

# Keynote: Become a Leader and Not a Casualty in the Digital Age

Mike J. Walker

# Opening Video

(Script on Next Slide)

Disrupt or...



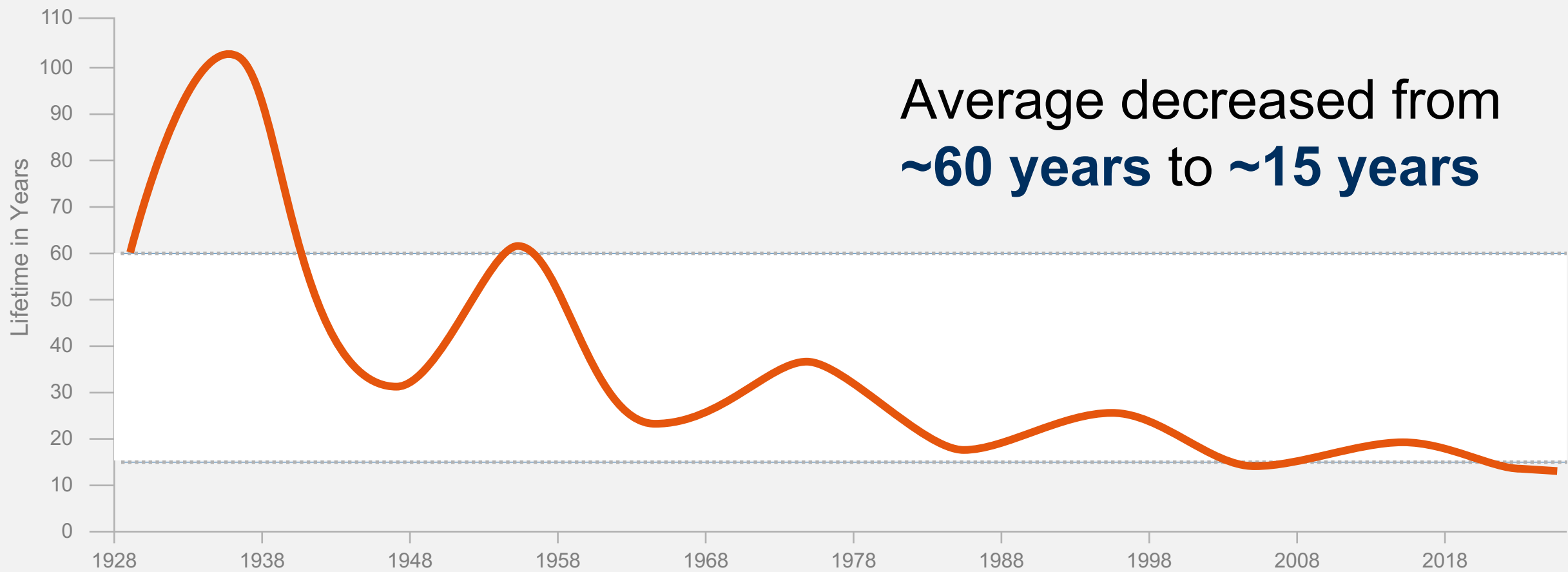
be **Disrupted**

# Next Decade Introduces **New Business Landscape**



# Corporate Vitality Is Plummeting

Average Lifetime of S&P 500 Companies



From Creative Destruction by Foster and Kaplan

# Digital Age Success Is Skyrocketing

## 20-Year Net Returns

U.S. Venture Capital  
(Early Stage Index)

51.9

SAP 500 Index

7.9

Source: Cambridge Associates 2Q16 VC Benchmark



# Techtronic Shifts

Stores

Specialized & Integrated

Music

Streamed Everywhere

TV

Smart & Interactive

Hotels

Robotic Helpers & Cooks

Transportation

Self-Driving | Shared Economy

Movies

Virtual Reality

# Top 10 Companies With Having the Greatest Market Capitalization

**Apple Inc.**

▲868,880

**Alphabet Inc.**

▲727,040

**Microsoft**

▲659,910

**Amazon.com**

▲563,540

**Facebook**

▲512,760

**Tencent**

▲493,340

**Berkshire Hathaway**

▲489,490

**Alibaba Group**

▲440,712

**Johnson & Johnson**

▲375,360

**JPMorgan Chase**

▲371,050



# Top 10 Companies With Having the Greatest Market Capitalization: 2007

Rank	Name	Headquarters	Primary industry	Market value (USD million)
▲ 1	Petrochina	China	Oil and gas	▲ 723,952
▼ 2	Exxon Mobil	United States	Oil and gas	▼ 511,887
▼ 3	General Electric	United States	Conglomerate	▼ 374,637
▼ 4	China Mobile	Hong Kong	Telecommunications	▲ 354,120
▼ 5	Industrial and Commercial Bank of China	China	Banking	▲ 338,989
▼ 6	<b>Microsoft</b>	<b>United States</b>	<b>Software industry</b>	▲ <b>333,054</b>
— 7	Gazprom	Russia	Oil and gas	▲ 329,591
▼ 8	Royal Dutch Shell	The Netherlands	Oil and gas	▲ 269,544
▼ 9	AT&T	United States	Telecommunications	▼ 252,051
▲ 10	Sinopec	China	Oil and gas	▲ 249,645

# Will You?



**Roll the Dice**

With the Status Quo

**Take the Leap**

With the Status Quo



"We always **overestimate** the change that will occur in the next two years and **underestimate** the change that will occur in the next ten."

— Bill Gates





3

# Top Emerging Technology MEGA TRENDS



**Emerging  
Technologies**

**Transformative  
Impact**

**1 to 10  
Years Viable**



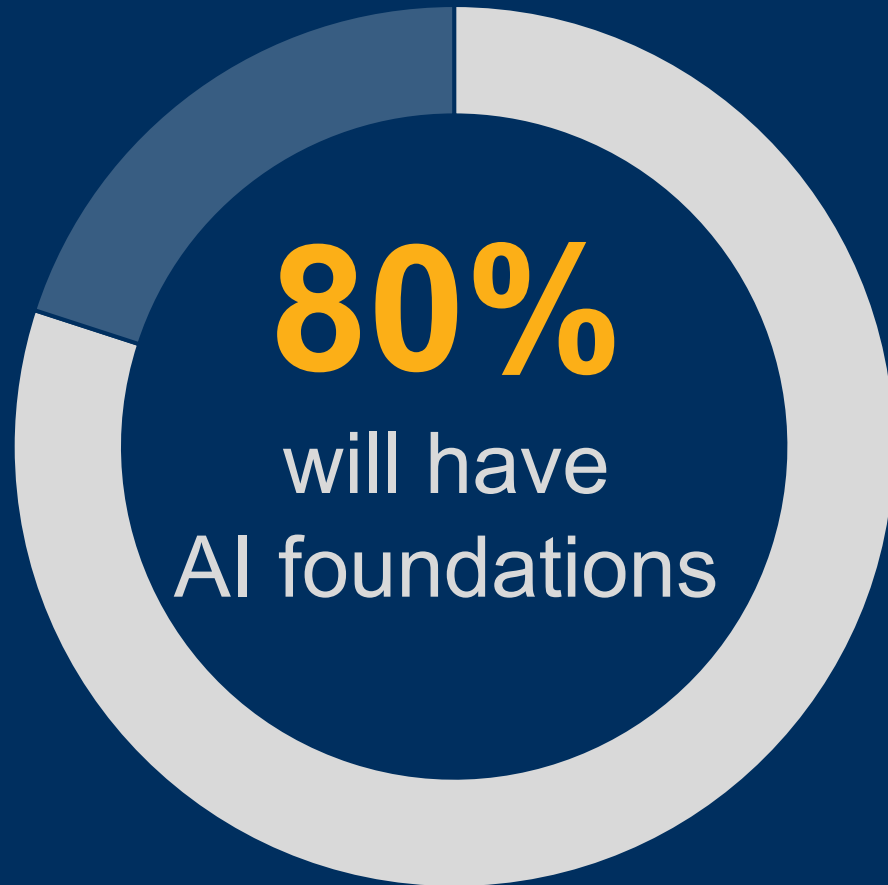
The background of the slide is a dark blue field filled with a complex, web-like pattern of thin, light blue lines. Interspersed along these lines are numerous small, glowing orange-yellow nodes, creating a sense of a vast, interconnected network or data structure.

1

# Artificial Intelligence Everywhere

# By 2020

## Emerging Technologies

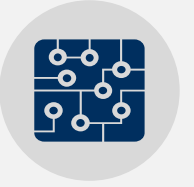


## Organizations





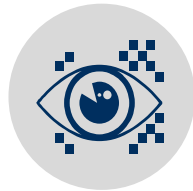
# Machine Learning



# Technologies of AI Everywhere



Deep Learning



Deep Reinforcement Learning



Artificial General Intelligence



Enterprise Taxonomy & Ontology Management



Cognitive Computing



Smart Dust



Virtual Assistants



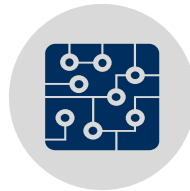
Conversational UI



Smart Workspace



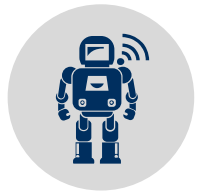
Conversational User Interfaces



Machine Learning



Autonomous Vehicles



Smart Robots



Commercial UAVs (Drones)

The background of the slide is a dark blue gradient. At the top and bottom, there are decorative horizontal bands. These bands feature a complex network of thin, light blue lines that crisscross and form a web-like pattern. Interspersed within these line networks are numerous small, glowing orange-yellow dots, some of which are slightly larger and brighter than others, creating a sense of depth and movement.

**2**

# **Transparently Immersive Experiences**

# By 2020



The market for head-mounted display devices will exceed

**35M** devices

and generate

**\$75B** in revenue



# The Context Switch

Humans Learn and Adapt to Technology



**System**

Human

Technology Learns and Adapts to Humans



**Human**

System

# Nanodrops Correcting Human Vision





# Getting Physical With Exoskeletons



Physical Therapy



# Augmented and Mixed Reality Making Its Debut



# Technologies of Transparently Immersive Experiences



4D  
Printing



Augmented  
Reality



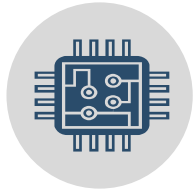
Connected  
Home



Brain-Computer  
Interface



Human  
Augmentation



Nanotube  
Electronics



Virtual  
Reality



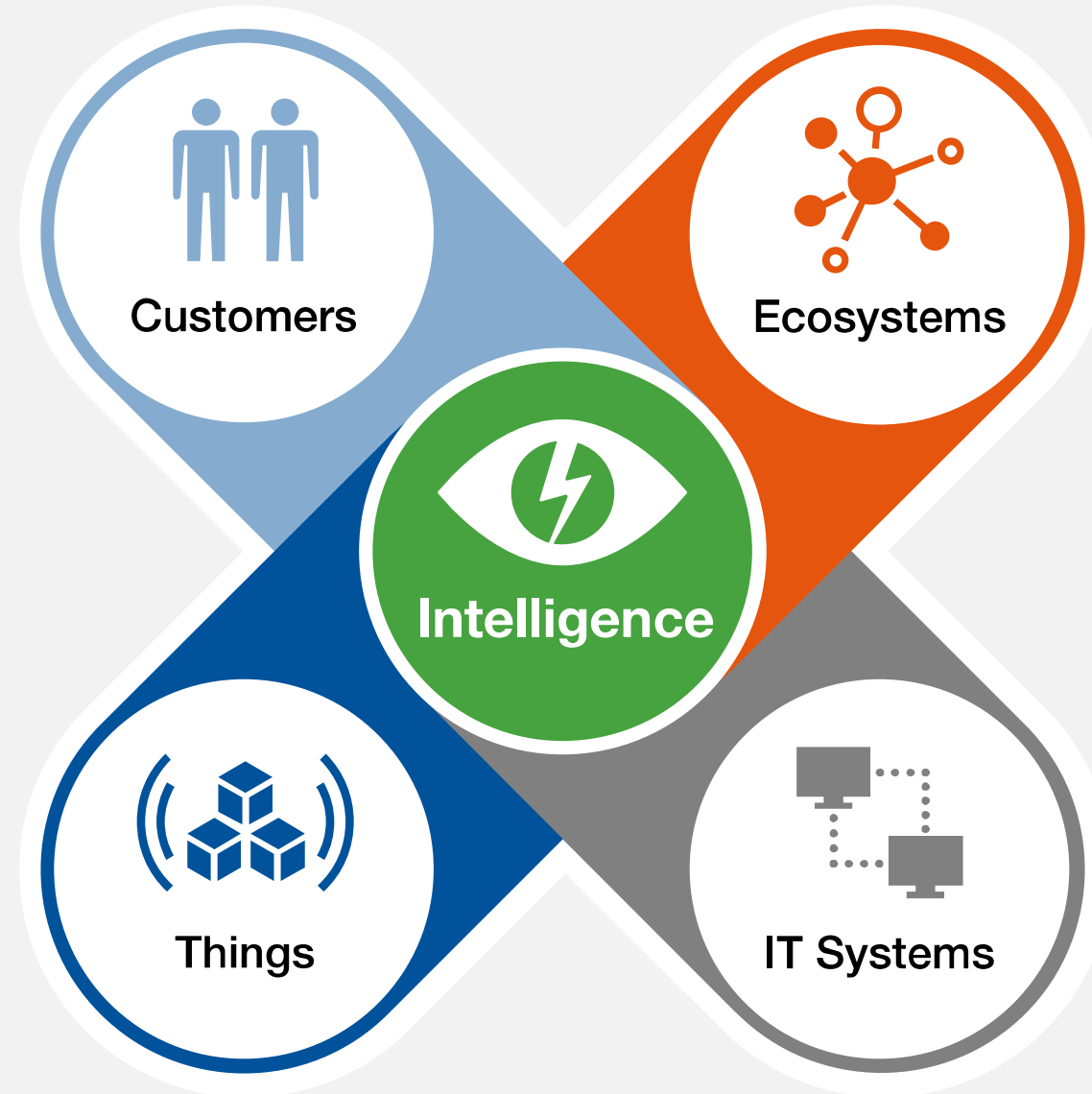
Volumetric  
Displays

The background of the slide is a dark blue gradient. At the top and bottom, there are decorative horizontal bands featuring a complex network of thin, glowing blue lines that connect numerous small, bright orange-yellow nodes, resembling a digital or neural network. In the center of the slide, there is a large, bold, grey number '3' followed by the text 'Digital Platforms' in a white, sans-serif font.

3

## Digital Platforms

# It All Starts With the Digital Business Platform



# By 2022



The Internet of Things (IoT) will  
**save** consumers and businesses  
**\$1 Trillion/Year**  
in maintenance, services  
and consumables.

# Mixed Reality Making Its Debut



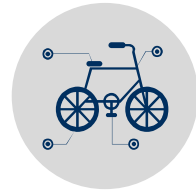
# Technologies of Digital Platforms



5G



Digital  
Twin



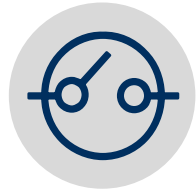
Edge  
Computing



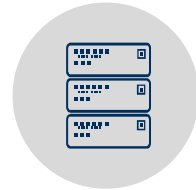
Blockchain



IoT  
Platform



Neuromorphic  
Hardware



Quantum  
Computing



Serverless  
PaaS



Software-  
Defined  
Security



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1

# Artificial Intelligence Everywhere

# By 2030

# 80%

of today's intensive PPM work  
will be eliminated by Human  
and AI/smart machine  
partnerships in 2030

# PPM Action Item:

Be **bold enough** to test the advantages of re-thinking PPM.

Data Lakes

Robotic Process  
Automation

Conversational  
AI

Machine-Based  
Learning



The background of the slide is a dark blue gradient. At the top and bottom, there are decorative horizontal bands featuring a complex network of thin, glowing blue lines that intersect to form a web-like pattern. Scattered throughout these bands are numerous small, bright orange-yellow dots, some of which appear to be connected by the blue lines, suggesting a digital or network theme.

**2**

# **Transparently Immersive Experiences**

# By 2021

# 30%

of large enterprises will **evaluate and adopt** virtual reality immersive solutions as part of their **digital transformation strategy**.

# PPM Action Item:

Provide immersive experiences at **every opportunity** to drive quality, engagement, and more-predictable and higher levels of customer satisfaction.

Training & Education

Collaboration

Stakeholder  
Engagement  
& Experience



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3

## Digital Platforms



# PPM & Digital Platform Value:

The **metrics** used to determine the success of digital platform-based programs will focus on the platform's ability to **enable value exchanges** between the providers and the consumers.

# PPM Action Item:

**Build** a metrics framework using leading indicators of future platform value and effectiveness.

Liquidity

Matching

Trust



# Gartner Recommended Research

- ▶ [Hype Cycle for Emerging Technologies, 2017](#)  
Mike J. Walker (G00314560)
- ▶ [How Leading Enterprise Architects Prepare Business Leaders for Business Transformation Through Ideation Workshops](#)  
Derek Miers and Mike J. Walker (G00345229)
- ▶ [Toolkit: An Enterprise Architect's Guide to Ideation](#)  
Mike J. Walker (G00326184)
- ▶ [Maximize Digital Business Value Creation Through AI Algorithms](#)  
Mike J. Walker (G00344426)

# Gartner Recommended Research

- ▶ [Top 10 Strategic Technology Trends for 2018: AI Foundation](#)  
Mike J. Walker, Whit Andrews and David W. Cearley (G00345512)
- ▶ [Top 10 Strategic Technology Trends for 2018: Intelligent Things](#)  
Mike J. Walker, Whit Andrews and David W. Cearley (G00345514)
- ▶ [Top 10 Strategic Technology Trends for 2018: Intelligent Apps and Analytics](#)  
Mike J. Walker, Whit Andrews and David W. Cearley (G00345513)