



# Lesson learn on Digital Ecosystem

July 2018

# Presentation Summary



Based on my 20+ years in digital, I will share high level lesson learned, some principal and the importance of digital ecosystem.

Digital is part of our daily life, work and continues to evolve rapidly, it impact key areas like manufacturing, IT, sales, marketing and consumer services. It is crucial to create synergie via digital ecosystem, in order to evolve, compete and survive.

## **This presentation will :**

- What is digital ecosystem
- Key layers of ecosystem
- Key trend and tools
- Understand your company needs and digital maturity
- Embrace digital disruption
- Key lessons learned

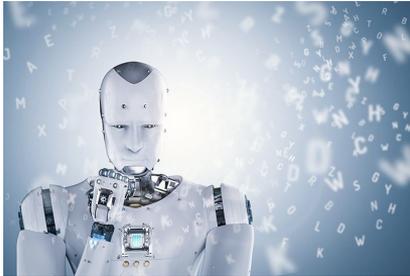
# Introducing myself



More than 25 years in Information technology where the last 22 were focused on Digital strategy, roadmap and solution design/ implementation across multiple industries.

Among key companies, worked for IBM Global Services global team and last Whirlpool Corporate, where I was Sr Manager IT for EMEA digital Ecosystem.

Where at Whirlpool in the last 7 years, created and optimized a digital ecosystem for EMEA to support B2C, B2B,,B2E, Marketing, Brand presence and other components like IOT



Digital continue to evolve every year, with key innovations like Artificial intelligence, Cloud microservices, robotic, blockchain, IOT, Voice command applications, wearables and more

# Reminder of a Natural Ecosystem



**The natural ecosystem, give us vital elements like oxygen**



# What is Digital Ecosystem



Concept started in 2002  
by a group of European  
researchers

A digital ecosystem is **“a distributed, adaptive, open socio-technical system with properties of self-organisation, scalability and sustainability inspired from natural ecosystems.”** from Wikipedia

# Key layers of Digital Ecosystem



Think of the layer toward blocks:

## Beyond the Core Layer:

- Typically Hours or days to apply a change
- 3rd parties external application
- Highly flexible component
- Faster response to business changes

## Extend the Core Layer:

- Typically few weeks to apply a change
- Integration with upper and back end layer
- Rich list of capabilities
- Support Business logic

## Core Layer:

- Typically few Months to apply a change
- Very stable and impact lots of critical applications and capabilities
- Strong governance processes to manage changes

### Beyond the core modules

( response in hours and days)

Simple services integration, mostly 3rd parties external components

### Extend the core modules

( response in weeks)

Standard integration, high flexible, internal components with rich rules, validation and can be personalized per markets

### Core modules

( response in Months)

High integration impact, high stability, internal components rich in processes

**Redundancy**  
**Security**  
**performance**  
**Stability**

**Cloud hosted**  
- Internal App  
- External App  
- Monitoring  
- Scans and Alerts  
- Reports

# Key layers of Digital Ecosystem: B2C view



**Beyond the core Layer: Lightweight**

Flexible environment      Leverage common foundation  
 Agile                              Re-apply across countries, brands, etc  
 ...    ...

Mobile App

Native or Hybrid

Web

UX: Responsive Layout

**Extend the core layer: Mostly Consider Front End code**

Transactional Platforms		Non Transactional Platforms		Social and marketing	
B2B, B2C & B2E VIP , F&F	Marketplace Amazon, eBay ..	Content and News	Brand presence www	Social platforms Facebook, Instagram, LinkedIn, Pinterest, ..	Marketing platforms Salesforce, Adobe, Hubspot, Marketo, ...

**Core layer : Secure, high availability, data integrity, scaled, Integrated with Sharing process, data and integration across all Brands**

PLM	ERP	DAMS	CRM
Product and Services Master Data	Enterprise Resource Planning	Digital Assets Management	Consumer Relationship management

**Redundancy  
Security  
performance  
Stability layer :**  
 Monitoring, Firewall,  
 data and security  
 compliance, scans

Security

Vulnerability Scan

Analytics

PKIs & Dashboard  
Application and  
web Analytics

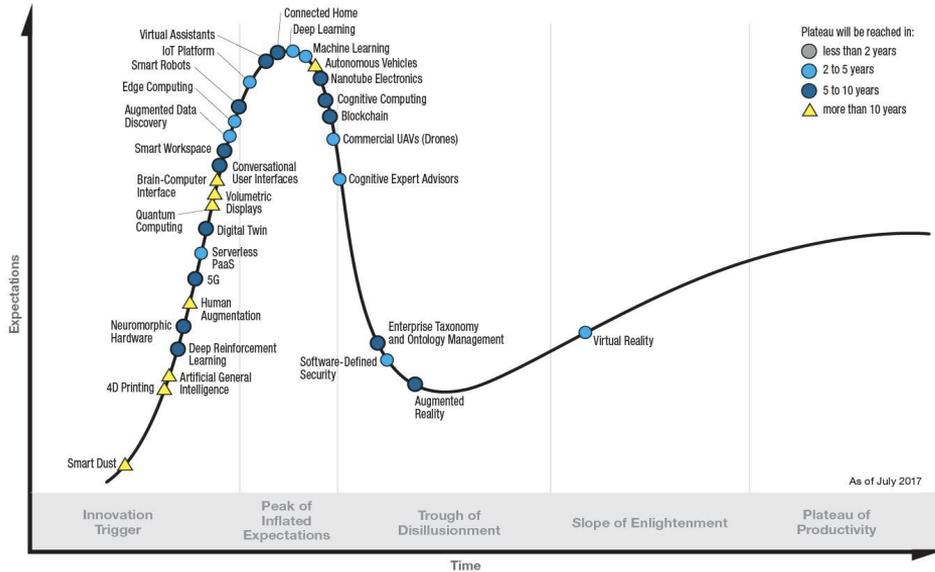
Compliance

Security & Access  
Data Privacy  
(GDPR)

# Key Trends from Gartner



## Gartner Hype Cycle for Emerging Technologies, 2017

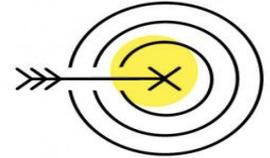


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## Top 10 Strategic Technology Trends for 2018



### Intelligent



AI Foundations



Intelligent Apps and Analytics



Intelligent Things



### Digital



Digital Twins



Cloud to the Edge



Conversational Platform



Immersive Experience



### Mesh



Blockchain



Event-Driven



Continuous Adaptive Risk and Trust

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# Key Trends and Technologies



## AN AUTOMOTIVE REVOLUTION IS COMING AND THE IMPACTS WILL BE HUGE.

## DRIVERLESS CARS

## FREE POWER

## FREE ELECTRIC POWER SET TO SHAKE UP THE STATUS QUO

### SET TO REDUCE

- Lives Saved / Year** ACCIDENTS
- INSURANCE
- PUBLIC SECTOR COSTS
- FUEL DEMAND

Industries will need to adapt or fade away:

- TAXI
- PARKING LOTS
- FUEL STATIONS
- SUPERMARKETS
- DEALERSHIP SUBSCRIPTION
- CAR DEALERS
- MAPPING

HERE BY 2020

## TECHNOLOGY & LIFE SCIENCES MEGA TRENDS TO WATCH

SOLAR CAPACITY ABOUT TO EXPLODE **6400 GW**

**200 GW**



Battery Technology Rapidly Improving



Utilization of water Increasing

## CYBER CASH & MOBILE PAYMENTS



The new normal yields Incredible Fintech Possibilities

FINTECH



CYBERCASH

## CLOUD COMPUTING



Closed systems getting integrated via Cloud Connections



Shift in Decision Making to Business Units



IT MANAGER



LINE OF BUSINESS MANAGERS

## THE INTERNET OF THINGS



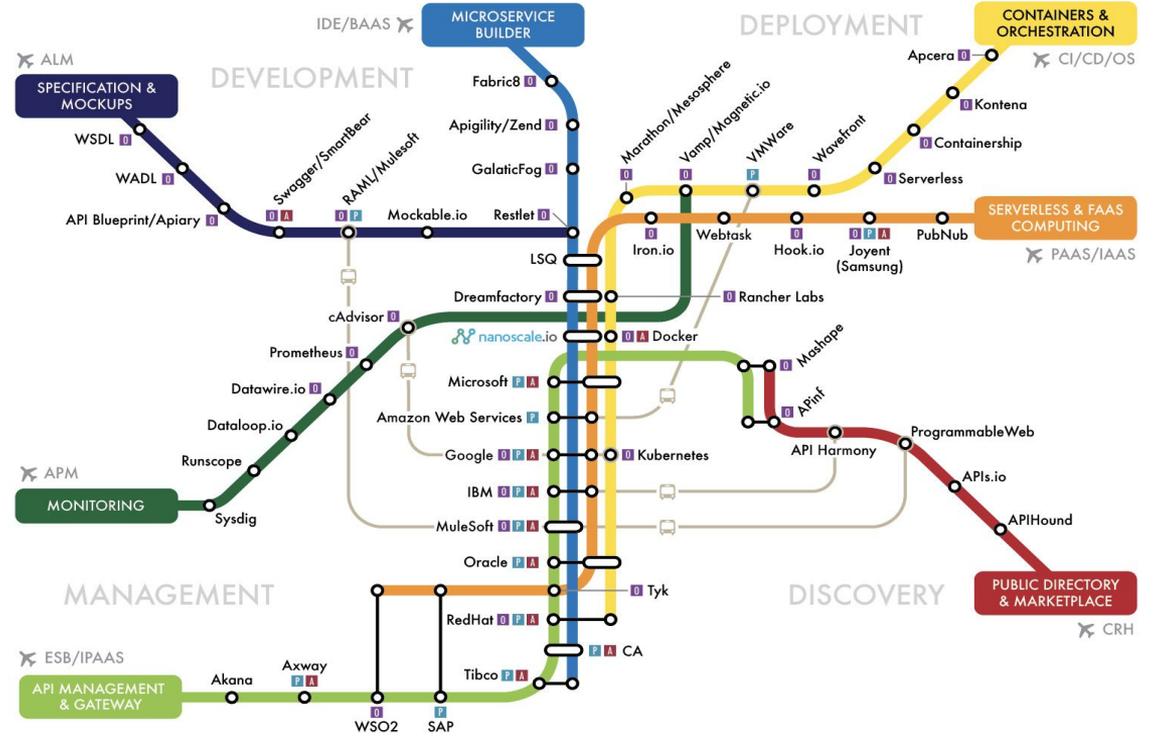
Incredible Engineering Opportunities

# Some Tools to consider



 nanoscale.io

## MICROSERVICES ECOSYSTEM TRANSIT MAP

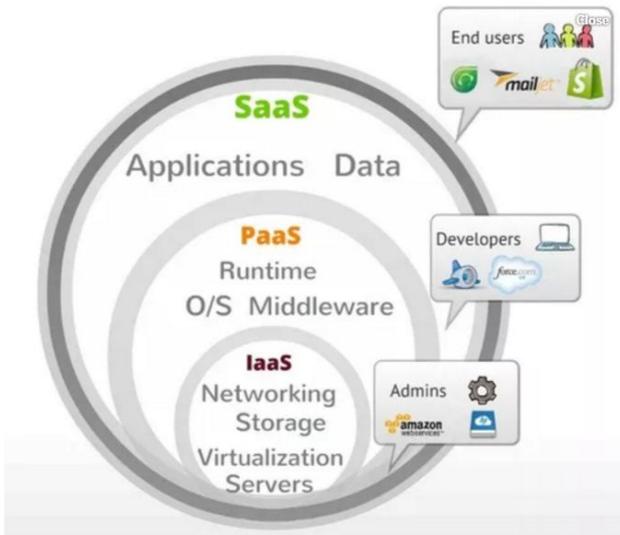


Avoid confusion  
Get SME help

Avoid frustration  
Keep focus on needs



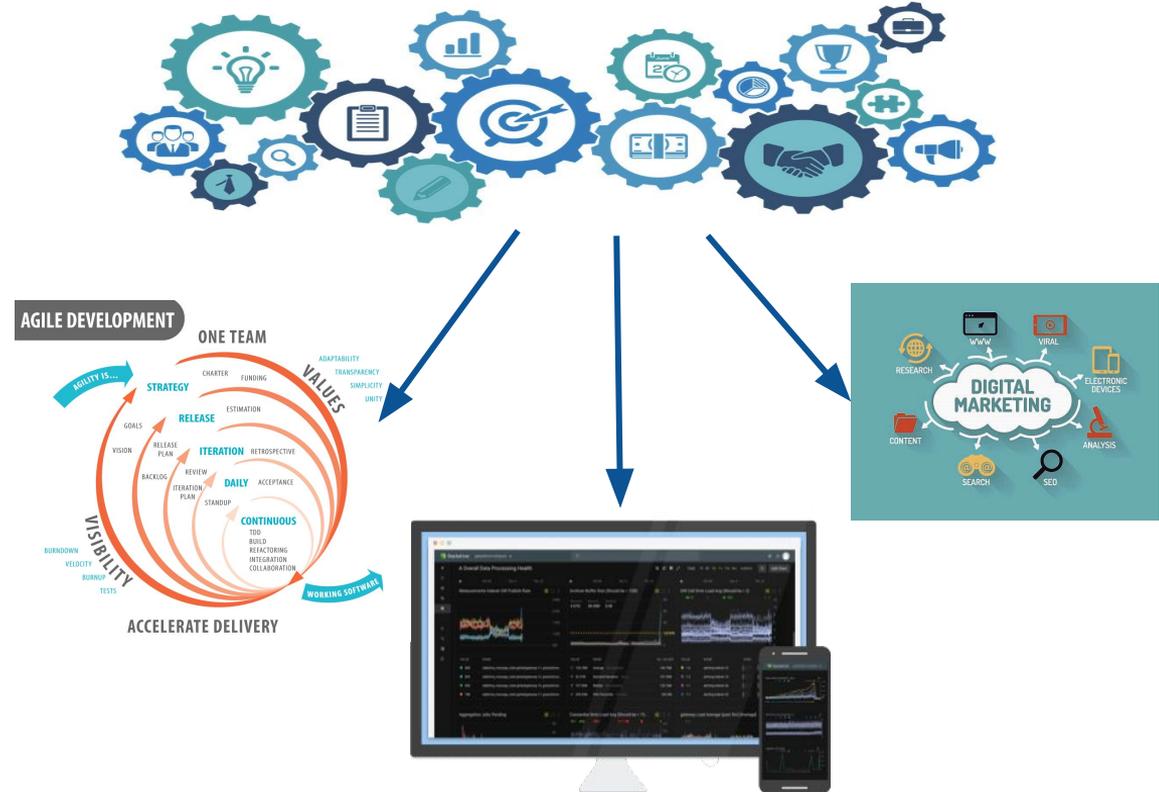
# Key simple Tool approach



Look at what can be move to the cloud to give you more flexibility.

What fits your business model:  
Private, share or hybrid Cloud.

Look at Microservices before creating or buying applications



# Understand your company needs and digital maturity



## Fashionistas

- Many sexy digital applications
- No vision of gaining synergies
- Motivated by digital change – But the strategy is not founded on how to maximise business benefits
- Maturity differences between corporate HQ, local subsidiaries and business units

## Digital Beginners

- Simple digital capabilities
- Unaware of opportunities
- Small investments
- No effective transformation management in place



## Digirati

- Truly understands how to drive value with digital transformation
- Combine a transformative vision, careful governance and engagement with sufficient investments in new opportunities
- Digital culture is the lever for fast exploitation of new opportunities
- Continuously advantage their digital competitive advantage

## Conservatives

- Favour prudence over innovation
- Acknowledge the need for a strong unifying vision, governance and engagement
- Sceptical about the value of new digital trends
- Often miss valuable opportunities

Based on your industry and company needs, review what is your current Digital maturity vs what your goals or vision.

Then you can start building a digital strategy that will lead to a roadmap

# Key items to consider for digital maturity



Must consider all the company groups and division that are needed for a strong digital ecosystem:

- HR support for people training and digital skills
- New collaborative digital tools with IT support
- Move to Agile development
- Move to Cloud services
- Automate and simplify processes
- Headless commerce and content
- Strong integration between platforms of ecosystem
- Keep it flexible and easy for evolution
- Online documentation and training
- Device accessible tools (Mobile, Desktop, Tablet)
- Strong monitoring tools and KPIs

# Some statistics on digital transformation



Digital ecosystem touches so many layers of the company.

In reality low % of company have good digital ecosystem implementation.

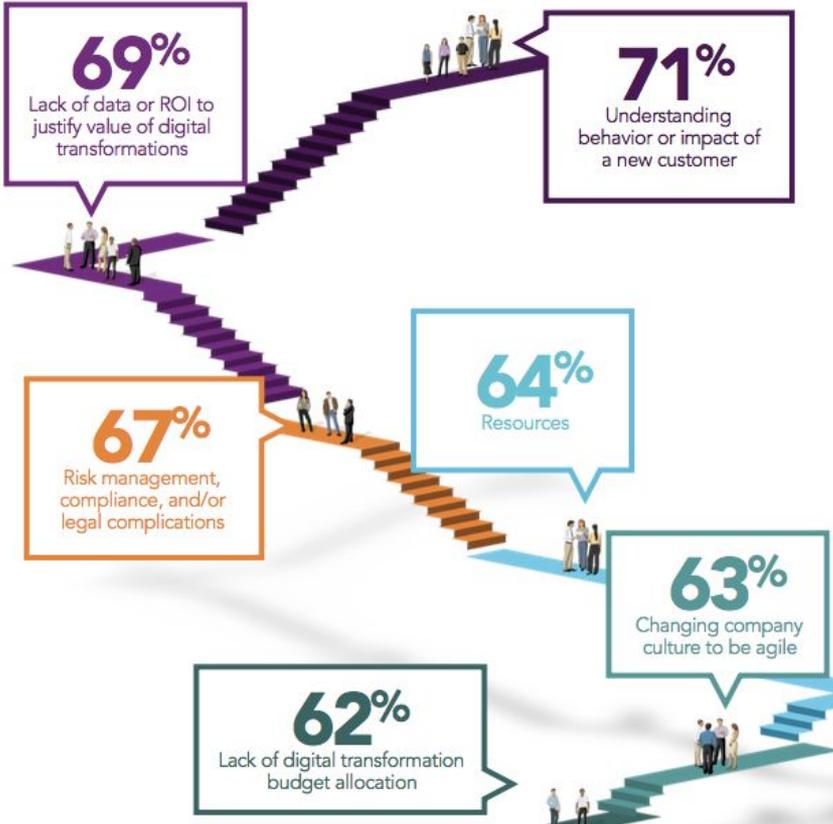
Technology tools exist, challenges remains on priorities, strategy, skills and organisation.

The benefits are big and proven

# Some statistics on digital transformation adoption



Percentage of companies saying different types of digital marketing initiatives are challenging ([source](#))



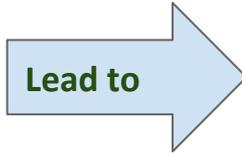
## Adoption stats:

- [26%](#) of organizations are 'completely ready' to execute digital strategies
- Only [10%](#) of companies describe themselves as fully digital
- [47%](#) of companies haven't started to embark on Digital Transformation
- [7%](#) of European companies rate their digital maturity as 'advanced', while 19% of North American companies do

## Challenges Stats:

- [39%](#) say implementing a digital strategy across the organization is their biggest Digital Transformation challenge
- [43%](#) say developing new business models and strategies to increase connectivity and engagement is their biggest Digital Transformation challenge
- [Many executives](#) see too many competing priorities (43%), the lack of an overall strategy (33%), security concerns and insufficient technical skills (25%), and a lack of organizational agility (25%) as the top five barriers keeping their organization from taking advantage of digital trends
- [29%](#) of businesses currently see 'metrics and measurements' as critical to their digital success

# Embrace digital disruption



Can not be avoided

Part of digital evolution

Great impact on our daily life

Bring Innovation and new services

New business value and market share

Generate new need for consumers

# Digital disruption that already happened



World's largest taxi company **owns no taxis**

▶ UBER



Largest accommodation provider **owns no real estate**

▶ AIRBNB



Largest phone companies **own no telco infra**

▶ SKYPE / WECHAT



World's most valuable retailer has **no inventory**

▶ ALIBABA



Most popular media owner **creates no content**

▶ FACEBOOK



Fastest growing banks have **no actual money**

▶ SOCIETY ONE



World's largest movie house owns **no cinemas**

▶ NETFLIX



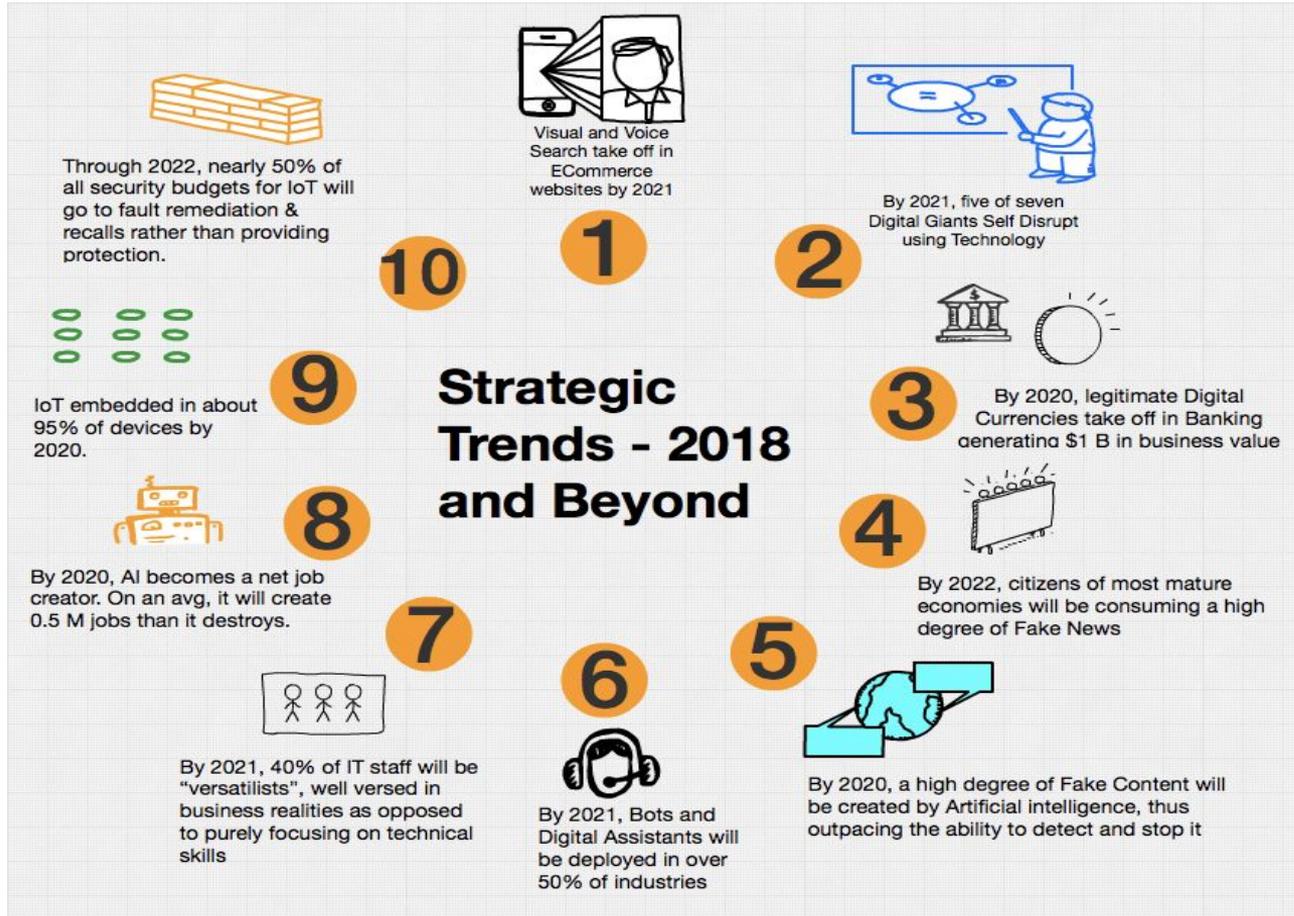
Largest software vendors **don't write the apps**

▶ APPLE / GOOGLE

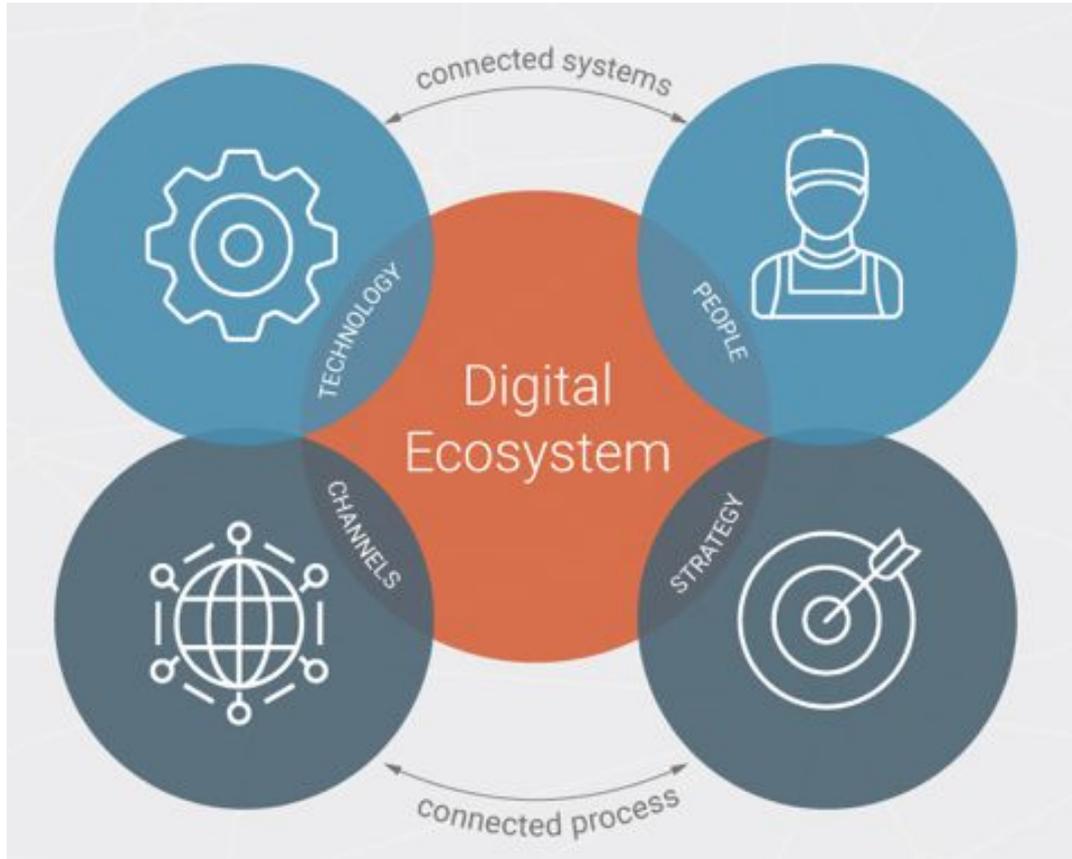
# Ongoing digital disruption



# Digital disruption trend of 2018 and beyond



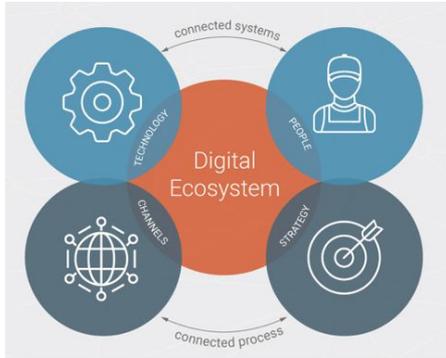
# Key lesson learned



The final slides are about sharing lesson learned on the follow 4 key items:

- People & organisation
- Strategy
- Channels
- Technology

# Key lesson learned - People and organisation

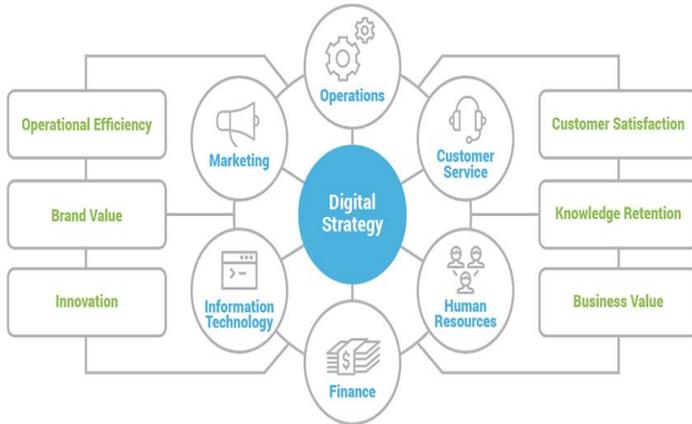
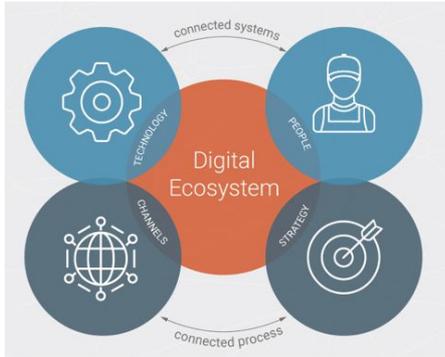


People and organisation:

- Evaluate and secure SME digital skills
- Invest internal training to keep intellectual capital
- Secure dedicated team for digital ecosystem that will support multiple projects
- Secure executive sponsors for multi year roadmap, priorities and budget

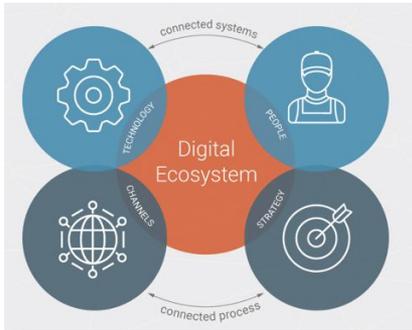


# Key lesson learned - Strategy



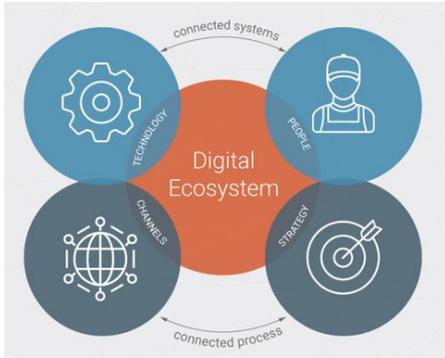
- Plan Digital strategy to support company vision and goals
- Get executive support across division toward joint implementation of the strategy
- Secure digital Lead team to secure reusability or digital components of the ecosystem
- Review and adjust yearly the digital strategy with digital disruption and innovations
- Secure proper partners, do not plan to do everything with 1 partners or by yourself

# Key lesson learned - channels



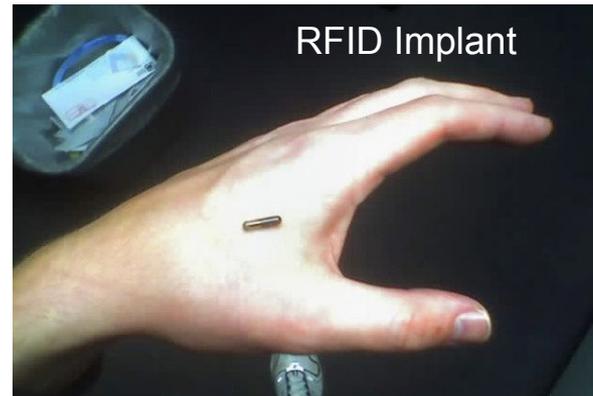
- Plan to be omnichannel and cross channel
- Review customer journey
- Implement same Tags for analytics
- Properly test and monitor main channel used
- Be receptive on new channels like voice assistant and automobile industry

# Key lesson learned - Technology



- Secure technology that fit your current maturity
- Monitor entire digital ecosystem, specially integration key points of failures
- Establish KPIs and dashboard
- Keep Digital ecosystem flexible and follow integration standards (APIs)
- Move as much as possible to Cloud solutions, service and infrastructure
- Make sure each components of ecosystem have fault tolerance and failover capabilities

# Digital ecosystem image take away



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# References



- [Wikipedia description of Digital Ecosystem](#)
- [Forbes.com article in Dec 2016 about creating a digital ecosystem that benefits your business](#)
- [Boardview digital transformation statistics](#)
- [Pat Research top 13 marketing cloud platforms](#)
- [Gartner Trends and willfull disruption](#)
- [Top 10 trends from Gartner in 2018](#)