Broadband Services

Sector Review Broadband has often been compared with the cellular industry of Pakistan due to the exemplary growth of the latter in the last few years. It is a fact that broadband penetration levels are low but the extent of this infant industry's success should be gauged by its growth rates not its penetration level. The inherent constraints of broadband also effect its propagation such as literacy rate, computer skills, high tariffs, reservations among parents regarding cyber security and child safety, language barrier, service availability and high cost of computer equipment. A close look at all these factors would reveal that broadband is actually propagating at a rapid pace even exceeding estimations by various renowned broadband experts. For example, Business Monitor International (BMI) in its last quarterly report (Q3 2009) had forecasted that there will be a 12% broadband penetration by end of 2013 but revised its estimate to 33% by end of 2014 in the most recent publication. (Q1 2010)

CableTV Operators & Broadband

A new paradigm has emerged in broadband arena with local CableTV operators ready to provide broadband DSL on this existing infrastructure. PEMRA stats show that Pakistan has strong CableTV profile with 2346 cable operators catering around 8 million households. PTA, recognizing the potential of this medium has asked for CableTV operators to apply for broadband license. License of M/s LeoNet in Karachi has been approved while other requests from Lahore and Karachi are under process with the Authority. Broadband through CableTV could be a viable alternative to copper dependence especially for under served and rural areas where poor or non-existent wire line infrastructure is barring the broadband proliferation

Broadband has long been termed as 'The Next Big Thing' for Pakistan primarily because not only it is a fast and reliable but also a cheap source of information dissemination and communication. Broadband market has experienced unmatched growth rates; steadily rising penetration level due to injection of latest technologies like WiMax and EvDO. Pakistan is ranked amongst top five most dynamic economies in terms of increased internet penetration in South Asian region (Source: UNCTAD 2009). Despite showing excellent performance in the recent times, a huge potential is still being offered by the Pakistan's broadband market in terms of infrastructure expansion, new subscriber addition and introduction of value added services.

Broadband Initiatives

PTA as a regulator is actively involved in nurturing this new born field by providing a common platform for broadband experts via establishment of Broadband Stakeholder's Group (BSG) and facilitating the new entrants in every possible way. One of the main barriers to broadband's proliferation in Pakistan is the lack of local content/killer applications. To address this issue, PTA in collaboration with Motorola organized an exclusive conference on "Promoting ICT Sector" on 25th February, 2010 in Islamabad. Content developers and leading ICT experts of the country gathered at this elite platform to discuss the ideas, applications and latest innovations in developing local content/applications. Leading content developers displayed their applications which could directly benefit the local community and eventually increase the broadband penetration.

Also as active member in USF board, PTA has mandated the broadband projects for rural areas. Billions of Rupees are being invested in the broadband projects for rural areas via USF since 2007. The first results of the tenacious work by PTA, USF and industry has brought 1-Mbps PTCL broadband connection for only Rs. 299/- to far furlong areas of Faisalabad and Multan like Jhang, Sargodha, Toba Tek Singh, Khushab, Bhakkar, Bahawalpur, D.G Khan, Khanewal, Rahim Yar Khan etc. Such a low price tag for broadband connection is unmatched anywhere in the world. To maintain fairness, these are subsidized rates only for rural areas where no broadband services were previously available. This step will also encourage a shift in people's dependency on dial up internet in these areas and eventually convert this huge pool of 'internet users' into 'broadband internet users'. Other projects of USF like laying optical fiber in rural areas and establishment of "Educational Broadband Centres" and "Community Broadband Centres" will not only propagate broadband in these areas but also bring about more awareness and elevate the power of Broadband among masses. However, it is also a fact that extensive awareness campaigns and aggressive advertisement of such amazing facilities should also be the priority of It is anticipated that with such initiatives, broadband will soon be present in every nook and cranny of the country.PTA has already provided input on the upcoming Broadband Policy to Ministry of IT & T (MoIT) and it is expected that the policy will hopefully be announced this year. Moreover, Broadband Stakeholder's Group (BSG) has also submitted its recommendations regarding broadband proliferation measures to MoIT. Recently developed Broadband Key Performance Indicators (KPIs) for monitoring the Quality of Service (QoS) of Fixed Broadband Services will ensure that high quality access is provided to the consumers and quality is not compromised in any way.
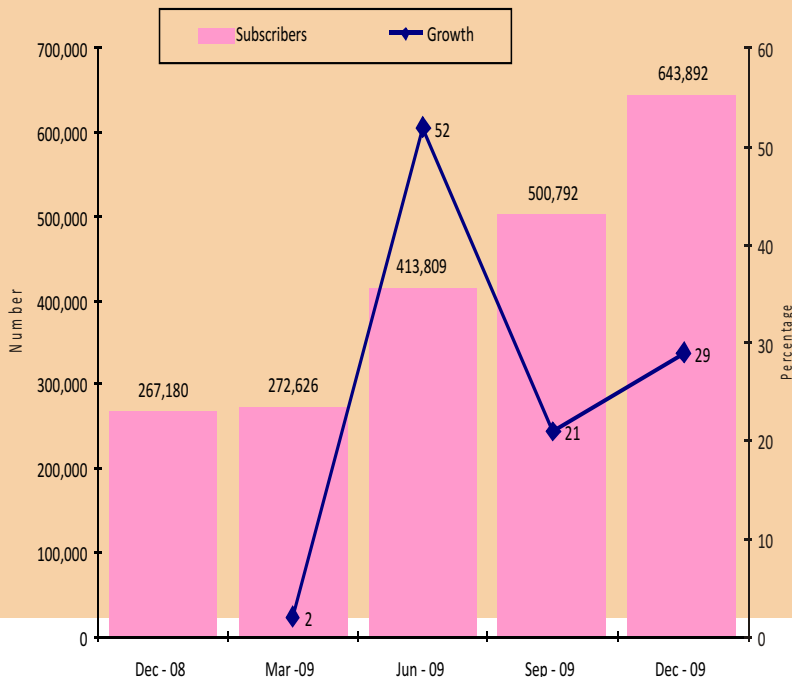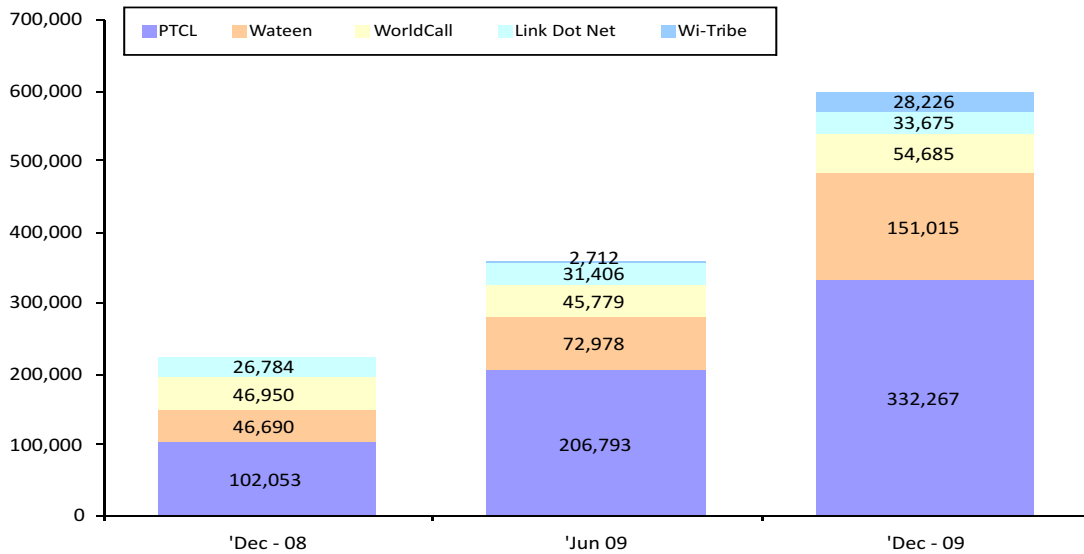
Broadband Growth

At the end of December 2009, Broadband subscribers have reached 643,892 with a growth rate of 29% in the last quarter. Compared with December 2008, a remarkable growth rate of 141% and 376,712 net additions depict the unmatched success of the sector. Broadband penetration level has also been steadily improving and stands at 0.39%, up from 0.16% from December 2008. Pakistan has been ranked 6th in terms of quarterly growth and 10th in terms of annual growth in the global broadband market (Source: Point Topic). However, industry statistics as collected by PTA place Pakistan at the top of both the lists when compared with other country's figures in the said report.

PTCL and Wateen are the two major operators of broadband in Pakistan while other companies like

Broadband Subscribers

Worldcall, Link dot net, Link direct and Wi-Tribe are catching up fast. With 332,267 subscribers, PTCL is the market leader with more than double the subscribers of its main competitor, Wateen which stands at 151,015. Figure given below depicts the rise of major broadband players in the last one year i.e. December 2008 till December 2009. PTCL, the market leader, is

Major Broadband Players
(December 2008 to 2009)

leading with 332,267 broadband and EvDO subscribers and a growth rate of 226% in last one year. Wateen holds the subsequent position with 151,051 subscribers and 223% growth rate, strikingly similar to PTCL. Worldcall and Link dot net are also steadily growing and depict a better position than in December, 2008. Wi-tribe has added 25,514 subscribers in a very short span of time and promises a bright prospect by putting up strong ad campaigns and attractive packages.

Broadband Tariff

Tariff is one of the most important factors in the development and proliferation of any technology and same is the case with broadband in Pakistan. Over the years, broadband tariff had been declining thanks to improved awareness, more coverage and introduction of new companies. Table given below provides a look at the comparison of lowest charges of 1-Mbps connection in Pakistan.

Broadband Tariff Comparison

Technology	Company	Price (Rs/month)	Data Volume (GB)	Additional Cost (Rs)	
				Installation	CPE/Device Charges
DSL	*Micronet**	749	Unlimited	750	2,494
	PTCL**	839	Unlimited	Free	Free
WiMax	*Wateen*	499	5	2499	99
	Wi-Tribe	650	5	Free	Free
FTTH	*Nayatel****	1199	10	--	--
EvDO	*PTCL*	2000	Unlimited	Free	3,999

*   128 Kbps from 8am to 8pm, 1 Mbps is from 8pm to 8am and Sundays
**   PTCL is offering 30% discount on its retail packages to all students, faculty members and
      admin staff of HEC recognized Universities
*** 1 Mbps from 8am to 8pm with 10GB limit, 3 Mbps from 8pm to 8am with unlimited Download

Tariff comparison of broadband in Pakistan can be a tricky affair because there is a variety to choose from. Although the monthly charges may seem comparable among all the companies especially for 1-Mbps unlimited packages, the real difference remains with the CPE charges. Referring to the table again, we can analyze that although Micronet is providing broadband at lesser charges than PTCL but the lucrative option of no additional cost may divert the consumers towards PTCL. Similarly, Wateen has lower charges than Wi-tribe for the same package but incurs a heavy additional cost to the consumer with the CPE charges. Companies must take into account such scenarios and come up with competitive offers so that a level playing field is maintained.

Broadband Subscribers
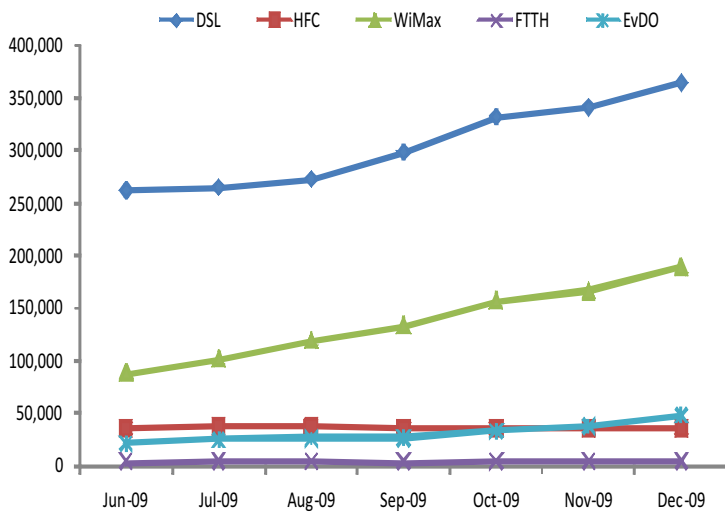

Broadband Technology Trends

Pakistan broadband market is truly unique as it hosts a wide array of technologies- both wired and wireless. Pakistan has limited copper infrastructure with only 3.5 M fixed line subscribers and installed capacity of approx 6.5 M. This limitation of fixed lined subscribers means that DSL alone cannot be a viable solution to meet the set targets for broadband proliferation. Unless the incumbent starts to expand the existing infrastructure to unexplored areas, DSL's propagation will eventually reach its threshold of 6.5 M. This fact has turned the new investors towards adopting wireless technologies like WiMax and EvDO.

The strong presence of PTCL in the broadband market is the main reason of DSL's dominance in the overall technology share as 86% of DSL subscribers belong to PTCL. WiMax has been a huge hit in Pakistan's broadband market and within two years of its introduction, its growth trend is very much similar to DSL which is relatively a veteran technology now. Although the figure may give the impression that only DSL and WiMax are propagating in Pakistan, the fact is that EvDO is also rising sharply since its introduction in 2008. Such a trend is highly suitable for Pakistan's broadband market as most of the population is concentrated in rural areas where poor or non-existent wire line infrastructure requires the availability of wireless solutions like WiMAX and EvDO.

Way Forward

While addressing coverage issues, it is imperative to delineate What can broadband do for Pakistani users? while listing out the the benefits of Broadband for Pakistani users, number of issues are needed to be addressed including need for local content and killer applications, e-portals such as e-health, e-education, e- shopping etc. Broadband potential must be utilized in a way that people use it for convenience rather than mere entertainment. Nations around the world are utilizing broadband as a learning medium to educate its citizens and provide online business opportunities to aspiring young minds. Online shopping, an everyday routine in other countries is almost non-existent in Pakistan and serious efforts in this regard can have a strong impact on broadband demand. It must be realized that broadband is not just a communication medium, it has economic incentives associated with it as well. Most of the world is becoming more and more oriented towards online connectivity of its services, using internet to contribute to their economic betterment, social networking and Government-public interaction.

World Technology Share
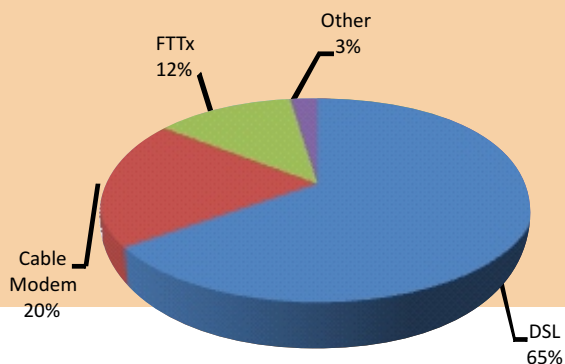
Pakistan Technology Share

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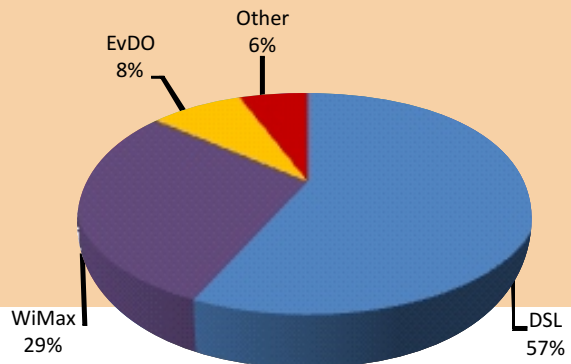
The growing stake of wireless services also points to a possibility that wireless may take over the wired broadband subscribers within next few year which will be a truly amazing achievement seldom seen anywhere in the world. Figure given below compares the global technology share with Pakistan's broadband market and it is evident that Wireless media has a 37% stake in the Pakistan broadband market as opposed to 3% worldwide.

United Nations Conference on Trade and Development (UNCTAD)'s Report on Information Economy 2009 shows some interesting facts about Pakistan's Internet and broadband status as depicted in table below: -

The report shows that Pakistan has a better Internet user penetration rate of 11.38% as compared to 4.81% of India, 2.77% of Bangladesh and 6.7% of Sri Lanka (till 2007) by the end of 2008. But at the same time, its broadband penetration level is lowest among the neighbouring countries which mean that Pakistan does have a sizeable

Penetration Comparison

Country	Internet User Penetration (2008)	Change in Penetration (2003-2008)	Fixed Broadband Penetration (2008)	Change in Penetration (2003-2008)
Pakistan	11.38	10.04	0.10	0.10
India	4.81	3.06	0.46	0.45
Bangaldesh	2.77	2.47	--	--
Sri Lanka	6.70	5.53	0.31	0.30

Note- Sri Lanka's fixed broadband penetration and change in penetration is up till 2007
(Source: UNCTAD)

pool of internet users but people are yet to realize the power of broadband. It is absolutely essential that this difference among internet and broadband internet users be minimized so that people are better connected to refined information and instant services.

Pakistan may lag behind in terms of penetration and availability of e-services but broadband continues to attract new subscribers with every passing month and the growth trend is likely to continue as the competition between wired and wireless technologies forces the companies to lower the tariffs and improve service quality. PTA has kept a special focus on the development of broadband sector in Pakistan and has achieved set targets for broadband proliferation. BMI forecasts that there will be 59.65 million subscribers by the end of 2014 in Pakistan.