

"Peeling the Wireless Onion: Advanced Mobile Networks Debunked"

Six years have come and passed since the PCS revolution cheered its way into mainstream headlines, paving an archway of future networks that could marry voice and data seamlessly with unfettered mobility. Well, the truism propped against network technology's futuristic portrait versus the current economic reality of collapsing service providers tells us a different story of less-than-certain ground. And during an era of business uncertainty in times like these, no one is immune nor few service platforms remain unscathed from the forces that drive trends in mobile markets.

Saddled by infrastructure debt of the previous digital generation enhancement, carriers find themselves flirting with fate regarding investment in the next hurdle of mobility reach—broadband convergence of voice and data (a.k.a. The Great Promise of the 1990's). This time, the deck of cards is stacked against eroding customer revenue streams, higher rates of subscriber churn and larger than expected costs to provide profitable service in most coverage areas. Coupled by an ailing economy at large, securing debt loads to advance the network expeditiously does not always imply a successful outcome. Moreover, the anticipated offset of customer revenue growth may not prevail—leaving the core carriers holding the bag on equipment spending that falls short of its scheduled return structure. And that increased financial burden comes at a period when cash is already scarce and profitability assumes a paradigm focus.

Turning the corner on broadband potential

With traditional digital line access in a bit of a quagmire and outside plant improvements slowed dramatically, the mandate for feeding the insatiable broadband appetite means architecting a clear path for viable wireless networks. Clearly, today's subscriber is less fixated on staying with any one particular service provider and more concentrated on delivering a fast, reliable quality of service experience at the lowest possible price. And they [consumers] want it now, not in six months or whenever the ILEC finds it generous to provision network capability. The instant gratification factor of recent years is here to stay—imparting opportunity to those who can deliver immediately.

Mobile networks haven't always been capable of meeting subscriber interests—plagued by technology limits and regulatory shackles. But it has become obvious since the Internet frenzy began that wireless could be the only salvation against the unfeasible deployment of costly in-ground plant improvement projects. And now that security and speed has caught up to xDSL rivals, the choice of least resistance appears to the wireless competitor with fixed access points popping up all over rural and suburban North America. According to World Bank data pertaining to telecommunications infrastructure, wireless equipment investments will surpass wireline capital expenditures by more than triple their current level in 2001. That's a significant impetus upon mobile carriers to think carefully about their futures and not ignore the pressing issue of broadband—beyond the bleak forecast of slumping handset revenues.

No one individual or organization has the exact crystal ball to predict the future, but history itself is a valuable mentor. Watching and surveying the past decade has taught the industry that technology may not always

deliver on what is promised, but rather the future lies in fashioning subscriber demand to parallel innovation. And that is where wireless networks should take heed: follow the money source to where wireline access fails to innovate.

