

Noter fra Wearable Technology Show 2015



Oplysninger fra <http://www.wearabletechnologyshow.net>:

A total of 3,872 people attended the event; making it the biggest dedicated show for wearables anywhere in the world. 108 companies exhibited, compared to 40 in 2014 and the show took over 4,000 square metres, four times as much space year on year.

Der blev løbende givet indlæg i syv parallelle spor: Augmented Reality; Smart textiles & fashion; Connected living; Medical; Performance sports, Product, payments & retail; Enterprise and M2M og Innovation and IOT. Adgang til førstnævnte seks kostede ca. 6.000 kr. for to dage – sidstnævnte var gratis, hvorfor vi – Anders Haubak Iversen og Jens Peter Hansen – holdt os til dette track (se program sidst i dette notat) og supplerede med indlæg på Cloud Expo Europe og Data Centre World – begge expo/konferencer i samme bygning som WearableTechnology Show.

Hoved indtryk

- Forbløffende lidt fokus på at sende data til device – stort set alt drejede sig om at opsamle og præsentere data fra devices
- Masser af ure og stort set ingen briller – en del tekstiler
- Der sker meget indenfor MEMS (bitte små kombinationer af sensor og computer)
- Data og ikke devices er kernen – hvordan behandles, transporteres og anvendes data?
- Privacy fyldte i præsentationer, men ikke hos udstillere
- Intet – for den der følger området – nyt under solen

Herunder diverse indtryk i form af noter og foto af slides

Forventninger til 2019:

- 455 mill devices vil generere 46.5 mia. \$
- Healthcare vil tegne sig for 121 mio. enheder
- Smartwatches vil med 21 mia. \$ genere største overskud – pt. er der solgt 20 mio. enheder
- Smart Glasses forventes at nå op på 35 mio. enheder

Om Google Glass i panel debat: De greb det forkert an – skulle have skabt succes eksempler i virksomheder frem for at satse på consumer marked, hvor design bare ikke var godt nok – bør lige alm. briller eller solbriller. Blev nævnt, at DHL opnåede en effektivitets forøgelse på 25 % ved brug af Google Glass – se [Wearables and augmented reality software improve picking process by 25 percent](#)



Figur 1 Optimistiske forventninger til markedet. % voksne i US, der forventer at købe wearable inden for næste 12 mdr.

Knap så optimistiske toner fra Justin Jungsup Lee fra LG Electronics:

- Der er solgt 20 mio. stk. smartwatches siden launch,
- Det svarer til 0,04 % af den globale population på 7 mia.
- Normalt antages, at Innovators udgør 3 % af befolkningen – dvs. at kun 1 % af de innovative har købt smartwatch,
- En udbredelse på 16 % (De innovative 3 % og early adopters 13 %) vurderes normalt som værende den kritiske masse til sikring af generelt markedsgennembrud

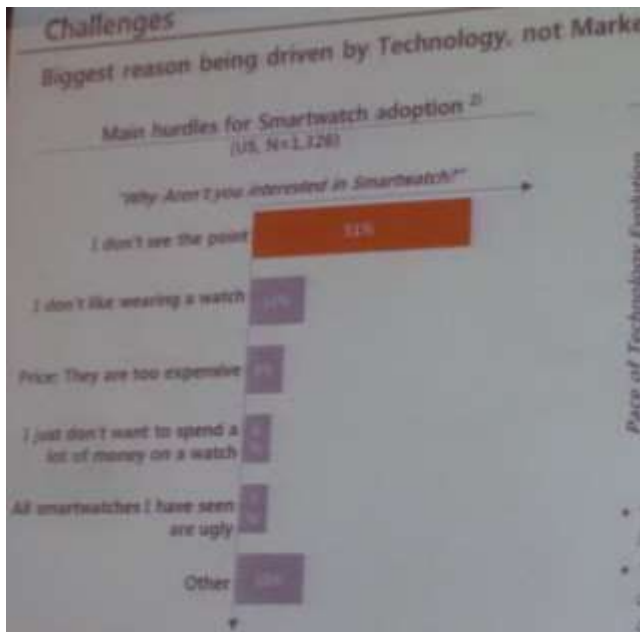
Til sammenligning sælges der 1.2 mia. ure pr. år; 300mio. pc'ere og 300 mio. briller.



Figur 2 Også droner indgår under wearables – en indlægsholder brugte tid på at promovere Nixie armbåndet



Figur 3 Atkinson brugte en del tid på hvordan data kommer fra devices til skyen. ARM er med i Weightless, der forsøger at etablere en standard for private LPWAN



Figur 4 Halvdelen ser ikke nogen mening i at anskaffe smartwatch - analyse præsenteret af Justin Jungsup Lee fra LG Electronics



Figur 5 Slagtilbud på rapport med analyse af markedet for smart glasses



Figur 6 Gary Atkinson, ARM, omtalte potentialet i landbruget for brug af LPWAN netværk

- Der er typisk samme computerkraft i et armbånd som der var i en laptop anno 2010.
- Vi vil se specifikke devices til de forskellige målgrupper så som børn, ældre, sportsfolk, læger osv.
- Udviklingen går mod, at devices vil kunne kommunikere direkte med skyen uden behov for smartphone. Dette kræver en form for LPWAN



Figur 7 Slide fra Indigigo indlæg visende, at indenfor crowdfunding og wearables er håndledsbårne dimser dominerende.

Jawbone (livsstils armbånd):

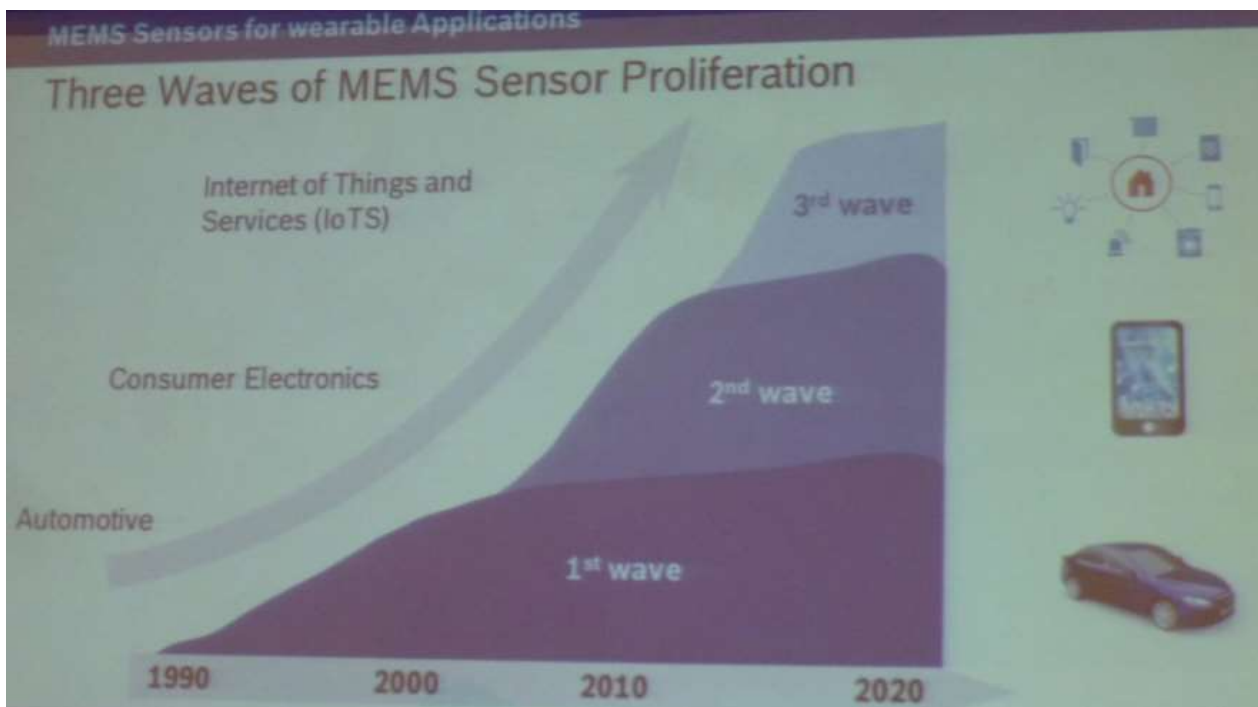
- Ni ud af ti angiver, at armbåndet har fået dem til at ændre adfærd,
- Jawbone's data viser, at mænd sover 20 minutter mindre end kvinder (privacy?!)

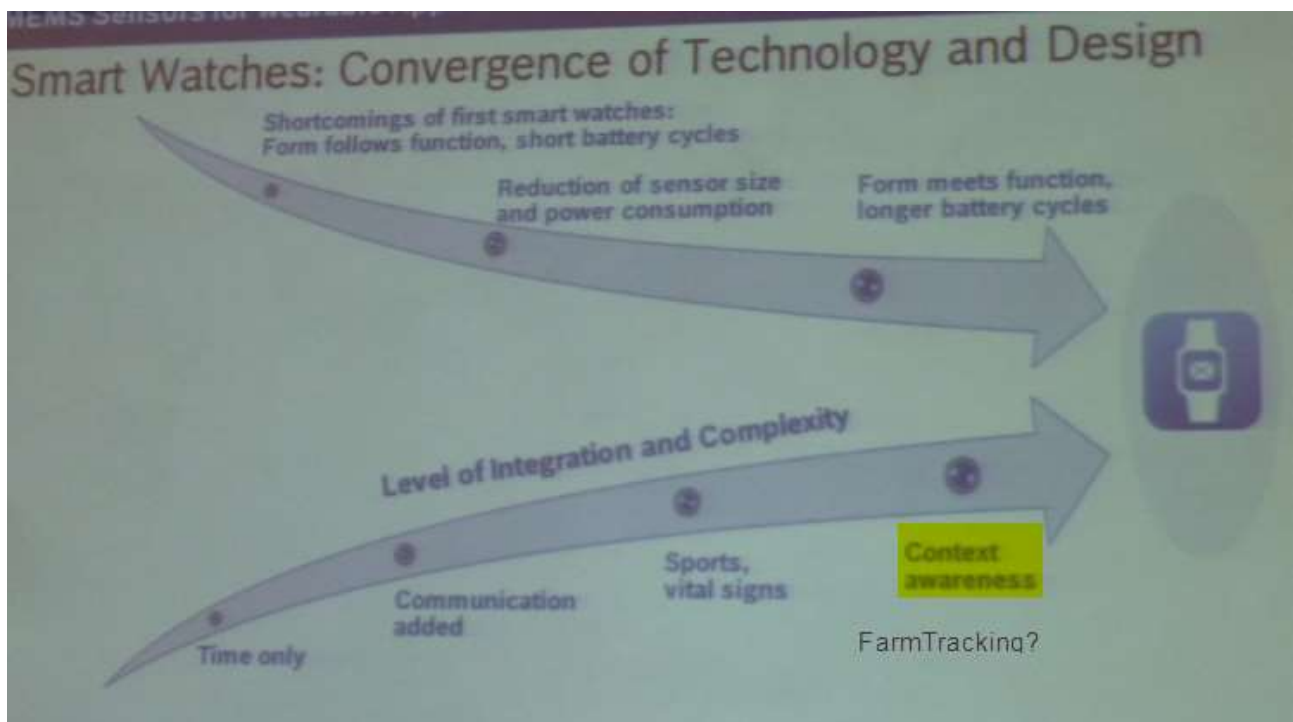


Figur 8 Personalisering ligger forbløffende lavt - dog 2012 undersøgelse.

Herunder tre slides fra Bosch Sensortec om MEMS (Micro-electromechanical systems (MEMS) is a technology that combines computers with tiny mechanical devices such as sensors, valves, gears, mirrors, and actuators embedded in semiconductor chips.)

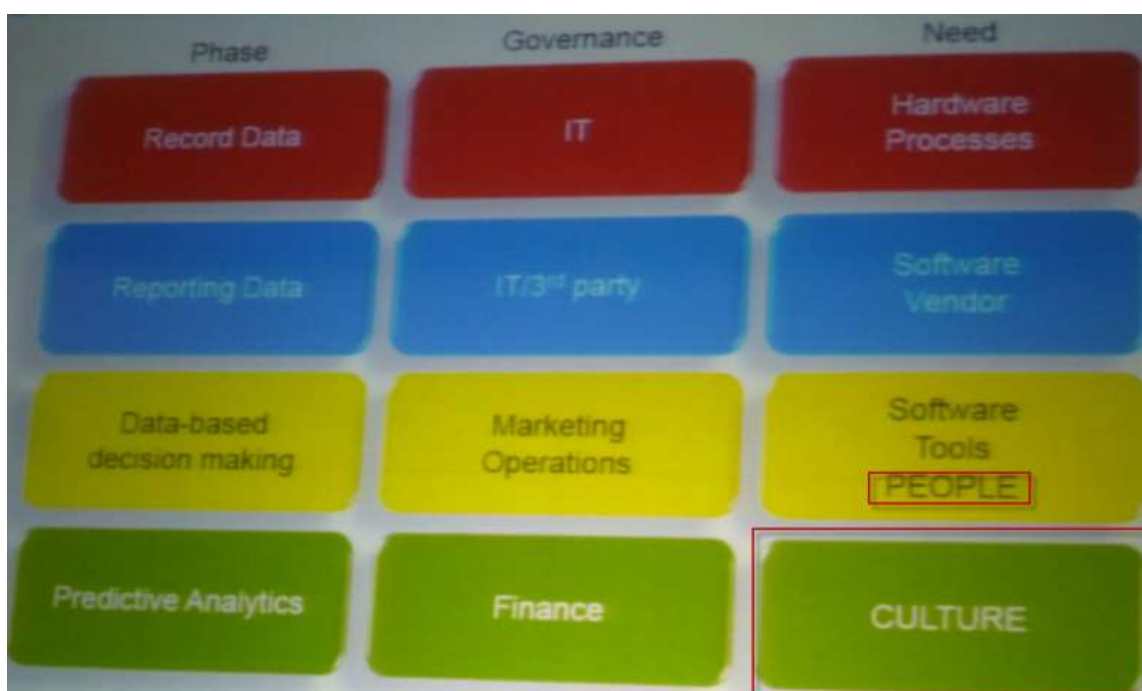
- Fra 2006 til 2013 er størrelsen reduceret fra 6 x 6 mm til 1,2 x 1.5 mm.
- I 2015 bliver der produceret 5 mia MEMS'er.
- Trykmåling er så præcis, at MEMS'en ved hvilken etage du er på





ExCel London er et ganske stort konference & messecenter, hvorfor der samtidig med Wearable Technology 2015 tillige blev afholdt Cloud Expo Europe og Data Centre World, hvor der ud over at se på en masse isenkram var mulighed for at følge en række tracks. I track'et Data, Analytics & Internet of Things var der en række interessante indlæg om big data.

Der er fokus på at forbehandle data så tæt ved kilden som muligt for at reducere data transport og der er bekymringer om, at processing power ikke kan følge med udvikling i generering af data.



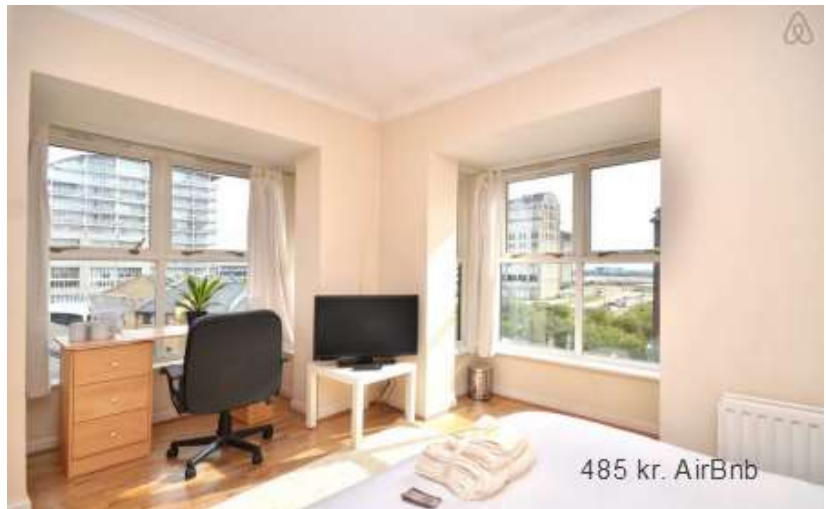


Turens omkostninger

Takket være vort digitaliserede samfund kan en smuttur til London gøres ganske billigt

- Ryanair benytter big data til at justere billet priser og sikre fyldte fly – t/r billet for under 500 kr.
- Airbnb udnytter dele økonomi og tilliden via sociale medier til at producere prisgunstige overnatningsmuligheder – en udmærket værelse kostede under 500 kr. Til sammenligning reklamerede et Ibis hotel i området med en værelsespris på 209 £ - godt 2.000 kr.
- Google maps gør det let at vurdere afstande fra logi til messecenter – Airbnb lå 7 minutters gang fra ExCel
- TripAdvisor henviste til restaurant med et godt tilbud: Tre retter inkl. en øl eller vin samt morgenmads buffet næste dag for 25 £





DAY 1 - 10 March 2015

Time	Track
Track Host: John Weir, COO, Wearable Technology Show	
9:15am	Conference Welcome and Opening Remarks John Weir & Lisa Doerr, The Wearable Technology Show
9:20 am	Keynote Presentation-Make It Wearable Marco Della Torre , Basis VP/Intel
9:40 am	Keynote Presentation – Challenges & Innovation for Wearables Speaker: Steve Wainwright , VP Sales & Marketing, Freescale
10:00am	The Future of Wearable Technology Where are wearables headed? With the changes to Google Glass and the imminent arrival of Apple watch, our experts discuss the way ahead and in particular which form function they think will be most appealing to consumers. Moderator: John Weir , COO, Evolve Panel discussion: Dan Cui , VP, Vuzix: Greg Jones , International Business Director, Misfit: Josh Waddell , VP Mobile Solution Management, SAP, Martin Wirsing , Head of Partner Development, Deutsche Telekom AG, Dean Johnson , Senior VP, Bandwidth
10:45am	Innovation Spotlight Speaker: Ashish Sethi , Strategic Business Development, Wearables, Samsung Semiconductor Europe GmbH
11:15am	BREAK
11:45am	Beyond the Chasm: Current Obstacles and Breakthrough Strategy for Smart Watches The Wearables Industry, spearheaded by Smart Watches, is one of the hottest topics these days. Despite the hype, Smart Watches of today has not yet fully met the ever-so-high expectations. The presentation addresses the key questions of what is the true customer value and how should Smart Watch manufacturers capture the value and deliver the promise. Speaker: Justin Jungsup Lee , Wearable& Smartwatch Strategic Partnership Lead, LG Electronics
12:10pm	Evolution of the Internet & Wearables As the internet or everything (IOE) becomes a reality, this session explores how we expect Wearables to become a key part of the IoE and the benefits that will bring to society and businesses. Speaker: Sarah Eccleston , Director, Enterprise Networks and IoT, UK&I, Cisco
12:30pm	Smart Technologies Key to the success of any technology product are its components. Our panel will detail the latest advances in battery, sensor, power consumption and chipsets and outline the future roadmap. Moderator: John Weir , COO, Wearable Technology Show Panelist: David Smith , Product Marketing Engineer, Texas Instruments: David Lamb , Marketing Development Manager - Europe, STMicroelectronics: Gordon Padkin , BDM, Northern Europe, Freescale
1:00pm	LUNCH BREAK
2:00pm	Can Wearables Have a Positive Impact for Humanity? There is an explosion of innovation taking place in the wearables space. Fitness and wellness has been driving the burgeoning market forward but now devices are being used to address large scale problems facing humanity in the realms of chronic disease management, elderly and vulnerable adult care, child protection, health and safety, tracking and identity. How can wearables help and what might the future look like? Speaker: Gary Atkinson , Director of Emerging Technologies, Arm
2.30pm	Connected Thinking How can technology join the dots? This session will examine connected devices and whether the Internet of Everything will soon become a reality. Moderator: John Weir , COO, Wearable Technology Show Panelists: Marc Attia , CMO, eLichens: Martin Gale , CTO, UK Mobile, IBM: Phani Pandrangi , Chief Product Officer, Kii: Martin Burns , Director of Sales, North Europe & EMEA Freescale
3:00pm	BREAK
3:30pm	Keynote Presentation
4:00pm	Keynote Presentation Jawbone presents their vision for the future of Wearables and 'The Internet of You' Jorgen Nordin , Head of International Product, Jawbone
5:30pm	Show Closes

DAY 2 - 11 March 2015

Time	Track
Track Host: John Weir, COO, Wearable Technology Show	
9:15am	Conference Welcome and Opening Remarks John Weir & Lisa Doerr, The Wearable Technology Show
9:20 am	Keynote Presentation: Wearable Trends and the Collaborative Hardware Movement The future of wearables is hard to predict but there is no better gauge than market demand. Indiegogo present their experience of how crowdfunding is a 'crystal ball' into Wearable trends, with data coming straight from the consumer. The talk will explore how the wearables industry has evolved over the past 6 years with a focus on health technology and the 'Quantified Self'. The talk will highlight case studies of how big brands, as well as startups are now leveraging Indiegogo to validate an idea, refine a product and build a customer base. Crowdfunding has created a more transparent and collaborative process in Hardware, allowing customers to shape and engage with products before they hit the shelves. Speaker: Anastasia Emmanuel, Director UK Technology & Design, Indiegogo
9:40 am	The Big Debate – What's the Problem with Wearables? Battery life, data collection, and functionality are all challenges that wearable technology has to overcome in order to be a must-have. Our panel present their possible solutions to these and other road bumps on the horizon. Moderator: John Weir, COO, Wearable Technology Show Panelists: Josh Waddell, VP Mobile Solution Management & Innovation, SAP; Phillip Miehlich , Geni Manager Marketing & Sales, Varta Microbatteries; Rob Milner , Technical Lead for Smart Systems, Cambridge Consultants
10:00am	Real World Case Study Orientation Sensors for Wearable Applications Speaker: Frederik Wegelin, Senior Product Manager, Bosch Sensortec
10:25am	Wearables at Work Consumer markets have long been a target for wearable technology vendors. Business opportunities though abound, and our panel of experts will look at what wearables can do in the enterprise and what solutions are on offer. Moderator: Anthony Mullen, Senior Analyst, Profusion Panelists: Charlie Isaacs, CTO, Salesforce; Brent Blum , Wearable Lead at Accenture; Gabriel Weiss , Head of Marketing Strategies for Carrier Ductless & VRF, a division of Carrier Corporation and a subsidiary of United Technologies Corporation.
11:15am	BREAK
11:45am	The State of Development of the Internet of Things and the Role of Wearable Technologies The presentation will offer an overview on directions, trends, and challenges in the development of the Internet of Things vision. Wearable Technologies are part of this vision and the presentation will assess their developments. Speaker: Saverio Romeo, Principal Analyst, Beecham Research
12:05pm	You Wear it Well - Designing for a Great Wearable Experience Wearables promise to make mobile computing even more personal, but how do we turn cool technology into something that makes a difference to people and organisations? In this session we will look at how we can learn lessons from the past to build wearable applications that make a difference in the future. Speaker: Martin Gale, CTO, UK Mobile, IBM
12:30pm	The Design Challenges of Wearable Technologies How to Pack Performance, Power and Advanced Capabilities into a Small Form Factor Device Speaker: Tim Saxe, CTO Quicklogic
1:00pm	LUNCH BREAK
2:00pm	The Big Mash Up The wearable technology market is split over many sectors from healthcare through to gaming, fitness and lifestyle. This session explores how different industry sectors can learn from one another and cross pollinate their ideas. Moderator: Saverio Romeo, Principal Analyst, Beecham Research Panelists: Ruth Thomson, Head of Consumer Product Development, Cambridge Consultants; Cath Rogan , Principal, Smart Garment People; Michael Platt , Director, Microsoft
2:30pm	Fireside Interview Itai Vonshak , Head of Product and UX Design at Pebble shares his vision of the future for smart watches with Blathnaid Healey , UK Editor of Mashable
3:00pm	BREAK
3:30pm	Connected Cities As cutting edge mobile products and services are changing our lives, this session looks at the advance of innovative integration of different technologies that make cities and communities 'smart'. Presentation: Paul Wilson, MD Bristol Is Open, Moderator: Saverio Romeo, Principal Analyst, Beecham Research
3:50pm	Panel Discussion: Paul Wilson, MD, Bristol Is Open; Cédric Giorgi , Head of Startup Relations at SIGFOX; Gordon Padkin , BDM Northern Europe, Freescale; Ashutosh Tomar , Principal Engineer, Jaguar Landrover Research
4:15pm	Keynote Presentation Samsung Mobile Speaker: Phillip Oldham, Head of Marketing, Enterprise Business Team
4:45pm	Session Ends
5:30pm	Show Closes