



In This Issue | December 2011

We Will All Be Connected *page 1*

Can Google Disrupt Television? *page 2*

The Fight for Smartphone Marketshare.... *page 3*

We Will All Be Connected

There seems to be little rhyme or reason in how and even why devices as varying as digital cameras to refrigerators suddenly need an Internet connection. But soon consumers will come to expect all their gadgets to connect to the Internet, especially as cloud computing becomes more ubiquitous, as networks get faster cutting response lag times, and as Hotspot 2.0, which will enable automatic Wi-Fi roaming network connections, begins to rollout sometime later next year.

In the meantime, device makers are experimenting with adding Internet connectivity to see what works and what doesn't.

For instance, while Apple's voice-assisted assistant, Siri, is a big hit, she suffers from one major flaw: She needs to communicate to Apple's Siri server via the Internet. Not only is Siri's Internet connection unnecessary to complete local tasks such as dialing a number (non-Siri iPhones allow you to dial by voice, albeit ineffectively), but there is often an annoying lag of up to 10 seconds before Siri communicates with her cloud brain and responds.

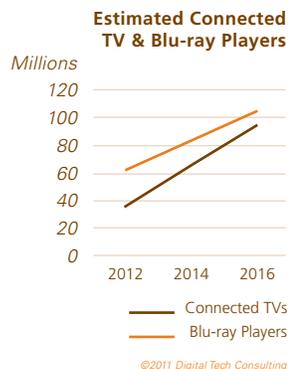
Connected HDTVs and Blu-ray players suffer from a more basic Internet connection problem: Few consumers have Ethernet connections in their living rooms.

Anecdotal evidence indicates only a small percentage of connected HDTVs actually get connected by consumers or, when connected, used. And when they are connected, remote controls fail to include QWERTY capabilities, limiting functionality and frustrating users.

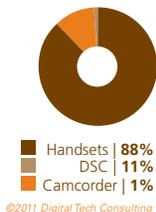
But it's clear consumers want to be connected to the Internet while watching TV – just not on the same device. According to recent surveys, the majority of TV viewers who have broadband Internet connections in their homes surf the Internet on a laptop, smartphone or tablet while watching TV – “media stacking.”

People media stack not because their HDTV or Blu-ray player is or isn't connected, but because what they're actively doing online on their portable or mobile device – checking email, sports scores, texting, social networking – is completely different from what they're passively watching on the big screen.

Continued on next page



Estimated 2011 Handsets vs. Digital Camera & Camcorder Worldwide Shipments



Google TV has so far been a failed attempt at merging media stacking on a single device. Before he died, Steve Jobs bragged he “cracked” this connected TV problem, and rumors are swirling that Apple will take a swing at a single media-stacked HDTV in the next year or two.

One product in dire need of an effective Internet connection are digital cameras. According to DTC, 440 million smartphones – nearly all with a 5 MP of higher digital camera – will be sold worldwide this year, vs. just 121.4 million digital cameras and 11.5 million camcorders. It’s obvious consumers love the photos and video their smartphones capture, love not having to carry around multiple devices and, most importantly, love being able to immediately share their images.

A handful of digital camera makers offer models with Wi-Fi connectivity, but none provide consumers with a constant connection, and lack an intuitive interface.

As with any developing trend, the market, wireless network infrastructure technology and products will continue to mature. It is clear that within the next decade, digital gadgets with Internet connectivity will become as normal as, well, connecting to the Internet.

Can Google Disrupt Television?

Disruption. If there’s one word that sets tech hearts aflutter, it’s disruption. Like anarchists hurling Molotov cocktails and dancing in the flames of bombed-out business models, the tech industry likes nothing more than a good disruption. Several industries have already been on the receiving end of digitals’ recent wave of disruption (think photography and music) and their balance sheets have never been the same. Now Google, a foremost agent of disruption, is seeking to push the wave into the living room.

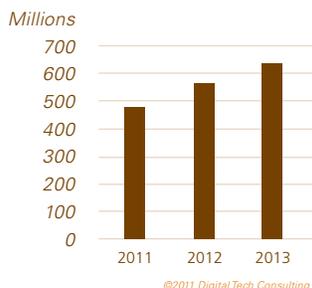
The search giant launched a three-pronged assault on the pay TV industry in 2011, but it will be sometime in 2012 and beyond before the wages of this war are fully realized.

The first prong is a reboot of its initially disappointing Google TV software platform. Changes include a new, sleeker interface, an Android Market for TV apps and, most importantly, better integration with YouTube. Lurking in the background of this particular effort is Google’s newest acquisition - Motorola Mobility, which is the market leader in IPTV set-top boxes (STBs), according to Digital Tech Consulting’s 2011 forecast. While Google is widely believed to have snatched up Motorola for its mobile phone patents, sooner or later it’s reasonable to assume that Google will begin to mine Motorola’s STB business for strategic synergies with its Google TV platform, especially given how increasingly receptive service providers are becoming to over-the-top video content.

The second prong was the announcement that YouTube would front a reported \$100 million for the creation of original programming. This roster would include shows from Disney, skateboard legend Tony Hawk and self-help guru Deepak Chopra and would be available free to consumers, with ads providing the revenue. Moving YouTube into a “lean back” experience will condition consumers to think of it as a viable addition to their other network staples (at least, that’s the theory).

The third and perhaps most ambitious and potentially far-reaching effort was the news that Google itself was considering becoming a TV service provider - at least in Kansas City (both Missouri and Kansas) where the company is rolling out its ultra-fast broadband network. This would see Google compete with incumbent TV providers like Time Warner in a more traditional manner.

Estimated Worldwide Digital Pay TV Subscribers



What to make of these moves? On the one hand, cash-rich Google is famous for trying a lot of different things. Many of these experiments fail (Google Buzz, anyone?). To mount a truly disruptive challenge to the pay TV market would require a sustained investment and focus. It’s clear that Google wants a piece of the \$150 billion TV ad business and the pay TV market is growing - DTC expects the worldwide pay TV subscribers to reach 883 million by 2016. But outside of mobile, Google has yet to demonstrate that it can move decisively into a new market for the long haul.

Stepping back, Google’s moves do signify that the wave of digital disruption that has capsized the photo industry and humbled the once mighty music industry is finally cresting onto the shores of the pay TV market. But unlike the earlier digital deluges, the pay TV

market may be able to resist the disruptive tide, even as it bends it to its own ends. High quality content - the kind consumers are willing to pay for - is a relatively scarce commodity, which gives content holders enormous market power vis-à-vis the distribution channel. Google's dalliance with providing the actual triple play bundle may speak to its frustrations in trying to make an end-run around the existing system (if you can't beat 'em...).

The Fight for Smartphone Market Share: Business as Usual or a Radical Industry Shift?

Eye-popping device prices and wireless service providers' increasing dependence on smartphones to satisfy a seemingly insatiable consumer demand has created one of the fiercest CE market-share races in recent memory.

All the signs point to more uncertainty ahead as service providers get squeezed between consumer hunger for more bandwidth and device suppliers' (primarily Apple's) more favorable position on the device/service food chain. Mix in the hyperactive patent litigation environment and it's apparent that the smartphone king has yet to be crowned. And, when he is, all expect a long and prosperous reign.

Just a normal market-share grab in an evolving market? Or, a dramatic business model shift and a cross-industry change in power?

Although there are familiar elements to this story, multiple factors point to a radical change in the business of making and selling gadgets.

- **Business models:** Wireless service providers are now subsidizing, in some cases, devices that cost them as much as \$600 per subscriber and the devices are eating bandwidth like hogs at the trough. The result is an adoption of tiered or metered service, and in a perpetual quest for new revenue sources; service providers are now contemplating charging for the otherwise "free" Wi-Fi at their sponsored hotspots (or at the least, counting the use against the monthly plan).

- **Balance of power:** The balance between device and service providers is tipping (in some cases, heavily) to the device makers. Sprint's deal to agree to buy a minimum of 30.5 million iPhones at about \$650 a pop (whether it has customers for them or not) represents a radical power shift where some service providers must commit to such unappetizing terms to survive.

- **Cross-industry convergence:** The smartphone revolution is making for strange dinner companions. Seated at the table are the consumer electronic, wireless service, software, and internet industries and a nasty food fight is in progress. With more than 550 million smartphones estimated to ship in 2012, as well as the smartphone market's seeming immunity to the anemic economy, it's no wonder that everyone is fighting over market share.

- **Intellectual property:** Patent litigation is often used as a tool for acquiring and maintaining market share. So, what's different now? In addition to the sheer number of smartphone patent-infringement cases and the amount of IP in a single device, IP is being sourced from multiple industry sectors. Hence, some IP owners have yet to negotiate cross-licensing agreements, which is a long and expensive process. And, with Google, which doesn't need to make money off its mobile OS and has little interest in licensing, you have different strategies shaping the market. An unusually large number of strategies are being employed (see table) including appeals to the International Trade Commission (ITC) to stop alleged infringing products from crossing international borders.

Business as usual? Hardly. Radical IP strategies, device prominence and a seemingly recession-proof category are reshaping this market. Next up: tablets, smart TVs, and maybe the future of the consumer electronics industry.

Smartphone IP Strategy	Description	Primary Practitioners
<i>Cross licensing</i>	Multiple entities licensing each other's IP to keep down litigation and protect IP within an industry	Widely practiced
<i>Outbound licensing</i>	Additional revenue stream from IP	Microsoft
<i>"Status quo" litigation</i>	Protecting market share & uniqueness of product	Apple
<i>IP acquisition</i>	Build arsenal for defense in patent litigation	Google
<i>Royalty-free licensing</i>	Make devices & SW cheap; rely on other sources of revenue to make money	Google
<i>ITC petitions</i>	Block imports; run around traditional patent-infringement process	Samsung, Apple

The Video Optical Disc, Devices and Media: Worldwide Shipments Forecasts (2010-2016 | 6th Ed.)

December 2011 US | **\$1,750**

This data-intensive report provides detailed worldwide historical data and forecasts of Video Optical Disc devices and media. Both the high-definition (Blu-ray) and standard-definition formats for product categories including PC and peripherals, non-PC video optical disc devices, pre-recorded media, and video gaming systems are detailed in a comprehensive spreadsheet format.

- Shipment data from the years 2010-2016
- Regional and vendor market share estimates for 2012
- A section of charts and graphs for ease of interpretation and presentation
- An executive summary that gives a brief overview of this exciting market.

For more information, please visit
http://dtcreports.com/report_optdisc.aspx

Digital Tech Consulting is a market research firm providing strategic information and analysis to help companies succeed in the consumer digital marketplace. To learn more about DTC and how our analysts might help your company, please contact us at the information below.

PUBLISHER

Myra Moore,
President
Digital Tech Consulting

214.915.0930
214.915.0931 fax
dtcreports.com

CONTRIBUTING ANALYSTS

Myra Moore
Greg Scoblete
Stewart Wolpin

digital digest

a market research quarterly
 Digital Tech Consulting

918 DRAGON STREET DALLAS, TEXAS 75207