



# Top 10 Tech Predictions for 2016

Bob O'Donnell, President and Chief Analyst



# Agenda

- Revisiting 2015 Predictions
- Top 10 Predictions for 2016
  - Prediction 1: The Death of Software Platforms, The Rise of the MetaOS
  - Prediction 2: Market Maturation Leads to Increased Specialization
  - Prediction 3: Apple Reality Check Leads to Major Investment
  - Prediction 4: The Great Hardware Stall Forces Shift to Software and Services
  - Prediction 5: Autonomous Car Hype Overshadows Driver Assistance Improvements
  - Prediction 6: Wearables Will Make An Impact...in Business
  - Prediction 7: First Products with Foldable Displays
  - Prediction 8: The Biggest Innovation in IOT Will Be Business Models
  - Prediction 9: Connected Homes Will Continue to Underwhelm
  - Prediction 10: VR Stalls But AR Makes an Impact



# 2015 Prediction Outcomes, Part 1

- Prediction 1: Retro Tech Will Be a Major Theme in 2015
  - ➤ *While knobs and sliders didn't make much of a comeback on digital devices, some of the top-selling Amazon gift items for the holidays were film and turntables, two classic retro technologies*
- Prediction 2: There Will Be More "Dis-Connected" Homes Than Connected Ones in 2015
  - ✓ *Lack of real consumer value, confusing technical standards battles, and fears of hacking kept the vast majority of consumers from adopting any connected home devices in 2015*
- Prediction 3: Custom Mobile Applications Will Go Mainstream in Business, But Android Will Lead
  - ✗ *Android is the leading platform for mobile devices in business, but the ongoing challenges and lack of in-house talent for building custom mobile apps kept this market nascent in 2015, though there's still hope for 2016*
- Prediction 4: Windows 10 Will Be a Hit and Will Reinvigorate the PC Market
  - ✓ *Windows 10 has been extremely well received by reviewers, consumers, and businesses, and it is driving renewed interest in PCs*
- Prediction 5: Wireless Charging Will Be Broadly Adopted
  - ✗ *Ongoing standards battles throughout 2015 kept this technology from being widely adopted, but the prospects for 2016 look much better*

# 2015 Prediction Outcomes, Part 2

- Prediction 6: Wearables Will Make Advances, But Remain a Modest Market
  - ✓ *Despite all the hype, wearables remained a decent, but modest market in 2015, and the Apple Watch did not drive enormous growth for the category*
- Prediction 7: Following Tablets, Smartphone Shipments in Developed Markets Will Decline
  - ✓ *While final year-end numbers aren't in yet, it's clear the smartphone market is slowing rather dramatically, particularly in saturated markets like the US and Western Europe and even, to some degree, in China*
- Prediction 8: The Next Version of Big Data Will Be All About You
  - ➤ *The personal analytics market is still somewhat slow to evolve, but increasingly sophisticated portals offered by some of the wearable makers at least provide a much more detailed view of your health data*
- Prediction 9: Biometric Sensors Will Make Passwords Start to Go Away
  - ✗ *Though the logic behind this prediction is still absolutely there, passwords are unfortunately still very much an everyday reality as we enter into 2016, and there's still more work to be done on infrastructure support*
- Prediction 10: Instant Gratification Web-Based Services Will Consolidate (and Possibly Implode)
  - ✗ *A few of the "sharing economy" services closed down in 2015, but many of the biggest players remain surprisingly strong, with company valuations that continue to defy all logic (but could fall to earth in 2016)*

# 2016 Prediction 1: The Death of Software Platforms, The Rise of the MetaOS

- Many of the recent developments in the tech industry have been driven by dedicated mobile operating systems and the apps they enable, but the walls supporting the app-driven world are starting to crumble
- People don't really want separate/individual apps, they want access to the services they use across all device types and all operating systems
- Companies like Facebook, Microsoft, DropBox, Box, and others are building MetaOS's, which provide a platform-like layer of software and services that are independent of any underlying device platform
  - Many are starting to integrate communications, intelligent agents and, eventually, ecommerce and much more
- Soon these MetaOS's will provide many of the capabilities of standalone apps, but in a more integrated fashion



# 2016 Prediction 2: Market Maturation Leads to Increased Specialization

- The era of mass market product categories is coming to an end, and we're starting to see the rise of more smaller categories
  - Witness the "hoverboard" phenomena
- These smaller categories won't sell to the same degree as big categories, such as smartphones, tablets and PCs, but they might lead to products that are better suited to a smaller market segment
  - Expect shipments in the tens or hundreds of thousands instead of the tens or hundreds of millions
- Maker Movement and crowd-sourcing can help drive more specialized hardware
- China/Shenzhen hardware ecosystem will also need to evolve
- The key will be the ability to customize and specialize with smaller production runs



# 2016 Prediction 3: Apple Reality Check Leads to Major Investment

- Apple will face a challenging 2016 as the slowdown in the worldwide smartphone market starts to affect them as well, particularly since 2/3 of revenues now come from the iPhone
- The “reality distortion field” and other benefits that surround the company and its image will likely start to fade in the face of these challenges
- Status quo won't be acceptable in 2016, so expect to see them use their large cash hoard to make some significant, game-changing investments this year
- Potential bets for them could be in:
  - Augmented/Virtual Reality
  - Financial Services
  - Automotive
  - Enterprise Software
  - Media
  - A combination of the above

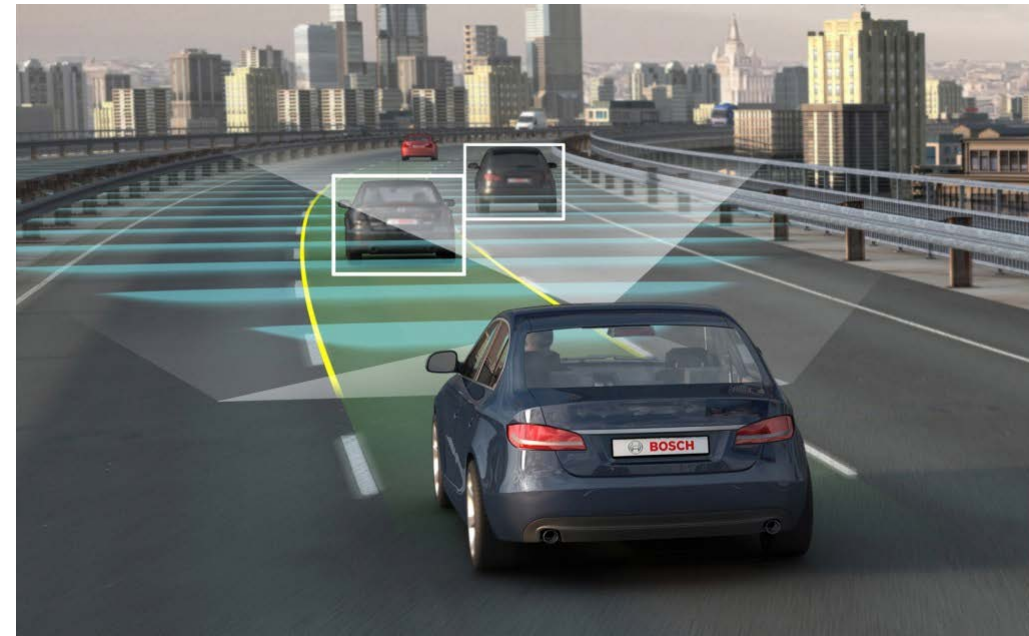






# 2016 Prediction 5: Autonomous Car Hype Overshadows Driver Assistance Improvements

- Major advancements are occurring in smart and connected cars, but virtually all of the press attention is being focused on self-driving cars
  - The problem is, mass-market self-driving cars are still 10-15 years away
- As a result, key benefits in advanced driver assistance systems (ADAS) are being lost in the shuffle
- Car vendors are also more focused on giving their “vision” of self-driving concept cars than real-world benefits in production cars
- Auto industry and component suppliers need to be careful to avoid creating unrealistic expectations and confusing consumers about what they can and cannot get access to over the next few years



# 2016 Prediction 6: Wearables Will Make An Impact...in Business

- As predicted, the wearables market didn't live up to the hype in 2015, particularly as a consumer-focused product
  - Most seen as accessories for fitness enthusiasts, not mainstream devices for general consumers
- Better opportunity to prove value in the business world
  - Replace building access cards
  - Provide biometric authentication and log-in for devices, sites and services for all employees
    - Could greatly reduce IT costs for password-related issues
    - Offers better security
- Final opportunity is to drive lower insurance costs by collectively tracking activity level/health of all employees as a group
  - Potential big brother and privacy concerns, but properly implemented programs could help everyone



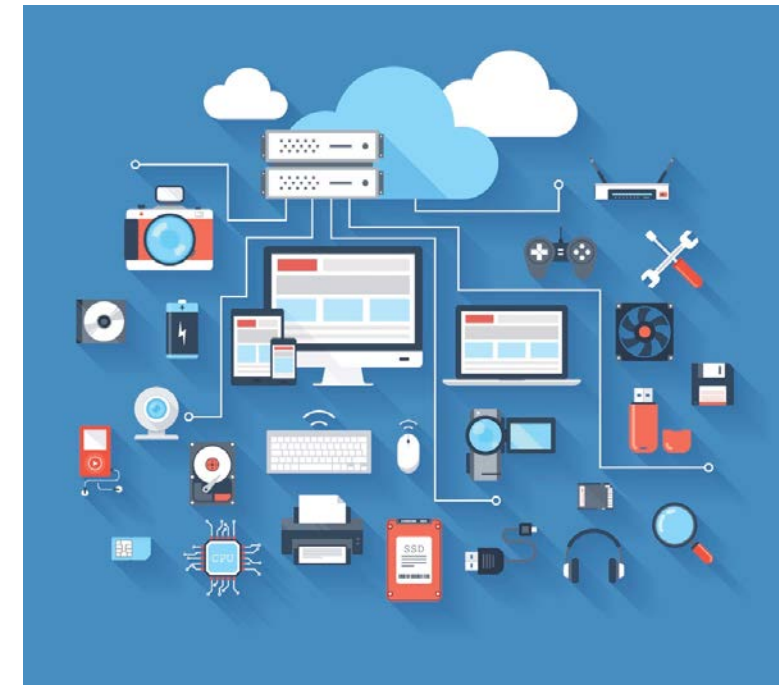
# 2016 Prediction 7: First Products with Foldable Displays

- Display technologies are the key element in driving the creation of new form factors
- Most exciting development now is foldable displays
- Prototypes have existed for years, but 2016 should be the year we see the first “real” products with bendable screens
- Offers the opportunity for completely new types of form factors, such as tablets that convert to smartphones
  - Lines between product categories will start to get even blurrier than they already are
- First screens will likely fold outwards instead of inwards because it’s easier to stretch the screen material at the bend instead of squeezing it together



# 2016 Prediction 8: The Biggest Innovation in IOT Will Be Business Models

- While IOT (the Internet of Things) is likely to have a big 2016, the biggest changes aren't likely to come from a technology perspective
- Most IOT technology is relatively simple
  - Low-power radios connecting a bunch of devices with low power CPUs, or even embedded microcontrollers, and simple sensors
- The key to IOT value is supposed to be software and analytics
  - Even there, however, much of the analysis is straightforward
- To really gain value, you have to scale the deployment in a big way and that requires significant capital investment
- The problem is, ROI for many IOT projects is not good
- The biggest developments, therefore, need to be in the creation of new business models that can help overcome capital investment and ROI challenges



# 2016 Prediction 9: Connected Homes Will Continue to Underwhelm

- Smart and connected homes continue to be an interesting area from a technology perspective, but for most consumers the value isn't clear
- After initial usage, many of the products seem somewhat "gimmicky"
- 2016 will, unfortunately, likely be the year we start hearing about home hackings and other security-related issues from smart home products
- Plus, it's extremely complicated even for tech-savvy consumers to make everything work
  - Ongoing standards battles continue to create confusion
  - The need for multiple apps makes integration challenging
- The bottom line is, we're still several years away from widespread adoption



# 2016 Prediction 10: VR Stalls But AR Makes an Impact

- Virtual reality has been one of the most overhyped products for decades, and it's not clear that the latest developments will be any different
- Definitely compelling for gaming and other niche markets, but not likely to go mainstream
- Augmented reality is more likely to be successful long-term because it works within the context of the real-world environment instead of trying to replace it, as virtual reality does
  - Most consumers are going to be more comfortable with augmented reality as a result, but even it will take several years to go mainstream
- Augmented reality essentially acts as a new type of display and enables people to interact with digital content in entirely new ways
  - In that regard, it offers the best vision of where computing is headed in the years to come



# Conclusion



- From the outside, it may appear that some of the changes that happen in 2016 will be modest, but they mark the beginning of important structural changes to the tech market
  - Several of these predictions will take several years to completely play out, but when they do, it will lead to a dramatically different tech landscape than the one we have today
- As these developments do evolve, technology will become even more integrated into our lives, but in a more invisible way
  - Technology starts to become more of the fabric of our everyday lives through our increasingly digital interactions with everyday things

# Contact



Bob O'Donnell  
President and Chief Analyst  
TECHanalysis Research, LLC  
1136 Halsey Blvd.  
Foster City, CA 94404

[bob@technalysisresearch.com](mailto:bob@technalysisresearch.com)

(650) 224-2355

[@bobodtech](https://twitter.com/bobodtech)

[www.technalysisresearch.com](http://www.technalysisresearch.com)



**technalysis**  
RESEARCH