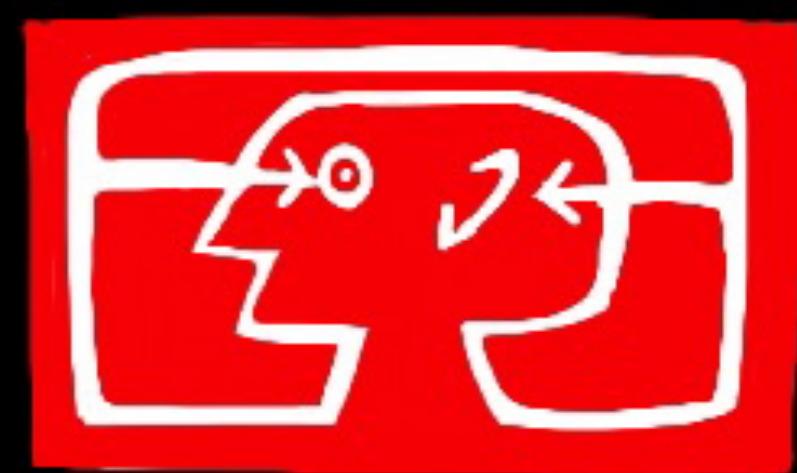


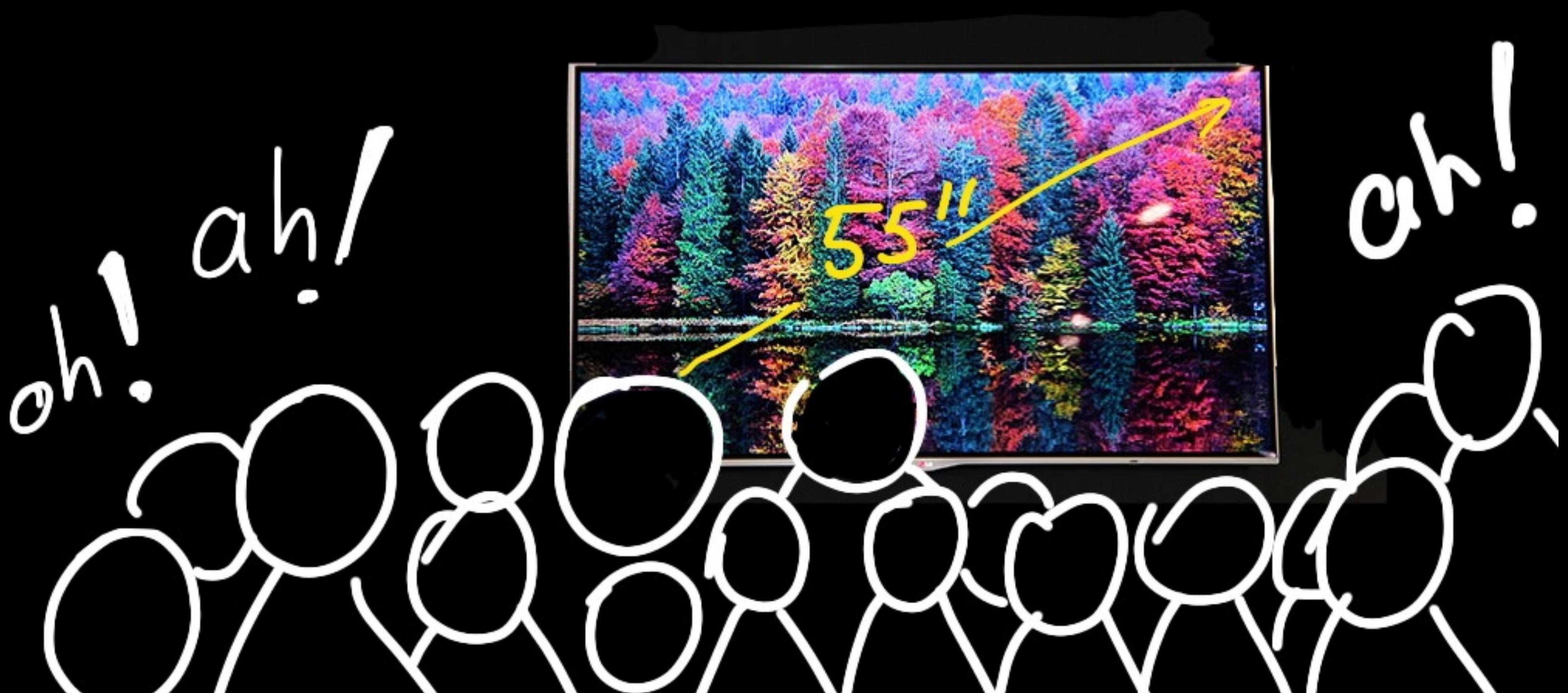
BLUE ROOM AT

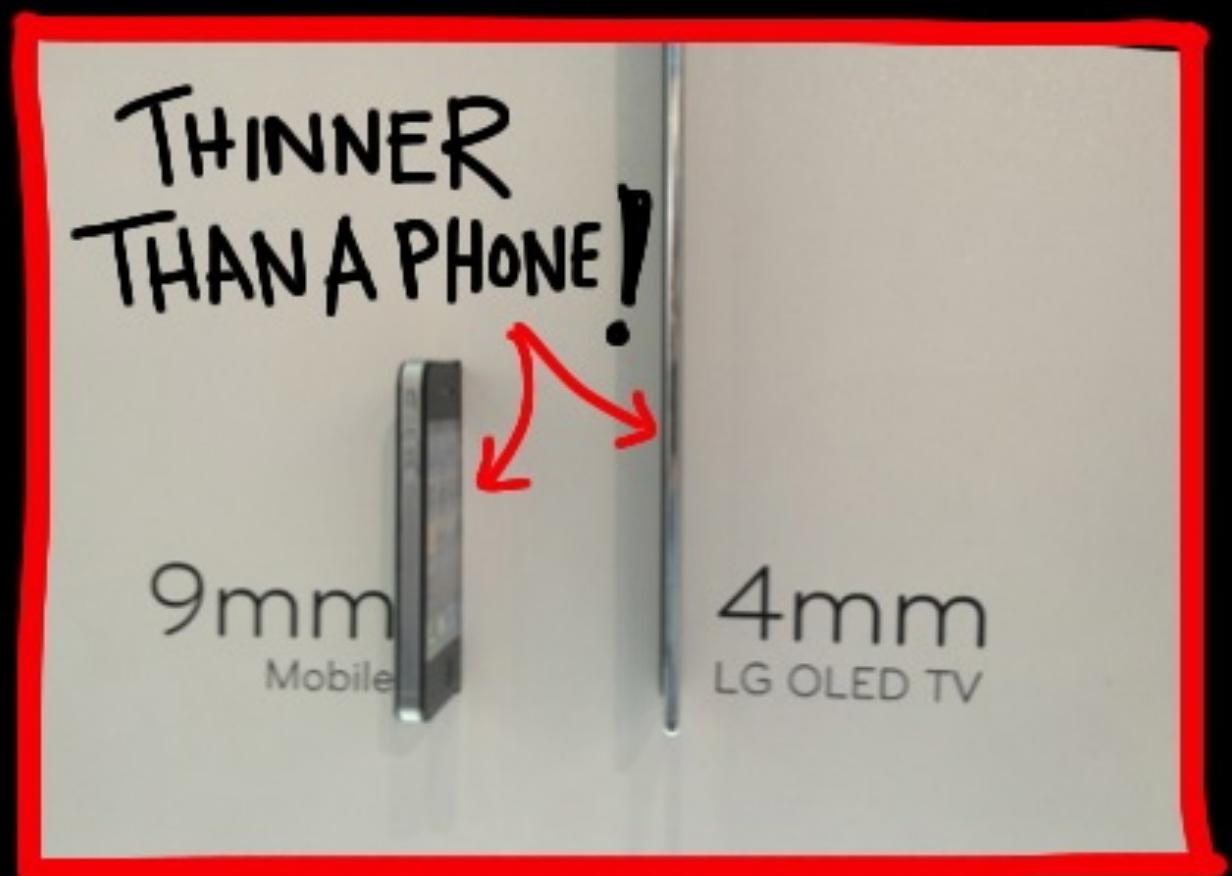


IFB 2012

10 THINGS WE LEARNT

1. ORGANIC LED DREW THE CROWDS





Organic-LED TV was the IFA showstopper. Samsung and LG are looking to use OLED to grab attention, both companies heavily pushed their 55" models that were previously announced at CES in January.

So it does look likely that we will see releases this year. However, no confirmed schedules or prices were given. We would expect any UK RRP to be around £6.5-8.5k.

The display technology beneath is different for each of the brands. Samsung's OLED pixels will comprise of three independent red, green and blue RGB sub-pixels. While LG are opting for a WRGB system which includes an additional white sub-pixel. In reality all four of LG's sub pixel generate white light before being filtered through a 'color refiner'. LG's system is cheaper to manufacture so they will very likely be able to hit a lower price-point. We also believe this technique is designed to circumvent the limited lifespan of blue OLEDs.

http://y2u.be/RzbdfDtu_Zo

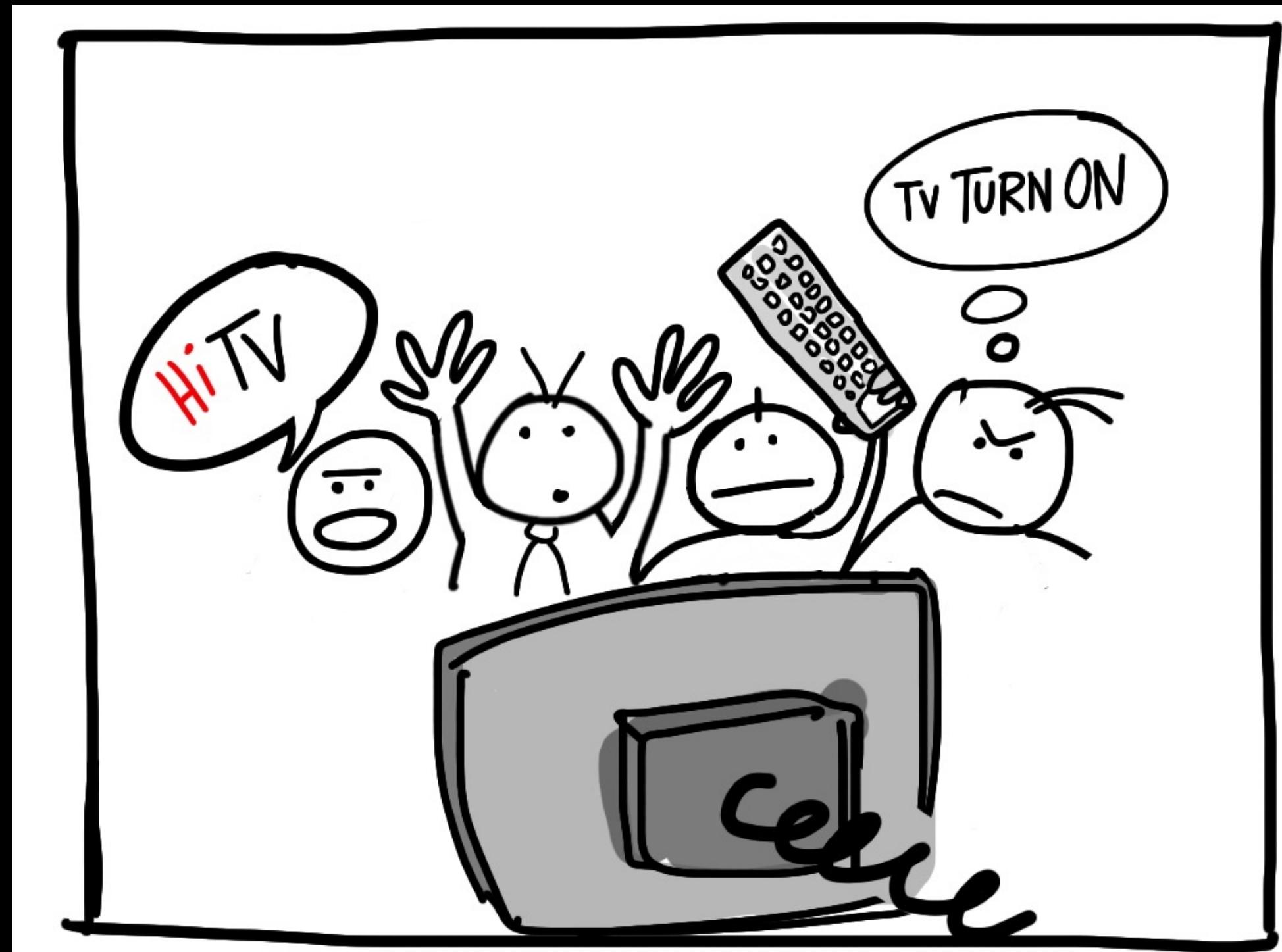
2. WINDOWS 8 WAS EVERYWHERE



Microsoft managed a really clever illusion at the show. They appeared to be the most omni-present company without actually attending. The reason they achieved this was because the hardware manufacturers have got right behind the upcoming Windows 8 launch with countless new PCs, notebooks, tablets, hybrids, all-in-ones and phones. It meant that Windows 8 was everywhere you looked.

However, there was very little pricing information or delivery timescales available behind the products. We expect more details in the run-up to [launch on October 26th](#).

3. EXPECT MORE WAVING SHOUTING AND EYE CONTROL



At CES in January Samsung introduced Smart Interaction voice and gesture control for it's 2012 range. We are increasing seeing a creep in to other brands and product categories.

Samsung will introduce gestures in a range of notebooks and AiO PCs and suggested the feature will be useful when following a recipe in the kitchen. Another useful application might be for point-and-shoot cameras?

<http://y2u.be/uNShlcdezMcM>

We also tried Haier's eye-tracking TV prototype, which surprised - it was more responsive than we were expecting.

<http://y2u.be/zcSA-K1F80Q>

Our experience suggests that Samsung's current implementation for TV is rather clunky and it will keep viewers reaching for the remote for the time being. Early adoption with voice and gesture will take place where there is added value (gaming) or when the hands are otherwise engaged (preparing and eating food, driving). We don't expect the see these new ways of interacting with devices to become the default interaction method until they become more natural and intuitive.

4. 3D IS HANGING ON... JUST!





BATTERY FREE



GLASSES FREE

It appears that the leading TV brands have awoken from their self-endued 3D trance. With the exception of LG all were very quiet on the topic. LG have seen more stereoscopic success than others because they were early to recognise that consumers would shun the heavy, expensive and battery powered active headgear. Instead they opted for the lighter, almost throwaway, passive polarised and more familiar cinema glasses.

While 3D might be on the back burner, the technology behind it is increasingly being showcased for [dual viewer 2D applications](#). We first saw LG demonstrate this at IFA last year with [2 player full screen gaming](#). We recognised the potential for TV viewing and set about creating a demo. Having modified 3D glasses and creating a special side-by-side two programme video stream for a Blue Room demonstration that we christened the 'marriage saver'. A number of booths were demoing the multiplayer gaming advantages and TV possibilities at IFA 2012.

However, Samsung impressed us with their '[Multi View' OLED showcase](#) that utilised active shutter glasses with Bluetooth headphones. The ability to deliver separate audio to each viewer gives this potential for TV viewing. However, we are unable to determine if their ES9500 will feature twin-tuners required to achieve dual live TV viewing.

With cumbersome glasses being recognised as the barrier to mainstream 3D adoption, a slightly subdued but recurring and expanding theme is [glasses-free 3D TV](#). The number of pixels found in 4k2k panels is an enabler for an enhanced auto-stereoscopic experience. However, the cost of adding auto-stereo technology at higher pixel densities will be prohibitive. Therefore, unlike Toshiba's early effort, we believe most early-adopter affordable 4k TVs will not include this feature.

<http://flic.kr/p/d4B235> <http://flic.kr/p/d4vTgE> <http://flic.kr/p/d4saLG>

5. 21:9 HAS GONE MAINSTREAM



21

9

The 21:9 cinemascope aspect ratio has been somewhat of a niche TV format in the last few years with Philips being the sole major manufacturer to introduce it to its range. However, just as it looks like Philips may be leaving, others are joining with products from [Vestel](#), [TCL](#) on show.

It wasn't just TVs getting the 21:9 treatment as LG unveiled the concept of widescreen computing with the [LG EA93 21:9 aspect ratio monitor](#), and Toshiba with their [U840W Ultrabook](#). It features multitasking capabilities which means you can split the screen into four sections. Potentially, meaning our dual screen monitor set-ups could move to one widescreen monitor instead.

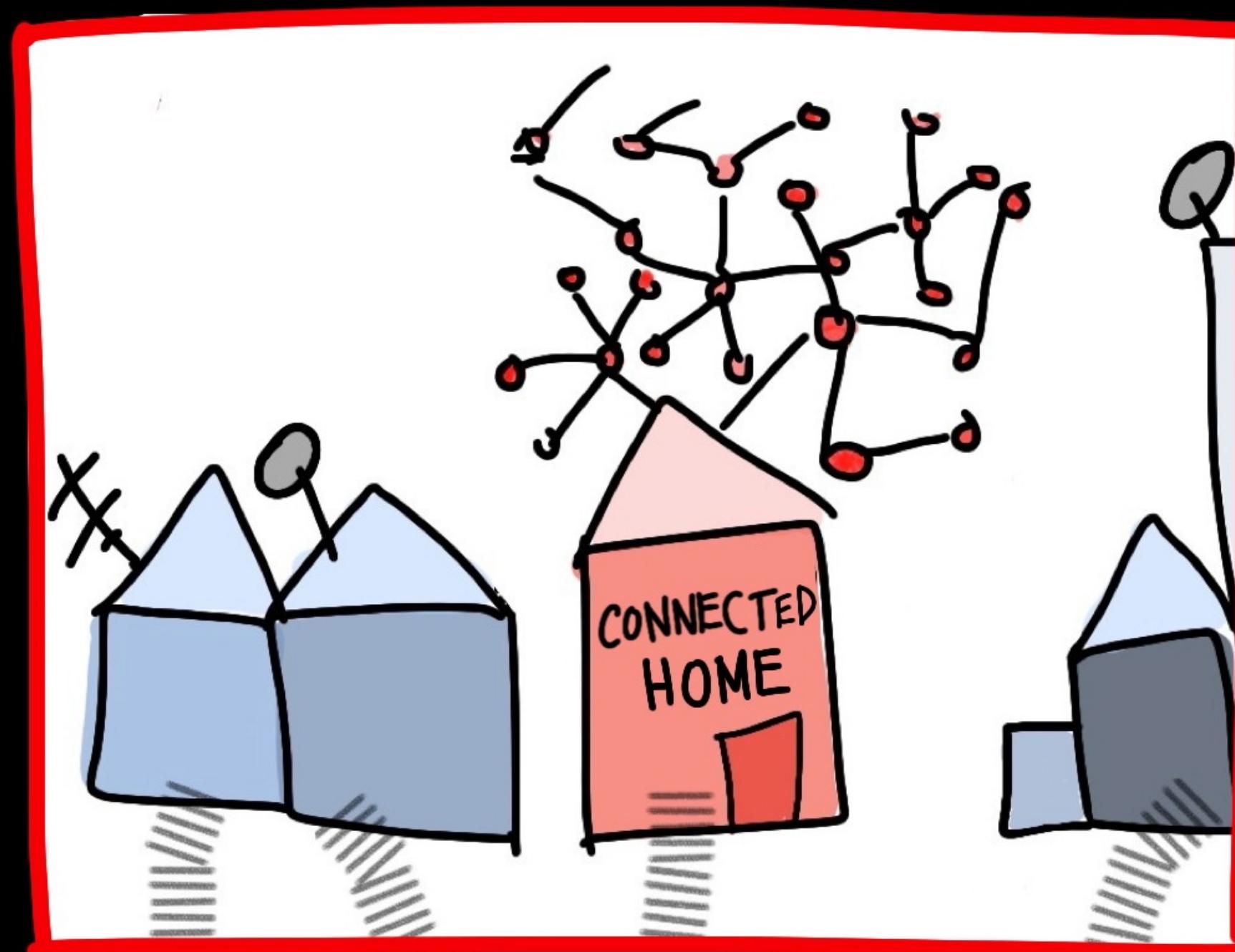
6. CAMERAS HAVE GOT SMART



Making a device connected and calling it Smart is very much in vogue at this years show. Everything from fridges to radios are getting the 'smart' treatment. So, it was not surprising to see Sony and [Panasonic](#) with new smart camera offerings. Adding [WiFi capability](#) to these cameras allows you to connect to cloud based storage, playback your material on other smart devices without the need of a computer and use photo specific applications on the device.

Deserving a special mention is the [Samsung Galaxy Smart Camera](#). Samsung have have taken a distinctly different approach to the other manufacturers. They have taken the compact camera form, [powered it with Android](#), whilst also adding 3G connectivity making it a potential future production tool.

7. THEY WANT OUR HOMES CONNECTED



The [connected home](#) idea of linking together audio visual devices to [home appliances](#) and energy related products via WiFi seems to be gathering real pace. It has all the signs of being the next so called 'big idea' that will cause the manufacturers to slug it out in an attempt to be crowned 'king of the connected home'.

All the major manufacturers had some form of connected home concept on show but Panasonic appear to be really thinking big. They announced a joint venture to build Skolkovo near Moscow. A [31,000 smart sustainable city](#) which will be completely CO2 free, which presumably will be full of Panasonic connected devices.

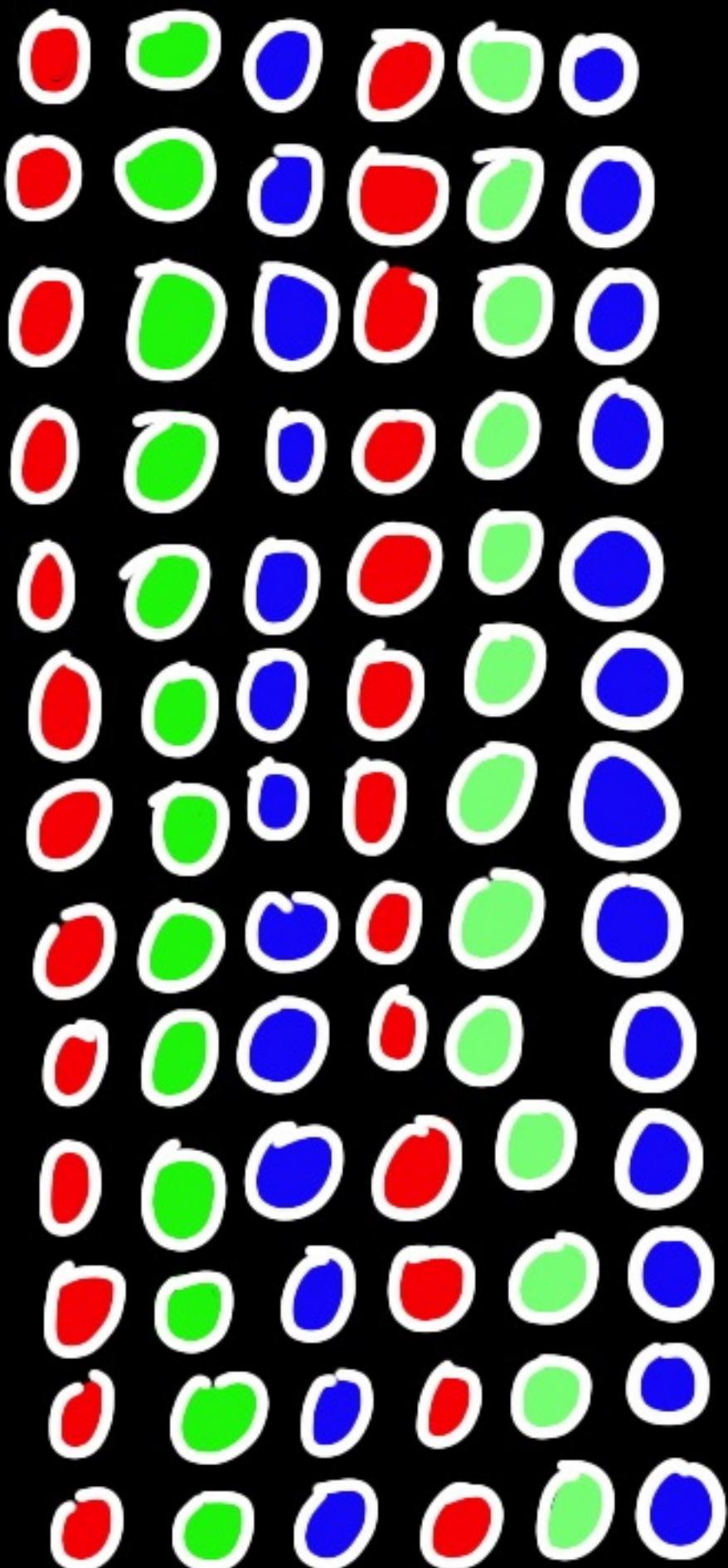
8. HYBRID DEVICES WERE IN ABUNDANCE



Hybrid devices was a definite theme for this year. One function certainly never seemed enough for most manufacturers with cameras running Android, laptops transforming into tablets and all-in-ones that are just waiting to become a touch tablet

The arrival of Windows 8 has certainly inspired the hybrid tablet notebook category with huge numbers and varieties on display. The challenge here is how do you best bring two devices together without compromising either. The solution has fallen broadly into two categories. Firstly, the dock-able/clip-able version, where the two parts come apart and secondly, the sliding version where the keyboard slide behind the tablet. These hybrid devices are blurring the lines between tablets, notebooks, ultrabooks and AiOs. In many cases it is hard to differentiate between the categories.

9. THE WORLD IS GETTING MORE PIXELS



Pixels count at IFA 2012! We saw exciting and new Ultra-HD 4k2k panels from Panasonic, Toshiba, Sony, Samsung and LG.

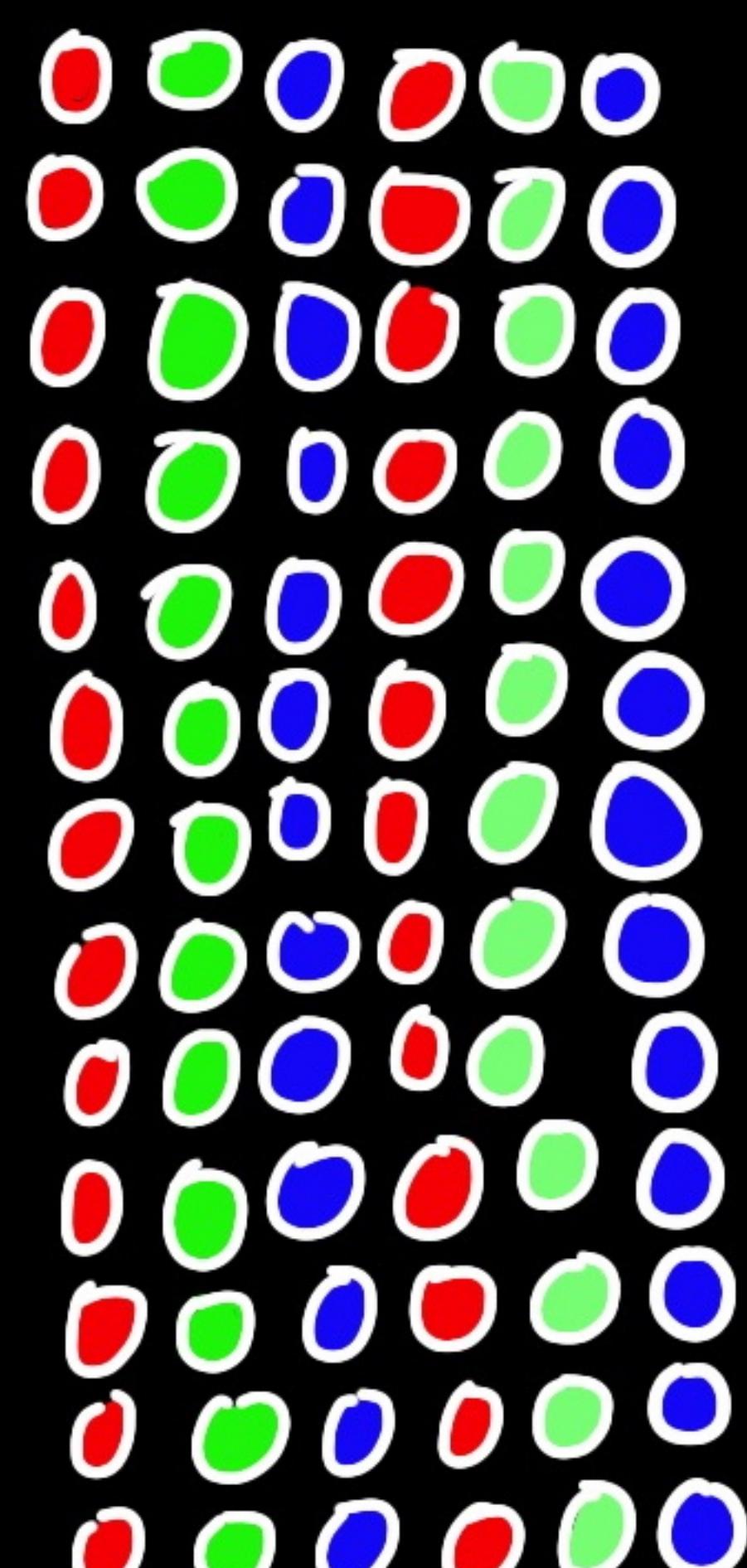
Toshiba were the first to the 4k market this year with their £7k 55" ZL2 - we have one of these on loan in the Blue Room. However, the number of pixels here are purely a vehicle for auto-stereoscopic functionality - 4k content can only be viewed via a special retail demo playback box plugged via proprietary connector. Toshiba were also proud to showcase their 84" 4k passive 3D TV due for release in Q2 2013.

We are told LG's 84" has already hit the stores in Korea, and could be available in UK later this month. However, expect it to cost £14k.

In addition to prohibitive price-points lack of content will be a key concern for any upcoming potential 4k panel purchaser. All brands were keen highlight the 'upscaling' functionality. Sony showcased PS3 4k photo viewing on their newly unveiled Bravia 84" KD-84X9005. We were not given a release date other than end-of-year but expect this to be an production model in-part due to the inclusion of a very legacy SCART connector!

Panasonic impressed with a museum like 'Future Display Technologies' tour in a darkened corner of their booth. Here we saw the 20" 4k2k professional LCD monitor first mentioned at CES. But also the huge 145" 8k Super Hi-Vision plasma - well ahead of NHK's planned experimental 8k broadcasts in 2020.

<http://flic.kr/p/d4AYid>



AND FINALLY...

10. THINGS JUST GOT SEE THROUGH

At least two companies want to clearly make a mark with transparency displays.

We first saw transparent screens at CES 2010 in the form of this prototype AMOLED touchscreen [Samsung MP3 player](#). Last year at IFA Haier showed us a [22" 'Organic TV'](#). While at CES in January Samsung showcased their LCD touch 'Smart Window' and Haier appeared to raise their game and produced a 46" TV panel.
<http://y2u.be/-kyukGeCGT8>

IFA 2012 saw both companies highlighting this technology. Samsung's 'Smart Window' had disappeared, but we did spot their transparent 22" paneled advertising enclosure. [Haier again showed their 46"](#) TV (although the screen had frozen when we visited). [Vestel also introduced a 46"](#).

We are unlikely to see this technology in the living room TV set any time soon. Mass production will first come for [business solutions](#) and advertising.

However, perhaps any introduction to the home will come via the kitchen? <http://flic.kr/p/d4w971> <http://y2u.be/G2S2Y3bGraU>

