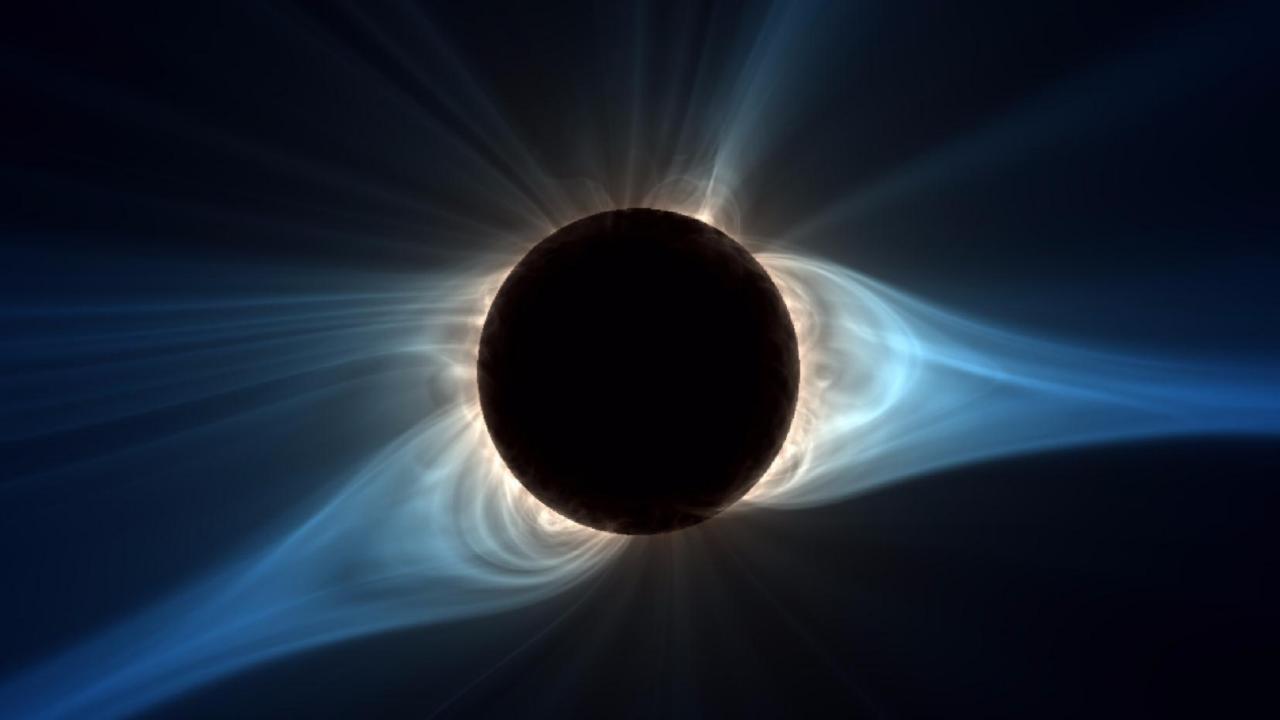


## Society of Actuaries in Ireland

# The 'Integrated Digital Economy' is coming to every business.

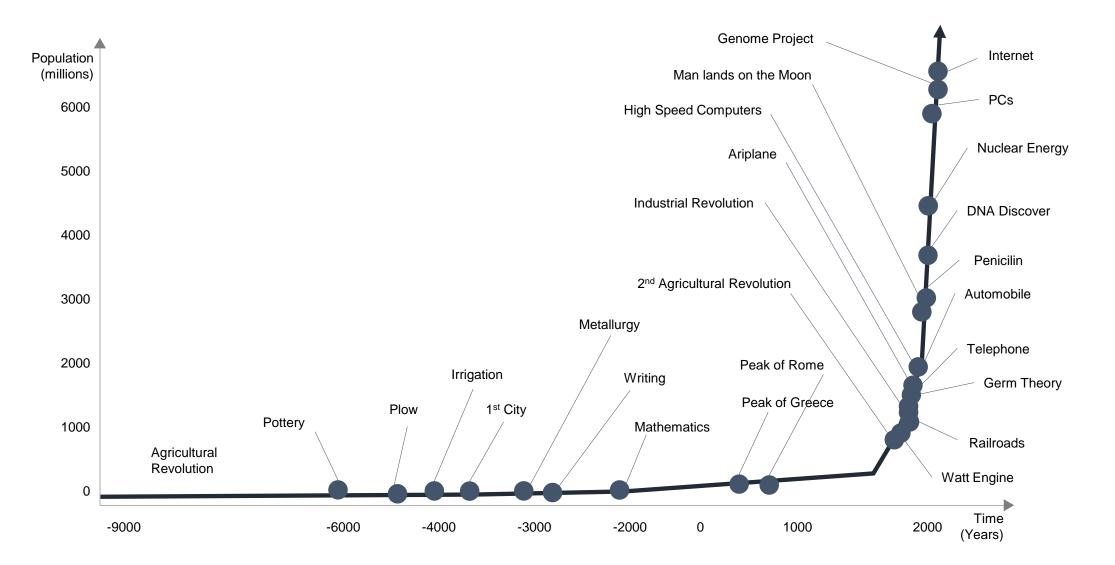
18<sup>th</sup> June, 2019

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# Intro to exponentials **HUMAN HISTORY**

The world has changed dramatically since the Industrial Revolution and the rate of change continues to accelerate

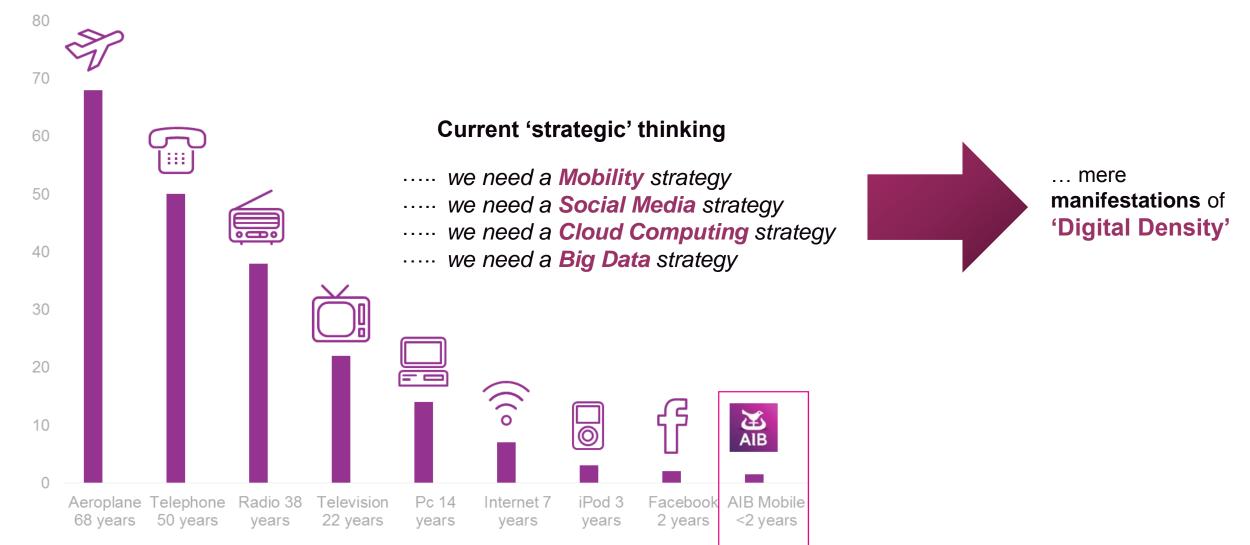




# Accelerating Mass Adoption **EXPONENTIAL TECHNOLOGIES**

AIB

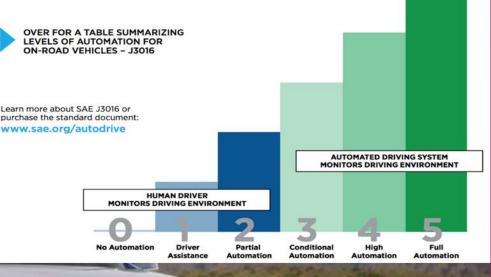
The time it takes to adopt new services is dramatically accelerating





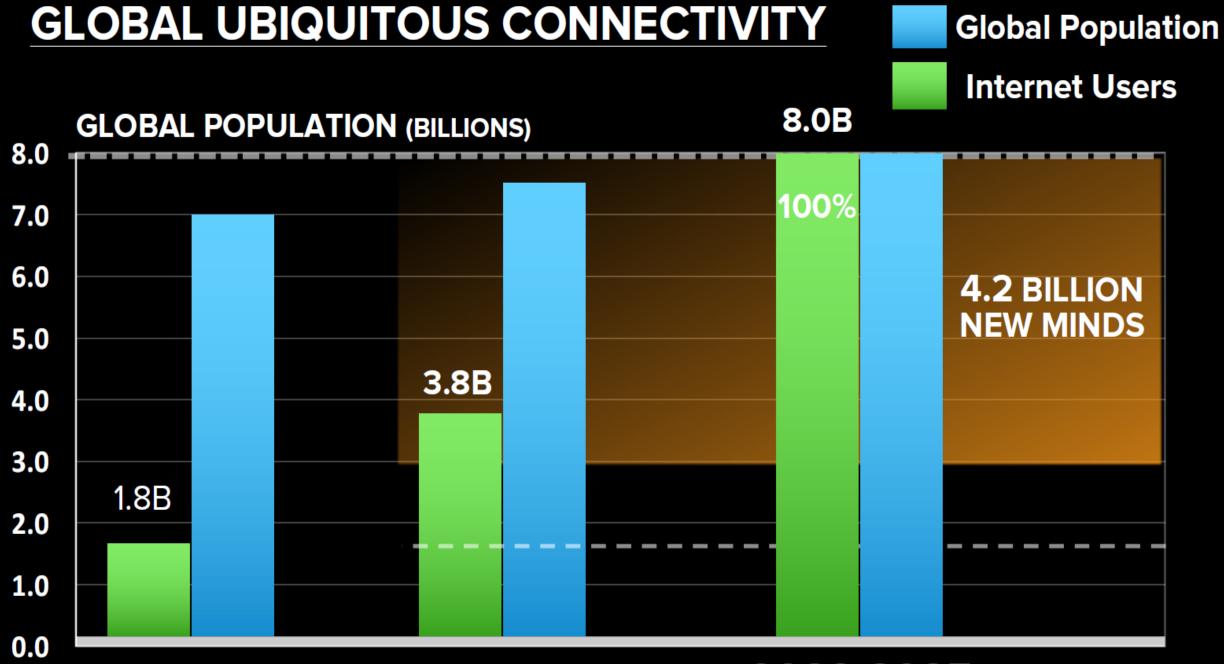
## 20 Years Later, All of These Fit in Your Pocket

## EVERY TESLA BE FULLY AUTONOMOUS



## 8 Cameras, 12 Ultrasonic Sensors feeding the NVIDIA DRIVE<sup>™</sup> PX 2 AI computing platform.

Autonomous Driving

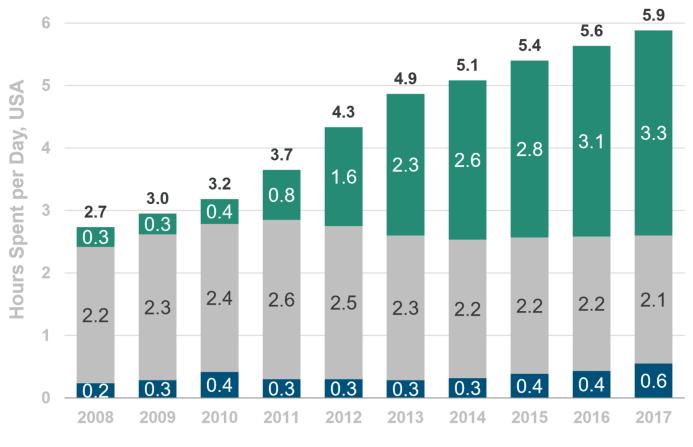




# @4% growth pa – 5.9 Hours per day **DIGITAL MEDIA USAGE GROWING**



**Daily Hours Spent with Digital Media per Adult User** 



Other Connected Devices Desktop / Laptop Mobile

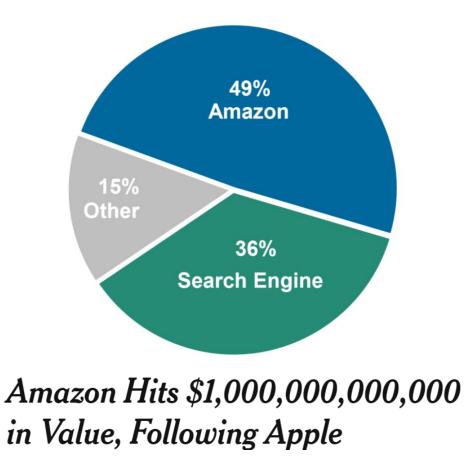
## Starts @ Search (Amazon, Google ...) **PRODUCT FINDING**



## Rising User engagement drives.. **MONETISATION**



Where Do You Begin Your Product Search?



## Facebook Annualized Revenue per Daily User



## Starts @ Search (Amazon, Google ...) **PRODUCT FINDING**

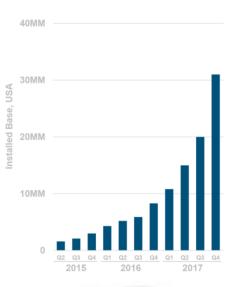


## Rising User engagement drives.. **MONETISATION**



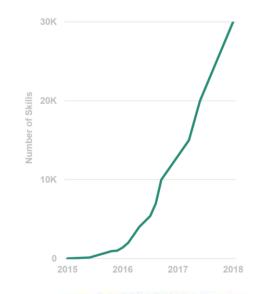
### **Google Machine Learning Word Accuracy** 100% 95% 95% Word Accuracy Rate 90% 80% 70% 2013 2017 2014 2015 2016 - - Threshold for Human Accuracy Google

#### Amazon Echo Installed Base





#### Amazon Echo Skills





## AIB the 1<sup>st</sup> business in Ireland to use full biometric identification **Exponential technologies ... early adopters**





Voice ID customer proposition has been positively received by our customers. The uptake on this optional servise is in excess of 23K enrolments over 120 days





## Changing global demand & supply side trends RADICALLY DIFFERENT CUSTOMERS

Critical to understand todays customers and learn how to **discover** their needs



#### ... to survive Business must change





Changing global demand & supply side trends are DRASTICALLY CHANGING THE ECONOMY



## SUPPLY SIDE TECHNOLOGY TRENDS

## MARKET IMPLICATIONS

## DEMAND SIDE CUSTOMER TRENDS

#### **MOBILE DIGITAL INTERFACES**

**Reducing information asymmetry** 

#### **MOORES LAW**

Cost of computing

### **BIG DATA**

Machine learning & Personalisation

### **OPEN INTERFACES**

Micro services and open APIs

### **SHORT TERM**

Digitisation everywhere Data driven activity Extreme Customer Centricity

### LONG TERM

Industry barriers disappear Rules of engagement change Rethink on Customer journeys

#### SERVICE EXPECTATIONS

Impatience with complexity, Bad CX

### **PRODUCT USAGE & BEHAVIOURS**

Less focus on ownership

### **IMAGE & PERCEPTION**

Self perception of intelligence & knowledge

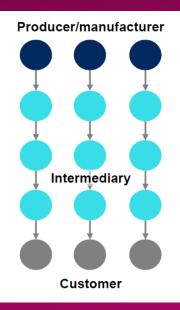
### **ATTITUDE TO PERSONAL DATA**

Willing to hand over for better free services

## Industry barriers blur INTEGRATED DIGITAL ECONOMY



TRADITIONALLY, CUSTOMER NEEDS HAVE BEEN SERVED BY DOZENS OF PARALLEL VALUE CHAINS ...



... HOWEVER TECHNOLOGY AND CUSTOMER TRENDS CREATE A SHIFT IN THESE CHAINS ...

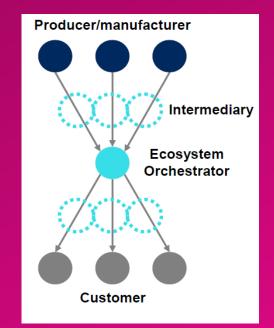
Ease of access via digital

Automation

Decrease informational asymmetry

Increase supply chain efficiency

... AND INCREASINGLY, VALUE CHAINS ARE COLLAPSING INTO ONE CHAIN AROUND EACH KEY CUSTOMER NEED



## EMERGING VIEW ..... "ECOSYSTEMS"

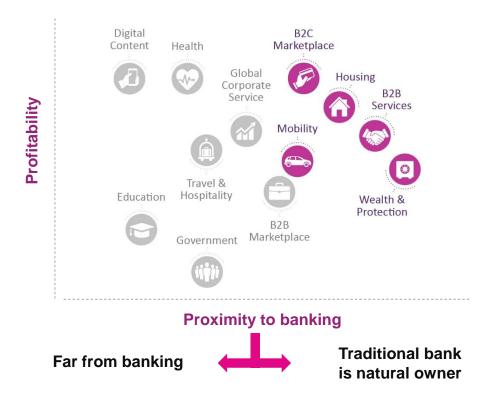


The **Global Digital Economy** may be coalescing around **12 large ecosystems.** 



**Some of these ecosystems** may be closer to your business and should be your focus.

#### A banking lens on relevance of converging ecosystems



## Zoom out, then Zoom in ... are you doing the right activities ? YOUR BUSINESS ...



## WHAT ARE EXPONENTIAL TECHNOLOGIES DOING FOR (OR TO) YOUR BUSINESS ?





**DESCRIBE YOUR BUSINESS** 

**IN 5-10 YEARS** 



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**Thank You**