

## International Consumer Electronics Show 2011 Major Highlights, Themes, and Hottest Trends



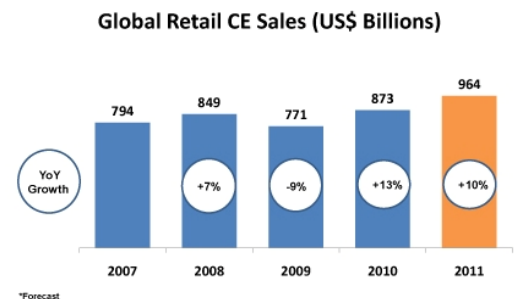
2010 was a year of rapid change in the consumer electronics industry. The International Consumer Electronics Show (CES), which took place from January 6-9 in Las Vegas, NV, serves as an annual compass that points our eyes in the direction of where things are going. After a failing economy drove down attendance and enthusiasm at CES in the last two years, this year's show was back with a vengeance and buzz was at a high pitch. Attendance topped 140,000 (up 11% from the 126,000 last year) and the roster of exhibitors climbed from 2,000 to 2,700.

The beauty of this year's CEA was that it was less about manufacturers pounding their chests about whose products are the biggest, thinnest, shiniest, or fastest... it was about technology with **the consumer top of mind**. It was about opening up new platforms to **connect content** across all kinds of devices. With a great deal of the show's emphasis on tablets, smartphones, smart TVs, and cars as well next-generation wireless networks, consumers have new ways to get content delivered to them faster - no matter where they are or what screen they have in hand. Most of these platforms will get heavy advertising and marketing support this year and are also ripe for delivering Time Inc.'s content.

What follows are the major highlights from the show and what we see are the 5 key themes that we should be thinking about this year.

### **Global CE roars back from recession and U.S. sales expected to hit record highs**

To kick things off, the Consumer Electronics Association (CEA) offered a rosy view of global demand for CE products, citing a **13 percent** uptick for 2010 over 2009 figures for a total of \$873 billion in sales. As was the case for U.S. CE sales' stronger performance in 2010, the recovery that followed a dismal 2009 sales decline of nine percent over 2008 was due partly to pent-up demand for tech products and partly due to the introduction of certain tech innovations in categories like smartphones and tablet computers (iPad). The CEA's official forecast, compiled in association with the Gfk Group market research firm, calls for growth of 10 percent in 2011 consumer electronics sales.



CEA President and CEO Gary Shapiro announced that the U.S. consumer electronics industry will reach a new industry peak in 2011, with revenues exceeding \$186 billion, following a stronger than anticipated 2010, growing **6%**. Innovative new products, like tablets, eReaders and smartphones, helped spur consumer interest and brought stronger than expected growth throughout the year.

### **Microsoft Keynote: Steve Ballmer gets his game on**



One year ago, Microsoft CEO Steve Ballmer took the stage at CES's opening keynote address to showcase a Windows-powered HP tablet computer to an audience that had yet to even meet the iPad.

But this year, with tablets marking the hottest items at the show - and Windows lagging far behind iPad - many had expected a splashier tablet announcement from the software maker. Instead, Ballmer focused this year's talk not on tablets but on its Xbox video game system and on Windows Phone 7, Microsoft's updated smart phone software. Here is what he covered:

- **Xbox 360 Kinect** sensor - an add-on for Xbox 360 that lets people control games and other features by moving around - sold 8 million units in its first 60 days...3 million more than expected. He demonstrated new Kinect avatar software that will more closely mimic game players' behaviors and facial expressions after an update this spring. Microsoft also said that this spring, people who have Kinect will be able to wave their hands or speak aloud to browse and play video from NetFlix and Hulu.
- Microsoft will be releasing a series of **Windows Phone 7** updates over the next few months, and these will bring features like copy/paste, improved multitasking performance, improved camera and OneNote access, enhanced lock and Start screen interface, better Bing integration, increased language support, and more.
- A Windows executive demoed an unnamed new version of Windows will support **System on a Chip (SoC)** architecture. SoC takes the major components of a computer and puts them in a thin silicon chip that can fit into small devices like tablets.

## Five Themes

### 1. "Tablet-Palooza": Tablet PCs take a star turn

Last year, a slew of eReaders took center stage. Prototypes of more full-featured tablet devices were shown off, but companies were waiting to see how Apple would fare with the iPad, which was unveiled a few weeks after last year's CES. Many of those eReader manufacturers are now out of business.

The tablet market is expected to surge to more than 50 million units in 2011. The blockbuster sales of the iPad inspired an explosion of me-too devices at this year's trade show. In fact, more than 35 companies showed tablets at this year's CES, where most new products will be based on **Google's Android OS** and launched by CE suppliers rather than PC suppliers. Among the 80 or so tablets at the show, here are the five to keep on your radar:

- Marking a resurgence of interest in the company's products after several lackluster years, **Motorola** revealed its new Xoom tablet, the first portable device to run Google's new Android 3.0 Honeycomb OS. The Xoom comes standard with front- and rear-facing cameras, including one that can record in HD, compared with none in the current version of the iPad. It also boasts a larger screen with a higher resolution, supports Adobe Flash, and will be capable of using Verizon's 4G LTE network instead of AT&T's. Watch Xoom video here: <http://www.youtube.com/watch?v=D7zheLybA-Q>



- **RIM's BlackBerry** has been talking about their **PlayBook** tablet for months, but at CES it finally made its functioning debut. Research in Motion and Sprint have collaborated with the 7-inch tablet to compete in the tablet market with the revolutionary new QNX operating system. Aside from the 1 GHz dual-core processor and 4G speeds, the Playbook also supports Adobe Flash Player 10.1 and Adobe AIR so you can enjoy more games and media, including YouTube (and likely Hulu). The tablet has a front and rear HD cam for photography and video chat, and a giant digital keyboard that you can bring up at any point with ease. RIM is launching the WiFi-only version in March and will be sold under \$500. Its wireless version to be released later will run on Sprint's wireless 4G technology.





- Set for release in the "coming weeks," the (non-Honeycomb) Android 2.2-based Streak 7 from **Dell** will represent T-Mobile's first 4G tablet, running on T-Mobile's speedy HSPA+ network. The Streak's seven-inch display boasts a resolution of 800-by-480, and yes—full-on Flash support is part of the deal, along with Wi-Fi data sharing for up to five devices. Watch Streak 7 video here: <http://www.youtube.com/watch?v=6Lh7SUfNg3M>



- **Vizio**, the top LCD TV company in America is expanding its horizons to compete in the world of mobile devices and announced the release of a tablet. Vizio's upcoming tablet will be entitled the VIA Tablet, and will be part of the company's larger VIA Plus ecosystem. The VIA Plus system is part of the family of Vizio internet apps and will help users unify devices from HDTVs to smartphones to tablets. The device will feature a 1 GHz processor and high resolution capacitive touch screens. The VIA tablet will boast an 8-inch screen and will run on Android.
- **Samsung** announced a Wi-Fi version of its Galaxy Tab. The Wi-Fi Galaxy Tab is the same as the current Galaxy Tab, which launched in November, but it will lose the ability to connect to a wireless carrier. The current Galaxy Tab sells for about \$400 to \$600 - depending on which telecom company you buy it from – so expect the Wi-Fi only to be less expensive. They also announced a Verizon Wireless 4G LTE-enabled Galaxy Tab. Watch the Galaxy Tab TV commercial here: <http://www.youtube.com/watch?v=GHPJdqgsJ9g>

## 2. TV makers show off their smart TV prowess while still trying to resurrect the 3D TV revolution

Smart TV, Web TV, and Internet TV may be different names, but they're all trying to do basically the same thing - allow users to access the Internet from the living room couch. While it's been around for a couple of years, they are improving, and (unlike 3D TV) consumers seem to have a positive reaction to connected sets. Even though such TVs made up a small portion of overall sales last year, that number is growing, as consumers recognize the vast amount of Web-based content available to them. Here are the announcements from the key TV makers playing in the Smart TV space...and some trying to take 3D technology further with cheaper or no 3D glasses.

- **LG** will be releasing in April their first appropriately named "Smart TV" to the market. The network enabled HDTV features a Nintendo Wii-like "Magic Remote," DLNA support, 150 TV Apps (free and premium – i.e. Netflix, Hulu Plus, VUDU, etc.), and a web browser. Not only will users be able to stream and playback local network content on the TV, but they can also pick up where they've left off when they leave the home. Those who do not wish to buy an entire new TV will have the option to buy just the **Smart TV Upgrader** box. It will connect to existing sets over HDMI and allow the same functionality as full-blown Smart TV sets. LG also prominently displayed a 55-inch glasses-free 3D TV and cheaper "passive" 3D glasses. 
- **Samsung** announced it was making its new range of high-definition 'smart televisions' the hub of compatible gadgets that can link via Wi-Fi and allow content to be viewed across different screens – the **Smart Hub**. This is part of the company's theme of 'The Smarter Life - Agenda 2011'. The Smart Hub is a simple menu system that allows users to connect, discover and enjoy a wide range of content. Users can easily search for movies, shows and videos via online services and across connected devices, browse the Web from their TV and access a wide variety of apps from Samsung Apps, the world's first HDTV-based apps store. Samsung also announced that it will let users of its TVs (and tablet computers and Smartphones) access content directly from Comcast and Time Warner Cable via the internet. 

In response to consumer outcry over the cost of active shutter 3D glasses, Samsung, which is the market leader in 3D TVs, partnered with **RealD** to make in-home 3D an easier experience. RealD is the company that provides 3D technology to almost all major movie production companies and theaters to make the experience as seamless as possible.

- **Vizio** introduced a lineup of TVs that include "**Vizio Internet Apps**" (**VIA**) that allow the TV to stream content from Netflix, Amazon, Pandora, Hulu Plus, and others. Some of Vizio's more expensive TVs under the VIA Plus line, run Google-TV and allows interoperability between the TV and Android-equipped phones and tablets.

- In his keynote, **Sony** CEO Sir Howard Stringer referred to Internet TV (and 3D TV) as the company's "battle pair" in its quest to become the leading TV maker in the US by 2013. Underscoring this message, Sony will produce an ad campaign this year with the tagline "**Television Redefined: Sony Internet TV.**" Sony's main connected TV line is the Bravia Internet Video Link platform, and partners for which now include Sony's Qriocity VOD service and Music Unlimited, a multiplatform music service that launches in the US with a library of 6 million tracks. Previously announced content partners include Netflix, YouTube, HuluPlus and Amazon on Demand. Also, Time Warner Cable is set to deliver its entire video programming line-up to customers with Sony's internet connected Bravia HDTVs later this year.



**Sony** previewed a slew of 3D-compatible products. The 3D theme transcends the company's line of products, from TVs and Blu-ray players to laptops and game titles. They also intend to launch a 24/7 3D channel called **3Net**.

- **Panasonic's** new Internet TV suite, Viera Connect (formally, VieraCast) keeps all of the old services and adds a few new ones, including Hulu Plus, MLB.TV, MLS Matchday Live, NBA Game Time, NHL Game Center and Facebook. It will also interact with Panasonic's Viera Tablet.
- "**Net TV**" is the name **Toshiba** has given to its suite of internet applications and streaming content options, which at the moment includes Netflix, Skype, VUDU, YouTube, and Yahoo TV Widgets (which in turn gets you Pandora and numerous others). Toshiba also showed off its 65-inch and 56-inch glasses-free 3D TV prototypes.
- **Yahoo!** Announced that it is working with CBS and HSN to add interactive features to live broadcasts on sets with Yahoo! Connected TV widgets (including models from Sony, Samsung, Toshiba, D-Link and Haier). The new features, called Broadcast Interactivity, let viewers click buttons to learn more about an actor or a program, or buy items they see while watching live shows.

### **3. It's going to be an Android world, we'll just live in it**

Google didn't have a booth at CES, but the company's Android operating system software was practically everywhere. Android got off to a slow start a few years ago -- in the first year that devices were commercially available, the platform garnered less than three percent of the market. In 2010 all that changed. As more handsets came on the market from more carriers, and as the number of Android apps grew, adoption rates shot up. Last summer, Google was activating more than 200,000 phones a day and is now up to 300,000 a day -- in other words, iPhone levels. In fact, according to a recent comScore report, Google's Android platform has passed Apple and gained an astonishing 6.4 points from October 2010 to November 2011 and is estimated to now hold **26.0% of the U.S. market.**



Android stole the show at CES. Every new 4G smartphone and tablet announced by the four major cellular carriers at or during the show ran on Android. Verizon Wireless, Sprint, T-Mobile, and AT&T all showcased Android-powered smartphones from LG, HTC, Motorola, and Samsung. Tablets from ViewSonic, Vizio, Dell, Asus, Lenovo, Toshiba, and Samsung (Galaxy Tab) are also powered by Android. **Sony Ericsson** introduced its **Xperia Arc** smartphone that runs on the latest version of Android, 2.3 "**Gingerbread.**"



During the Verizon keynote, Google showed off a preview of its hotly awaited, tablet-optimized Android 3.0 -- nicknamed "**Honeycomb.**" Honeycomb is meant to improve upon previous Android versions with features including a holographic user interface, home screen customization, desktop-like Web browsing and simpler multitasking. The only high profile introductions of Honeycomb tablets were from Motorola (Xoom) and LG (G-Slate).

#### 4. Carriers square off with speedy 4G networks and an arsenal of hot devices

Once dominated by TV and audio manufacturers, now mobile is white hot at CES. At the show, the major wireless carriers announced plans to build out and ramp up their high-speed data networks and showed off a slew of cool new devices for accessing them. The 4G wireless services are expected to deliver data at rates five or more times faster than current network speeds.

##### **Verizon**

- Not only did Verizon announce its 4G LTE network will support the **Motorola Xoom** tablet (with the Android Honeycomb OS), they also announced three major Android devices supporting its 4G networks: the **HTC Thunderbolt** arrives as Verizon's first 4G LTE supporting smartphone. Next in the line-up of smartphones is the **LG Revolution**, the **Motorola Droid Bionic**, and the **Samsung SCH-i520**. No details on pricing and availability were mentioned.



**Motorola Xoom**



**HTC Thunderbolt**



**LG Revolution**



**Motorola Droid Bionic**

##### **Sprint**

- Sprint now has 17 4G (WiMax) devices in its portfolio. Sprint was the first carrier in the United States to begin selling true 4G devices, starting with some USB modems and then adding the HTC EVO 4G and Samsung Epic 4G. At CES, Sprint announced a new 4G phone--the **HTC EVO Shift** as well as RIM's **BlackBerry PlayBook** tablet. Sprint currently sells a 3G connected **Samsung Galaxy Tab**.



**HTC EVO Shift**



**BlackBerry PlayBook**



**Samsung Galaxy Tab**

##### **T-Mobile**

- T-Mobile, the fourth largest mobile operator in the U.S., is offering its own high-speed network using a different technology in 100 markets nationwide, and plans to double the peak speed of that network by the middle of the year. Among the devices T-Mobile will be carrying include the **Dell Streak 7** and **LG's G-Slate**.



**Dell Streak 7**

##### **AT&T**

- The **HTC Inspire** partnered with AT&T to bring it to market, and features a large 4.3-inch screen, as well as some new advances in HTC's Sense technology, including an online component that will allow users to locate lost phones or wipe a phone's data from a website. In the second quarter, AT&T will be launching the new **Samsung Infuse 4G**. AT&T will also support the newly introduced **Motorola Atrix 4G**. It is one of the most powerful smartphones to hit the US market with a dual core 2 GHz processor capable of browsing the web at

twice the speed of most competitors. The phone has a corresponding Laptop Dock that turns the phone into an 11.6-inch laptop with full keyboard, speakers and three-cell battery. The phone is simply docked into the back of the device and all the phones apps can be enjoyed on the much larger screen.



HTC Inspire



Samsung Infuse 4G



Motorola Atrix 4G

### 5. Automakers revving up a connected experience

With consumers making their auto buying choices on things other than horsepower, handling, and design, auto manufacturers are focused on pushing the tech features inside. "There is a revolution taking place," said Audi Chairman Rupert Stadler in a CES keynote address Thursday. "Some of the most exciting new consumer electronics aren't the ones in your living rooms or in your offices. **They're the ones in your cars.** We're redefining what it means to be a really fast computer."

- During his keynote speech, **Ford** CEO Alan Mulally brought out the **Ford Focus EV** a new electric car due out from Ford by the end of the year. The sedan will be differentiated from the competing Nissan Leaf and Chevrolet Volt by having double the charge rate (6.6 kilowatts). Ford also showed off a new mobile app to compliment its new electric sedan. It'll allow users to check charge status and find charging stations, plan fuel-free trips and have remote control access to change the climate or unlock the doors, all while the user is away from the vehicle itself. The apps will let electric car owners share stats on their planet-saving habits to both Twitter and Facebook.



- **Audi** marked its first major presence at CES by unveiling that it would commence production by the end of 2012 of two plug-in vehicles that were previously concept cars, the **A1 e-tron** plug-in hybrid and the **A8 e-tron** battery electric vehicle. Audi is incorporating Tegra II graphics chips from NVidia to drive the displays for the vehicles, and the company would use Google Earth maps to enhance the mapping used in its navigation system..



- **Hyundai** introduced their **BlueLink** telematics technology – their in-car connectivity system. The system offers similar capabilities as GM's OnStar and Ford's SYNC. All Hyundai models will be featuring this technology in a short time, but it will be initially loaded on the 2012 Sonata and the new Veloster three-door coupe later this year. Under three subscription-based plans, this new technology will be offering more than 30 connected services for the Hyundai users.
- **Toyota** announced that it will be bringing **Pandora** to the Toyota **Entune** multimedia system. Toyota's Entune platform is similar to the Microsoft Auto platform that Ford uses for SYNC, but is built on a platform from Nuance. This platform allows users to use voice commands to perform tasks like tuning into Pandora radio stations, looking up directions and integrating with other web services.
- **OnStar** announced a rear-view mirror device that will automatically call an OnStar advisor if an accelerometer in the mirror detects a crash. The emergency services will be summoned if the driver does not respond to a call back. The mirror will be available at Best Buy stores in the US in the spring for \$299 plus installation and a service charge ranging from \$19 a month to \$199 a year.

