

Communicate the Value of Connectivity to Bridge the Digital Divide

By Thomas Asp, Principal Engineer and Analyst, January 2006

Broadband Internet is more than an evolution – it's a revolution. The impact of the Internet revolution is not unlike the ones seen with telegraph, which allowed sending messages from town to town in a matter of seconds, versus days; with the telephone, which allowed instant communication among families and businesses; and with the computer, which facilitated data analysis and information processing. In ten years, the Internet has been adopted by over 70 percent of all households (a quicker adoption rate than cable television).

Broadband Internet is changing the way we communicate, the way we conduct business transactions, the way we learn---but not for all citizens--yet. The majority of Internet users still choose to poke along with a dial-up Internet connection. Those of us that have broadband find this hard to believe. Surely, if the user had availability to broadband, they would subscribe; and given that they don't subscribe, this must mean it's not available.

Realization of Connectivity's Value

Is the question of the lack of demand at the current price due to broadband services being overpriced for the value received, or that a large percentage of the population does not know how to, or have the tools to, realize the value?

We have found great variations between communities on the adoption of broadband services. We have seen broadband take rates in some communities exceed 90% of all households, while other communities see less than 20% of households subscribe to broadband. We have found that the broadband adoption is related to a variety of factors including age, income, education level, and number of school-aged children in the household.

Younger adults are more likely to purchase a broadband option. Higher income households tend to a higher adoption of broadband. This gap, however, has declined over the years. Head of households with college degrees are more likely to acquire a broadband service. Households with school-aged children tend to have a higher use of broadband.

Of the above factors, it appears the strongest correlation is whether or not school-aged children reside in the households and education.

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We are served by a few large companies that corner the marketplace – providers that historically do not know how to compete. In a given region, we are served by two providers – the telephone company and the cable television company that:

- Have each installed their own connectivity infrastructures, one designed for voice telephone, the other for broadcast cable television.
- Have each modified (or are considering modifying) their networks to support high-speed data delivery.
- Have expanded (or are considering expanding) their offerings to compete.

Imagine that our package delivery system was managed the same way. UPS, the Postal Service, and FedEx would all be required to build their own roads to each household and business. Obviously, this would not make any sense. So, why do we think it will work with broadband?

Recommendations

Although today's model has met some of the early adopters' needs, we have concerns whether the incumbent providers can adjust pricing and capabilities of their service offerings. In conjunction, we must recognize and respect the pocket books of the population that can't afford or don't see the value of cable or DSL service at current price levels.

- Education, training, and awareness are key to keeping up with the information age. Unless we have a population that can leverage connectivity for business and the home, we will fall behind in the information age.
- We need to explore new business models. The incumbent's internal business models hamper our citizens from receiving reliable-broadband connectivity.
- Providers, educators, and municipalities need to address supply and demand gaps to enable to adjust to a society that our nation needs to maintain and improve its competitive position in world affairs and commerce.

About the author: Thomas Asp has been serving public power systems for over 20 years. Tom is recognized as an expert in evaluating and offering recommendations regarding municipal broadband communications systems. He has been actively involved with telecommunication market research and feasibility analysis for over a decade.

About CTC: CTC is a public interest communications consulting firm. We provide engineering and financial analysis for public sector and non-profit clients throughout the United States.

