



GEEK Industrial MeetUp:  
Умный дом & интернет  
вещей  
Джин Колесников, индустриальный  
брокер



# INTERNET OF THINGS LANDSCAPE

## Platforms & Enablement (Horizontal)

|   |  |  |   |  |  |
|---|--|--|---|--|--|
| <b>Connectivity</b><br>IFTTT, Symplo, ioBridge, ARRAYENT, haystack, electric Imp, sensinode, ThingWorx, NNODE, EVERYTHING, bugsworm | <b>Open Source Platforms</b><br>sense, spark, Nimbix, ThingSpeak | <b>Software Platforms</b><br>sense, SmartThings, Withings, NINJABLOCKS, xively, TWINE, OSITO, zonoff | <b>Sensor Networks</b><br>MESHSYSTEMS, SAFECAST | <b>Enabling Networks</b><br>FreedomPop, SocialSign.in, Open Garden, SIGFOX | <b>Corporates</b><br>IBM, LG, CISCO, Honeywell |
|---|--|--|---|--|--|

## Applications (Verticals)

|  |  |   |  |  |
|--|--|---|--|--|
| <b>Quantified Self</b><br>Wearable Computing: GLASS, Pebble<br>Fitness: FUEL, amigo, Withings, fitbit, JAWBONE<br>Health: BASIS, LUMO, HAPIfork, wahoo, NuMetrex<br>Family: REST, Lively, Good Night Lamp, Withings, EVADO FILIP | <b>Lifestyle</b><br>Leisure: blossom, ICA kitchen, Thimble, remee, iGrill, HEXBRIGHT, sobi<br>Pets: gibi, FITBARK<br>Toys: sifteo, MakieLab, KAROTZ, greenGOOSE!<br>Music: glar<br>Gardening: BITPONICS, plantlink, Koubachi<br>Home Improv.: Radiator Labs, netatmo | <b>Connected Home</b><br>Home Automation: SmartThings, NINJABLOCKS, revolv, Ubi, lapka, electric Imp, Wovyn, NODE<br>Energy Efficiency: knut, nest, tado, LIFX, we mo, ecobee, belkin echo, micasaverde<br>Security: Kwikset, ALARM.COM, Bosch, Lockitron, CANARY, HomeMonitor, iSmartAlarm<br>New Interfaces: NeuroSky, sphero, gestigon, EQUISO, emotivo, Interaxon, LEAP | <b>Industries</b><br>Retail: Nomi, euclid, placemeter<br>Healthcare: VISI MOBILE, AdhereTech, AliveCor, TELCARE, intelligentM<br>Automotive: Dashlabs, SYNC, OpenXC, mojo, enture<br>Smart Buildings: APOGEE, Johnson Controls, Schneider Electric | <b>Industrial Internet</b><br>Robotics: KIVA Systems, Double Robotics, Airware, ROBOTEX, 3D Robotics, MOMENTUM<br>Greentech: BigBelly, Axeda, SOLAR, enlightened, GRIDMOBILITY<br>3D Printing: BOYSYSTEMS, Mezzoni, Stratasys, formlabs, shapeways, MakerBot, RepRap |
|--|--|---|--|--|

## Building Blocks

|  |  |   |  |   |  |                              |
|--|--|---|--|---|--|------------------------------|
| <b>Connection Protocols</b><br>neu, DigiBee, mattern, RFID, NFC, WI FI, Bluetooth, M-BUS, MQTT, 2G, 3G, 4G | <b>Telecom</b><br>at&t, verizon, T-Mobile, boost             | <b>M2M</b><br>Jasper, gemalto, Telit, ERICSSON                              |  |   |  |                              |
| <b>Software</b><br>amazon web services, Parse  | <b>Hardware</b><br>spengate, ARDUINO, beagleboard.org, spark | <b>Parts / Kits</b><br>MAKE MARRY, Tinkerforge, littlebit, MOSORO, YODAMATE | <b>Services</b><br>DRAGON PRODUCTION, makekey, CIRCUIT LAB | <b>Incubators</b><br>BOLT, LEMNOS Labs, springboard() | <b>Funding</b><br>KICKSTARTER, indiegogo | <b>Distribution</b><br>Arriv |



# INTERNET OF THINGS TECTONICS

THE THINGS

| LIFE SAFETY  | HOME SECURITY    | TAGS & TRACKERS      | HOME AUTOMATION | AUTO-MOTIVE      | COMMUNICATION | LIFESTYLE & ENT.         | WEARABLES            | FITNESS & HEALTHCARE         | INDUSTRIAL INFRA. | TOYS         |
|--------------|------------------|----------------------|-----------------|------------------|---------------|--------------------------|----------------------|------------------------------|-------------------|--------------|
| <br><br><br> | <br><br><br><br> | <br><br><br><br><br> | <br><br><br>    | <br><br><br><br> | <br><br><br>  | <br><br><br><br><br><br> | <br><br><br><br><br> | <br><br><br><br><br><br><br> | <br><br><br>      | <br><br><br> |

THE INTERNET

| CLOUD / SCALE / PLATFORMS | APP MARKETPLACE                      | HOME AUTOMATION           | CONTROLLER / HUB | IoT OPERATING SYSTEMS | IoT DEV FRAMEWORK | BIG DATA / ANALYTICS | DEV TOOLS / CM                   | DISTRIBUTED APP |
|---------------------------|--------------------------------------|---------------------------|------------------|-----------------------|-------------------|----------------------|----------------------------------|-----------------|
| <br><br><br>              | <br>                                 | <br><br>                  | <br><br>         | <br><br><br><br>      |                   | <br><br><br><br>     | <br><br><br><br><br><br><br><br> | <br><br>        |
| API / CLOUD SERVICES      | DATABASE                             | STORAGE                   | CPU              | SECURITY              | DNS               |                      |                                  |                 |
| <br>                      |                                      | <br>                      | <br>             | <br><br><br><br>      | <br><br><br>      |                      |                                  |                 |
| HARD INFRA-STRUCTURE      | INFRASTRUCTURE HARDWARE              | NETWORK / CDN / TRANSPORT | FIBER            | DATA CENTER           | POWER / BATTERIES |                      |                                  |                 |
| <br><br><br><br><br><br>  | <br><br><br><br><br><br><br><br><br> | <br><br><br>              | <br><br>         |                       |                   |                      |                                  |                 |

DESIGN: MILLENNIAL DESIGN

SOURCE: CENTER ELECTRIC 2015



# THE AUTOMATED HOME


Focus: Home, Automation, Security


Popular devices like Google's Nest smart thermostat and Wemo's electrical outlet controllers gained in popularity last year. Since then, numerous home automation IoT technologies have flourished - everything from smart locks to wi-fi enabled lightbulbs.

As these technologies continue to evolve, you should expect prices to become more affordable and accessible in 2014.



## INDUSTRY INSIDER

 People with home automation see home insurance savings of 20% (on average) or \$1,154 a year

 The home automation and control systems market is expected to reach \$35.6M by 2016

## INDUSTRY INNOVATORS

**Lockitron**

**nest**



**LIFX**



# Google

## Google is developing a Smart Home Network just for the Internet of Things



# Microsoft





LG



# Samsung


ADD FOOD

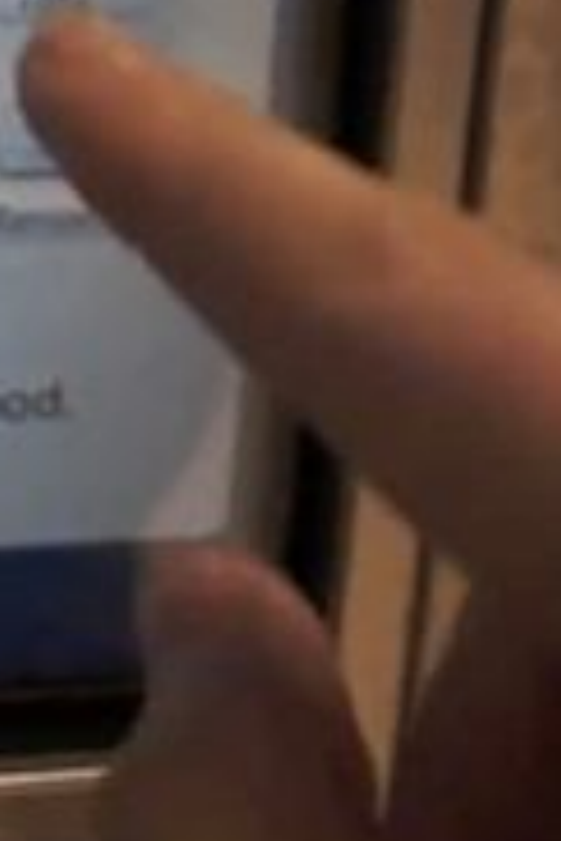


      
Vegetable Milk Meat Fruit Condiment

      
Processed Seafood Fish Kimchi Tofu

      
Grains Beverages Healthy Leftover Miscellaneous

 Select category of your food.





# Пирамида потребностей Маслоу для Умного Дома





Когда-нибудь...

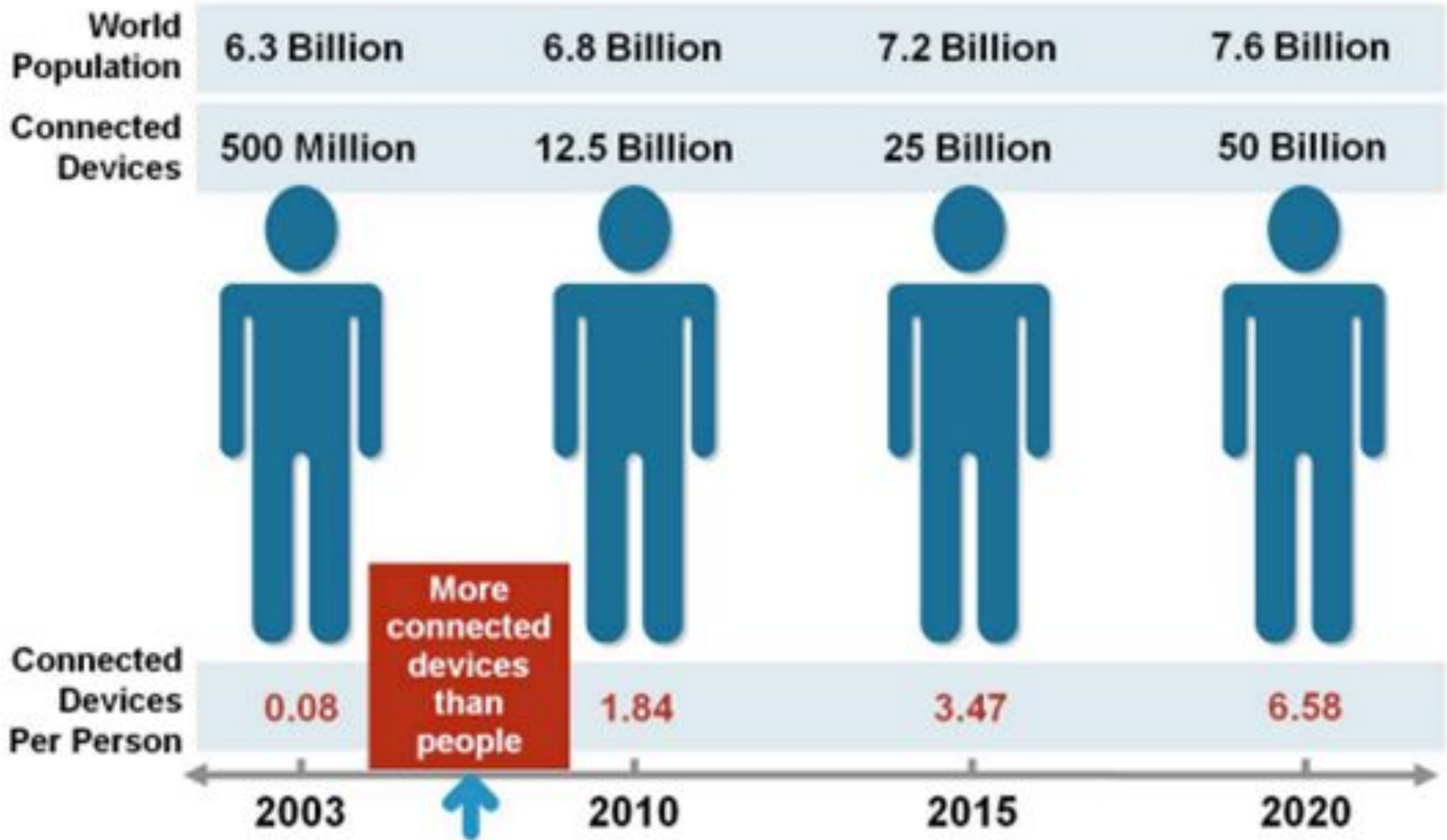




# Фиаско развития носимой электроники







Source: Cisco IBSG, April 2011



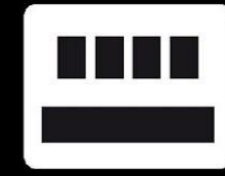
# INTERNET OF THINGS & Quantified Self

survey

Upcoming technologies

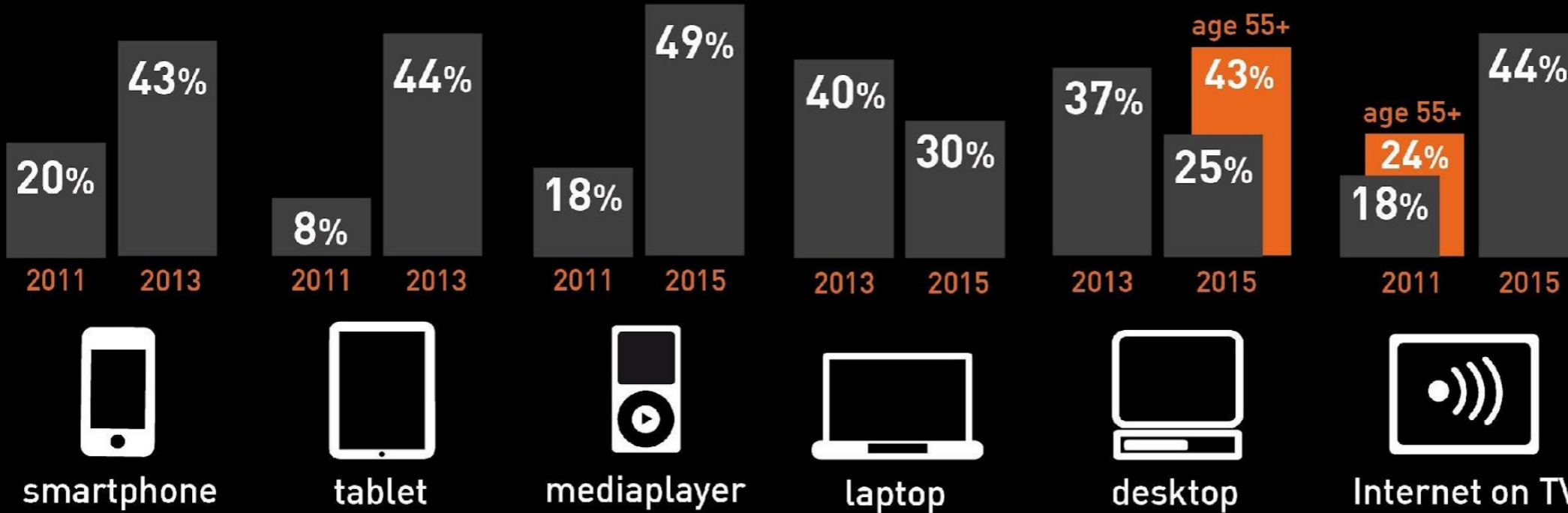


in 2015 **56%** connects lighting to the Internet

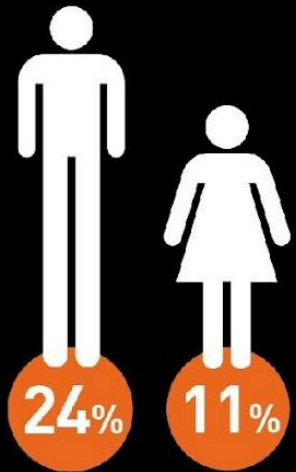


in 2015 **59%** connects thermostat to the Internet

Use of devices that are connected to the Internet



Positive attitude towards Internet of Things

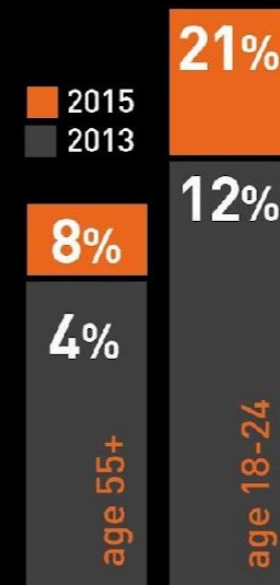


The Internet has changed life concerning:

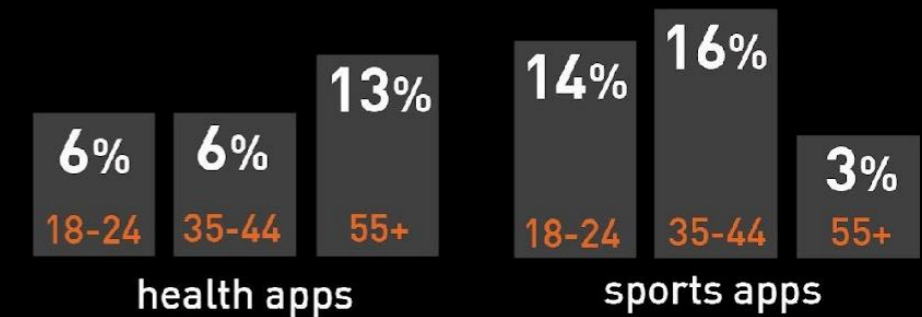


The Internet and health

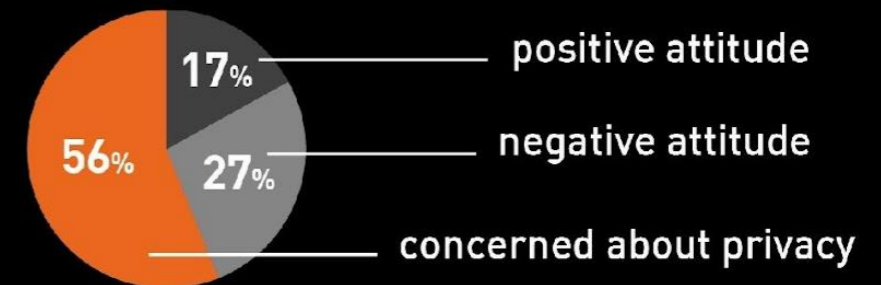
Use of apps for measuring health/sports



Sort of apps people will use in 2015



Online monitoring by doctors





**Machine Learning (Gen)**

**Machine Learning (App)**

**Computer Vision (Gen)**

**Computer Vision (App)**

**Smart Robots**

**Virtual Personal Assistants**

**Artificial Intelligence**  
633 Companies

Contact [info@venturescanner.com](mailto:info@venturescanner.com) to see all

**NLP (Speech Recog.)**

**NLP (Gen)**

**Speech to Speech Trans.**

**Context Aware Comp.**

**Gesture Control**

**Recommendation Eng.**

**Video ACR**



### City/Infrastructure

### Automotive

### Healthcare

### Home

# Internet of Things

640 Companies

Contact [info@venturescanner.com](mailto:info@venturescanner.com) to see all

### Fitness

### Toys

### Lifestyle/Entertainment

### Smartwatch/jewelry

### Platform

### User Interface

### Agriculture

### Tags/Trackers

**Venture Scanner**



### Clinical Admin



### Digital Med Devices



### EHR/EMR



### Population Health Mgmt



### Online Health Communities



### Gamification



### Patient Engagement



### Genomics



# Digital Health

760 Companies

Contact

[info@venturescanner.com](mailto:info@venturescanner.com)

to see all

### Medical Big Data



### Services Search



### teleHealth



### Remote Monitoring



### Online Health Destination



### Healthcare Mobile Communications



### Mobile Fitness / Health Apps



### Payments & Insurance



### IOT Health & Fitness



### Robotics



### Healthcare Marketing



## Venture Scanner





## HEALTH & FITNESS TRACKING

Focus: Health & Fitness, Nutrition

Last year, health & fitness tracking devices like the Nike Fuelband and Jawbone Up were among the most popular IoT gadgets, making a large appearance at CES. This year, expect companies to further integrate their devices with improved mobile software and interconnectivity.



### INDUSTRY INSIDER

-  Average Fitness Tracker Pricing: \$50 - \$150
-  Rumor: Apple is expected to announce HealthBook later this year, an iOS application focused on health & fitness tracking

### INDUSTRY INNOVATORS



JAWBONE

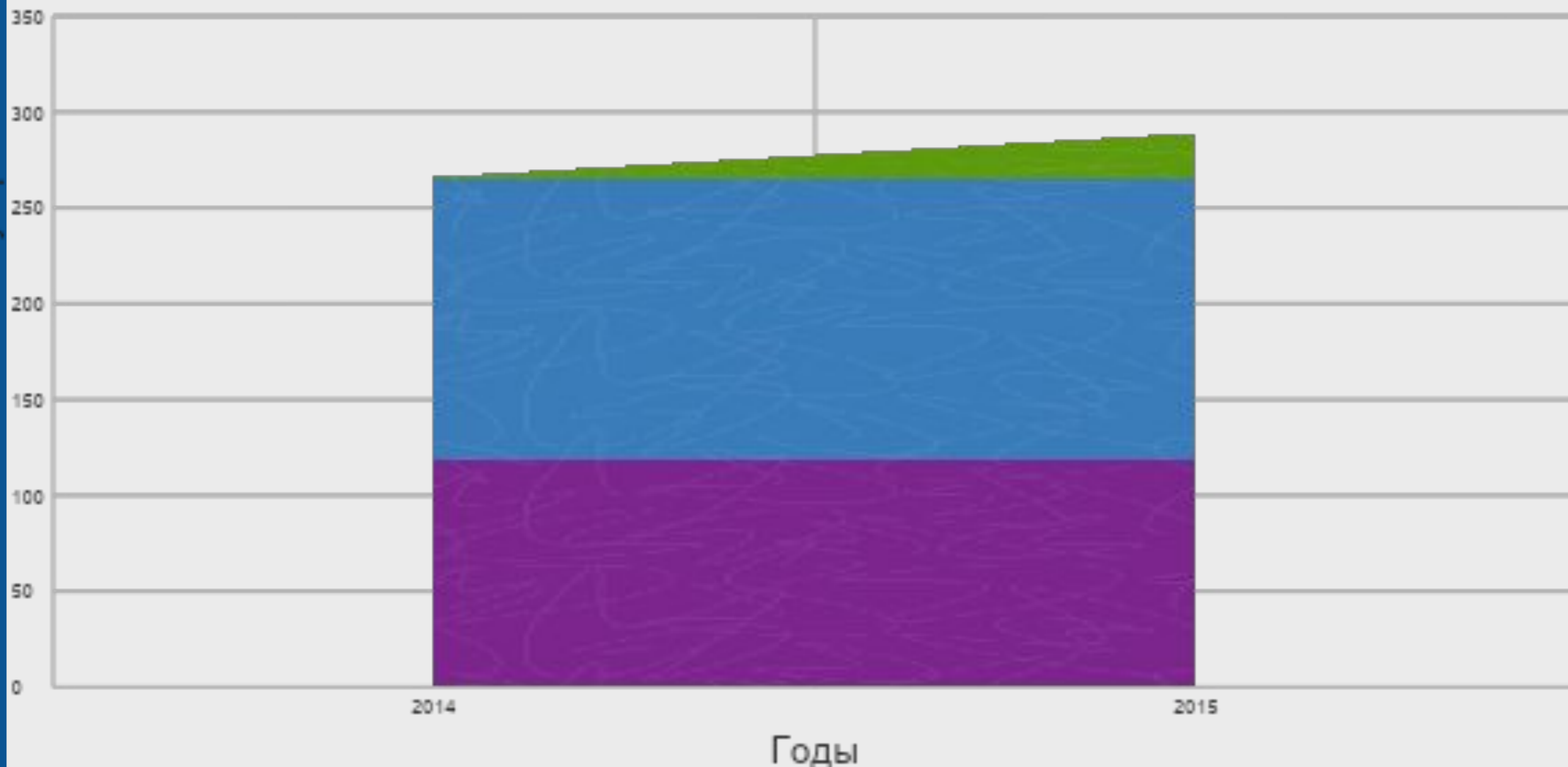


Dorothy  
устройство от iStrategy Labs,  
крепится внутри обуви и  
позволяет вызвать  
машину с помощью  
Uber, щёлкнув 3 раза  
каблуками.





По состоянию на 30 сентября 2014 года насчитывалось 266 носимых устройств (118 из них относятся к категории «фитнес»), а ещё 23 появилось на рынке к январю этого.





THE WAIT IS  
**OVER.**



Healbe

Вопросы?