



Innovation & Disruption

Adapting to change

February 2018

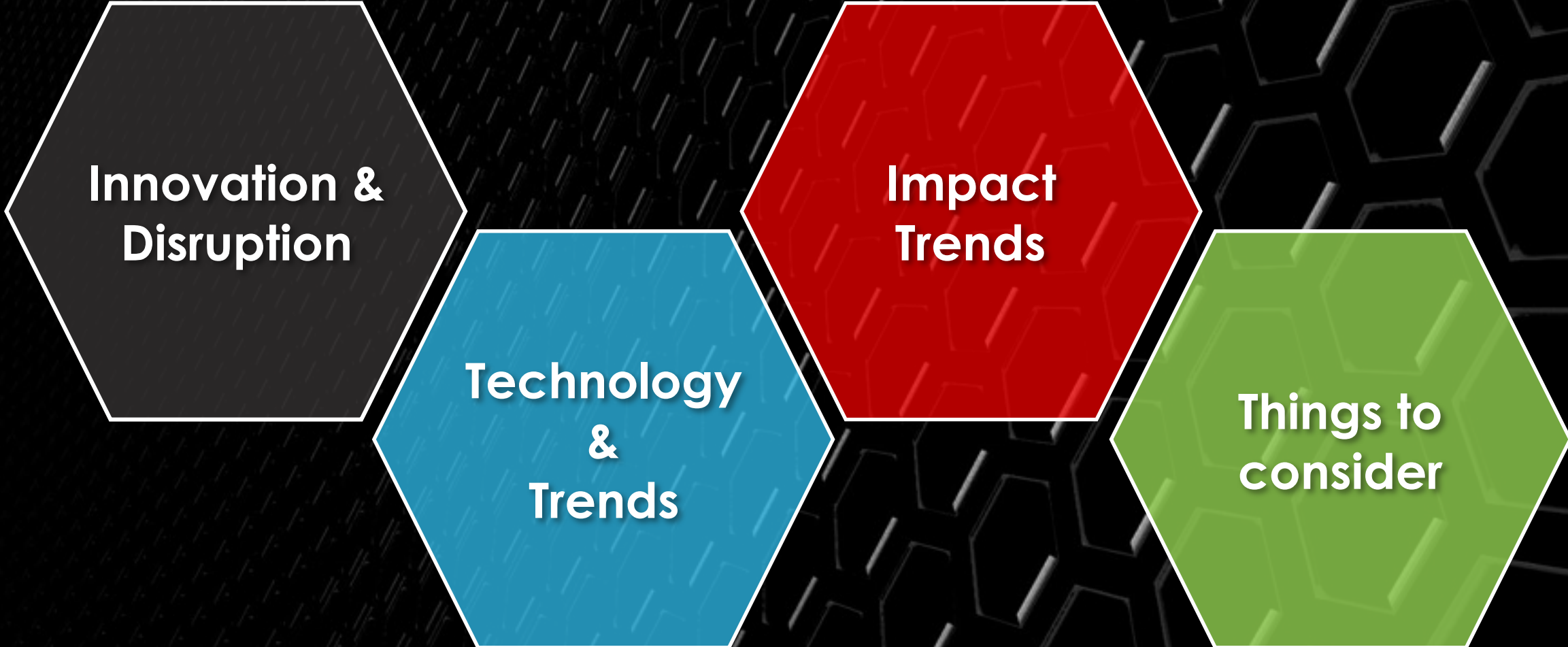
Cameron Ward

DESIGNSPARK





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SVP Global Innovation
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**Innovation &
Disruption**

**Technology
&
Trends**

**Impact
Trends**

**Things to
consider**

Innovation & disruption



So what?

“Long established brands are embracing disruption and innovation by creating entirely *new services, partnerships and streams of revenues.*”

– Accenture



Incremental Innovation

Small improvements on
an existing idea



Disruptive Innovation

New ideas which displaces the
existing



“innovation and disruption go *hand in hand*. The arrogance of success is to think that *what you did yesterday* will be *sufficient for tomorrow*.”

William Pollard

What does innovation and disruption mean?

Iteration

a procedure in which repetition of a sequence of operations yields results successively closer to a desired result

“Doing the same things but better”



Innovation

a new idea, device or the application of better solutions that meet new requirements

“Doing new things”



Disruption

a radical change in an industry, business strategy, etc., especially involving the introduction of a new product or solution that creates a new market

“Doing new things that make the old ones obsolete”



“Success is dependant on a **balance of iteration, innovation and disruption**. If you do not become a disruptor, it will be a gift given to you by someone else...” Matt Ballentine



Brave New World

- New technology
- Speed of change
- Higher customer demand
- New competitors and business models
- Risk and uncertainty



**Technologies
and trends to
keep an eye on**



Disruption and opportunity



**Artificial
Intelligence**



**Digital
Twin**



**Augmented
Reality**



Voice Search



**3D
Printing**



**Data as-a
-service**



**Advanced
Robotics**



Mobility



**Renewable
Energy**



Cloud



**Single Board
Computing**



IoT



**Autonomous
Vehicles**



**Machine-to
-machine**



**Intelligent
Apps**



Virtual Reality



Blockchain



IoE

Impact trends

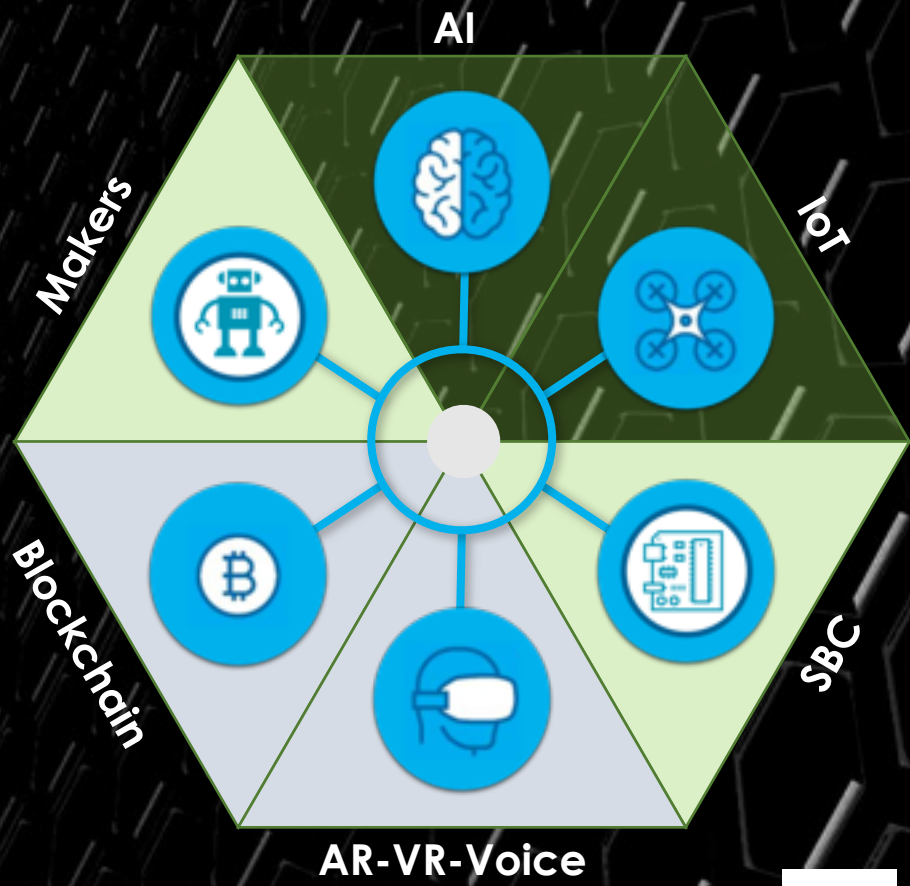
\$15.7Tr

Contribution to the global economy by 2030 from AI



30M enterprises

Maker ecosystems by 2035



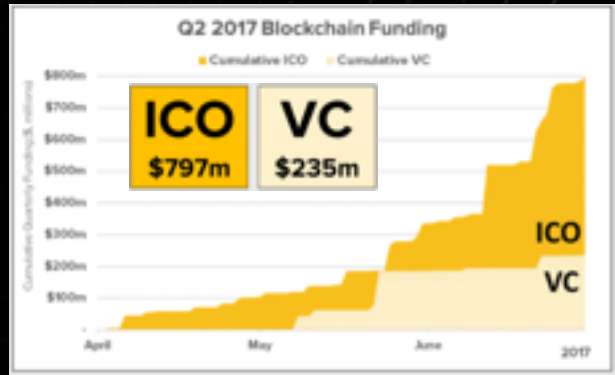
\$11.1Tr

IoT TAM by 2025



US\$700M

SBC high-service market growing at 35%



70%

Voice Assistant market owned by Amazon and Google



The Maker Movement



The Maker eco-system continues to grow

100 Million adult makers in the North America alone

3D Printing market expected to reach \$8 Billion by 2020

2241 Hackerspaces around the world

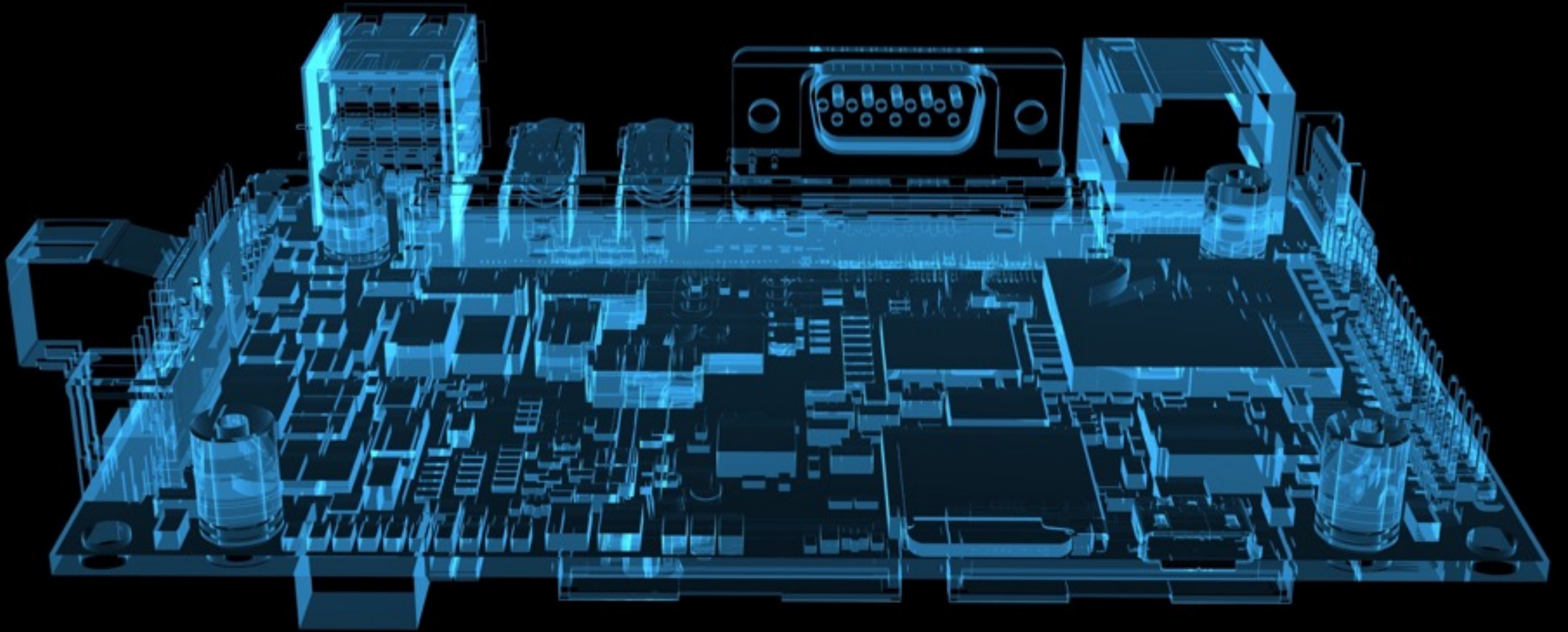
20 Million SBCs sold

215,000 attendees at US flagship Maker Faires

By 2025 the crowdfunding investment market is projected to reach \$93 billion



Single Board Computing



Disrupting the electronics space

SBC is playing an increasingly disruptive role in the industrial electronics space

\$700M growing at 35% YoY

Start up costs are less than **\$100** and are fully open sourced

Accessories and associated products provide a **substantial opportunity**

Estimated total available market of
\$2.2bn

This is a growing ecosystem looking for partners to launch, scale and support

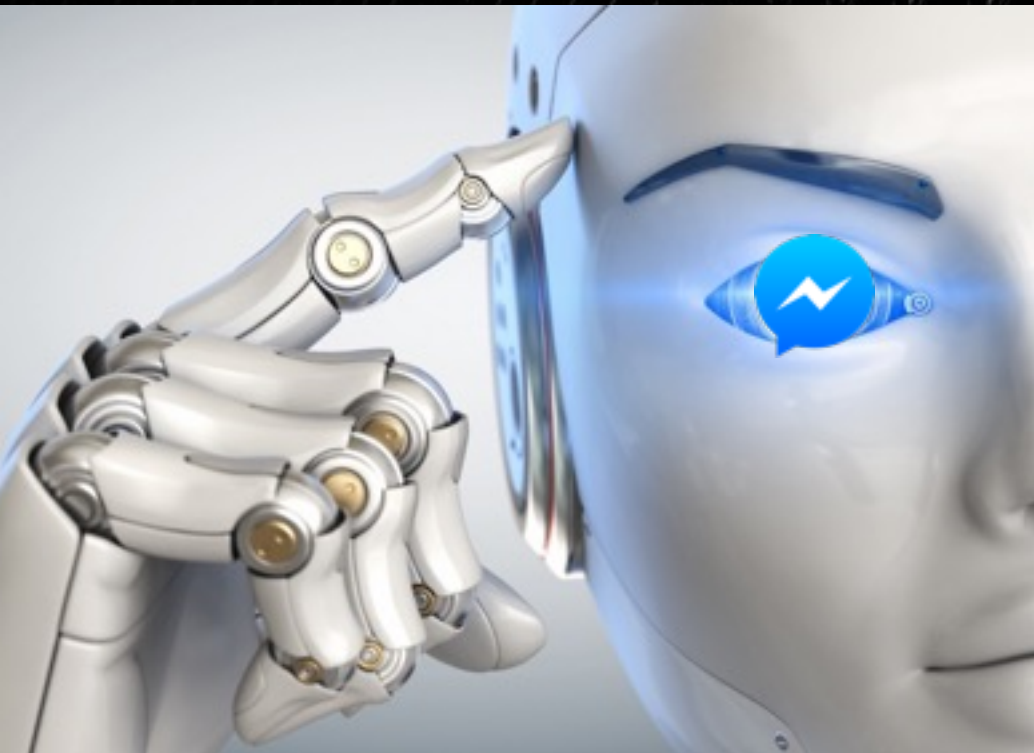


Artificial intelligence

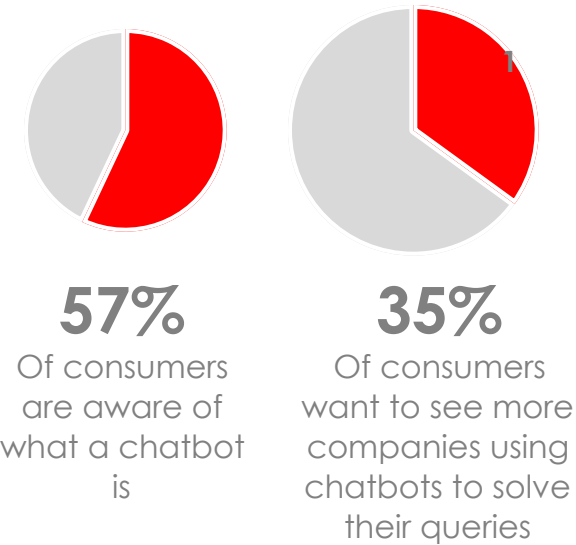
A stylized illustration of a human head profile in silhouette, facing left. The interior of the head is filled with a dense collection of small, glowing yellow and orange icons. These icons represent various concepts related to technology, business, and data, including a magnifying glass, a target, a bar chart, a pie chart, a globe, a computer monitor, a smartphone, a document, a gear, a lightbulb, a handshake, a dollar sign, a percentage sign, a network diagram, a cloud, a speech bubble, a bar chart, a pie chart, a globe, a computer monitor, a smartphone, a document, a gear, a lightbulb, a handshake, a dollar sign, a percentage sign, a network diagram, a cloud, a speech bubble, a bar chart, a pie chart, a globe, a computer monitor, a smartphone, a document, a gear, a lightbulb, a handshake, a dollar sign, a percentage sign, a network diagram, a cloud, a speech bubble. The head is set against a dark blue background with glowing blue and red geometric shapes and lines, suggesting a network or data structure. The overall aesthetic is futuristic and high-tech.

AI & chatbots

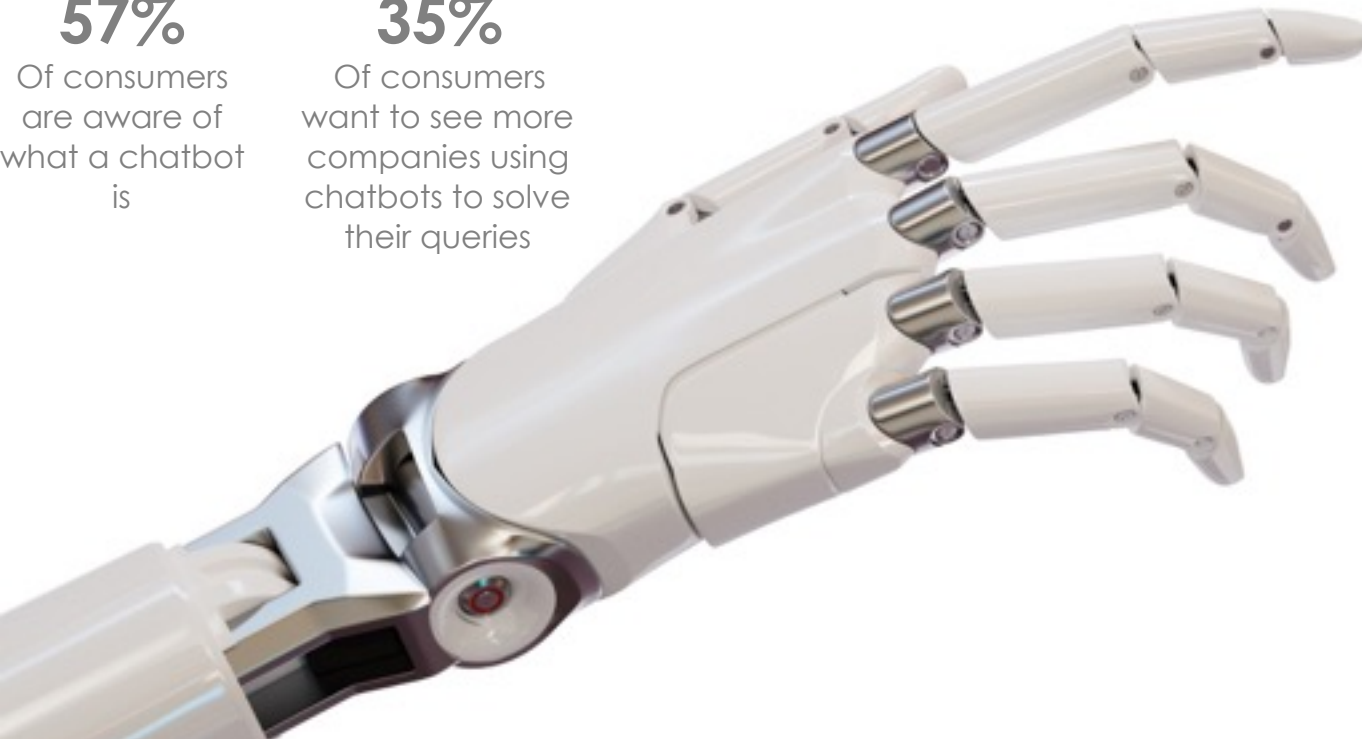
We hear a lot about AI & Chatbots, but what exactly are they?



Computing power and Cloud now allow **Artificial Intelligence (AI)** to make sense of data, enabling text and voice interactions



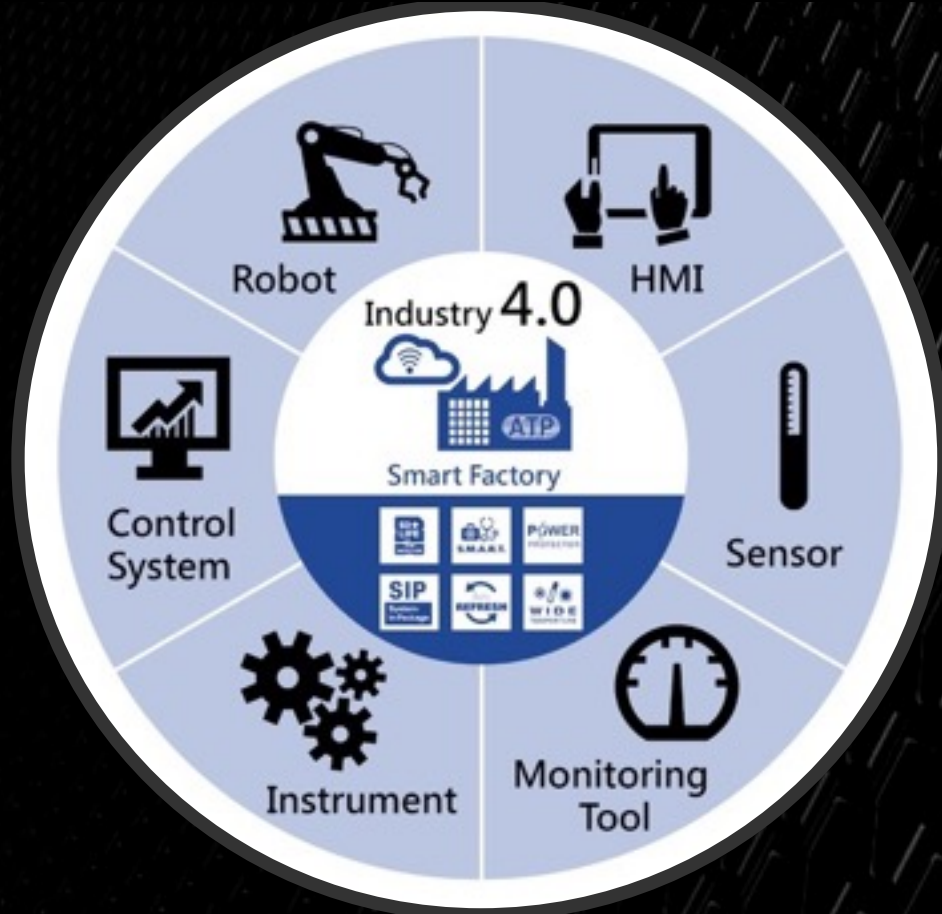
Chatbots could save **\$174 Billion** across the Insurance, Financial Services, Sales, and Customer Service functions by 2030



Internet of things



Connectivity & your customer



“Our perspective is that *cost of both the sensors and devices is approaching free* and *literally everything will have IOT technology at some point*” - Accenture

\$447bn

Global
Maintenance
spend alone³

2.2bn

Things will be
connected by
2020⁴

\$11.1tr

Estimated IOT
market by 2025²

Falling hardware costs and an increase in the ***number of cloud services*** makes IOT devices ***attractive for SME's and Makers***

1. <http://www.digitalistmag.com/2016/09/20/finding-value-in-iiot-data-0449813>

2. www.mckinsey.com/business-functions/business-technology/our-insights/the-internet-of-things-the-value-of-digitizing-the-physical-world

3. Global Framework on maintenance and asset management

4. Statista 2014

Things to consider



Creating new value out of technology

Top 5 Myths of Innovation

Innovation comes primarily from being creative...

It is far likelier to come from being disciplined...
innovation is no longer optional

Innovation is expensive, demanding lots of resources...

Failure to innovate is what's costly

Financial analytics are key to approving concepts...

Guessing cash flow in year four for something unprecedented wastes months and is almost nearly wrong – focus on beta's and prototypes instead

Create hundreds of ideas because of high failure rates...

Fewer, bolder idea with strong senior leadership
and the right incentives

Innovation is about creating a hot new product...

New products alone are swiftly copied and rarely enjoy sustained products

Drivers of continuous innovation & disruption...

Technological Advances

Advances in technology have revolutionized the way work is done today. Exponential technologies will continue to push the needle

Millennial Mindset

Shift in mind-set around the way Millennials work with speed, ease, agility, transparency, data, continuous feedback and natural collaboration



87%

emerging technology
will disrupt their
company & industry in
next 2yrs

11%

their current talent
pool can compete

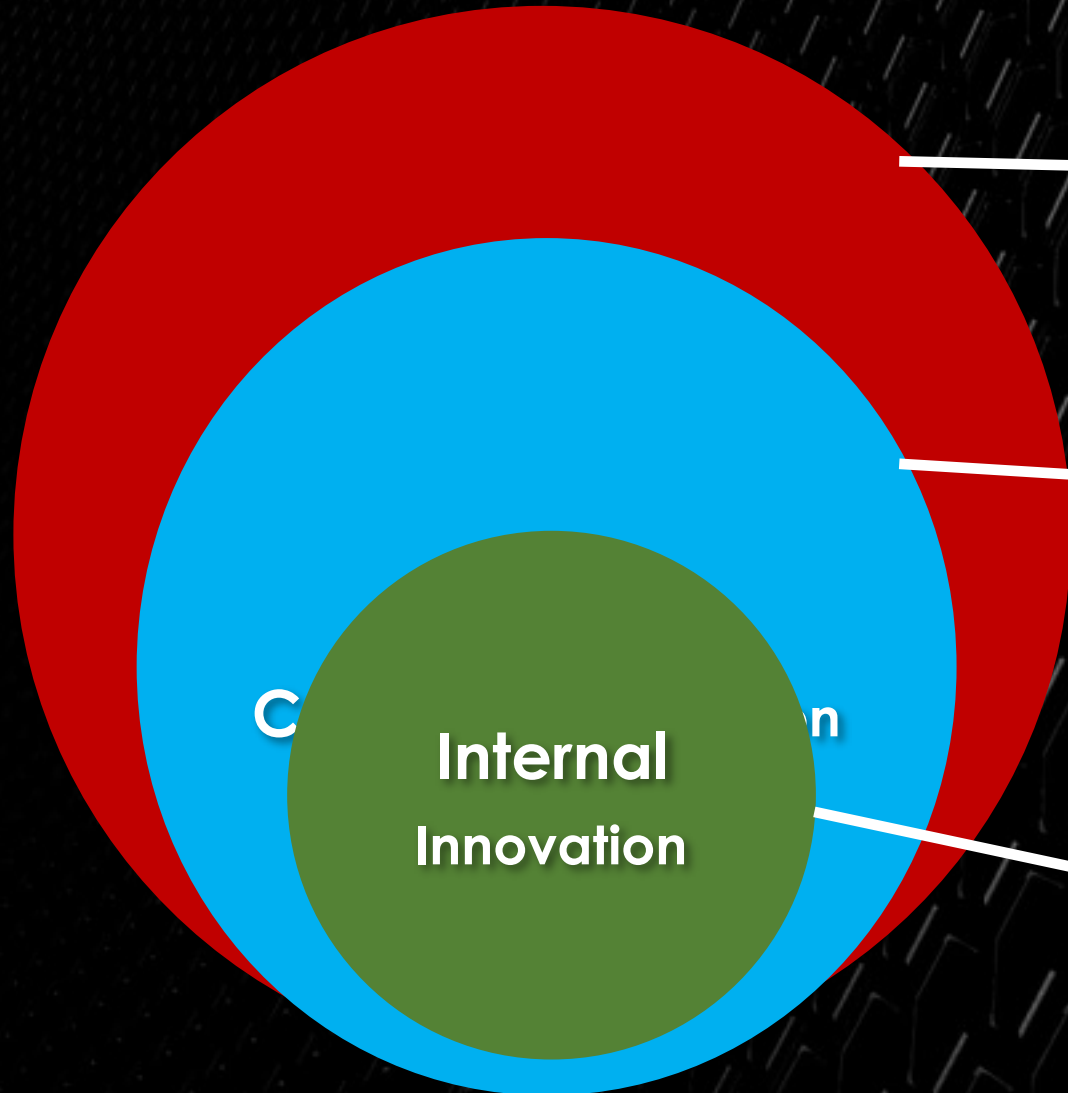
92%

they are not
structured to operate
in this new
environment

70%

they need a whole
new talent base to
compete

Innovation is change that unlocks new value...



Accelerated innovation through collaborative partnerships

- **“Competition makes us faster: collaboration makes us better”**

Innovation that drives better customer experiences -

“Don’t ask them what they want, give them what they need”

Innovation developed by your teams - **“Making innovation come alive internally”**

With great disruption, comes great opportunity

Strategic partnerships and eco-systems

Services and solutions beyond products

Experiment and embrace technology

Sell your story!

It doesn't have to be perfect, you just have to try...

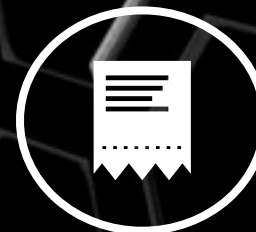
A few thoughts from experts

“manufacturers and suppliers want to be relevant to their customers while defending against potential **disruptors** and **disruptive business models** in their core sectors.” KPMG

“Collective
wisdom”

“Companies that are not able to **make the leap** forward will find themselves **largely irrelevant** in the next 5 to 7 years because people will increasingly be looking for **value beyond the product**.” — Khozema Shipchandler, VP & CFO GE Digital

“The **biggest risk is not taking any risk** [...] In a world that’s changing really quickly, the only strategy that is guaranteed to fail is not taking risks.” - Mark Zuckerberg





Thank you.....

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