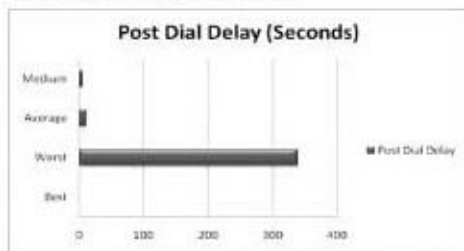
The result shows that 34.3% subscribers are satisfied about sound quality, 23.7% of the subscribers are satisfied about PDD (Post Dial Delay), 17.6% users are for reliability and 23.7% for lack of successful calls. The analysis shows that still we have a lot of things to do to develop the Quality of Service as only 34.3% of the customers show satisfaction about sound quality and 23.7% of the customers are happy about reliability.

Call Duration of VoIP Calls



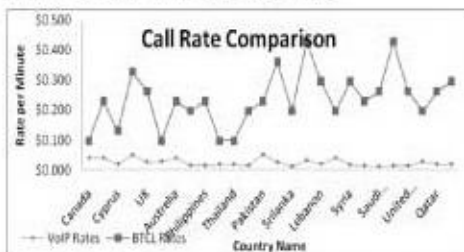
Here we see the call duration, from the graph it is clear that the highest call duration is 120 minute and the lowest call duration is approximately 0-1 minute. Which shows a picture of VoIP's strength to satisfy a customers demand to talk for a long session.

Post Dial Delay of VoIP Calls



The graph given above shows the call Post Dial Delay of VoIP call, maximum PDD of a call is 340 seconds and lowest PDD of a call is 2-3 seconds [app.] Average PDD of VoIP calls is 5-7 seconds.

Call rate comparison [BTCL Vs VoIP for outgoing calls]



Here the chart has figured out the comparison of call rates per minutes among the BTCL rates and VoIP call rates. The blue line is showing the call rates of VoIP against different countries.

It amazingly shows that the rate is like flat rate for all the possible countries, where the BTCL rates are huge.

Bangladesh is a country where we have been always too late to make a radical decision in welcoming a technology which is the key point for the development of a nation and this lack of making key decisions is pushing the country into the dark day by day. VoIP is a technology which has been the victim of the same problem though it's good news that government has provided license for a couple of providers in a very limited extent.

From the case studies we can clearly guess the remarkable potentiality of VoIP in our country. The number of VoIP users in our country is incredibly high due to its very low rate compared to BTCL. It can be really good news for our government if we can encourage more players to do business in this field through license which can result the generation of more revenue. Government can generate a huge amount of revenue as people highly prefer VoIP for it is very much compatible with their earning level and also able to fulfill their demand (especially low volume data services) in terms of Quality of Service though still there is a lot of works to do develop the quality.

So, it can be said that we should always choose a technology which is easily reachable by the major part of our people and should never take a policy which is not compatible with the economic level of our mass people. VoIP is a technology which has high potential as a revenue generating tool for our government. ■

Sources of Data: 1. Nirban Voice Ltd, KSA, 2. Digital Voice Ltd., KSA

আপনিও হতে পারেন কমপিউটার জগৎ-এর একজন সম্মানিত লেখক

আপনি কি ছাত্র, শিক্ষক, পেশাজীবী
কিংবা প্রযুক্তিবিষয়ক লেখালেখিতে আগ্রহী?

যে-ই হোন

আপনার সেরা লেখাটাই
আমরা ছাপতে আগ্রহী

আপনার লেখার বিষয়টি
আমাদের জানিয়ে
এখনই লিখতে বসে পড়ুন

আর লেখাটি দ্রুত পাঠিয়ে দিন
ছাপা লেখার জন্য রয়েছে উপযুক্ত সম্মানী

যোগাযোগ

মহীন উদ্দীন মাহমুদ

সহযোগী সম্পাদক, কমপিউটার জগৎ

মোবাইল : ০১৯১১ ৫৯৮৬১৮, ফোন : ৮৬১৬৭৪৬

ই-মেইল : mahmood@comjagat.com