



CES 2015 Trends and Retail Innovations

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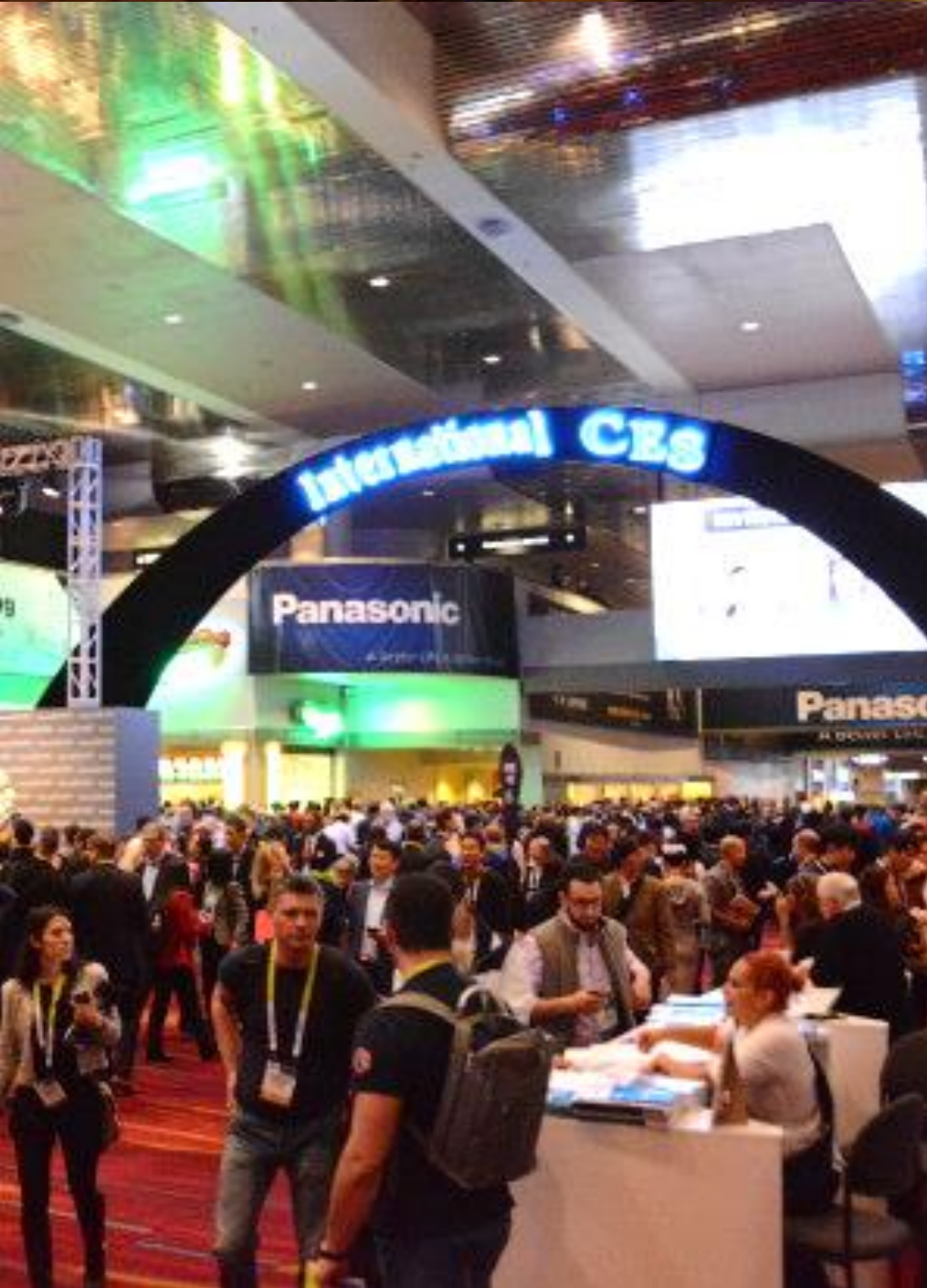


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Overview of CES 2015

The Consumer Electronics Show (CES) is the biggest industry event of its kind in the world, which this year saw over 170,000 attendees scour over 2.2 million square feet of exhibit space featuring more than 3,600 exhibitors. Whilst big brands often steal the show, this year also featured a record number of start-ups showcasing their innovations to an eager industry keen to see the next big thing!

This event is used by big and small brands alike to showcase their products on the world stage and over its history has seen products announced like the VCR, CD player, DVD, Blu-Ray and the Xbox just to name a few. This event is held in the second week of January each year in Las Vegas, one of the only cities in the world capable of housing such an event (Fun fact – did you know Las Vegas has more hotel rooms than all of Europe combined?).

This year's CES saw the usual plethora of big screen ultra high definition and curved TVs but it was some of the emerging categories that continued to demonstrate why they will be the technologies to watch over the next decade. Technologies like the "Internet of Things" powering connected homes, wearables and fitness tracking, 3D printing, virtual reality headsets, robotics and drone technology grew considerably in exhibit space and interest judging by the crowds they drew.

More Information at [CES 2015: Innovation at the Speed of Awesome!](#)



CES By The Numbers

Social Media Command Centre by FleishmanHillard

FleishmanHillard, on behalf of the Consumer Electronics Association provide a mobile data intelligence system called FH TrueIQ which provides analytics on “big data” produced across social media platforms during CES.

Their booth in the Central Hall of the Las Vegas Convention Centre and website provide a hands on experience where users can access the outputs of this data and see what is trending and the most talked about companies, categories and products.

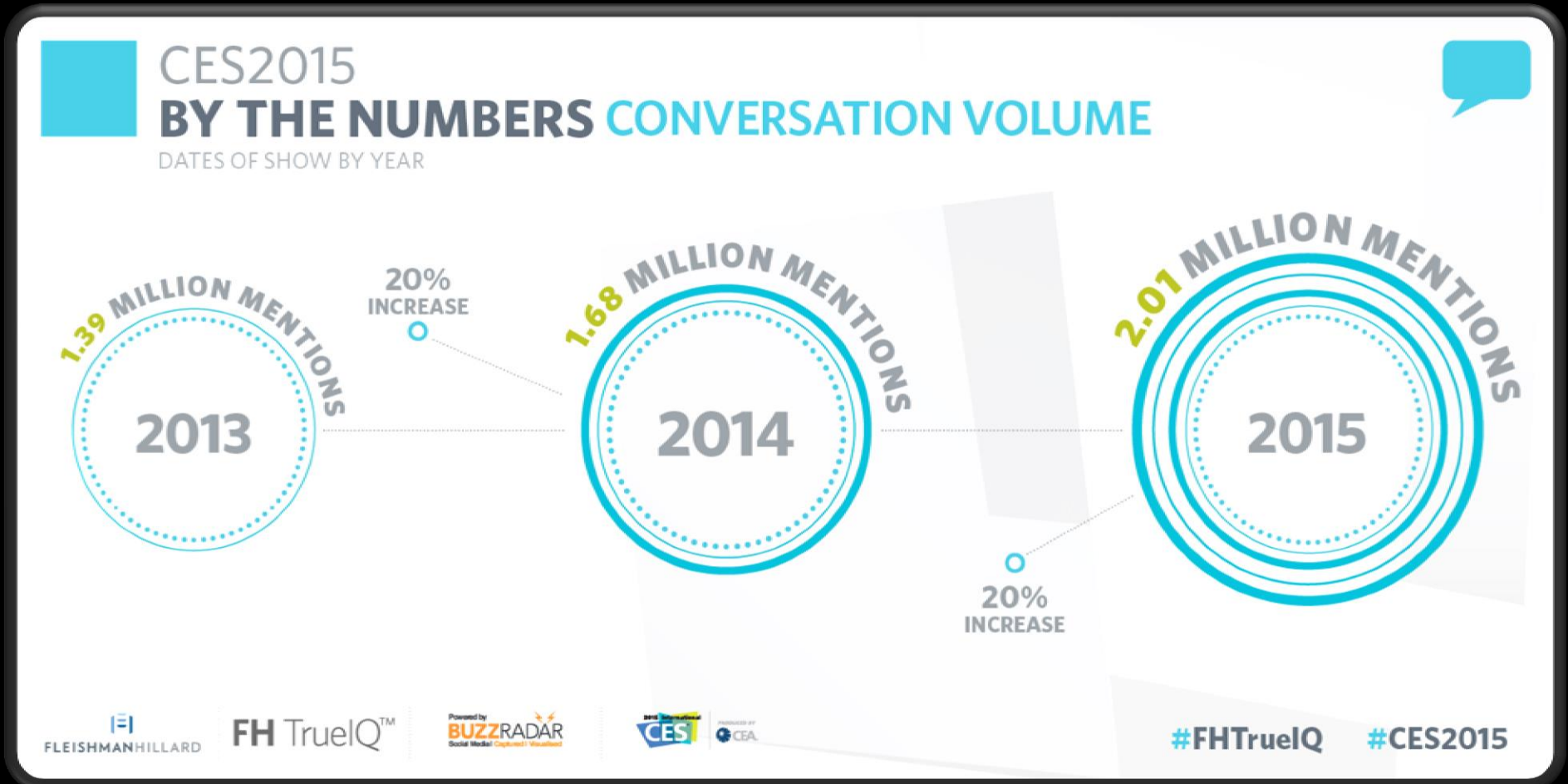
This makes their booth an essential touch point each day of the show to see what else has been announced, who is the most talked about and therefore, what else to seek out at the show amongst the 2.2 million square feet of exhibit space.

The following slides provide a summary of some of the impressive numbers and analysis provided by this powerful big data tool across all four days of the show.

More Information at [FleishmanHillard Powers the 2015 International CES Official Social Media Command Center](#)



CES By The Numbers



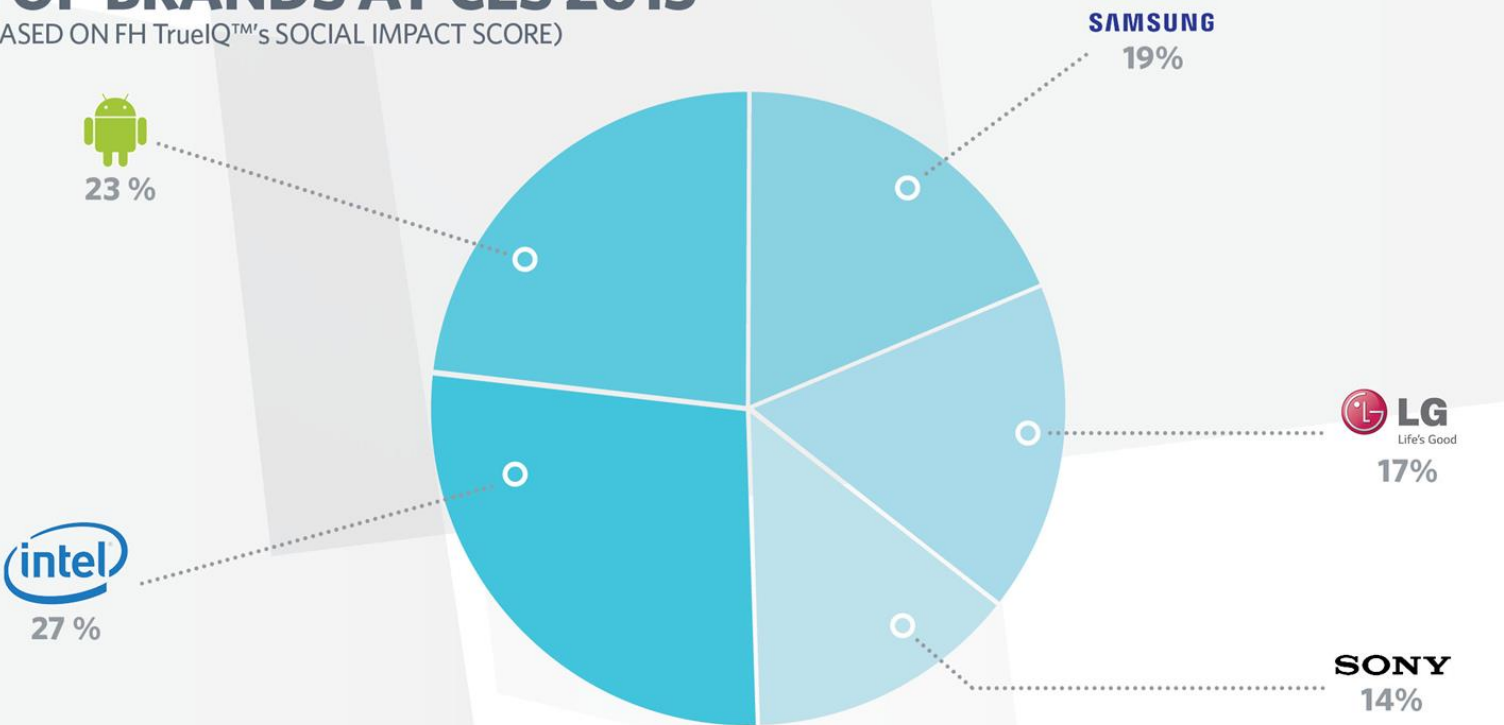
CES By The Numbers



170K TOTAL ATTENDEES, INCLUDING **45K** FROM OUTSIDE THE U.S.

TOP BRANDS AT CES 2015

(BASED ON FH TrueIQ™'s SOCIAL IMPACT SCORE)




FLEISHMANHILLARD

FH TrueIQ™

Powered by
BUZZRADAR
Social Media | Captured | Visualized

2015 International
CES

PRODUCED BY
 CEA

#FHTrueIQ

#CES2015

CES By The Numbers



CES 2015 RECAP BY THE NUMBERS

JAN. 6 — JAN. 9, 2015

67,800 INSTAGRAM PHOTOS
SHARED AT CES



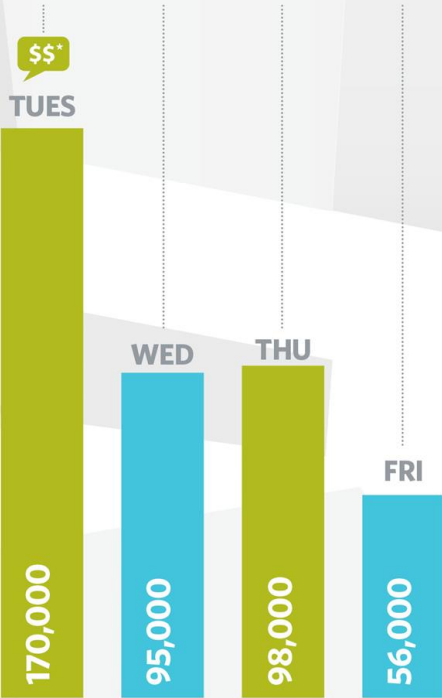
TOP TRENDS

- 1 WEARABLE TECH
- 2 ULTRA HD/4K
- 3 VR (VIRTUAL REALITY)
- 4 ROBOTICS
- 5 DRONES
- 6 3D PRINTING
- 7 CONNECTED HOME
- 8 SMARTPHONES

CES TOTAL MENTIONS

1,022,533

#CES2015 419,000 MENTIONS



*Promoted Trend on Twitter by Intel

CES 2015 Opening Keynote

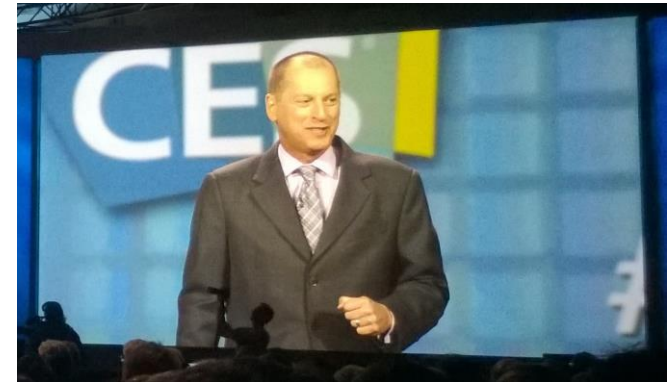
Gary Shapiro – CEO & President of the CEA

“Innovate or die!” A familiar mantra from the CEO and President of the Consumer Electronics Association, Gary Shapiro, and again a common theme in his keynote to open the Consumer Electronics Show for 2015. Because “innovation by its very nature disrupts the status quo” and innovation is what CES is all about!

With over 3,600 companies showcasing their latest and greatest products and services and 375 of these companies being new start-ups in the Eureka Park section of this year’s show, it appears that innovation is alive and well in the road ahead for consumer electronics. In the U.S alone, it is projected that the Consumer Electronics market will grow around 3% to over 223 billion dollars in 2015.

To a packed ballroom the President of the CEA then went on to discuss the evolution of retail and how the way we acquire products is being changed by new technologies. In the past, present and future, the bricks and mortar retail experience remains paramount for consumers. Experiencing new technology in a “hands on” environment to make an informed decision based on qualification of their needs. In more recent times and as we look ahead, online purchasing will continue to grow and new technology will offer alternative solutions for product fulfilment after purchase.

Technologies like drone and unmanned aircraft delivery systems are already being trialled and with a record of ten car manufacturers involved in this year’s CES. Driver-less cars are a hot topic and clearly another part of “the road ahead” (pun intended) for delivery of purchases. Or how about purchasing the schematics of a product online then printing at home utilizing 3D printing technology? A lot of it sounds like science fiction but these technologies continue to gain strength and accessibility and will gain further traction in 2015.



TECH GIANTS

Intel

- Brian Krzanich (Intel CEO) provided the Tuesday afternoon keynote this year. For a full review of the keynote presentation visit <http://www.retailsafari.com.au/ces-2015-intel-keynote/>
- Intel had a big focus on RealSense technology on their booth this year with many applications of the technology demonstrated like:
 - Gesture based games and PC control
 - 3D scanning and printing applications (e.g. scan & printed an arm for an amputee on the booth!!)
 - Facial recognition and security applications
 - Photography editing and analysis tools with added depth perception
- Wireless charging and connectivity was a stand out on the booth as Intel works towards completely tether free PCs and tablets in 2015 and beyond.



Brian Krzanich Keynote



Intel acquired Basis Science in 2014 – Makers of the Basis Peak Smartwatch featuring Intel wearable technology

TECH GIANTS

Intel

- Wearables too were in the spotlight with Intel demonstrating how their technology empowers the next generation of smart wearable technology like:
 - 2014 “Make it Wearable” contest winners showcasing smart baby monitoring technology (built into car seats)
 - SMS Audio BioSport headphones which track heart rate
 - The MICA (My Intelligent Communications Accessory) bracelet by Opening Ceremony which pairs with your smartphone to provide email, messaging and calendar support right on the wrist
 - Live stream camera and tracking technology built into sports jerseys for the next generation of sports broadcasts and performance analytics
- Oculus Rift and virtual reality was again present this year in its latest form for people to play in a social multiplayer basketball arena. Long lines as always!



Brian Krzanich introduces the Curie processor and next phase of their developer competition to create next generation wearables.
Image sourced from MIT technologyreview.com



Demonstration of RealSense technology built into Dell's Venue 8 7000 tablet allowing photo editing with incredible depth perception thanks to the 3D camera

TECH GIANTS

Samsung

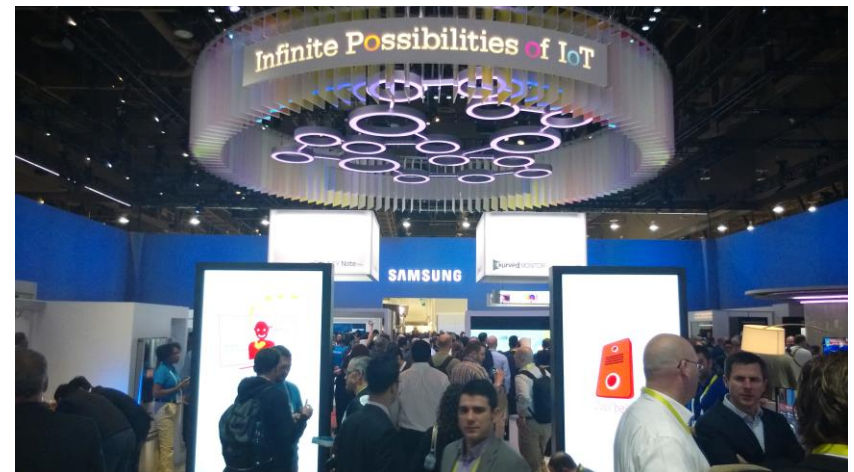
- Samsung's main drawcard this year was its further initiatives around Ultra High Definition TVs. These TVs range from 48" right up to 88" in flat and curved designs. To improve the UHDTV experience Samsung showcased their push towards a UHD Alliance. Bringing together content industry leaders like Disney, Dolby and Netflix to ensure an attractive pipeline of UHD content in 2015 and beyond.

Samsung also announced that in 2015 all of their TVs will be re-engineered around the new and improved "Tizen" operating system bringing new smart TV functionalities and access to content and apps.

- Following on from their connected home focus last year, Samsung showcased their Internet of Things (IoT) plans this year, committing to all Samsung TVs being IoT enabled by 2017. Their partnership with the SmartThings open ecosystem also means that 3rd party devices will connect and integrate with Samsung devices around their next generation SmartThings Hub and service.



Samsung Ultra High Definition TV Showcase at booth entry



Internet of Things (IoT) & Connected Home Showcase

TECH GIANTS

Sony

- Sony had a big focus on 4K this year with a slew of announcements around 4K TVs, projectors, camcorders and action cameras.
- Big focus this year was placed on high resolution audio with the announcement of a brand new Walkman, headphones, wireless speakers, home theatre systems and amplifiers. These products use Sony's proprietary LDAC codec technology to provide 3 times the audio data and quality as currently available.
- In keeping with the explosion of wearable technology, Sony also announced a range of different products and form factors to push into this space. Products like their SmartWatch, GolfShot SmartWatch, SmartBand and SmartEyeGlass are designed to provide “depth and variety in user experiences, and providing choice with beautiful, functional products,” in an effort to optimise performance and provide real time feedback on physical activity both through sports and everyday life.



Sony booth entry & 4K TV Showcase



Sony SmartWear SmartEyeGlass head mounted display and sensor demonstration

TECH GIANTS

Lenovo

- Lenovo operate a closed doors booth at CES in the Venetian Hotel as they have done for several years. This is an invite only area showcasing their confidential upcoming range restricted from media and wider audience coverage.

Having partnered with Lenovo over the last 6 months in running their “Legends” retail field force, I was lucky enough to get access to this exclusive area and see what’s in store from the world’s number 1 PC manufacturer. Whilst not much can be said about the range from Lenovo (and Motorola who they acquired in 2014) due to restrictions, I can say this, the future is looking very bright for these truly innovative brands!

- One product that was unveiled to the public during CES was the LaVie HZ550 notebook, winner of the coveted “Best PC” prize in this year’s Best of CES awards as presented by Engadget. At an incredible 0.77kgs (43% lighter than MacBook Air) this notebook claims the title of lightest notebook on the market but still packs a punch with Intel’s latest 5th Generation Core processor and up to 7 hours battery life.



Lenovo product showcase at entry to closed doors product showcase



Lenovo video wall at entry to closed doors product showcase

TECH GIANTS

LG

- LG put a lot of focus on their Ultra High Definition TVs at this year's CES, showcasing a new range of panels utilizing their 4K Ultra HD OLED technology. LG also introduced a new technology into some of their top end panels in "Quantum Dot Technology" as well as a wider colour palette and improved colour saturation. Their UHD OLED range offers varieties from 55" up to 77" in curved, flexible and flat design options.
- LG also used the opportunity to announce their own IoT initiatives for connected homes in what they call "Innovation for a better life" through connected devices that promise to make the way consumers live, work and play more convenient and more productive.
- Additionally, LG took the wraps off their TwinWash washing machine line. An incredibly simple yet compelling range of washers allowing two separate loads (e.g. colours and whites) to be run at the same time. Revolutionary!



LG's OLED TV Showcase



LG Announcement of the dual load Twin Wash washing machine.
Image sourced from techinvestingdaily.com

TECH GIANTS

Panasonic

- In keeping with the likes of Samsung and Sony, Panasonic's focus this year was 4K Ultra High Definition, touting the widest range of 4K products in the industry. As well as 4 series and 9 models of 4K TVs and their commitment to the UHD Alliance, Panasonic also showed off their wares in:
 - A prototype of the next generation of 4K Blu Ray players
 - A range of palm sized 4K capturing handycams and action camera
 - 4K professional video cameras capable of movie studio image capture
 - 4K tablets designed for engineering and design professionals
 - 4K stadium screens as recently shown at the Kentucky Derby
- Panasonic also showcased a range of technologies for retail and service environments which attracted a lot of attention from attendees at the booth. Highlights included an interactive smart mirror setup in a salon environment allowing the user to trial different looks (e.g. makeup, hairstyles, moustache on a young lady!) and Smart Downlights capable of recognising objects and projecting customised content onto any surface.



Panasonic Beauty Interactive Smart Mirror demonstration.
Watch the Beauty Salon in action at [Panasonic Beauty Salon @ CES 2015](#)



Panasonic Intelligent Down lights demonstration

TECH TRENDS

#Drones & UAVs

- The presence of drones and unmanned systems was one of the most notable increases at this year's CES. The CEA rolled out a new Unmanned Systems Marketplace which consisted of over 6,500 square feet of exhibit space featuring over 16 high end commercial and consumer UAV technology companies.
- Drone technology has been growing in presence at CES over the last few years but this year's show saw the technology move from toy and novelty classification to genuine commercial applications.
- The CEA expects the drone technology category and market to grow in global revenue to over \$130 million in 2015, increasing by 55 percent from 2014, with unit sales of consumer drones expected to reach 400,000. The revenue from drone sales is estimated to easily exceed \$1 billion in just five years.

More Information at [Unmanned Systems Take Flight at the 2015 International CES](#)



Drone technology is growing its presence as is the size of drones showcased, and this was the biggest we saw!



Intel's "Make it Wearable" competition winner "Nixie" – an autonomous drone worn on the wrist and deployed to take the next generation of selfies.

Image sourced from [makezine.com](#)

TECH TRENDS

#Virtual Reality

- Virtual Reality (VR) technology has been in the realm of science fiction and just out of reach for decades. However, with Facebook's acquisition of Oculus in 2014 for the handy sum of just over \$2 billion, it showed that this technology has come leaps and bounds and is the next frontier of immersive entertainment. The lines at this year's Oculus booth for attendees to go hands on with the product further prove the interest in this exciting new category.
- Sony and Samsung also had VR headsets showcased at this year's show as they look to leverage the technology to provide the next generation of gaming and cinema experiences.
- Interest in this technology also goes beyond gaming and cinema experiences with potential applications for real estate (virtual house tour anyone?) and travel (try before you fly) just to name a few.



Oculus Rift, the future of immersive entertainment?
Image sourced from Bostonno.streetwise.co



Long lines at the Oculus booth

TECH TRENDS

#Action Cameras

- Action cameras are another category that has seen a consistent increase in presence at CES over recent years lead by the ever popular GoPro. After pursuing a desire to have cameras capable of capturing his surfing adventures up close and personal, GoPro founder Nicholas Woodman, in just 12 years has created an empire with an estimated stock price net worth of \$3 billion and revenues in 2015 expected to exceed \$1.2 billion.

More Information at <http://en.wikipedia.org/wiki/GoPro>

- Major brands like Sony, Panasonic and Polaroid are also in on the “action” with impressive products of their own in this category capable of capturing 4K resolution video.
- Polaroid showcased an impressive range of affordable action cameras on their large booth this year serving as a great example of a legacy brand capable of reinventing itself for the 21st century.



The GoPro booth packed to the brim as always

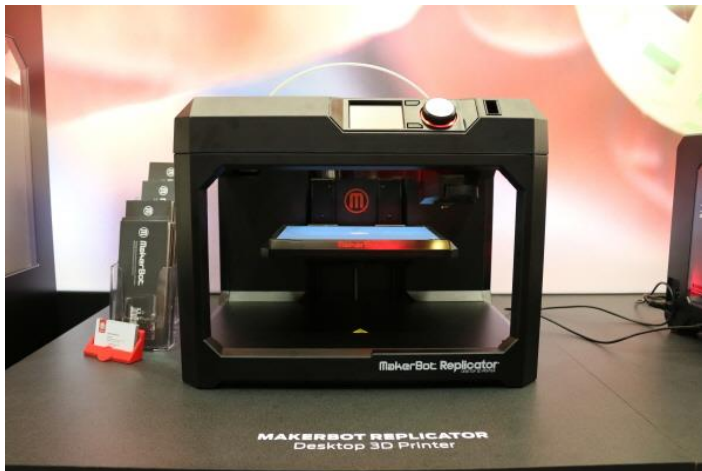


Who doesn't love Lego? Impressive displays at the Polaroid booth

TECH TRENDS

3D Printing & Scanning

- 3D printing continued its phenomenal growth as a trend at CES 2015 with significant advancements in the technology as well as accessibility through more cost effective consumer solutions.
- MakerBot a leading innovator in this space showcased their latest wares and demonstrated their commitment to the 3D printing ecosystem. A highlight from their show was the announcement of new filaments allowing 3D printing in new materials such as bronze, maple, iron and limestone.
- Intel set their sights on 3D printing through announcing a partnership with HP as they enter this space and showcasing RealSense technology's ability to 3D scan objects for reproduction via 3D printing. One such example was on their booth where an amputees hand was scanned using RealSense and then used to create a model of his missing hand which was then printed on the booth during the show!



MakerBot Replicator – Desktop 3D Printer.
Image sourced from tshow.aving.net

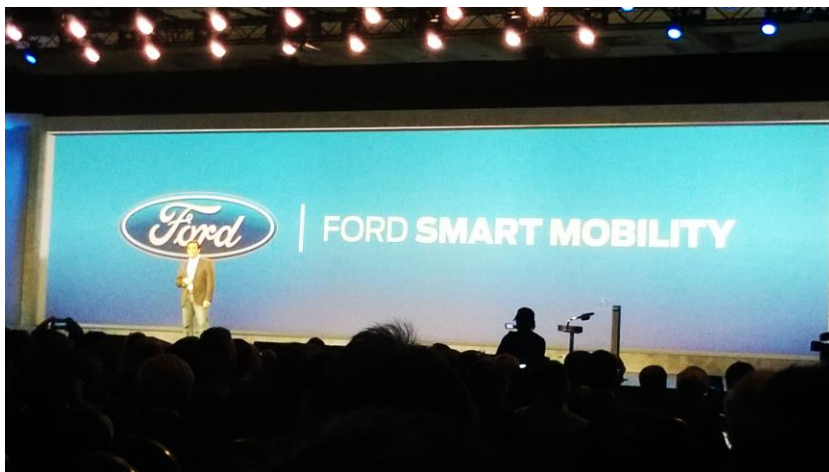


3D printed hand produced on the Intel stand thanks to 3D scan taken using RealSense Technology.
Image sourced from m.tech.firstpost.com

TECH TRENDS

Automotive - #SmartCars

- CES 2015 featured a record 10 major automotive manufacturers. With technology and the automotive industry becoming more synonymous it is expected that this will grow further in 2016 and beyond.
- Both BMW and Audi showcased driverless cars travelling as fast as they can go, simply to demonstrate how well the technology works. And it works well!
- BMW also provided attendees the opportunity to experience their self-parking technology in an i3 capable of parking itself into a cramped dimly lit garage, hundreds of times in a day, without incident.
- Ford's keynote, following Gary Shapiro's opening presentation, focused heavily on technologies they are developing to increase road safety and decrease human error elements through initiatives like park finding and self-parking cars, driverless cars and 360 degree collision avoidance.



Ford Keynote delivered by Mark Fields (President & CEO)



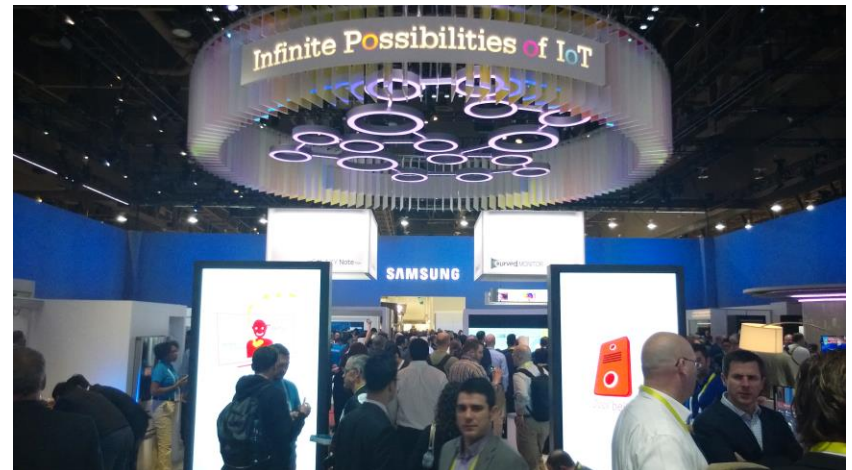
Ford Smart Mobility Parking Spotter Technology showcase

TECH TRENDS

#Internet of Things

- CES 2015 featured the largest ever showcase of technologies, products and services opening up the trend that is the “Internet of Things” (IoT). With over 900 exhibitors showcasing innovations that utilise the power of networking and the web to provide better and smarter integration of everyday devices.
- “The ‘Internet of Things’ is the hottest topic in tech right now,” said Karen Chupka, senior vice president, International CES and corporate business strategy, CEA. “It’s all about the opportunity to connect everyday items like cars, home security systems and kitchen appliances to networked devices like PCs and smartphones for greater control and management of our everyday lives.”
- IoT will rely on intuitive connectivity between all types of devices both from major brands and smaller players, hence why announcements at CES 2015 around major brands like Samsung and LG utilizing open systems is a key stepping stone.

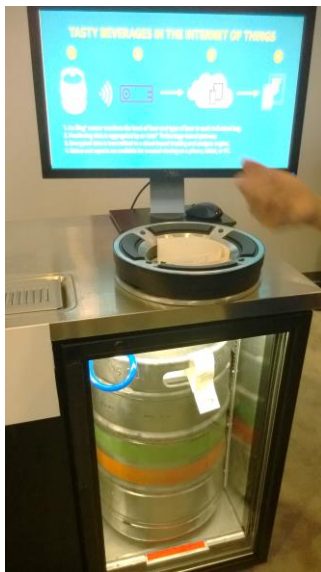
More Information at [2015 International CES to Host Largest Ever “Internet of Things” Showcase](#)



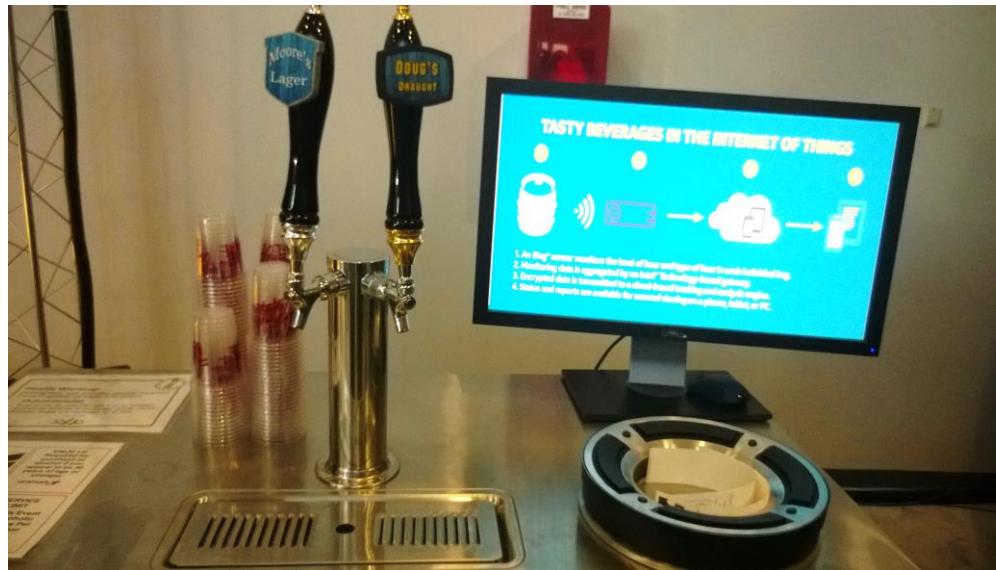
RETAIL INNOVATIONS

Smart Vending Machines

- Smart Connected Vending Machines: Intel showcased a range of smart connected vending machines on their booth this year demonstrating how the Internet of Things can help provide intelligent features and analytics vending machines and product dispensers.
- Products and features like:
 - Beer keg and dispensary systems providing analytics around the amount of beer remaining and feeding back powerful inventory data.
 - Vending machines with remotely manageable transparent LED screens that can also be combined with technologies like eye tracking and demographic analysis to customise content for the consumer standing in front of it.



Intel Smart Beer Dispensing System



Intel Smart Mountain Dew
Vending Machine with
Transparent LED

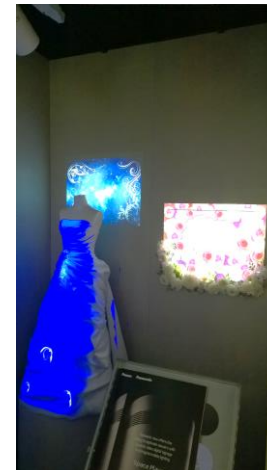
RETAIL INNOVATIONS

Smart Lighting

- Panasonic showcased an impressive array of smart lighting solutions on their booth this year, perfect for creating theatre and point of difference in the retail environment.
- Their Smart Downlight was positioned above the below pictured table and capable of recognising when the waiter approached the table with a bottle of wine. When recognised the bottle was lit from above and a scene from the country and wine region of the bottle projected on the table. When champagne flutes were placed on the table, the Smart Downlight also recognised these and lit the area for easier pouring. As the waiter poured, the entire tabletop had champagne projected across it. Brilliant!
- Panasonic also demonstrated their short throw projectors by showcasing their ability to project onto 3D objects like a wedding dress and even a waterfall!



Panasonic Smart Downlight Demonstration – wine region projected.
Watch it in action at [Smart Downlight Demonstration 1](#)



Panasonic Short Throw Camera Demonstration– projection onto 3D object

RETAIL INNOVATIONS

Transparent LED

- Transparent and mirrored LEDs are not new to CES or the market but each year we see intelligent new ways of utilizing this technology in the retail or commercial environment.
- This technology is also capable of touch screen functionalities providing a platform for products to be positioned behind the transparent LED and custom content able to be showcased to and manipulated by the consumer.
- Panasonic again had the most compelling showcase on their booth with transparent LED switching between mirror mode, content mode and transparent.



Panasonic Transparent Window Screen Display



RETAIL INNOVATIONS

Remote Sales Assistants

- Robotics and telecommunications were another trend at CES this year and perhaps the most compelling booth was that of Beam. Pictured below, the Beam booth was staffed by people sitting in rooms all across the U.S, with no one physical present on the booth.
- Upon entering the booth we were quickly approached by one of the Beam units and greeted by someone sitting in LA remotely controlling the movement of the device and talking to us via Skype.
- Brand Ambassadors and Sales Assistants of the future??
Watch it in action at [The Beam Team | CES 2015](#)



Beam, Booth Staff!

Image sourced from suitabletech.com



Our Beam Booth Personal Assistant

The Fun, The Weird & The Wonderful

It's not all serious business at CES. There's fun to be found and plenty of concepts that border on straight up strange. Here are some of the weirder things we saw at this year's show!



Communication Android from Toshiba – quite terrifying!



Spider like robots that combine to create a dress with built in proximity detection to ward off personal space intruders



Pico Brew internet connected craft homebrew system – Yes please!



Game of Epiphones?



Restored Typewriters – not coming to a store near you in 2015



Retail Safari does not endorse this customer engagement strategy



About Retail Safari

Retail Safari provides a complementary suite of retail marketing services that connect the consumer with a brand in environments where the ability to influence is at its strongest. The integrated channel structure activates brands along the purchase journey, triggering the impulse to buy at critical points both in-store and out-of-store.

As part of Australia's biggest sales and field marketing group, CPM Australia, Retail Safari offers unrivalled international experience and know-how combined with local insights, national coverage and execution excellence.

For further information about the 2015 CES or any specific details on products featured in this presentation please contact:

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For further information on Retail Safari or CPM Australia please visit www.retailsafari.com.au or www.cpm-aus.com.au

