

Guest Editorial: Free vs. Fee

Can they co-exist for RTK GPS networks?

by Jim Martin

Can a free GPS network and a fee-based GPS network co-exist in the market? Is one network better than the other, and will one eventually fade away? Can we even begin to predict what the market for GPS networks will look like in a year, five years, or more?

As one who recently invested in the future of fee-based GPS networks, I am betting that there is a future for the services, and that to some extent they may even co-exist. But my investment in the future wasn't based on speculation. Instead, it was a calculated risk based on how other industries have adapted to technological change.

In the weeks leading up to any big sports event, it's fun to prognosticate and predict the outcome of the game. But often it's not until you lay money on the table that you experience a moment of serious pause. For many private companies and public entities, like myself, who have "money on the table" with an investment in a GPS network, we are looking for more than water-cooler forecasting to determine the future of GPS networks and our money.

I am thoroughly convinced that there is a place for both free and fee-based networks and had to look no further than my living room to find a historical analogy for my belief. The television set, it all its technological glory, has set precedent for how the market reacts to free and fee networks.

Since its first invention in the late 1920s through the most recent transition to all digital airwaves, we have seen the television broadcasting system (including cable) navigate many of the challenges that face our GPS networks.

Free Lunch?

Make no mistake: There is no free lunch. From television's invention through its exploratory stages of development in the 1950s, there wasn't any marketplace motivation for television to evolve. Sure, the airwaves were free and anybody could put up a tower and broadcast, but there was no motivation to buy a TV for your home until advertising helped us complete the cycle of supply, demand, and profit motivation. Capitalism and its motivators helped bring technology to our living rooms, and the same will be true for advanced technologies associated with GPS networks. It wasn't until advertising revenues drove the cost of television technology and created a motivated market when we saw acceptance by the consumer. And that acceptance led to another 50 years of technological evolution.

Not to imply that there are advertising revenues down the road for GPS networks, but the concept of "free" to someone has a cost to someone else.

Regulating the Airwaves

Free television simply meant that the government decided because there were limited broadcast bands the airwaves should be free. Those limited airwaves led to government regulation and the Federal Communications Commission. But neither the government nor the fact that the airwaves were free led to what we know today as television.

Not that the concept and purpose of free airwaves were wrong or bad. The contrary is true. For the next 20 years from the 1950s through the 70s, television broadcast over the airwaves was more than acceptable; it was our lives. Government regulation assured that, as long as you could receive a television broadcast signal and could afford a television set, you were in business.

Still in its infancy, GPS network similarities with the early stages of television stop here. Technological change is much faster today. Our expectation of technological advances reaching the market is so fast paced that we can't even anticipate what the next product introduction in GPS networks will be.

To insure that the market keeps moving forward at a rapid pace and continues to meet the user's demands, profit motivation must be intact. Limited airwaves can be regulated but not at the cost of product development.

Fast forward to February 2009, just for a moment. In February the free television broadcast system moved to an all-digital format, requiring millions of Americans to purchase digital converter boxes. Does the concept of "free" inhibit technology introduction? Many in the broadcast industry would say yes.

As I look around my home and office I see almost a ubiquitous digital environment. Only if I unhook my television from my cable do I revert to an analog technology to receive a signal. In this case, it can be implied that "free" inhibited the introduction of digital technology.

Free is not truly free when it is government supplied. We tend to forget the tax supported implications of free. But my research and positioning is not to argue where our tax payer dollars are spent. I am simply saying that the marketplace is a better provider of products and services that we as consumers, businesses, and surveyors need most.

Did We Really Need Cable?

To continue the analogy, consider that no, cable wasn't a market necessity. We could have all survived very well on three, possibly five basic television stations broadcast over our airwaves. But consumer and user tastes changed. We became a demographically and psycho-graphically diverse marketplace. In business and in our personal lives we wanted choice - and choice is what we got - to the tune of hundreds of channels.

Make no mistake that without profit motivation and advertising supported revenues there would be no place in the market for cable television. But there was, and cable television created an unbelievable myriad of choices. The simple ability to bring a broader span of signals into a home brought with it some amazing technologies that free airwaves could have never delivered.

In today's wireless environment we can deliver considerable content, but don't lose site of the core of the message. It wasn't the technology that drove advancements in cable, broadband, telephony and high definition, it was consumers' demand for choice.

The same is true for every industry, including GPS networks. "Free" is intended to make something accessible to everyone. Fee-based allows a business or consumer to say, "I am willing to pay this much for something more." That "something more" might be advanced technology, better service, expanded choice, or a new product that hasn't even been developed yet.

Universal Access

Read the small print on your next phone bill. Ever wonder what the Universal Access tax or charges are for? That was government intervention that insured that even the remote reaches of our nation would have access to telephone service. While noble, the concept of the tax is no longer applicable; except for the farthest, most remote locations, access is universal. It wasn't government intervention that enabled access, it was technological innovation.

My local library offers the most wonder array of tax-payer supporter "free" services, from books, videos, and music I can borrow to online databases that I can use to help me manage my business. I think my local library is a tax-payer supported "free" service that I fully support, but at times I need more. So I am willing as a consumer and as a business owner to buy more than what my library has to offer. The same will be true for many in our industry whose needs exceed what a free network can provide.

Looking Down the Road

It is possible that our technology will be the future backbone of telematics (real-time data transfer in relationship to positioning), especially in the case of precision agriculture and machine control. Networks might be used to provide real-time yield and efficiency monitoring. With two-way data communication, owners, equipment managers, etc., might monitor fuel usage, oil temperatures, maintenance logs, rotation of equipment, load monitoring, crop yield monitoring, speed, and efficiency. Who knows where the technology will take us?

It is fair to say that without consumer demand and a fee-based system to support it, technological advances will be greatly diminished.

I want everyone who needs access to a GPS network to have it. I also want users who need personal customer service, new equipment, additional training, or other value-adds to consider my network or others as an option. What we cannot do as an industry is create an environment where "free" interferes with the motivators that drive technological advancement. Free and fee-based must co-exist in our industry for the good of our industry.

I don't know about you, but I like having 58 channels on my television - even if there's nothing on.

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