Introduction.
The achievement of national broadband Internet coverage has been a policy objective adopted in many developed and developing countries. Although some countries have advanced towards this goal more than others, an increasing number of developing countries like Pakistan are attempting to achieve widespread broadband availability in order to provide their citizens with access to the information society to reap the socio-economic associated with it. The Internet in Pakistan started in 1990s and to further facilitate the growth of broadband Internet in the country the PTA (Pakistan Telecommunication Authority), at the behest of the government, undertook a major initiative in 2004 to encourage the diffusion of affordable and high speed Internet access. As part of this initiative, it was recommended that broadband Internet access be made available to all households, so that they could actively participate in the information revolution and contribute to the socio economic development. The purpose of this paper is to give an overview of broadband Internet adoption in Pakistani households in order to understand the extent to which they are able to participate in the knowledge economy that is deemed so essential by the government.

Analysis.
A household’s decision to subscribe to broadband is influenced by a number of factors such as income, education, availability and affordability of technology. Household income is one of the major determinants of broadband Internet adoption in developing countries. This and other key factors will be discussed in turn.

Internet Access: Figure 1 highlights where households in Pakistan access the Internet. The majority of the individuals interviewed in the survey access the Internet from home. While females have a higher percentage (69%) to access the internet from home compared to men.

![Figure 1 Respondents Access to Internet](image)

**Internet Access Technologies:** The level and type of Internet access at home depends upon a number of complex variables such as the availability of technology, gross income, education, age and gender. Figure 1.2 shows the type of internet connection available to access internet at home in Pakistan.

![Figure 1.2 Internet Access Technologies](image)

It is clear from Figure 1.2 that dialup remains the dominant method of accessing the Internet in Pakistan.
even though there has been a surge of broadband services. In other words, services that are typically associated with broadband are being accessed via much slower dial-up connections. The availability of economic resources and technology are also key factors in determining the connection type chosen by the household. Figure 1.3 details the type of connection adopted against gross monthly income.

Figure 1.3 Gross monthly Income and Type of Internet Connection

More high-speed broadband connections through DSL and cable are associated with high-income Pakistani households than low-income households. Similarly, as income levels rise the time spent online increases. As a result, there is a clear divide in this respect between high and low-income Pakistani households. The divide is particularly evident with respect to gender.

Broadband Adoption: The adoption of broadband in Pakistan remains relatively low, with penetration level at just 0.39% (PTA 2009). While the affordability of the Internet is beyond many in Pakistan, the low take-up of the Internet is also due to a lack of basic information regarding how the Internet should be used as well as more general usability issues. These issues are shown in Figure 1.4.

Figure 1.4 Reasons For Not Adopting Broadband Service

Broadband Cost: The price of broadband service remains a barrier to adoption of broadband for some consumers, even though there has been a gradual decline in the cost of the service. Quite simply, notwithstanding this decline in the cost of broadband, low and middle-income households are not willing to pay for access to the Internet. In contrast, as Figure 1.5 shows, the majority of the most affluent households are.

Figure 1.5 Household Willing to Pay to Acquire Broadband Connection

Conclusion.

A reasonable conclusion is that despite government claims of connecting Pakistani households to the Internet, it has failed to reach the most disadvantaged segments of Pakistani society. Those Pakistanis who are not online are those who are disadvantaged by income or education, and as such are a tangible expression of the failure of existing policies to provide equal access to the information society. If the potential of the information economy is to be maximised, then
everyone needs access of one form or another to the Internet. One aspect of this is ensuring that costs are brought down to such a point that affordability is maximised, while another is providing a plurality of access mechanisms to ensure that no one part of Pakistani society is excluded.

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