



Wi-Fi vs. WiMax – Wi Do I Care?

Written by:
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Wi Fi Fo Fum, I think I smell the blood...oops wrong tale. This story doesn't involve giants, but it does involve giant leaps forward in technology that will affect us all.

The other day I was watching two kids play. Each had a tin can up to their ear and they were speaking to each other on the 'phone'. Talk about technological leaps. Yes, the string that I used as a kid to hook up this intricate communication system had disappeared, and they were now wireless!

When I was Batman back then, the string always kept me close enough to Robin so we could hear each other, even around the corner of a cinder block wall. Unrestricted by 'the magic string' these kids tended to drift out of range from time to time. Showing true genius, they engaged Billy's little brother to position himself on middle ground, and he relayed wireless messages back and forth. They called him 'tower'. I laughed.

It really is a reflection of a changing world. We've gone from HiFi to Wi-Fi, and next on the endless chain is WiMax. The transition from 'High Fidelity', which simply related to sound quality, to 'Wireless Fidelity' or Wi-Fi, took about thirty-one years. The transition to WiMax is already in play, yet most of us haven't figured out what Wi-Fi is really all about.

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According to the 'Webopedia', the term is promulgated by the Wi-Fi Alliance, and is short for Wireless Fidelity as I indicated above. What it means is that you can access the Internet from a laptop computer with the right stuff (wireless card) in various locations without the burden of a physical wire.

Hold it – Webopedia? Yikes! Yes, it's real, and it defines and explains web 'stuff'. I guess Babe Ruth probably thought that Encyclopedias were on the bleeding edge, yet I wrote my 7th grade essay all about him using that

standard, great source of knowledge. Makes you wonder what 'pedia' is next doesn't it?

It goes on to say that any products tested and approved as Wi-Fi certified (a registered trademark) by the Wi-Fi Alliance are certified as interoperable with each other, even if from different manufacturers.

That's kind of like Fords & Toyotas use the same gas to make them go, and their owners use the same ramps and highways to pick up milk, or go to the cottage. Even Hudson Hornets used a leaded version of the same fuel.

An example where this wasn't so well planned is the access to the electricity grids in Europe as opposed to North America. The same plugs don't work in both places.

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Rather than making that mistake, the Alliance has created an accepted standard so that manufacturers create equipment, and the like, that can be used in a similar fashion to access the web. That means that your laptop, regardless of brand, will use the same 'hot-spots' to get access. Hot-spots are areas where the facility, like Starbucks or the hotel that owns the lobby, has put in the proper equipment to provide access from your wireless card to the great big cloud called the Internet. The wireless card is the gas for the Fords & Toyotas, and the hot-spot is the on ramp.

And therein lie both the beauty and the problem. The beauty is that I can access the web from Starbucks in Atlanta, as well as a hotel lobby in Vancouver. If you've ever seen someone doing the hippy-hippy shake with their computer in their hands, you're probably witnessing the problem. Wi-Fi access is limited in both speed and distance. The twisting person was probably trying to get a more consistent signal in the 'hot-spot'.

Enter WiMax. That's not Max Smart and his wireless shoe communications, but it is the next generation of

Wi-Fi. According to WiMaxxed.com it "will connect you to the Internet at faster speeds and from much longer ranges than current wireless technology allows." They go on to say "WiMax promises up to a ten mile range without wires, and broadband speeds without cable or T1."

The result – we are absolved from the penance of viewing way too many hippy-hippy shakes. Well, not so fast, don't throw out your dancin' shoes quite yet. It's not on the Wal-Mart shelves for next Christmas, but there are a lot of indicators that it's real, and it's just around the corner.

First of all, it is an acronym for Worldwide Interoperability For Microwave Access, and it has actually been in the works for quite a while now. An article titled 'FCC Move Could Boost WiMax', states "A number of vendors and carriers have announced products, testing, or support for the standard in the last month, including Intel, Nokia, AT&T, BellSouth, Sprint, and Motorola." These companies aren't akin to Duke's Pool Room – these are the big boys.

So instead of hot-spot hopping, WiMax will provide true wireless mobility.

The article continues to say, "Congress has been lobbied for months now to free more frequencies for wireless broadband."

AlcaTel states that WiMax will "bridge the digital divide by delivering broadband in low-density areas." If you really study that statement, you can see where we are in the world today. Where governments once ensured that all residents were able to receive phone service in the Ma Bell days, that lingo is now being used in relation to broadband access to the Internet. May everybody have equal access is the refrain, but only if it's high speed!

So instead of hot-spot hopping, WiMax will provide true wireless mobility. And there's more. In an article by Al Senia of America's Network, he states that 'Phone manufacturers such as Samsung and LG are expected to introduce Wi-Fi handsets compatible with this service by year's end."

O.K., so that's VoIP, except it's wireless VoIP in hot-spots. Next is WiMax, with wide-area wireless VoIP.

To be sure, there are quality and security issues to be resolved, whether that's for surfing, voice applications, or a gazillion other Internet applications, before wider market acceptance is achieved. However, I attended a recent presentation by the Gartner Group, where the presenter stated emphatically that security is not an 'if' but rather 'how much'. His meaning was clearly that the

level of security required for business applications will be achieved, and that commercial providers will find the economic model that works. Ditto for quality.

We used to trade information at the speed of the Pony Express, when the air was just filled with farm smells. Now when the air is filled with zeros and ones, information is transferred at speeds faster than Clark Kent. If we're to remain on competitive even ground, we had better pay attention to these applications that are on the horizon. We have to assume that our competitors are paying attention.

It took a century to transform from Alexander Bell's basic invention to wireless phones. However, in the last decade alone, the Internet has met with wide acceptance by business, VoIP has become more common, Wi-Fi and Wi-Fi VoIP is now a reality, and WiMax and wide area wireless VoIP is very nearly on the market.

In the past, I've often used an example of future possibilities by alluding to a chip in our eyebrows that can transmit holographic images around the globe. That's not even that far-fetched anymore, so I guess I'll have to come up with a better example. I'm going to have to track down the Jetsons and Star Trek reruns.

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"Grandpa, why is the sky blue?" That's always been a puzzler. What on earth are you going to say when the question is "Grandpa, why is the sky zeros and ones?" That's when you ask yourself, "Wi me?"

That begs another question. Where do all the zeros and ones go when they're used up? Is there a big Z&O dump somewhere? Or should that be backwards – OZ. Oh, that Wizard, I knew he was up to something.

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