

A teal-tinted cityscape featuring a prominent white arch bridge over a river. The background is filled with various skyscrapers and buildings, creating a dense urban skyline. The water in the foreground reflects the city and the bridge.

# Microsoft Dynamics 365 First Look

Enable your organisation to grow, evolve, and transform.



# Stefan Hajkowitz

Senior Principal Scientist – Strategy And Foresight, CSIRO

“the best way to anticipate change in your sector is to spend some time outside of it”

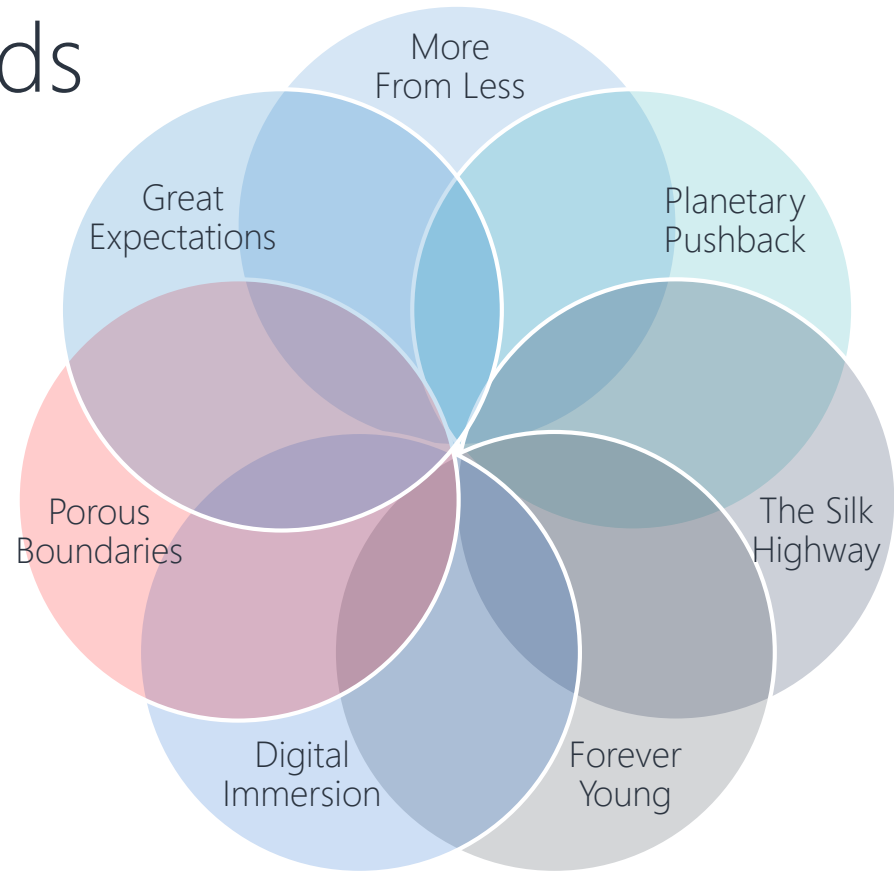
Quote from The Australian Financial Review, 9 April 2015

Photo of Michael Cameron, GPT CEO by Louie Douvis



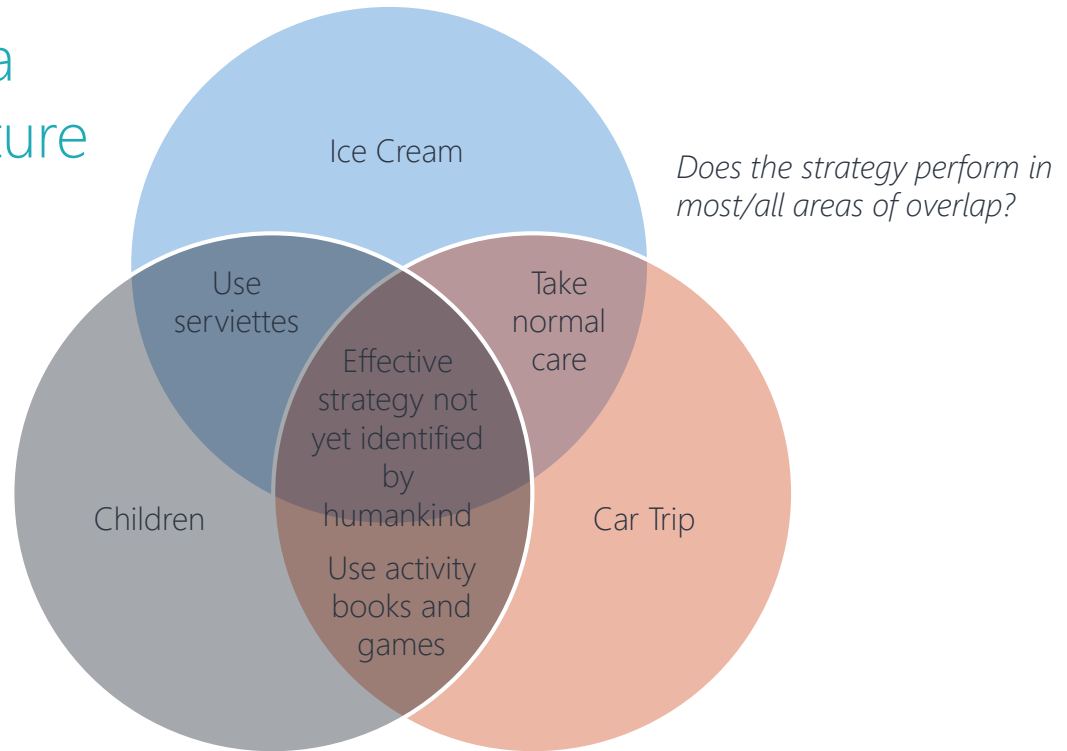
Michael  
Cameron  
(CEO of GPT)

# Global Megatrends



# Why a Venn Diagram?

Each area of overlap tells a unique story about the future



# More from Less



# About 60-70 percent more food will be required to meet demand by 2050

The world consumes 33% more energy, and 70% more electricity, by the year 2040



# Energy Supply and Demand

The world consumes 33% more energy, and 70% more electricity, by the year 2040

The energy mix changes. By 2040, oil & coal decrease share by 9%.  
Renewables increase by 5%. Gas and nuclear increase by 2%.

Renewables overtake coal for electricity by 2030

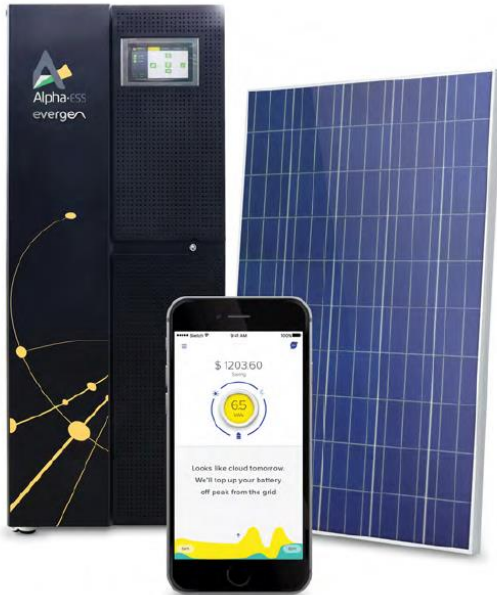
The world will spend US\$68 Trillion on energy infrastructure by 2040

Artists impression on solar farm on Queensland's sunshine coast. Will generate electricity for 500 homes.  
Source: Sunshine Coast Council.



# My House

Annual solar production is 7201 kWh (more than we use)



## Solar Potential



High

Medium

Low



## Optimum Solar Panel Layout

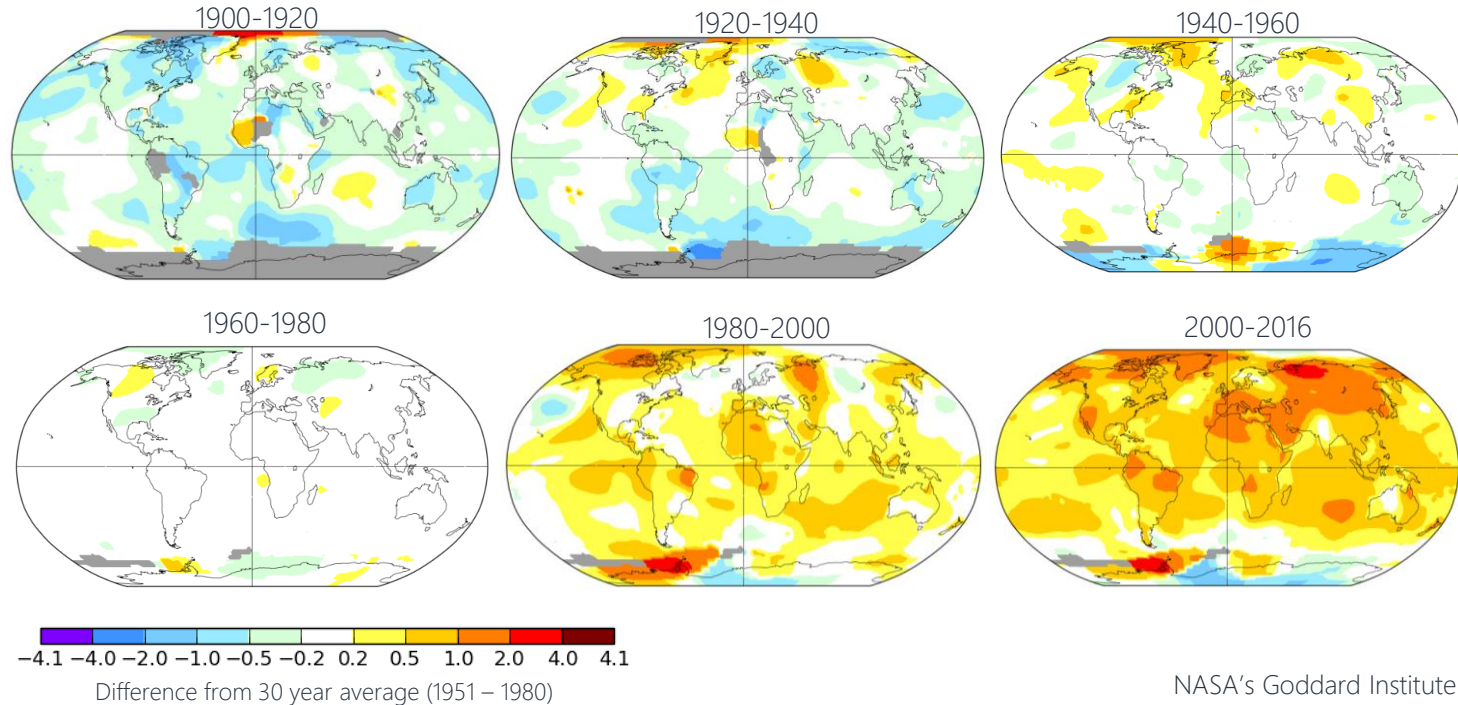


# Planetary Pushback



# Climate Change

So far 2015 was the warmest year on record. And 15 of the 16 warmest years on record have now occurred since 2001.

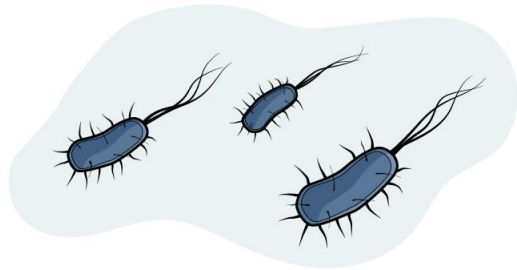


NASA's Goddard Institute for Space Studies

# Antibiotic Resistant Bacteria

## 2 million Americans

acquire **serious infections** caused by antibiotic-resistant bacteria each year.



**23,000 people die** each year as a direct result of these infections.

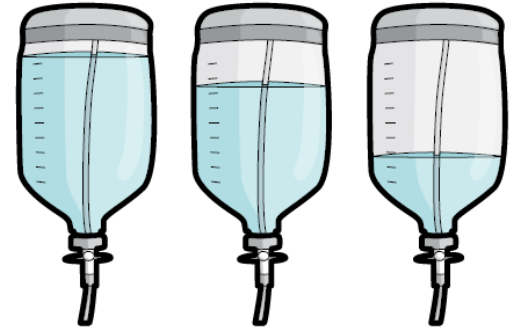


# 63%

of infectious disease doctors have treated patients with infections that **did not respond to any antibiotics.**

US Food and Drug Administration Guidance #213 Takes Effect in 2017 and aims to limit/manage medically important antibiotics in livestock production.

Global use of antibiotics for livestock was 63,000 tonnes in 2010 and will rise to 106,000 (67%) by 2030 at current trends.



**29** new antibiotics were approved in the **1980s.**

**23** new antibiotics were approved in the **1990s.**

**9** new antibiotics were approved in the **2000s.**

Data source: The PEW Charitable Trusts, Fact Sheet, 2014  
Boeckl et al, PNAS, 2015, 112(18), Global trends in antimicrobial use in food animals

# Pesticide and Herbicide Resistance

The Diamondback Moth which damages crops such as broccoli, brussel sprouts and cabbage has resistance to all modern insecticides which have been in use since the 1990s.

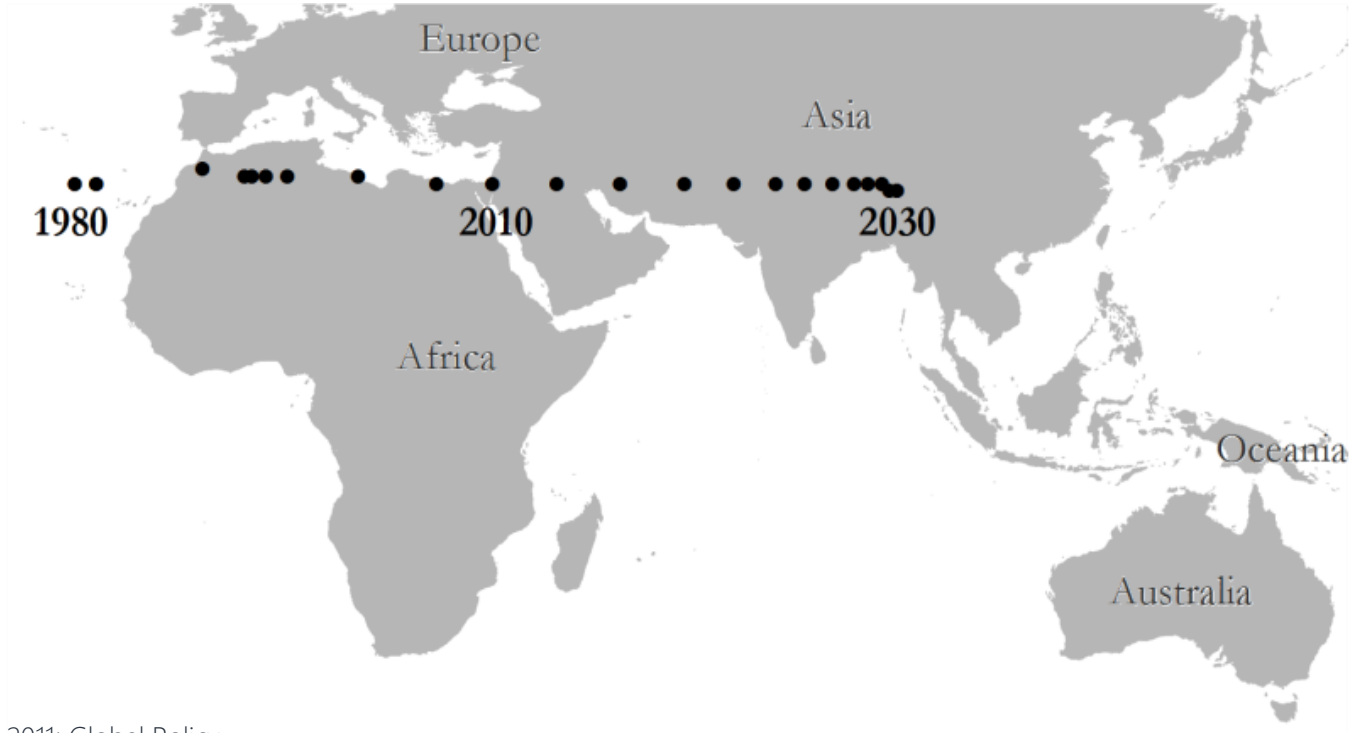
Image Source: Western Australian Government, Department of Agriculture  
Data source: South Australian Research and Development Institute



# The Silk Highway



# A Shifting World Economy



Source: Quah, 2011; Global Policy

# Making Cities in 20 Years - What Took Europe 400 Years

Shenzhen 1982



Shenzhen 2007



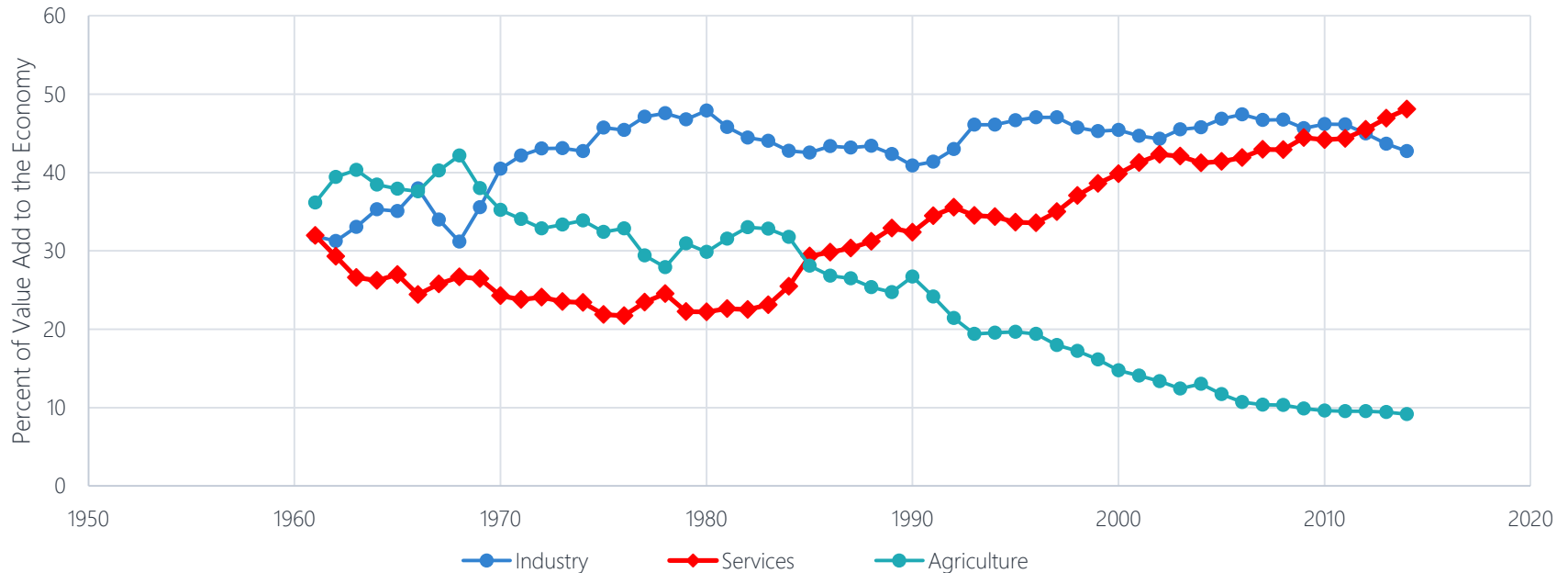
Image source: (c) The Chinese UPLA urban planning network, <http://www.upla.cn>

Statistic derived from analysis of the United Nations, World Urbanization Prospects, The 2007 Revision Population Database



# The Rise of the Services Sector

## Example ; Transition in the Chinese Economy



Source: World Bank Indicators



By 2030 China and India alone will account for more than 60% of combined OECD and G20 STEM graduates.

The BRIICS countries<sup>a</sup> will produce three-quarters of global STEM graduates

Source: OECD (2015) Education Indicators in Focus

BRIICS = Brazil, the Russian Federation, India, Indonesia, China and South Africa.

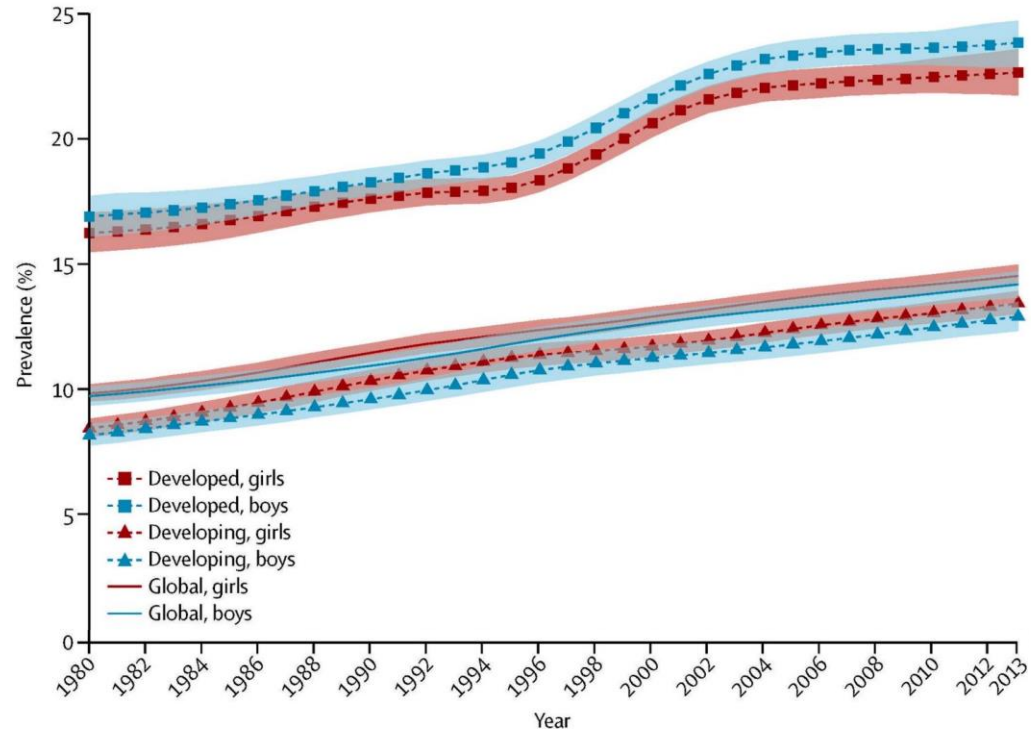
# Forever Young



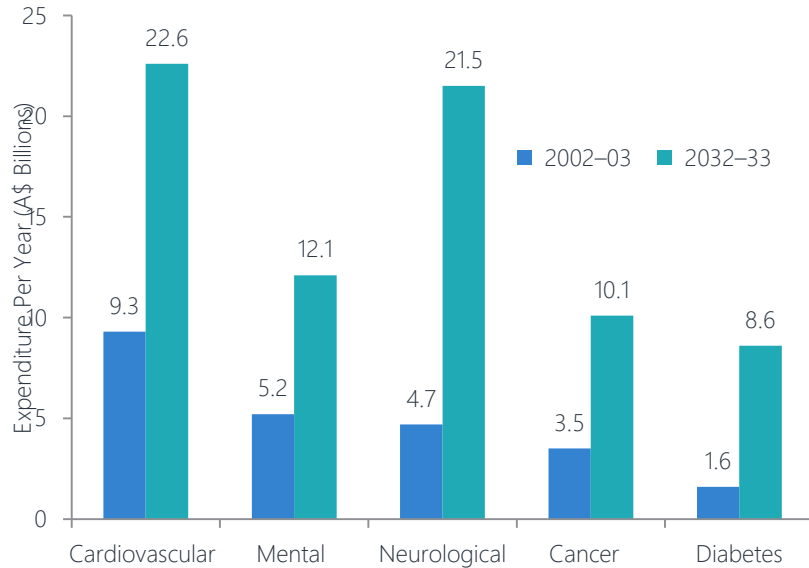
# Worldwide Obesity Prevalence Rates

"In 2010, overweight and obesity were estimated to cause 3.4 million deaths, 3.9% of years of life lost, and 3.8% of disability-adjusted life-years (DALYs) worldwide"

*The Lancet* 2014 384,  
766-781. Ng et al.

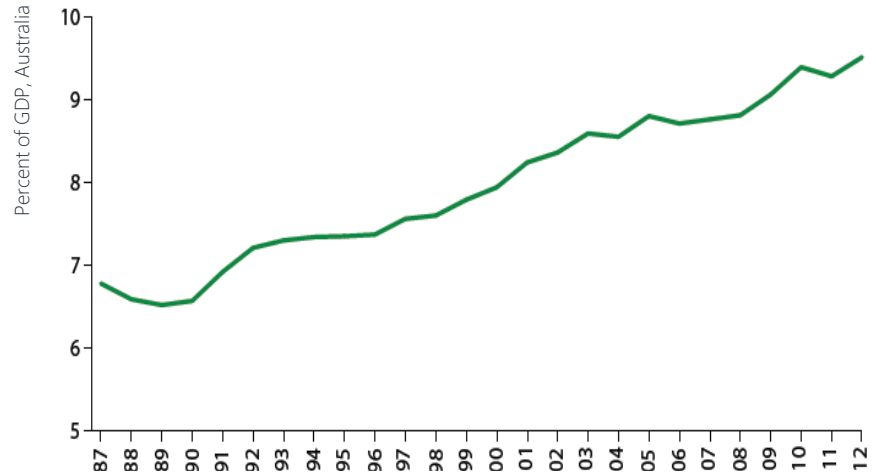


# Rising Healthcare Expenditure



Source: ACE-Prevention: Deakin University and University of Queensland.

Source: AIHW health expenditure database



Today we spend 25 percent of all government taxes in Australia on healthcare.

By the year 2043 it will be 40 percent.

Source: CSIRO DPAS Flagship

# The pandemic of physical inactivity

*"Physical inactivity is the fourth leading cause of death worldwide"*

- Prof Dr Harold Kohl et al., 2012 The Lancet

In Australia Physical inactivity is main cause for 21–25% of breast & colon cancers, 27% of diabetes and 30% of heart disease.

Only one-third of children undertook the recommended 60 minutes of daily physical activity.

60% of Australian adults did less than the recommended 30 minutes of moderate intensity physical activity per day.

- Australian Government, Department of Health

Source: Australian Bureau of Statistics (ABS) 2013 - Australian Health Survey: Physical Activity, 2011-12. ABS Catalogue number 4364.0.55.004



# Build it and they will come

If we build health promoting city infrastructure it will be used  
(shown in numerous studies).



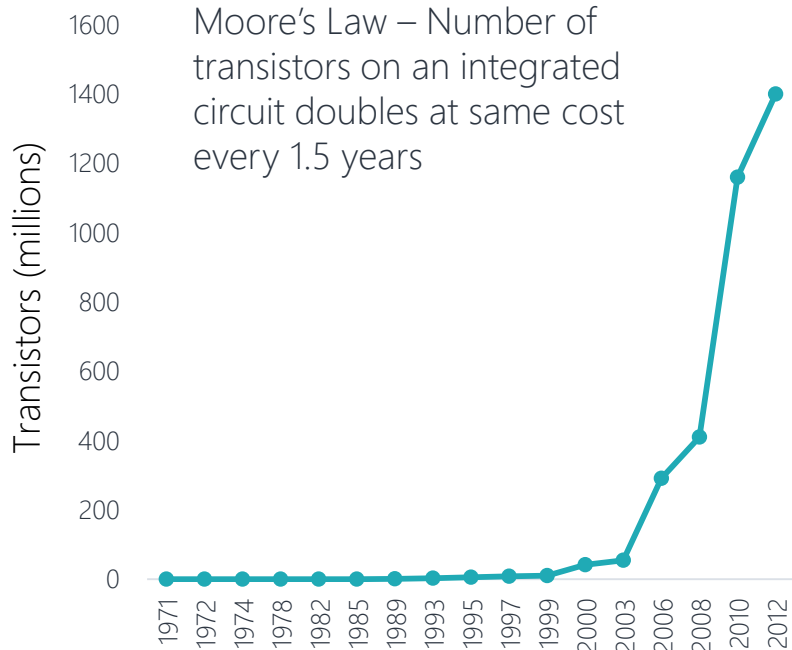
Source: Foster & Partners Designed Bikeway shown by CNN

# Digital Immersion





# Computing Speed

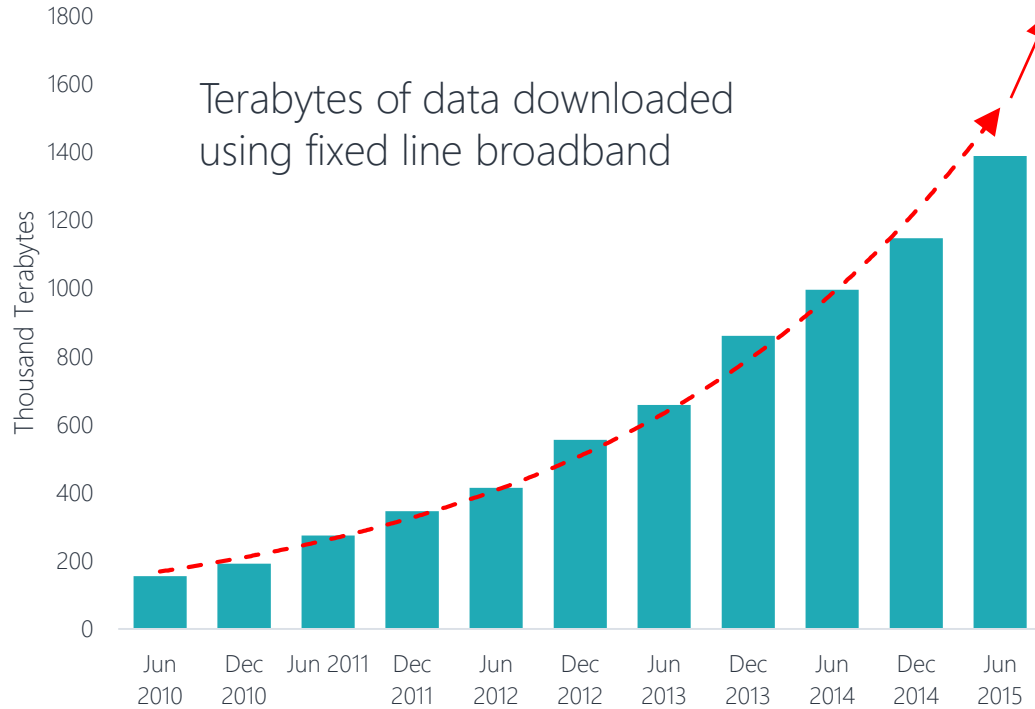


And then there's quantum computing which could be 10,000 times faster ...



Jury's still out on whether D Wave 2 (second commercially available quantum computer by Google, NASA and D Wave Systems) actually works. But maybe soon?

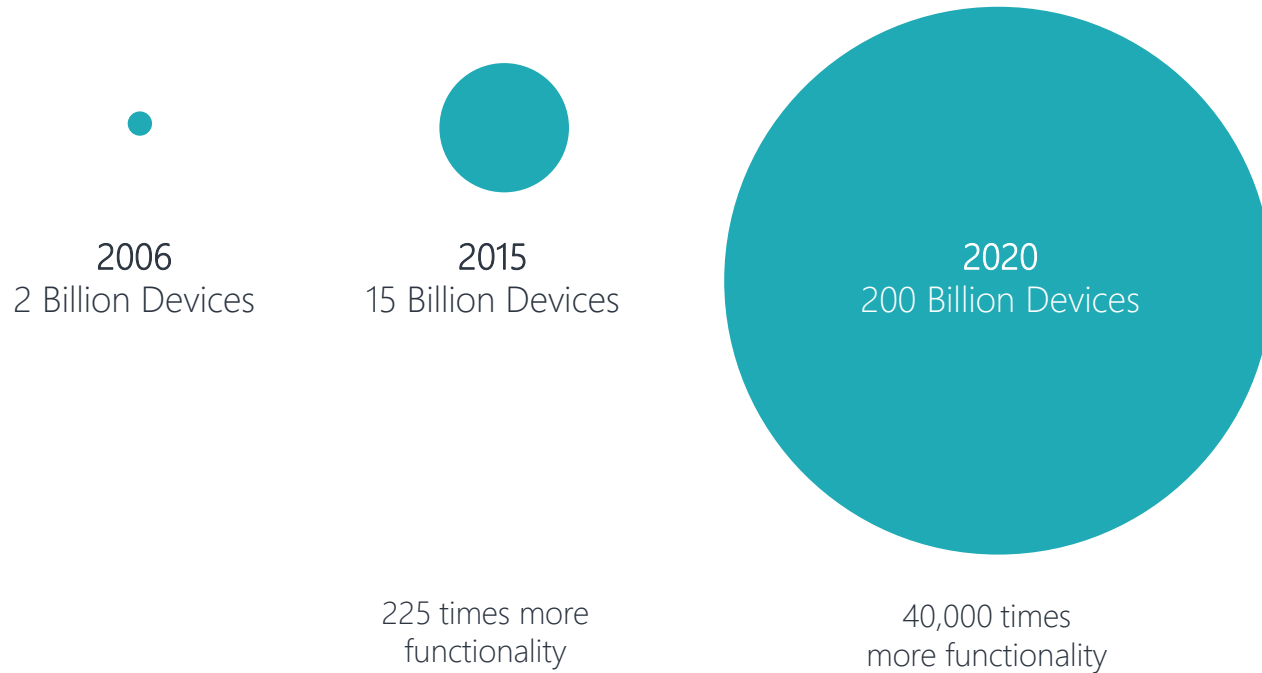
# Data Volumes



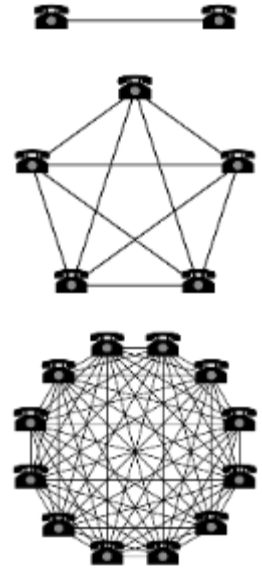
And we'd need another 75m to show you the 2025 forecast.

According to IBM The world creates 2.5 quintillion bytes of data daily; 90% of the data was made in the last 2 years.

# The Internet of Things



Metcalf's Law  
Value of a network =  $n^2$



Data source: Intel Corporation. A Guide to the Internet of Things. Image Wikipedia

# The Data Smart, Highly Automated and Digitally Connected City



## Towards Automation

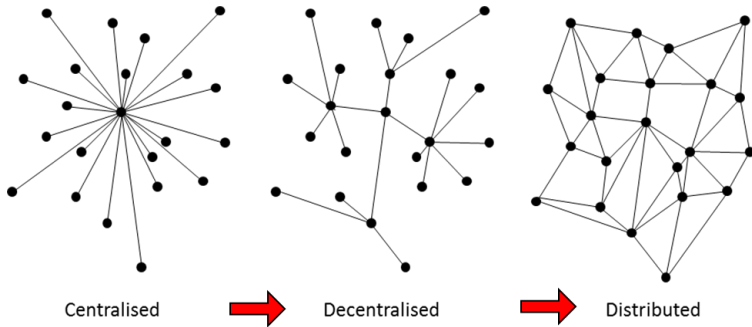
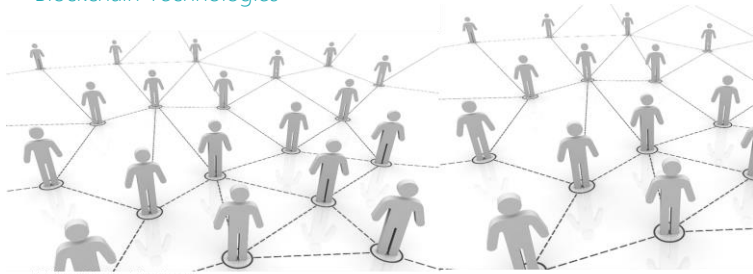
In Pittsburgh you can now select "Automated" when you order a taxi on your smartphone... Automated fleet cars are a transport game changer.



# Blockchain and Distributed Ledger Technology

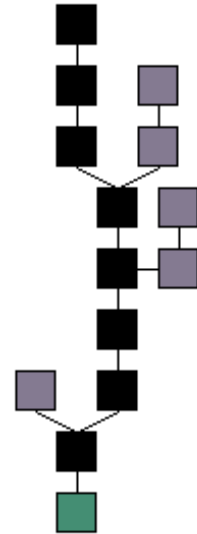
"A distributed ledger is a consensus of replicated, shared, and synchronized digital data geographically spread across multiple sites, countries, and/or institutions"

- Blockchain Technologies



A blockchain is a type of distributed ledger comprised of highly tamper resistant digital data records stored in packages called "blocks".

- Definition Adapted from Blockchain Technologies



# Task Automation and Job Replacement

47% of Jobs  
in America at  
High Risk of  
Automation

Michael Osbourne  
Oxford University



Learn to race with the Machine, not against it

Erik Brynjolfsson and Andrew McAfee  
Massachusetts Institute of Technology (MIT)

# What Jobs do People Get?

After seven years of effort by scientists from UC Berkeley a robot can fold a towel in ...

20 mins.

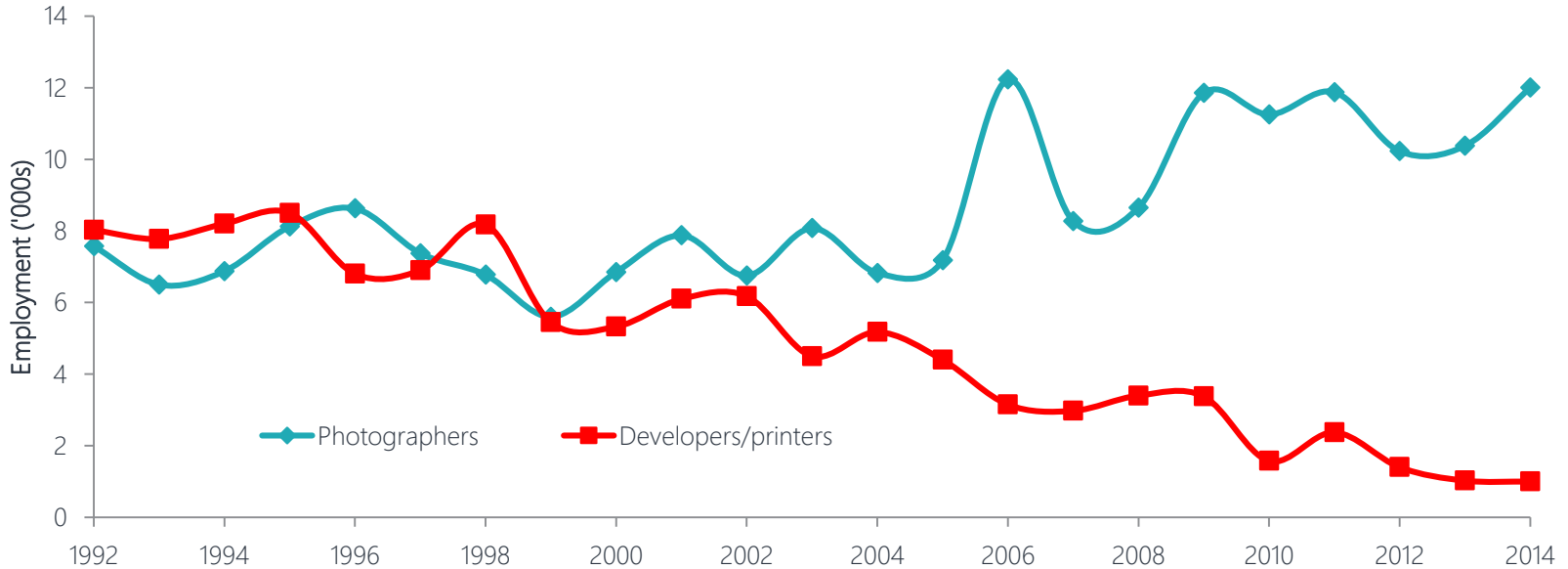
The Berkeley Robot for the Elimination of Tedious Task (Brett) by Prof Abbeel at UC Berkley. Image source: Youtube





# Photographers Versus Lab Staff

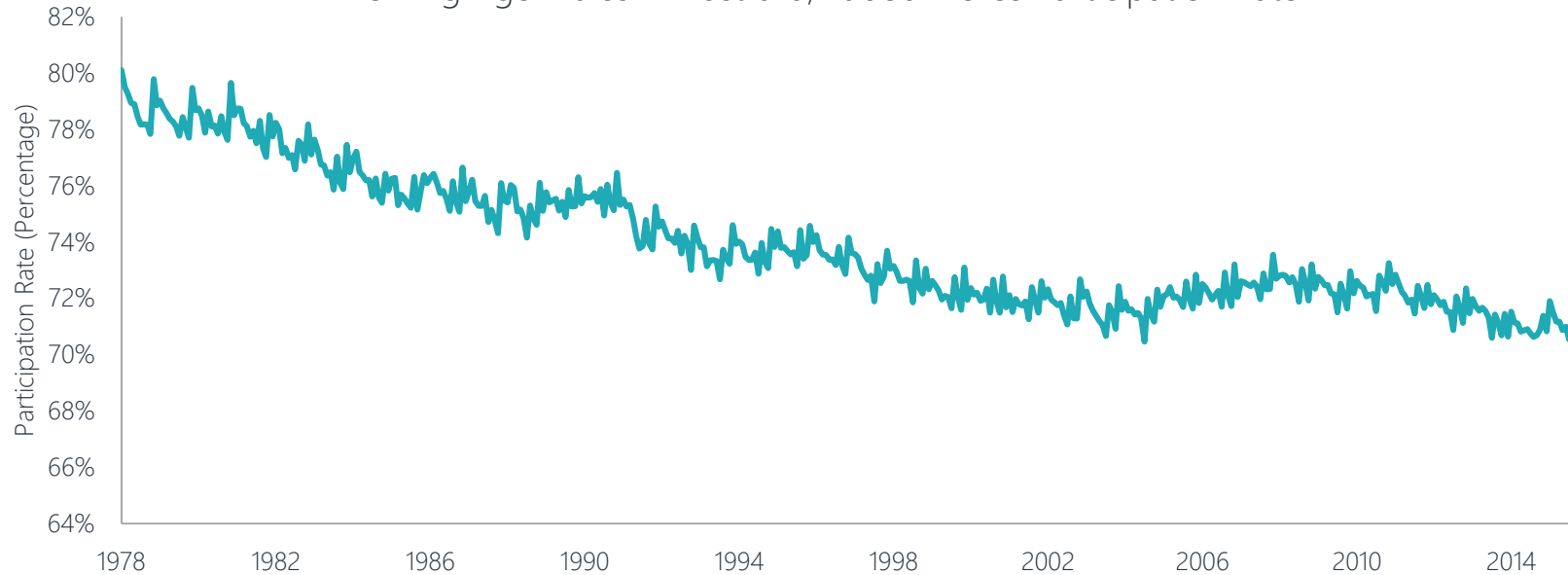
Australian Photographic Industry



ABS (2015). 6291.0.55.001 - Labour Force, Australia, Detailed. Canberra, Australian Bureau of Statistics.

# Not Everyone is Making the Transition

Working Age Males in Australia, Labour Force Participation Rate



Source: ABS (2015) 6202.0 Labour Force, Australia, Australian Bureau of Statistics



# Porous Boundaries

# Rethinking the Theory of the Firm?

Ronald Coase working in  
2003. Photo taken at and by  
University of Chicago Law  
School. Wikipedia.

# 1. Information asymmetry

is where one party has more or better information than the other. But ...



... can customer generated content create symmetric information?

# 2. Transaction Costs

Are incurred in making an economic exchange (i.e. the cost of participating in a market). But ...



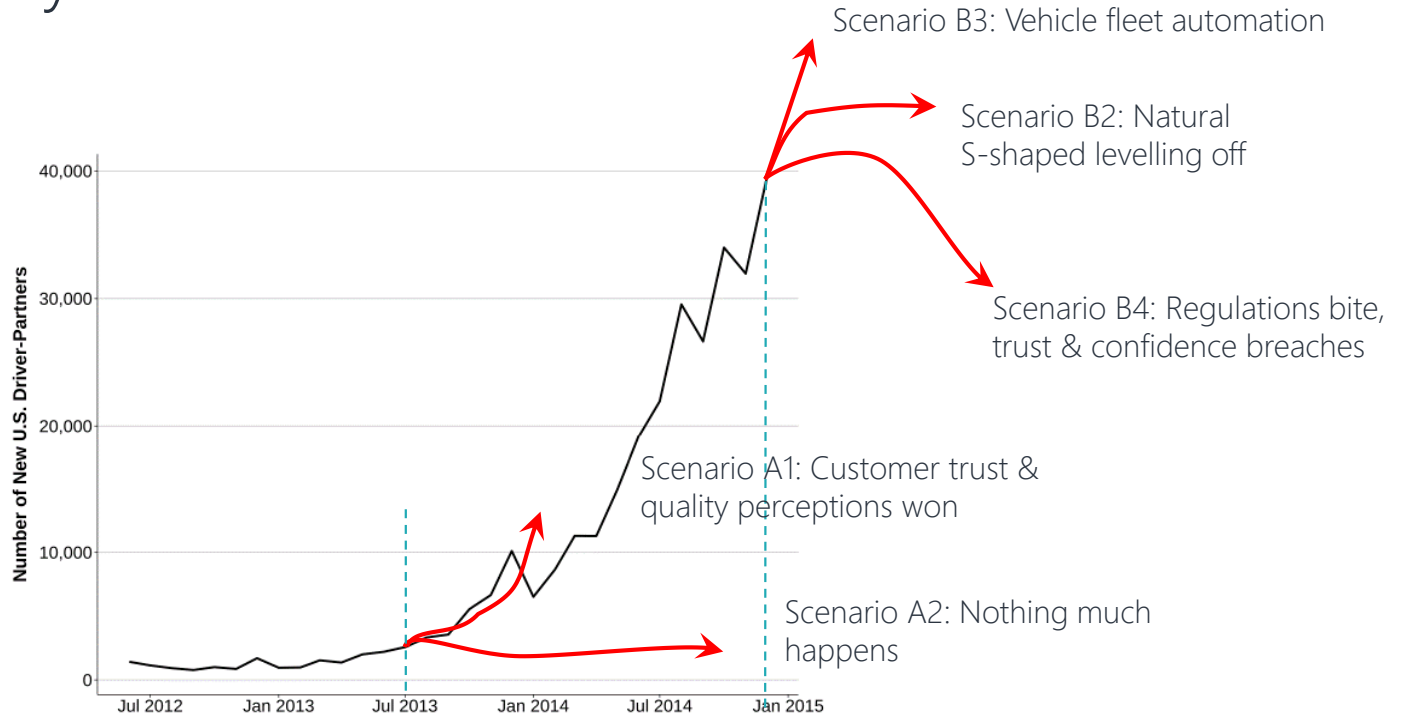
consider two ways of buying an e-Scooter from China.



# Scenario Planning of the P2P Economy: A Case Study of Uber

New Data in a study by Uber Technologies and Princeton University, published 2016

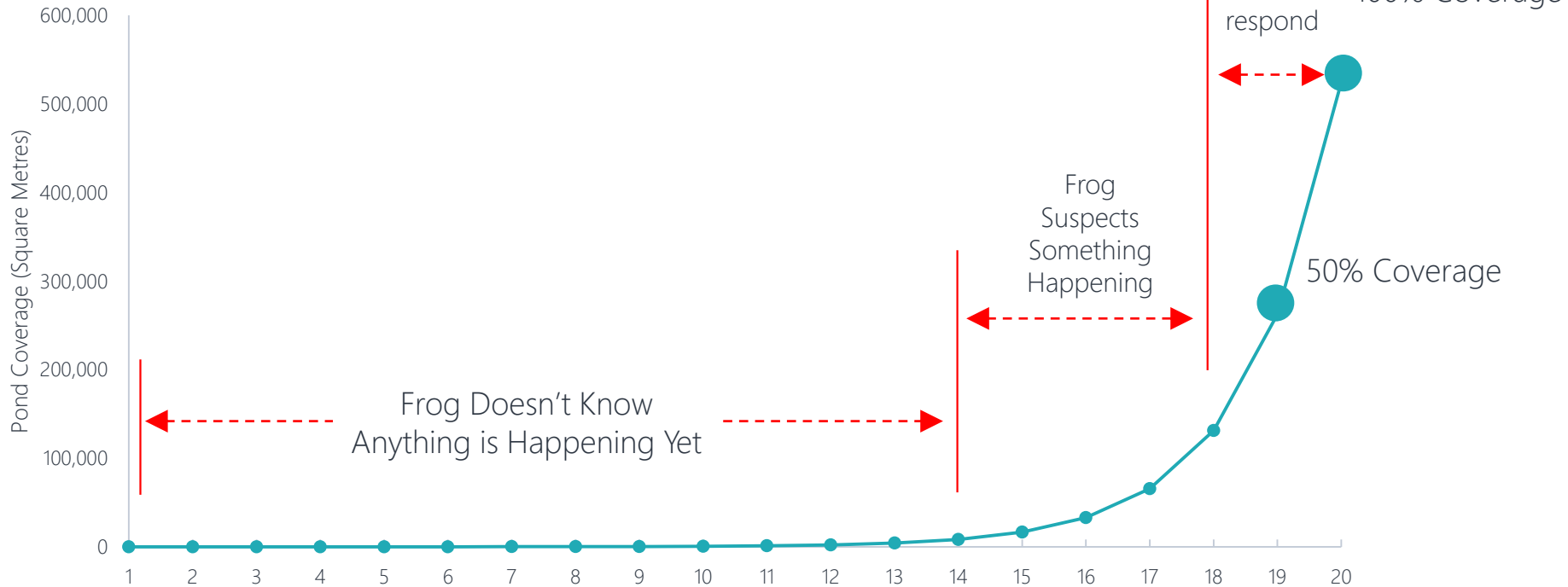
Proxy measure for Market Share



Question: The area of lilly pad doubles every day.  
It takes 19 days for the pond to be half-covered.  
On what day is the pond completely covered?



Answer: On day 20 (one day later) the pond is covered.



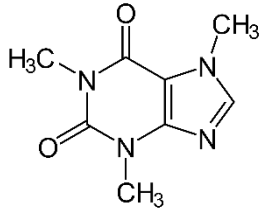


# Great Expectations

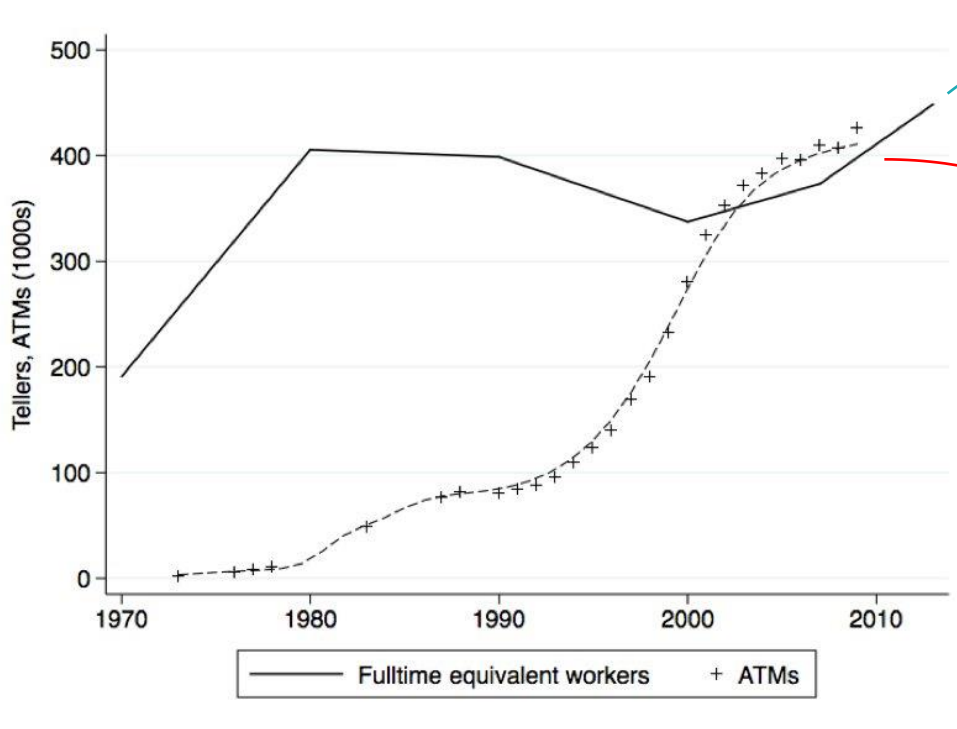


# The Experience Economy 2.0

Is it really just  $C_8H_{10}N_4O_2$ ?



# Even In a Digital World; People Still Like People

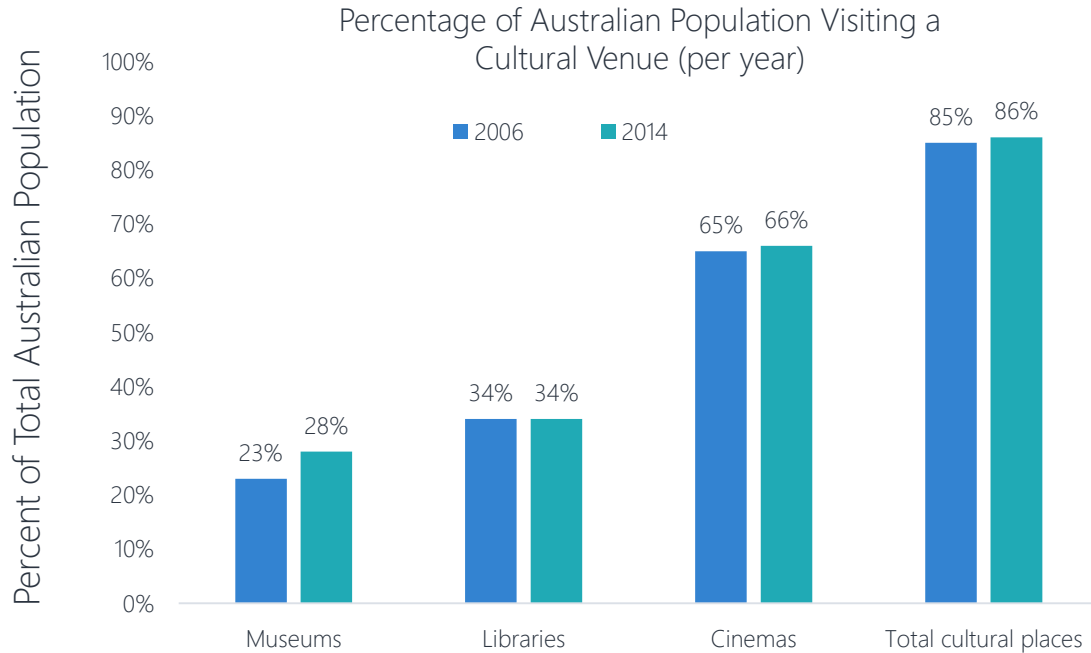


More tech = more complex finances = more consultations

Towards a cashless society (we pay with smartphones or fingerprints, retinal scans, body movements...)?

Source: World Economic Forum and VoxEU

# And people still like the physical world...



Despite ever growing virtual options

NETFLIX



Australian Bureau of Statistics: 4114.0 - Attendance at Selected Cultural Venues and Events, Australia

# The Innovation Imperative

Now is the time to rattle the cage, experiment with new business models, invest in ideas & rethink organisational structure because...

... Elephants must learn to dance.



# The Innovator's Dilemma

World Economic Forum via Flickr. Zanny Minton Beddoes  
interviews Clayton Christensen



T-Shaped professionals and organisational ecosystems (as opposed hierarchical structures)



# The Data61 Insight Team

Research excellence combined  
with business relevance

Please connect with us  
[@stefanhajkowicz](#)





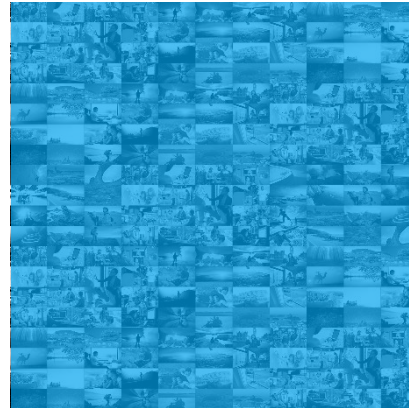
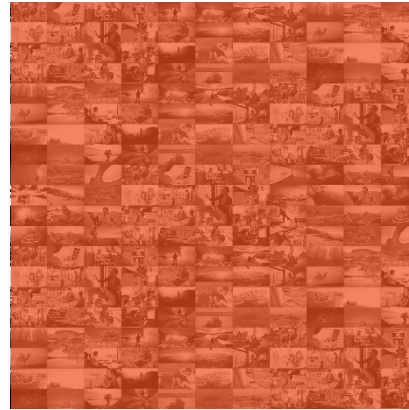


# Simon Davies

Vice President, Dynamics Asia, Microsoft

# Microsoft mission

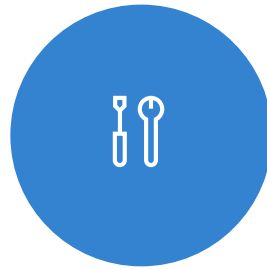
Empower every person and every organisation on the planet to achieve more



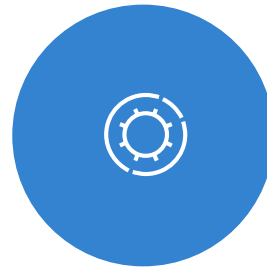
# Digital Transformation



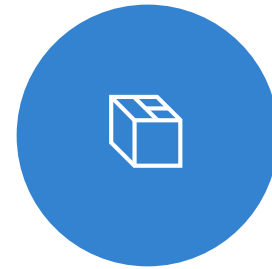
Engage  
customers



Empower  
employees



Optimise  
operations



Transform  
products



**Sustainability  
Victoria**

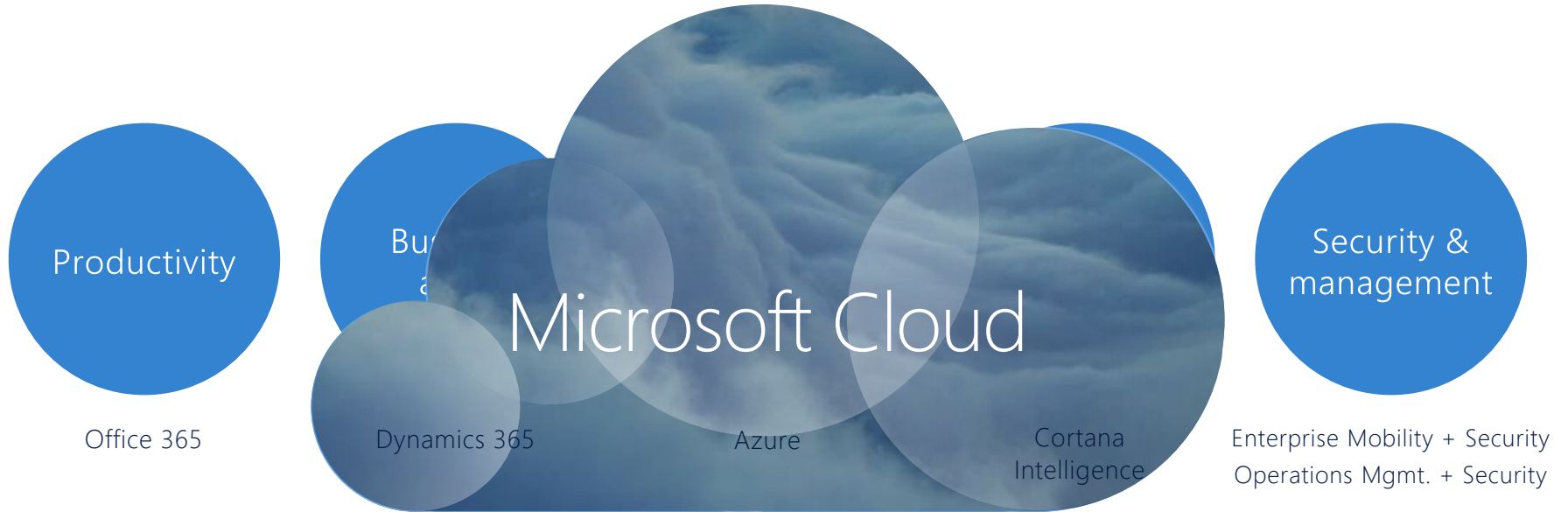
“Having Microsoft manage the cloud environment and infrastructure meant that we didn’t have to commission a separate system on premise. As we know, funding is changing and for us, the move from on-premise to Cloud with Dynamics 365 has paved the way for further digitisation. Now more than ever, we’re focused on living our own sustainable vision.”

**Chris Moon, Information Systems Business Manager, Sustainability Victoria**

# Digital Transformation with Microsoft Dynamics



# Microsoft Cloud







# Microsoft Dynamics 365

Business applications



**CRM**



**ERP**



A central blue pentagon contains the text "Microsoft Dynamics 365". Surrounding it are seven segments, each with an icon and a label: Sales (bar chart), Marketing + Adobe (megaphone), Financials (bar chart with arrow), Project Service Automation (stacked blocks), Customer Service (person with heart), Operations (gears), and Field Service (truck). The entire diagram is set against a dark blue background with a large circle and intersecting lines.

# Microsoft Dynamics 365



Sales



Field Service



Marketing  
+ Adobe



Operations



Financials



Customer  
Service



Project Service  
Automation



# Business apps in the cloud

Purpose-built

Productive

Intelligent

Adaptable

# Purpose-built

---

Built for your business, works with existing systems

Implement business processes across silos

Start with what you need, expand at your own pace





“Our sense is it’s a bit like the umpires in a game; you don’t notice the system if it works and I think from a patient perspective it’s been seamless. If you get good care and you’re looked after, you don’t notice all the systems and processes that are set behind it.”

**Dr Daryl Kroschel, Medical Director for Silver Chain**



Prospect



Cash



# Unified experience across apps

The screenshot shows the Dynamics 365 Home interface. At the top, there is a navigation bar with a grid icon, 'Dynamics 365', and 'Home'. On the right, there are icons for settings, help, and a user profile. Below the navigation bar is a large teal banner with the text 'The new home for all your business apps' and a sub-headline 'Here you'll find all your Microsoft Dynamics 365 apps — from sales and service to operations and financials — along with apps that work with them from Microsoft AppSource.' A 'Take a quick tour' button is present, along with a link to 'Learn more about Dynamics 365'. To the right of the text are several overlapping white cards with icons representing different business processes. Below the banner is a search bar labeled 'Search my apps ...' with 'Sync' and 'Filter' options on the right. Underneath is a 'My Apps' section with five app tiles: 'Customer Service', 'Financials', 'Operations', 'Sales', and 'Health360 Care Coordination'. Each tile includes an icon, the app name, and a brief description of its capabilities.

Dynamics 365 ▾ Home

The new home for all your business apps

Here you'll find all your Microsoft Dynamics 365 apps — from sales and service to operations and financials — along with apps that work with them from Microsoft AppSource.

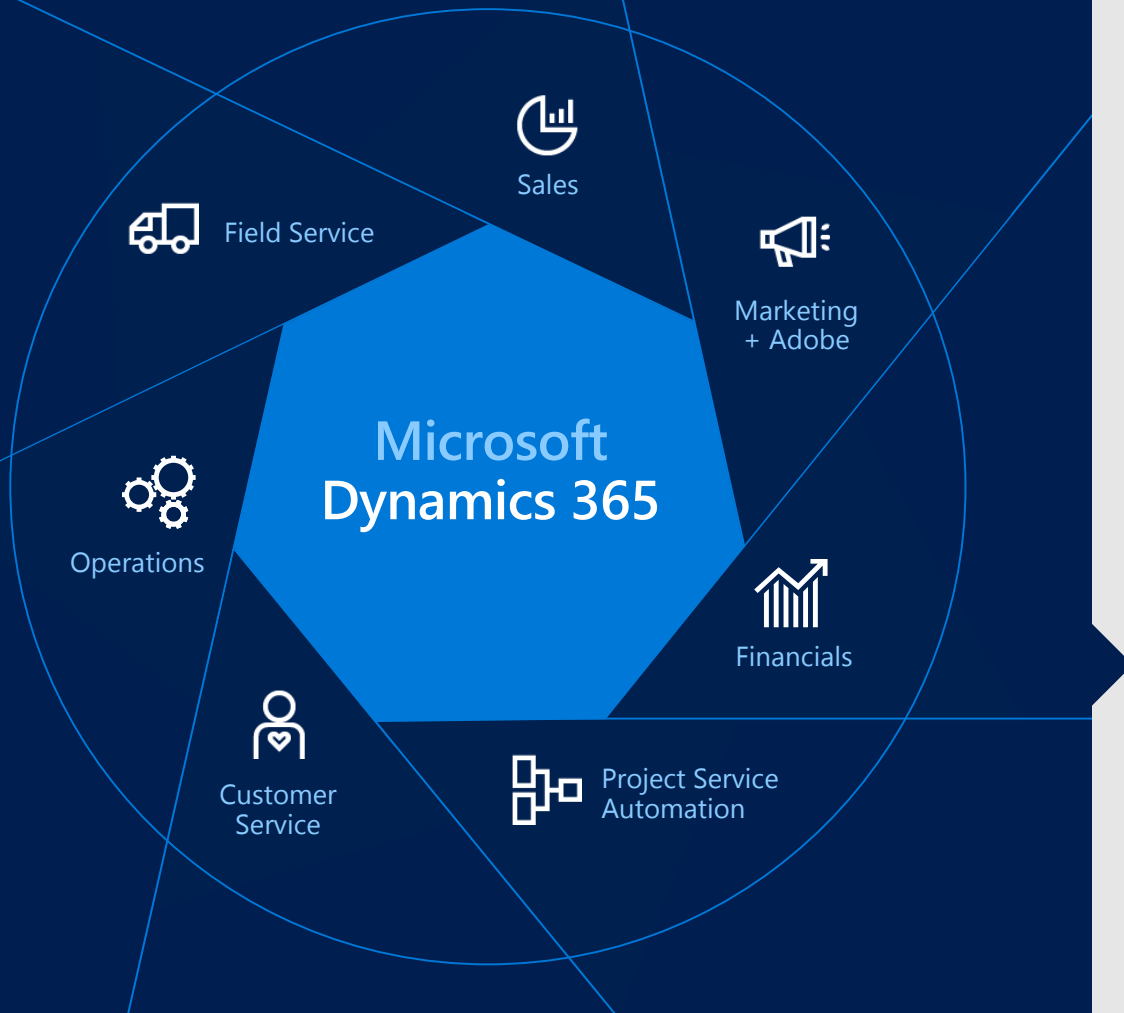
Take a quick tour →

Learn more about Dynamics 365

Search my apps ... Sync Filter

My Apps

- Dynamics 365 for Customer Service**  
Earn loyalty by giving your agents the complete information and digital intelligence they need to provide seamless service.
- Dynamics 365 for Financials**  
Makes ordering, selling, invoicing, and reporting easier—starting on day one.
- Dynamics 365 for Operations**  
Optimize your operations with digital intelligence that helps you make smarter decisions faster and grow globally at your pace.
- Dynamics 365 for Sales**  
Increase your sales with automation and digital intelligence helping your salespeople stay focused and work smarter.
- Dynamics 365 for Health360 Care Coordination**  
Engage patients, plan, coordination + personalize care.



# Business apps in the cloud

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# Productive

---

Productivity where you want to work

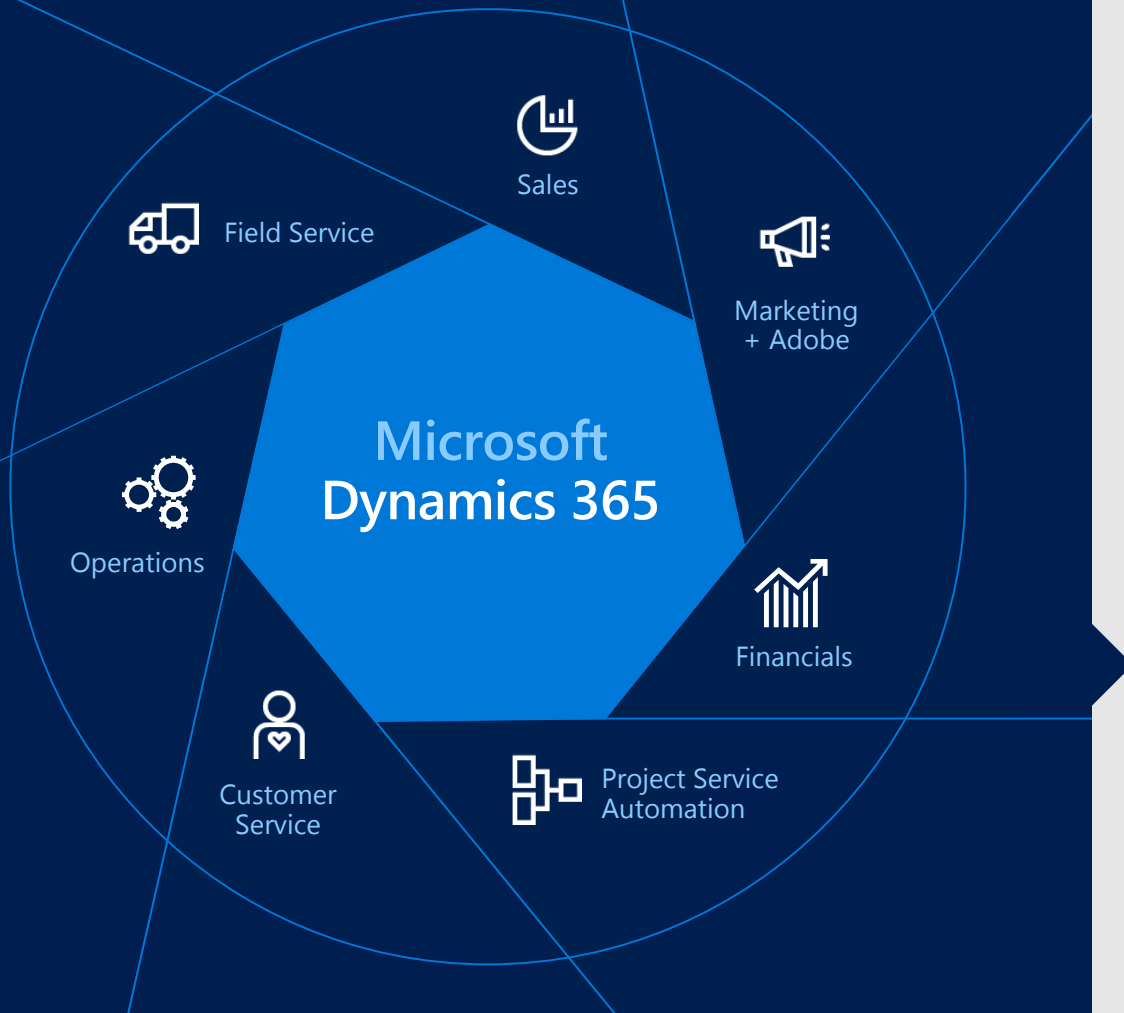
Immersive user experience with Office 365

Available on iOS, Android, Windows and web

Dynamics 365 + Office 365

# Office 365 Dynamics 365





# Business apps in the cloud

Purpose-built

Productive

Intelligent

Adaptable

# Intelligent

---

Built-in Artificial Intelligence

Out-of-box data visualizations and BI

Transformational Advanced Analytics platform

Dynamics 365 + Cortana Intelligence





## Built-in Artificial Intelligence

Relationship Insights

Lead Scoring

Cross-Sell/Up-Sell

Knowledge Base Insights

Demand Forecasting

Cash Flow Forecast

Product Recommendations

Preemptive Service

Resource Optimization

Predictive Sales and Inventory Forecast

Intent Analysis

Sentiment Analysis

# Relationship Insights

Spend more time selling with automated data capture of customer communication across Dynamics 365 and Office 365

**Dynamics 365** Sales Opportunities Needs to restock the...

Est. Close Date: 12/25/2016 | Est. Revenue: \$25,000.00 | Status: In Progress | Owner: crm

Qualify → **Develop (Active for 8 days, 4 hours)** → Propose → Close

- Customer Need: Diversify into selling new products
- Proposed Solution: Sell SKU AX305
- Identify Stakeholders: completed

Identify Competitors *mark complete*

Opportunity Sales Process (Active for 8 days, 4 hours) | Next Stage

### Summary

Topic	Needs to restock their supply of Products
Contact	Sidney Higa
Account	Blue Yonder Airlines
Purchase Timeframe	--
Currency	US Dollar
Budget Amount	\$16,000.00
Purchase Process	Committee
Description	--

Customerdatatypepeop --

Current Situation: Share prices dropping

### Today's Insights (Preview)

- MEETING REQUESTED:** Rene Valdes asked you to set up a meeting in a recent email.  
"Proposal looks good. Can we meet tomorrow?"  
[CREATE MEETING](#) [OPEN EMAIL](#)
- EMAIL OPENED:** Sidney Higa just opened your email.  
Your email "Re: Updated Proposal" was opened at 1:35 pm from San Francisco, CA USA by Sidney Higa.  
[VIEW RECIPIENT](#) [OPEN EMAIL](#)

### STAKEHOLDERS

Name	Role
Sidney Higa	Stakeholder
Rene Valdes	Stakeholder

### INSIGHTS

- Blue Yonder Airlines
- The ultimate insider: Windows veteran Dona Sarkar is the new face of the Windows Insider Program
- Now Hiring: A unique hiring program is opening more doors to people with autism

Microsoft Dynamics 365

Re: Updated Bike Catalog [Track](#)

RECIPIENTS

**Eva Elznicova**  
Sales Manager

Next activity Sep 02, 2016  
**Catalog review comments**

Last activity Jul 02, 2016  
**Discuss the new Catalog**

ACCOUNT

**Adventure Works**

RECENT OPPORTUNITIES

**200 Bikes for Contoso ipsum**

**Cooking Appliances IOT Capable**

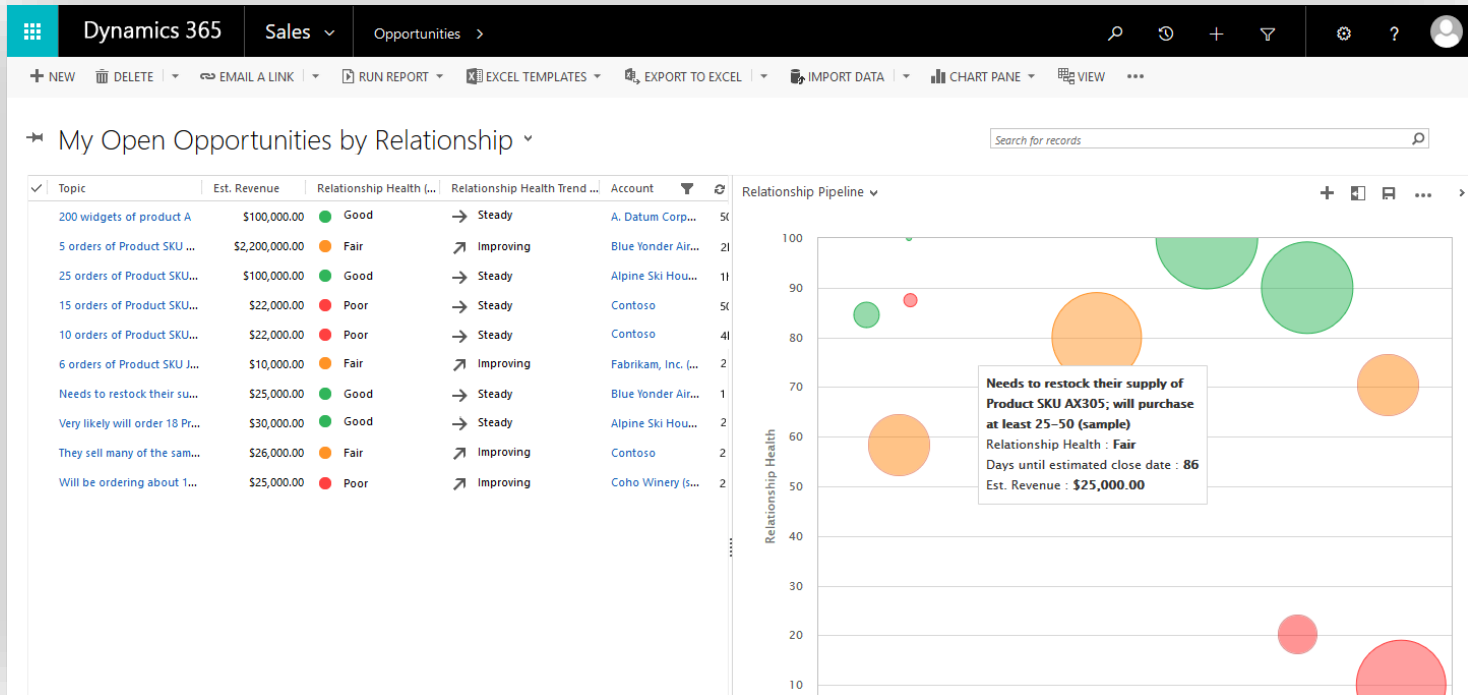
Est. Close Date: 10/4/2016

Est Revenue: \$290,000.00

[SET REGARDING](#) [OPEN IN DYNAMICS 365](#)

# Relationship Insights

Stay on top of your relationships



# Relationship Insights

Automated personal sales assistance  
makes you more productive



## Opportunity at risk

500 3D Printers

There has been no activity with this opportunity in  
last 30 days. This may affect the relationship score

Open Opportunity



Veronica Quek

Today



Sidney Higa just opened your email  
Re: Proposal Update

"Re: Proposal Update" was just opened by Sidney  
Higa at 01:20 PM from San Francisco, CA, USA

Sidney Higa's email looks like potential lead  
Action

Sidney Higa is interested in learning more about products  
for our conference rooms for better  
collaboration.



Sidney Higa just opened your email  
Re: Proposal Update

"Re: Proposal Update" was just opened by Sidney  
Higa at 01:20 PM from San Francisco, CA, USA

Open Email



Favorites (3)

Recent (3)

Nancy Anderson (sample)  
Lead

My Open Opportunities by Relationsh...  
Opportunity

Sales Activity Social Dashboard  
System Form



## Built-in Artificial Intelligence

Relationship Insights

Lead Scoring

Cross-Sell/Up-Sell

Knowledge Base Insights

Demand Forecasting

Cash Flow Forecast

Product Recommendations

Preemptive Service

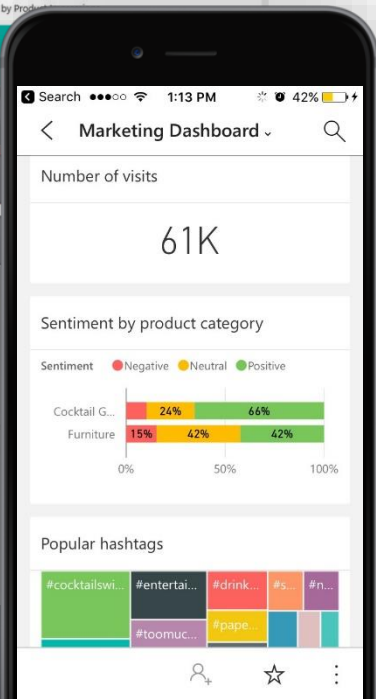
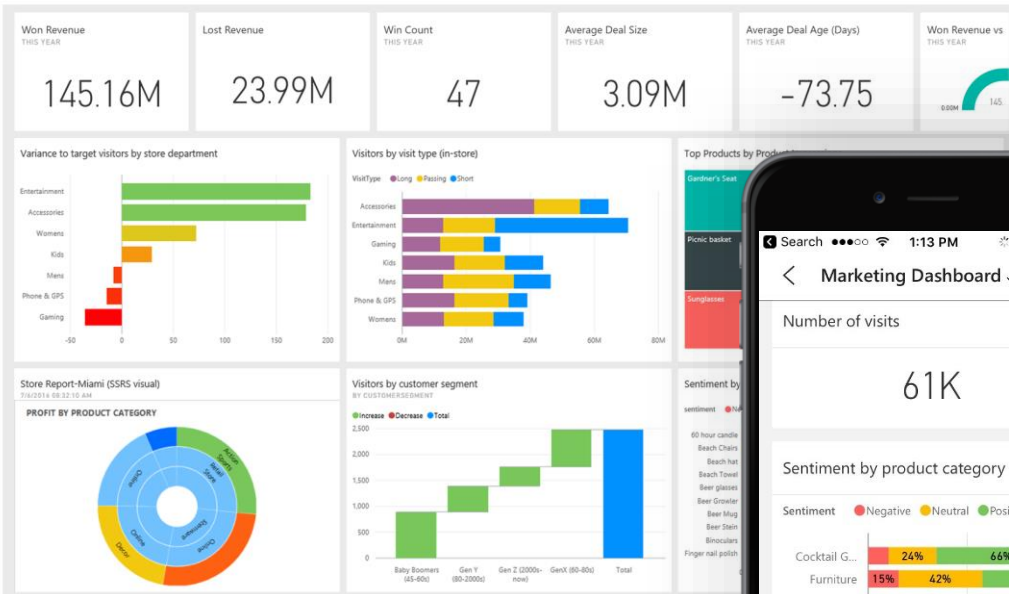
Resource Optimization

Predictive Sales and Inventory Forecast

Intent Analysis

Sentiment Analysis

Dynamics Sales Man...

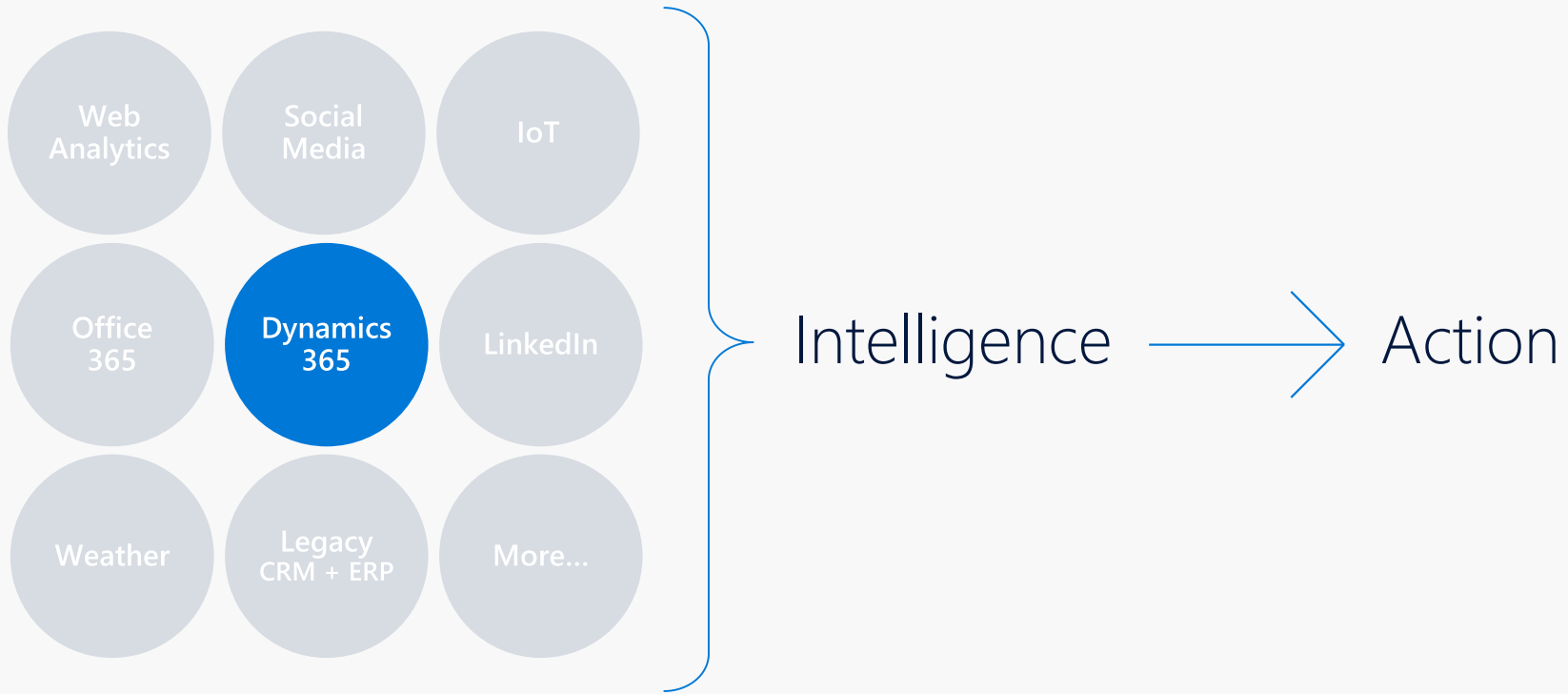


Business Intelligence analytics across all your Dynamics data

# Transformational intelligence platform



# Transformational intelligence platform







# Business apps in the cloud

- Purpose-built
- Productive
- Intelligent
- Adaptable

# Adaptable

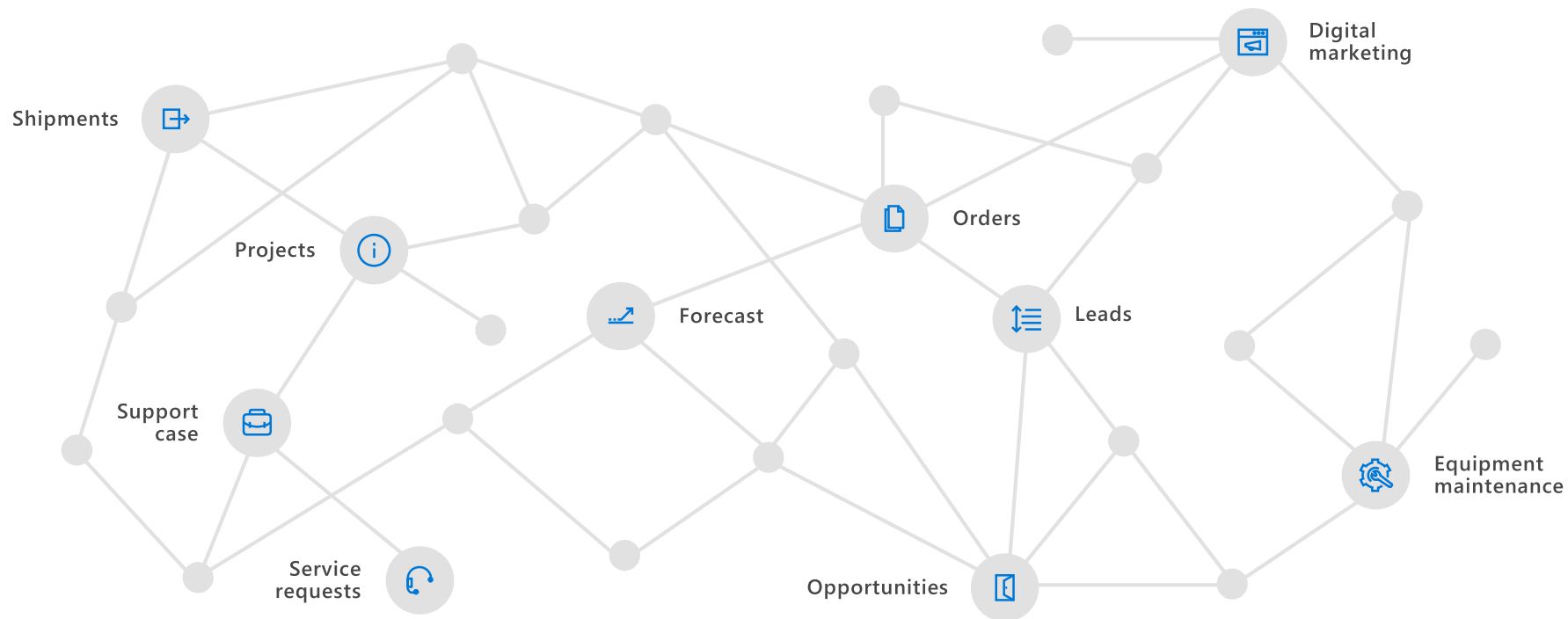
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Common Data Service across all your business

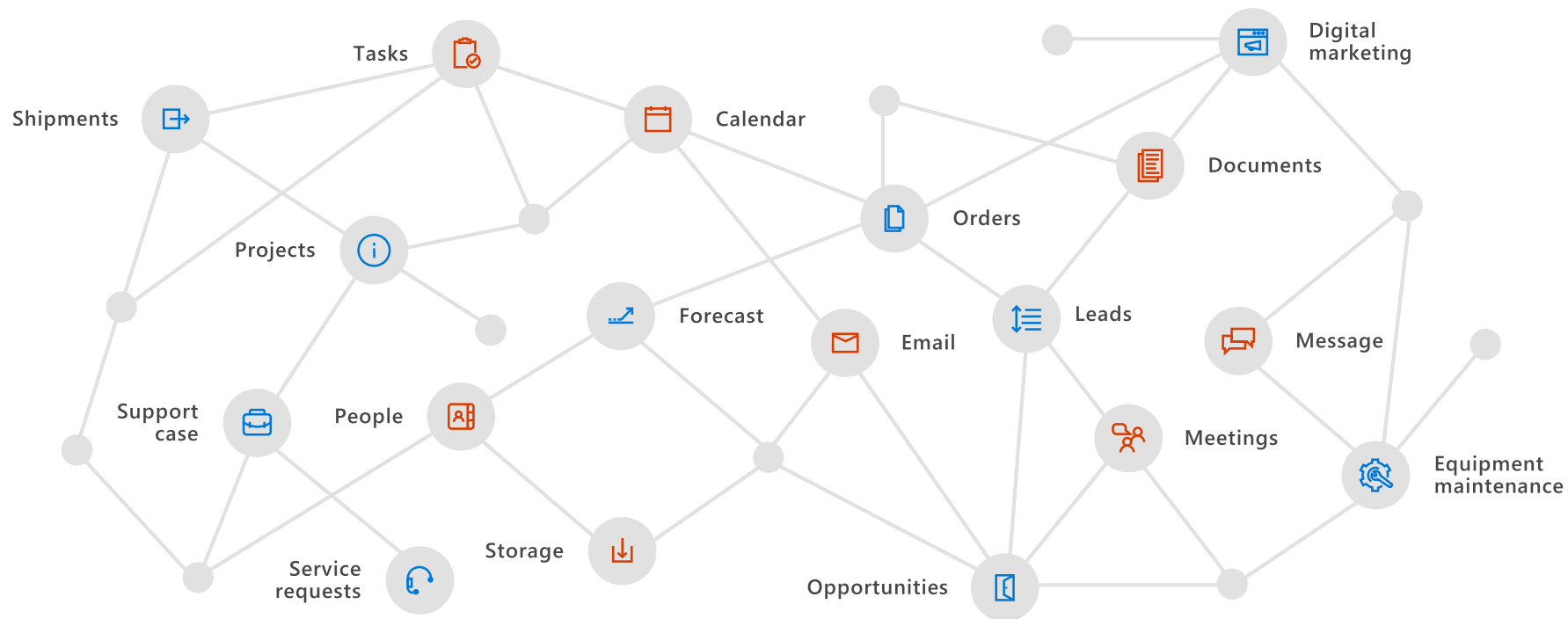
Automate tasks by integrating across applications

Build apps without writing code using PowerApps

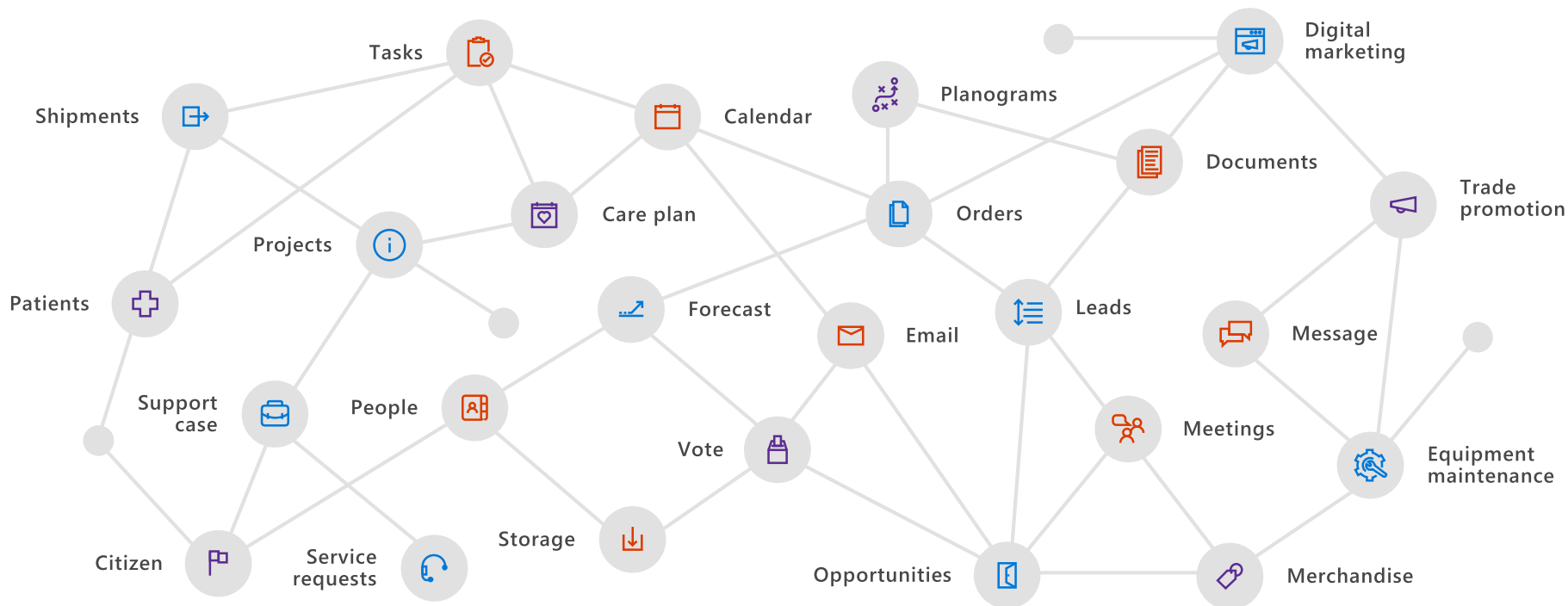
## Common Data Service: Dynamics 365



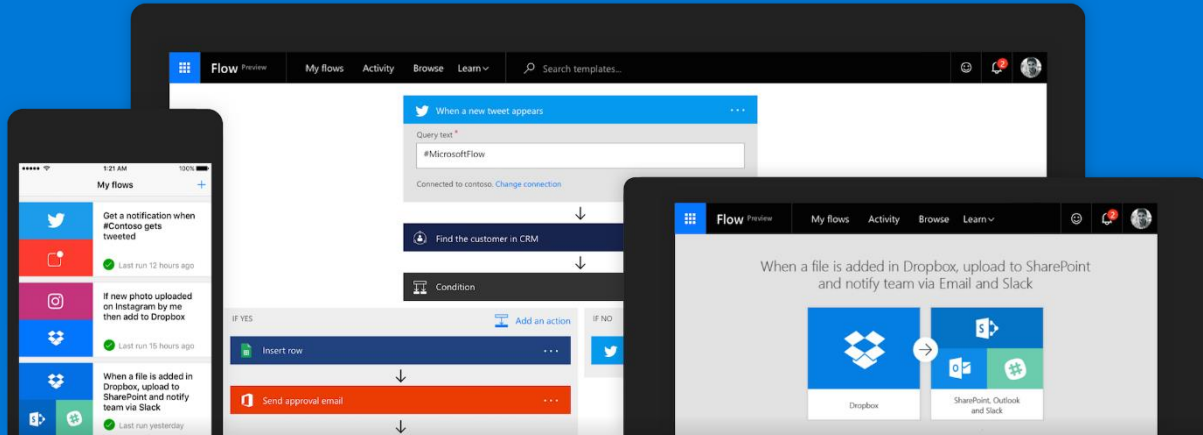
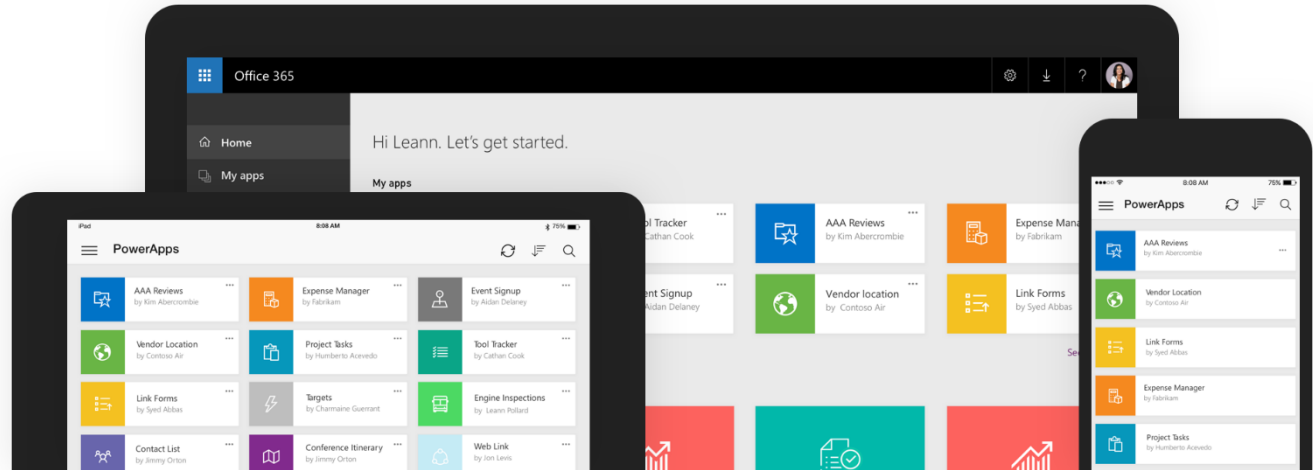
## Common Data Service: Dynamics 365 + Office 365




## Common Data Service: Dynamics 365 + Office 365 + Partner Industry Solutions



# PowerApps



# Microsoft Flow



“The way we see it, a client should be able to: find us online, be identified as a new or existing client, start a pre-planning instrument or make a request, enter all relevant information, find an appointment or an outreach service that suits them, make a booking and have it confirmed, and be seamlessly transferred to one of our client service officers for the face-to-face or videoconference interview. We hope that with this platform, staff will be equipped to provide the best service possible, and know as much as they can about clients before they walk in the door.”

**John Chow, Director, Information Technology, NSW Trustee & Guardian**



# Business apps in the cloud

Purpose-built

Productive

Intelligent

Adaptable





“Integration, ease of access, and strict security protocols around entire business records were crucial factors in our selection of Microsoft technology. The solutions deployed allow us to fulfil a real desire to offer every part of KPMG to each of our clients through a simple and secure platform. Being a large organisation with thousands of users this can sometimes be complex, but this is not the case with Microsoft Dynamics 365.”

**James Hunter, National Managing Partner-Markets and Growth, KPMG**





“It is about using technology to create and return value through knowing, understanding and connecting with our customers and being able to deliver an exceptional customer experience. This is the other way to bank.”

**Robert Aitken, CIO Beyond Bank**



“The days of having a call centre only are over. The omni-channel is far more varied, and Dynamics 365 is giving us the ability to not only create new services for our digital channel, but deliver them with ease.”

**Godfrey Boyd, Program Director at BUPA**

The background is a teal-tinted image of a city skyline. In the foreground, a bridge with a prominent arch spans across a body of water. The water reflects the buildings and the bridge. The overall scene is a panoramic view of a city, likely Pittsburgh, given the distinctive arch of the bridge.

Thank you