

Where's the Internet?

Find the Internet is like finding Waldo – it's everywhere around us but we can't see it because it's an idea and not a thing. It's within our devices (As Peter Capek noted in his recent [post](#)).

When people talk about the Internet they typically mean the social phenomenon based on the opportunity created by the internet as infrastructure. **More to the point – the Internet is about reducing transaction costs by eliminating artificial distinctions.** The social internet has emerged from this and is a consequence. But we're getting it backwards by looking at each application and device as if they were all special.

Case in point: I've got a Samsung TV. By TV I mean an all-in-one device like an old iMac but more closed. If I plug in an Ethernet jack I see a few widgets giving me yet another news and weather feed. But here's where things get weird – my cable connection also has the very same IP traffic. And, in fact, the FiOS set top box also has widgets feeding of the same feed but through a different path. And so does my PC.

So why do I have to have a separate wire for my TV ... for the same reason that each subscriber has a separate "pipe" going all the way from their homes to the "Internet" that is supposedly buried somewhere far far away.

Imagine if we applied the same logic to water or electricity and had a separate pipe or wire for each subscriber. We know it's absurd because we understand water and electricity. What would that cost? A thousand times the current system, a million? Conversely what happens to the cost of connecting if we eliminated these transaction costs. And, as I keep pointing out, we're not even talking about a consumable!

To put it into economic or Coasean terms the myriad of twisted passages represent the transactions costs that define telecom. By make all the bits interchangeable the Internet basically eliminates those transaction costs.

The Samsung TV represents the consumer electronics industry's difficulty in coming to terms with this concept as well as business models that depend on keeping those costs high. It's a 120 Hz (frames per second) TV but the current hardware/software inside reduces this to 60 Hz at the interface thus I can't use it as a 3D monitor. Other aspects of the implementation. I have redundant widget providers (especially if I also use a PC as a video source).

In terms of innovation it is the antithesis of the decoupled systems that promote rapid innovation. As policy this is broadband and why I call it the anti-Internet.

After all, if we have 100% broadband why do we need a billing complex billing to keep the bits and moneys separate? If we all paid the same amount to a central billing system then it would be far simpler. But then what are we paying for beyond the transactions costs of a billing system? And worse, we deny access to our devices and deny access when we aren't at home. When I say "central billing system" people have an allergic reaction to the T* word – but we're actually reducing the costs so we don't really have the T* — we actually got money back on the deal. **To put it another way, telecom \$1000.00 per year transaction tax on every family in the US.**

In the 1960's Coase's approach to reducing transaction costs led to the idea of spectrum auctions. But that was before we understood bits. Today I'd like to think he'd support a commons approach and wonder about those still stuck in the 60's.