

06+07.AGO '15

V/ANNUAL CONVENTION

GUATEMALA CITY, GUATEMALA

GLOBAL SERVICES: LATIN AMERICA
IN THE RACE FOR TALENT

INTERNET OF THINGS TAKES THE LEAD

JACK RUBARTH

Internet of Things

Jack Rubarth
06 August 2015
Guatemala

06+07.AUGUST '15

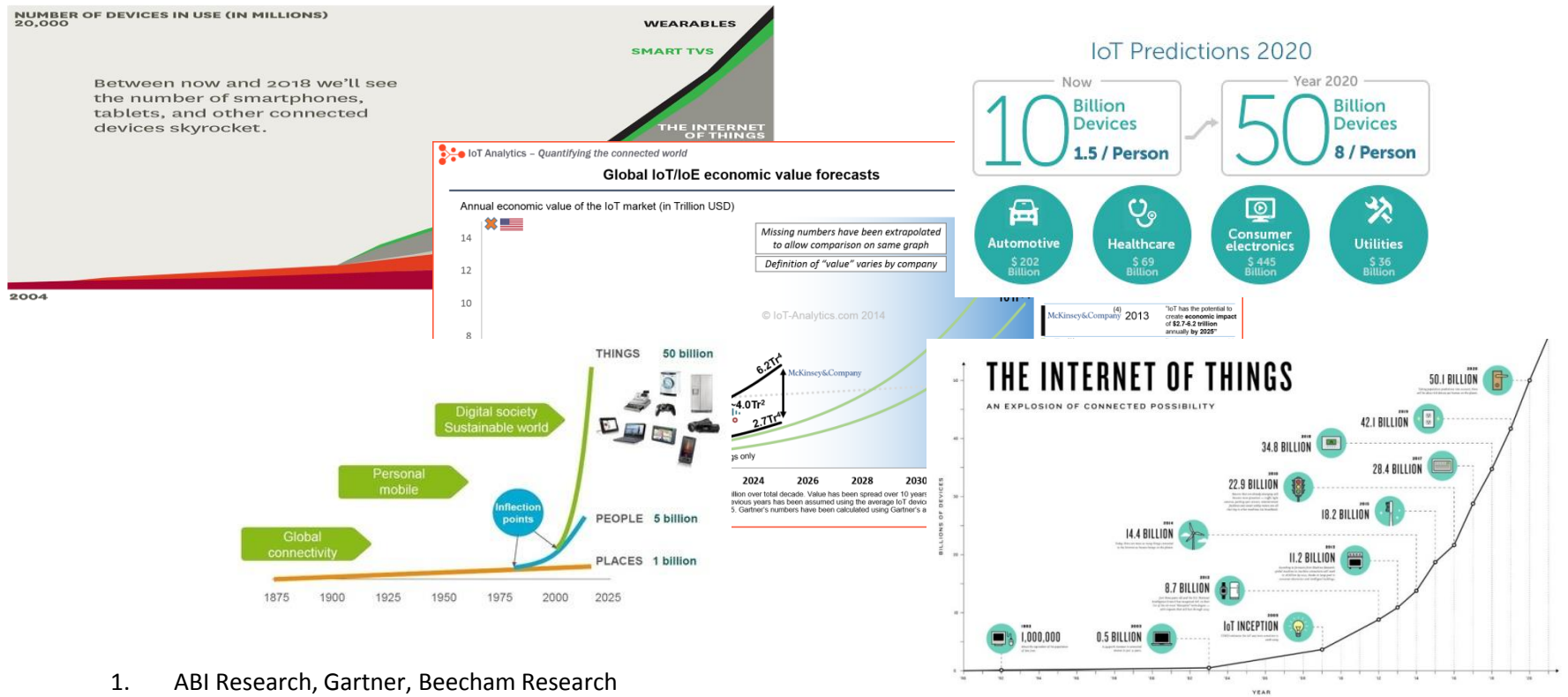
**V/ANNUAL
CONVENTION**

GUATEMALA CITY, GUATEMALA

GLOBAL SERVICES: LATIN AMERICA
IN THE RACE FOR TALENT.

context

- 20 - 50 billion connections by the year 2020¹
- \$19 trillion economic benefit²



1. ABI Research, Gartner, Beecham Research
2. Cisco CEO John Chambers

Applications (Verticals)

Personal Devices	Lifestyle	Connected Home	Industries	Industrial Internet
Wearable Computing pebble cookoo rucon iM GLASS RINGLY striiv APX MOTA Opnulent M wearable intelligence VUEK	Sports Brain Sentry BIKESPIKE so biometrics ZEPP infoMotion swingbyte HAMMERHEAD	Automation Quirky Radiator Labs netatmo LEVITON SmartThings Ubi nest LIFX gecko WeMo CRESTRON smarthome OLUTRON ecobee AdvancedLumens vivint.SAVANT Vera INSTEON CHAMBERLAIN PROBE LIGHTSOMfy	Retail Insignia PROXIMO SIVILEO maIntain GIMBAL KORTADO Boni RAZORPASS PassKit PERCH P PRINCE EDWARD brickIT stream	Robotics Double Robotics ALDEBARAN HARRY robot KENEX ROBOTIX EMPIRE KUKA KUKA iRobot Empowered KUKA EX ABB LIQUID ROBOTICS jibo
Fitness GARMIN Nike sonos amigo iFIT JAWBONE BE BEISPT VALKORR BASIS fitbit tomtom A LIFEBEAM wahoo	Cooking Smart Diet Scale ANOVA drop blossom iDevices THE ORANGE CHEF CO. pariky namiku	Monitoring lapka sense birdi BlueMaestro SUPERMECHANICAL leeo knut CUBESENSORS tado ambient	Payment/Loyalty Square shopify PayPal ACS Verfone LevelUp belly TRON1 payleven con	Drones/Aerospace 3DR KEMO CYPRUS Airware SKYCATCH spire dji Parrot Skybotix ayud workbox
Health LUMO nanowear kinsa HAPIfork soundshare SPIRE Withings QUANTUS Lively CANADA NENE AMEIO Kioxanomy hello AliveCor iHealth MyHeart remee acion corventis TELGATE	Pets Whistle PetPace pintofeod PetHub tagg BISTRO hoytag iMark PetChatz Petcube Inative Petnet gibi Petzillo	Security HomeMonitor canary ring dropcam butterflye Lockitron August SCHLAGE Raven Kwikset globesense genie UNKEY OP LINK GOJI scout nSmartAlarm Keylink SmartState	Healthcare VISI Serenonics STANLEY Aerovix VITALITY MedMinder TelleTracking MedSignals AcherTech PERSUS CENTRAK intelligent Sotera	Green-tech BigBetty enlightened Smart Genevo compology AMPY
Family FILIP sprouting ovuline AmberAlert greatcall COOL Night Lamp monbaby OWLET Secur BELLABEAT mimo Glow pocketfinder	Toys KAROTZ HOPCLOUD MAKIES atoms UBOOLY seebo	Tracker Chipolo linquet Locca! TrackR	Automotive Zbie fite INRIX navdy DELPHI Airbiquity d2sh automotive waze OpenXC	3D Scan/Print MakerBot dp Stratasys HOPER 3D formlabs MEO ph matterport FUELED AIB NEXTENGINE eRepRap ULTECH 3D VLAB Ultimaker Doodle
Garden plantlink BITPONICS radio EDYN Greenbox Koubachi	Music/Art/Video ROLI CATCH GO PRO narrative	Hub Homey revolv NINJABLOCKS Control LOWE'S zonoff STAPLES NEXIA muzzley wink	Infra-structure waveLink iBeam kisi Johnson Controls Trimble Robin Schneider CONSTRUCTION WITRITY SIGHT RACINGS	Smart Grid GRIDNET e-on SilverSpring SMART CLUSTER Itron Trilliant
Asset Tracking gdp a vloc NESH SYSTEMS Pabara ekahau RACALANTRO Plocmatix Inspiry CUBIC			Agri-culture AGRIS IOT Zed adapt-N Ag Leader	Asset Tracking gdp a vloc NESH SYSTEMS Pabara ekahau RACALANTRO Plocmatix Inspiry CUBIC

Platforms & Enablement (Horizontals)

Connectivity/Dev Platforms spark kynetx pinoccia iobridge Ayla Networks EUROTECH resin.io Symply TESSEL bluecity	Software/Data Platforms EXOSITE iconcontrol thingsquare carriers Keen IO SeeControl Things ConnectHQ NewAer BERG Axede Yaler.net RacoWireless SpaceCurve IFTTT greenWAVE wot io ZALAP CyberLighting alluux Yo ThingWorx DNIX X ecoo power IOTO COMPLEXE thingful CANDI bugswarm TempoIQ evercam.io covisint Jasper GroveSystems ETHERIOS PubNub NPLURA SensorCloud vivify	Open Source Platforms webinos AllJoyn openHAB nimble.com OPEN INTERCONNECT KAA ThingSpeak GRID2HOME	Sensor Networks SAFECAST placemeter Motionloft	Personal Interfaces Neulink Raylan wit.ai LEAP gestigon speech THALMICS INTUIGINE api.ai EMOTIV Makulu Reemo Oculus	Security inside SafeNet utimaco escrypt gemalto BASTILLE NETWORKS MOCANA	Corporates amazon hp LG intel htc PHILIPS IBM SAMSUNG Google WIND RIVER MOTOROLA belkin DELL BOSCH NATIONAL INSTRUMENTS ARM LogMeIn Microsoft Honeywell BEA SYSTEMS SONY Atmel SIEMENS QUALCOMM CISCO TOSHIBA SHARP
--	---	--	---	--	---	--

Building Blocks

Protocols Bluetooth Weaved MQTT RFID NFC RuBee Wi-Fi ZigBee oMa WAVE enModus HART MIWV M-Bus 2G 3G 4G LTE CoAP 6LoWPAN LWM2M BITXmi	M2M Networks Helium SIGFOX KORE Stream aeris HACHEEN M2M	Portable WiFi Open Garden You are the Internet GOODSPEED BRCK Karma	Telecom at&t boostmobile orange Verizon T-Mobile Telefonica VINGTEL.COM Sprint US Cellular vodafone airtel	M2M arXess Wireless seed erocanalis GREEN GainSpan Wavyn Telit			
Cloud Google Cloud Platform amazon web services ORACLE CLOUD Microsoft Azure	Mobile iOS Windows Phone BlackBerry	Processors/Sensors ARM MICO XILINX WICED beagleboard.org ESPRESSO VIOGARDEN MEMS REESCE	Parts/Kits Makey Makey SAM reedymate littleBits TinkerForge WUNDERBO	Services MY MINI FACTORY C3I 3D HUBS shapeways TIN CAN CAD dragon makeyz sculpteo radartube CIRCUIT LAB	Incubators Highway 1 LEANOS Labs WEARABLE WORLD R/GA Accelerator TechShip	Funding KICKSTARTER indiegogo MedStart	Distribution angelcam

what's changed?

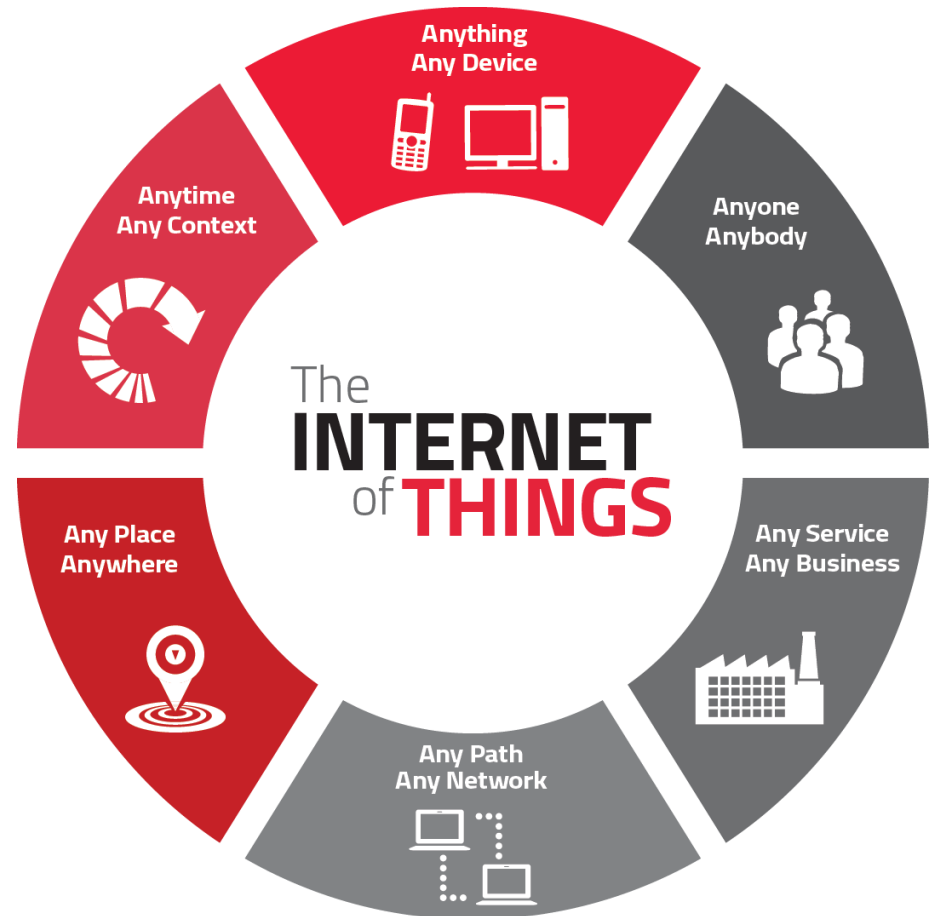
In short, everything

- the products and services we offer
- who our competitors are
- even how we price things
- how we look at the world



what is driving IoT?

- technology
- communication
- value chain



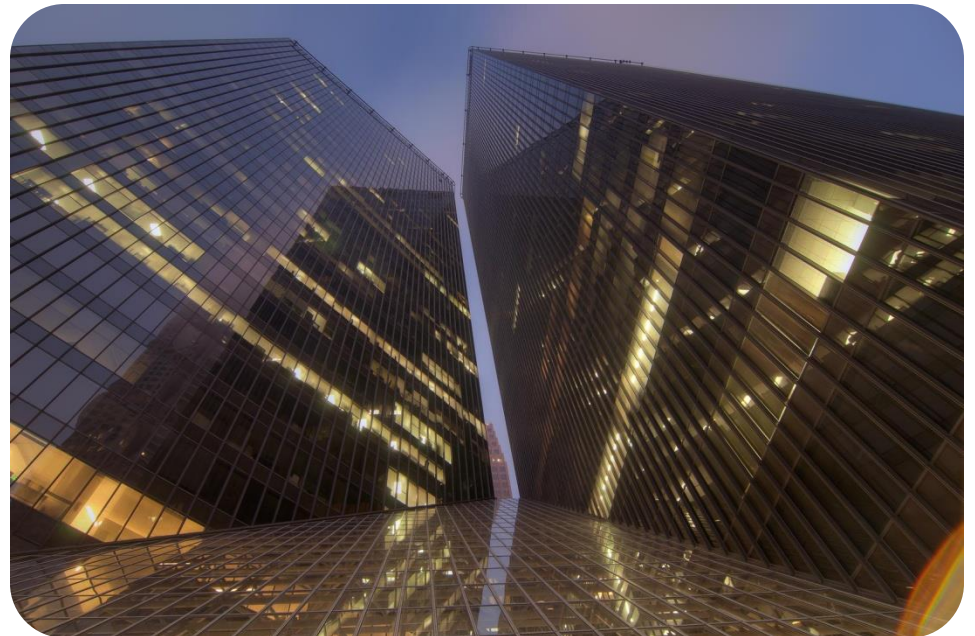
wearables

- smart phone
- fitness
- identity



smart buildings

- Pennzoil Place in Houston, Texas USA
- Cut energy consumption
- Lowered maintenance costs
- Increased safety



connected trucking

Daimler Trucks

- remote diagnostics
- shorter maintenance
- lower working capital





challenges

- Security
- Privacy
- Funding
- Digital divide



what do I do next?

