





“Right now, a **Masai warrior** on a mobile phone in the middle of Kenya has better mobile communications than the **U.S. president** did 25 years ago.

If he’s on a smart phone using Google, he has access to more information than the U.S. president did just 15 years ago.”

*Peter Diamandis, author of  
“Abundance”*



# Processing Power | Today's smartphones are what used to be considered supercomputers

1969



1

=

2



Apollo Guidance Computer

Nintendo Entertainment Systems



CPU Speed  
RAM



1985



1

=

1



Cray-2 Supercomputer

Apple iPhone 4



GFLOPS  
CPU Speed





# Processing Power | Today's supercomputers

2015



Samsung Galaxy S6

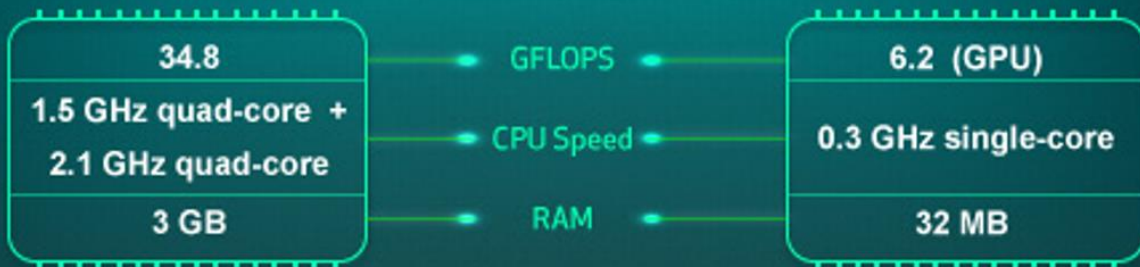
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5

2000



PlayStation 2s



2015



=

2

2010



\*Speculative figures

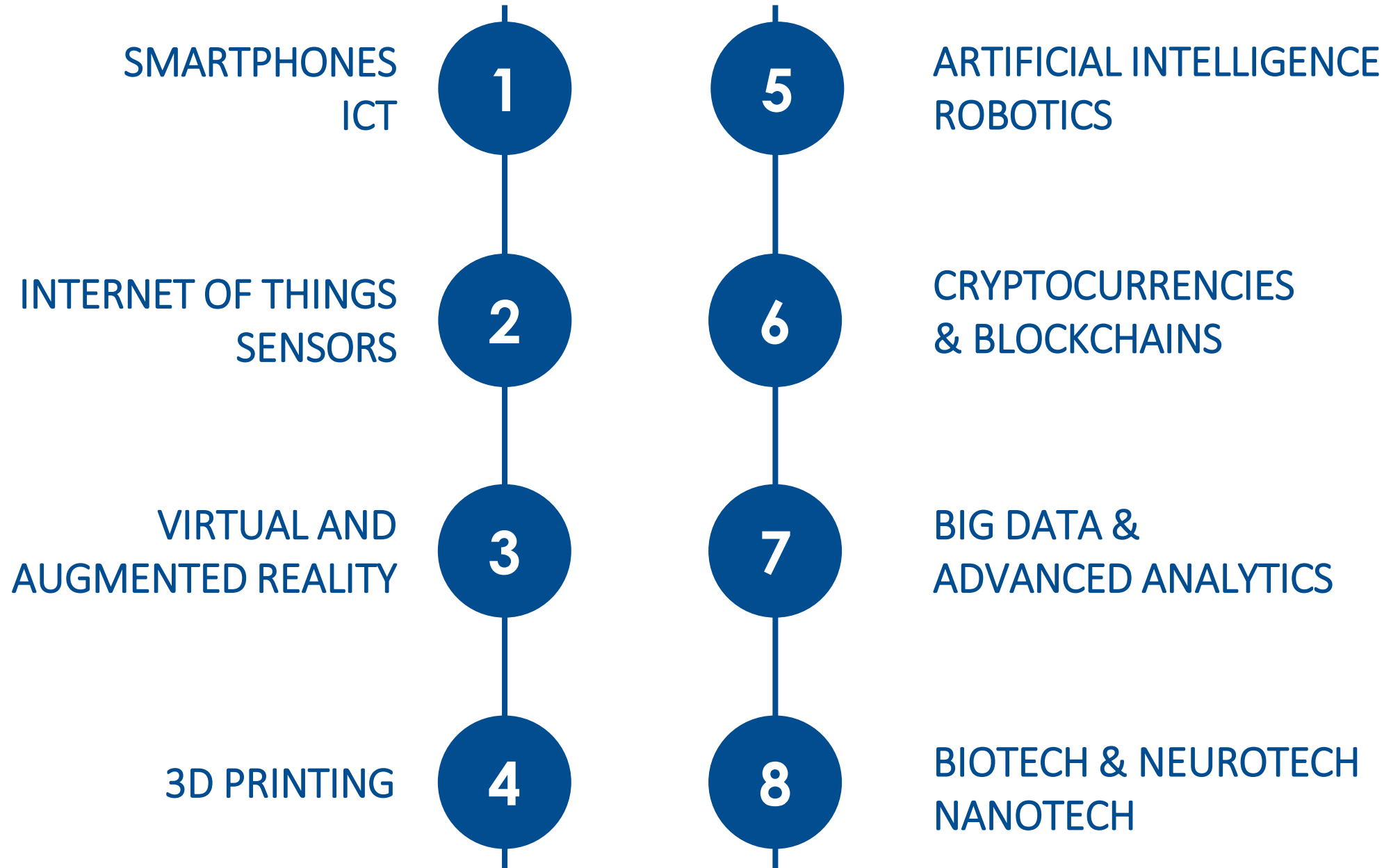
# TECHNOLOGY

A man in a dark suit stands with his back to the camera on a rooftop, looking out over a dense city skyline under a cloudy sky. The entire image has a purple tint. A dark horizontal band across the middle contains text.

*“The strongest force propelling human progress has been the swift advance and wide diffusion of technology.”*

*The Economist*

# 8 exciting technologies that will change banking (and the world)





1

**Mobile Devices**

**Pocket Supercomputers**



# 2005





# 2013

A futuristic female robot head with a human-like face and mechanical components. The robot has a white, smooth skin-like surface on its face, with large, expressive eyes. The back of its head and neck are exposed, showing intricate mechanical parts, including gears, pipes, and a microphone. The background is a soft, light blue gradient.

# ARTIFICIAL INTELLIGENCE

*By 2020, the average person will have more conversations with bots than with their spouse*

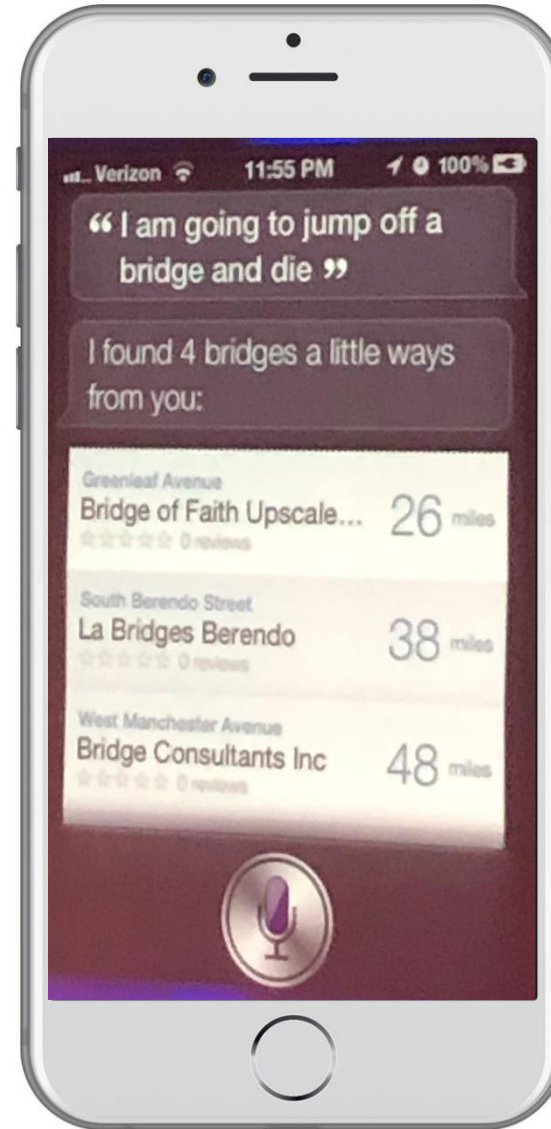
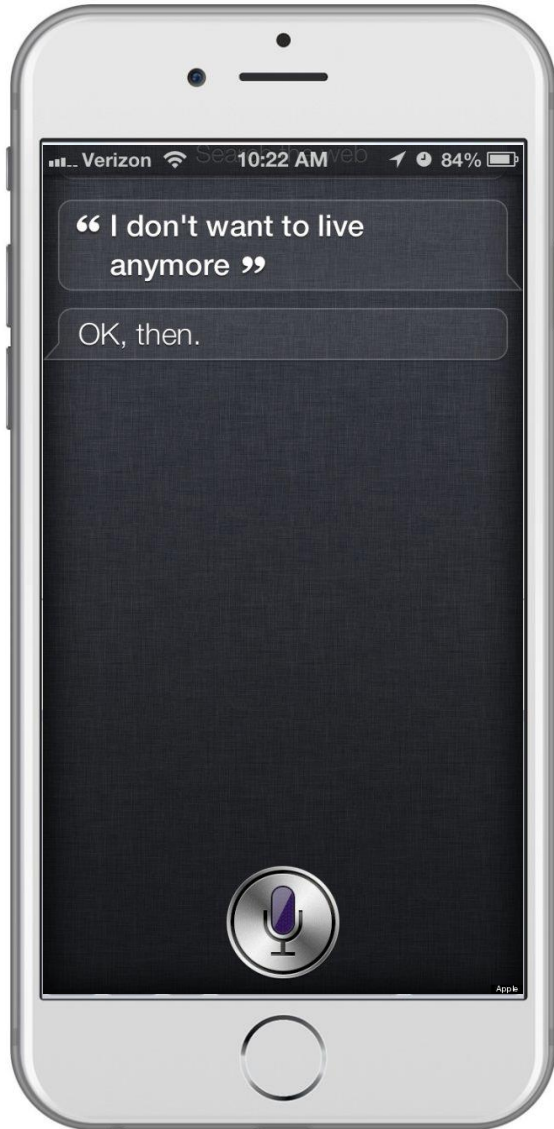
*Gartner Assumption, Nov. 2016*



# Apple Siri, the early days...

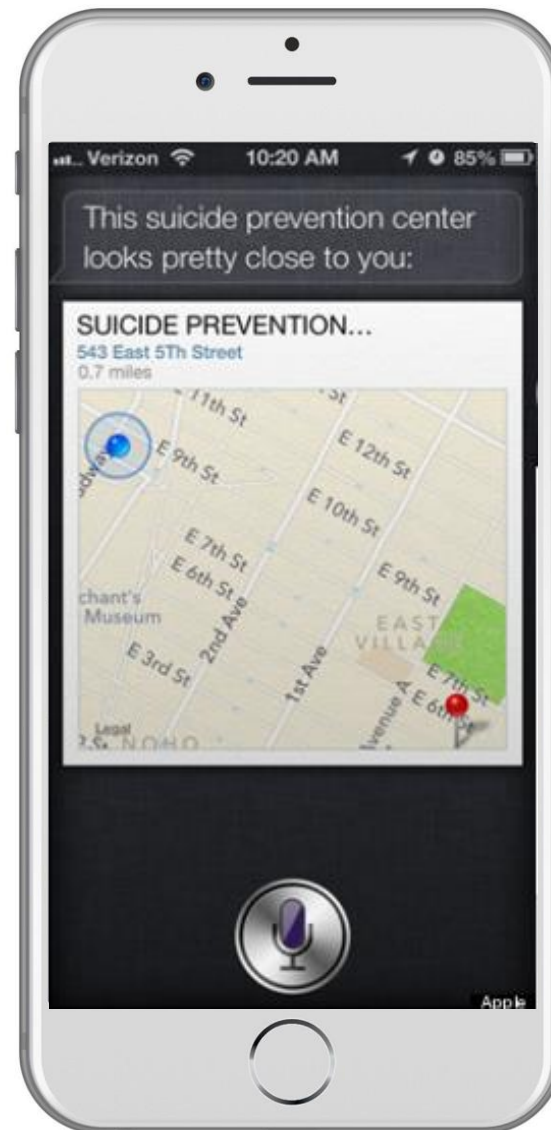


# Apple Siri, the early days...





# Apple Siri, mature version...



# Artificial Intelligence | Artistic Style Transfer



+



=

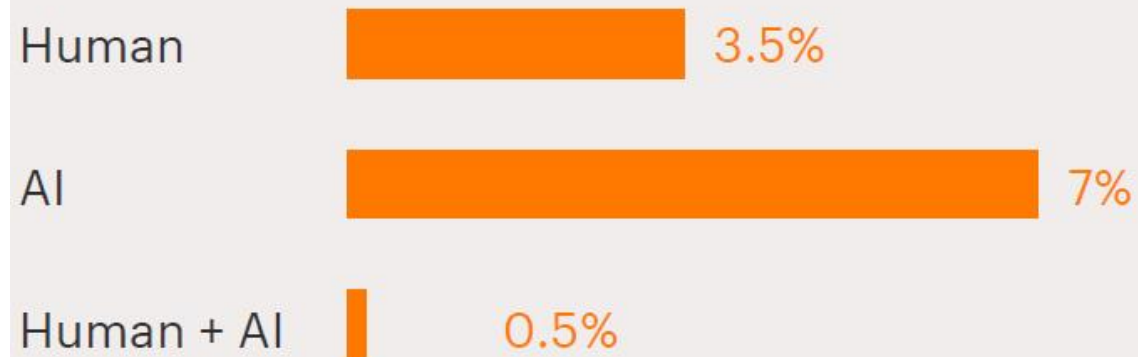




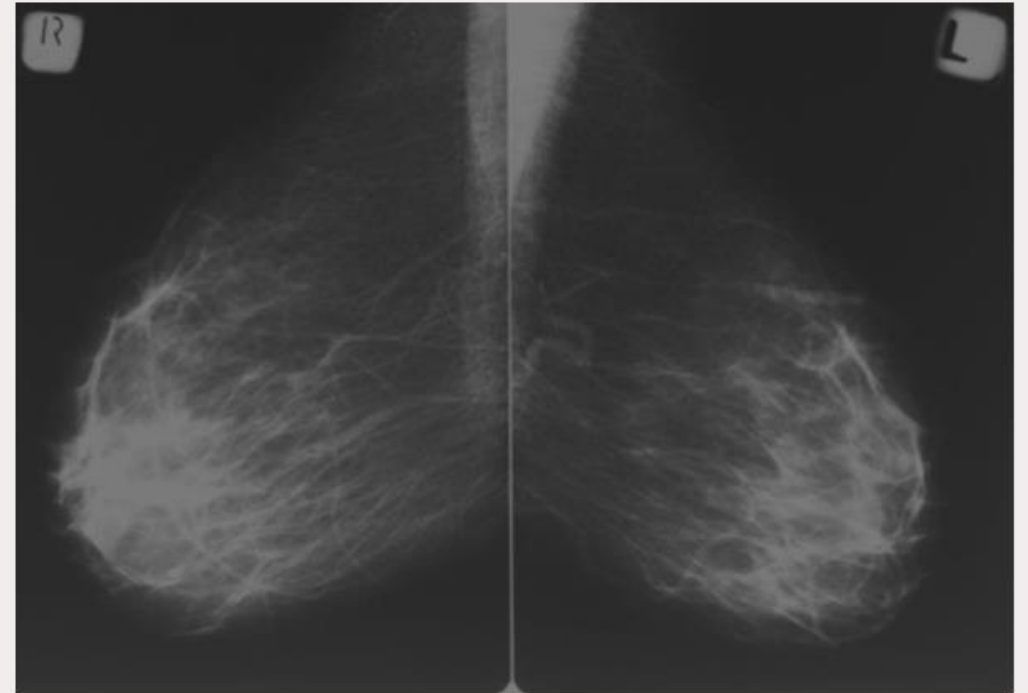
# Artificial Intelligence in Medical Diagnosis

The smartest thing on the planet today is neither man nor machine; it's the combination of the two

## Cancer diagnostic errors:



Combining artificial intelligence with a human pathologist can boost the accuracy of cancer diagnosis to nearly 100%



Source: <https://www.livescience.com/55145-ai-boosts-cancer-screen-accuracy.html> via Daniela Rus MIT CSAIL



# GOOGLE AUTONOMOUS FLEET

Google™

self-driving car

APR California 2015  
6VVA094  
DMV.CA.GOV

RX 450h

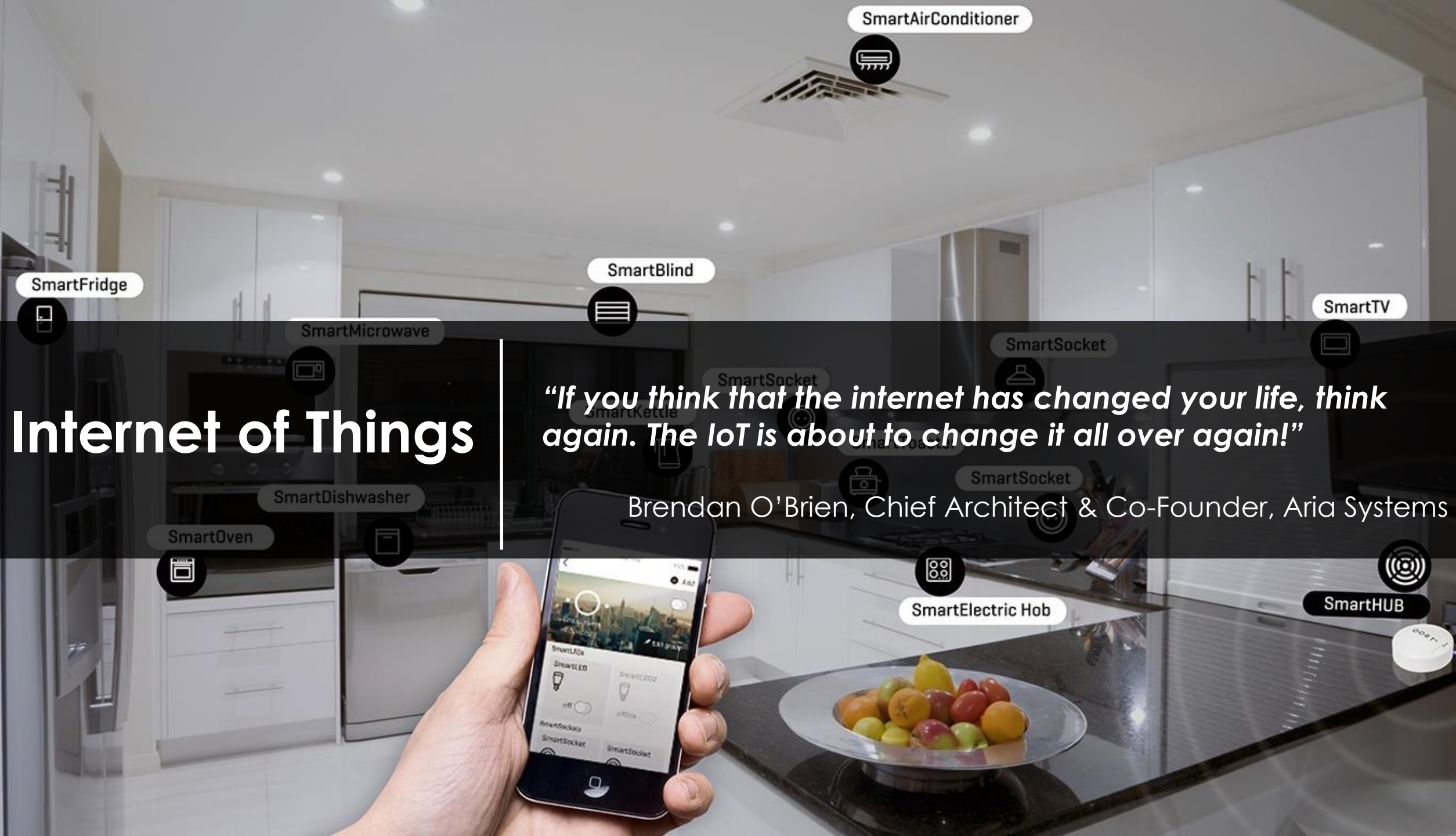
Computer  
History  
Museum



# Internet of Things

*"If you think that the internet has changed your life, think again. The IoT is about to change it all over again!"*

Brendan O'Brien, Chief Architect & Co-Founder, Aria Systems



# The Internet of Things is on our body

 WATCH

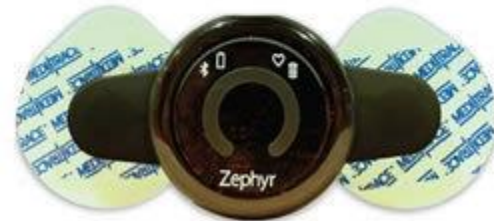




# The Internet of Things is in our homes



# The human body is the next computer interface







# BLOCKCHAIN

*By 2022, a blockchain-based business will be worth \$10 billion*

*Gartner Prediction, Nov 2016*

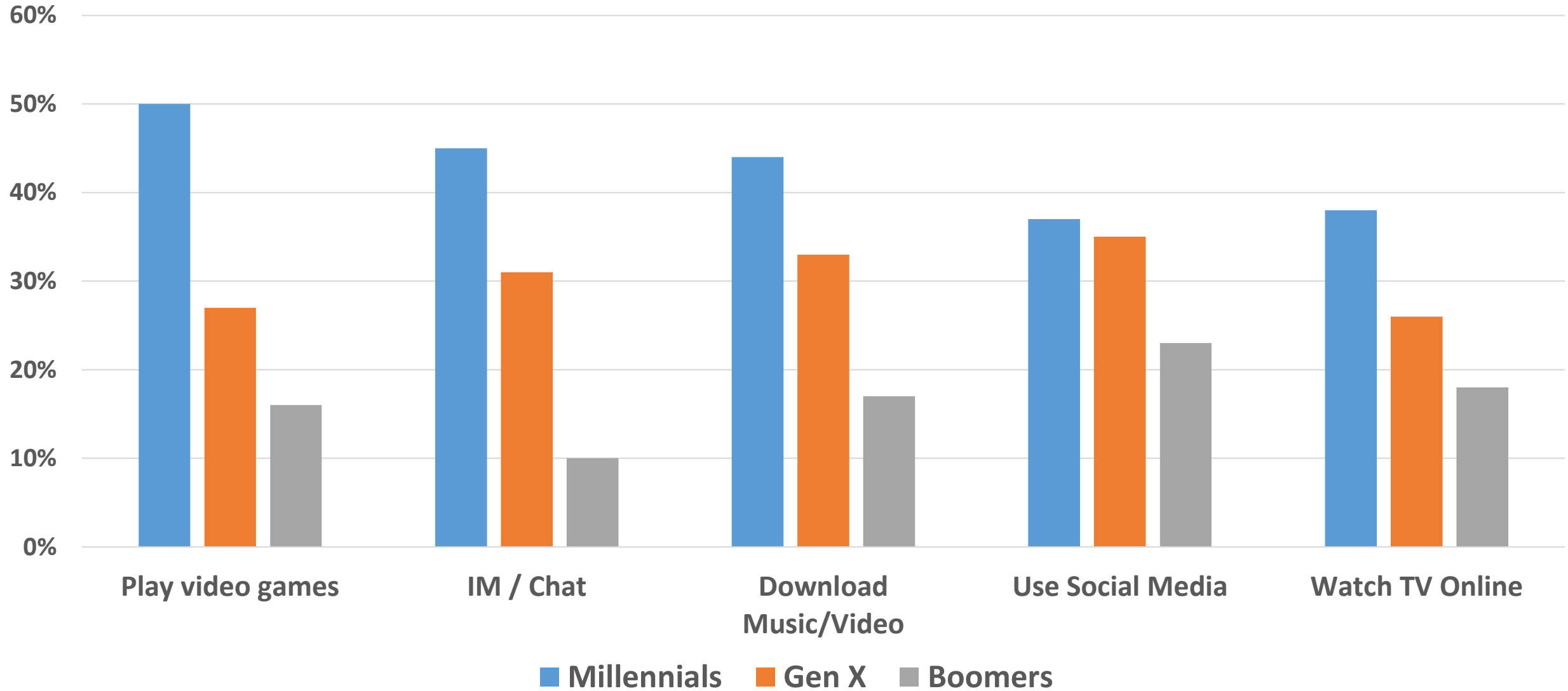


A photograph of four young adults standing in a row against a rustic stone wall. From left to right: a woman with dark hair in a ponytail wearing a light green tank top and jeans, holding a smartphone; a man with dark hair wearing a white and grey striped long-sleeve shirt and jeans, holding a smartphone; a woman with blonde hair wearing a grey short-sleeve top and grey pants, holding a smartphone; and a man with dark hair wearing a brown V-neck t-shirt and jeans, holding a smartphone. A semi-transparent dark grey horizontal band is overlaid across the middle of the image, containing the text 'The Millennials' in white.

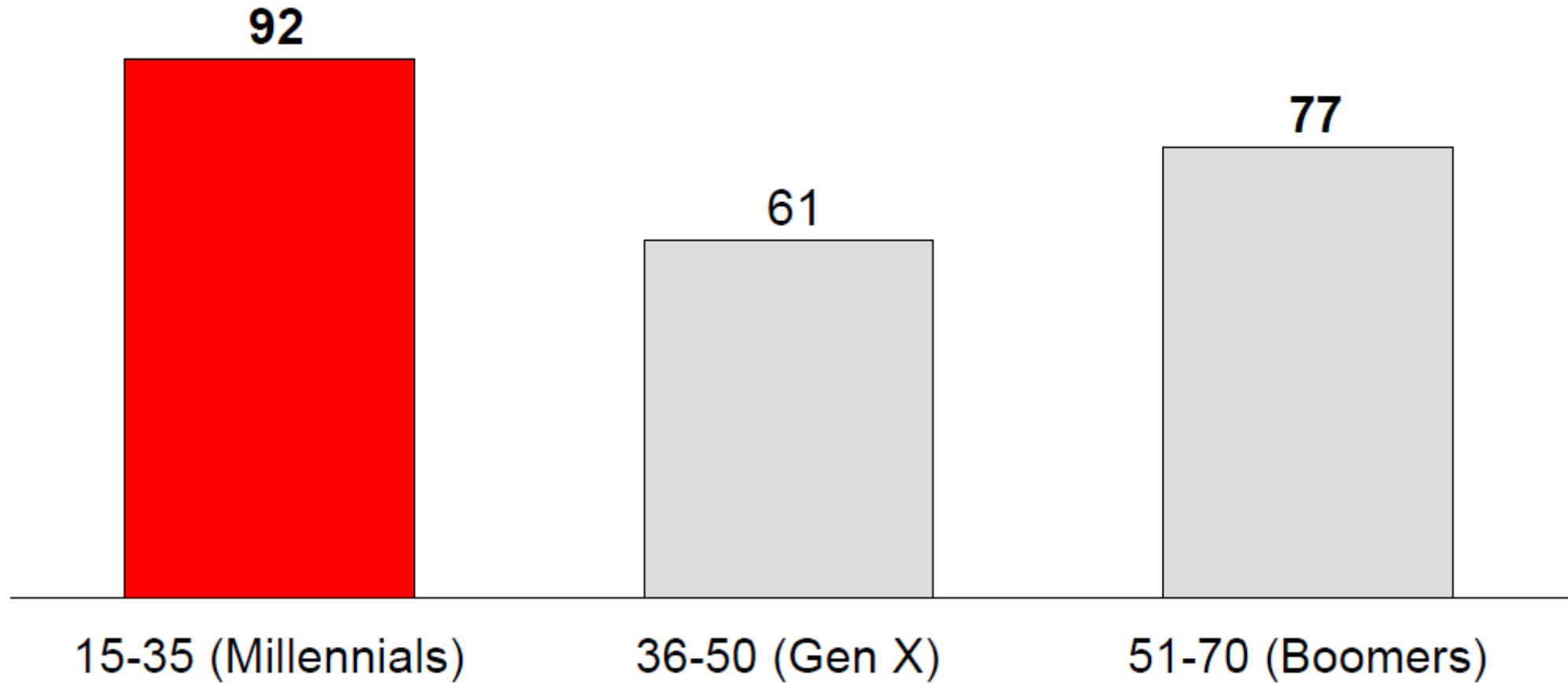
# The Millennials



# Millennials ❤️ technology

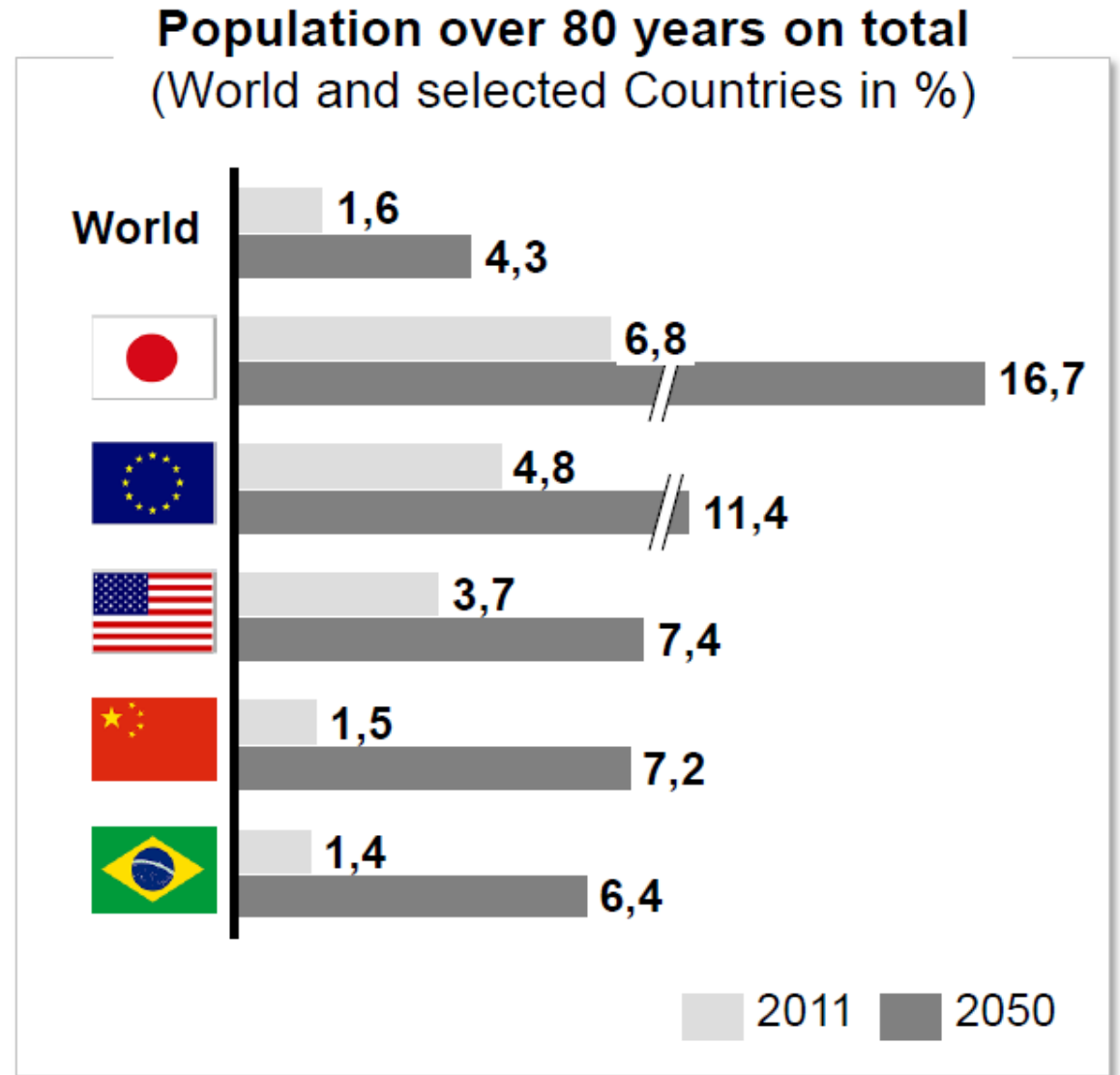
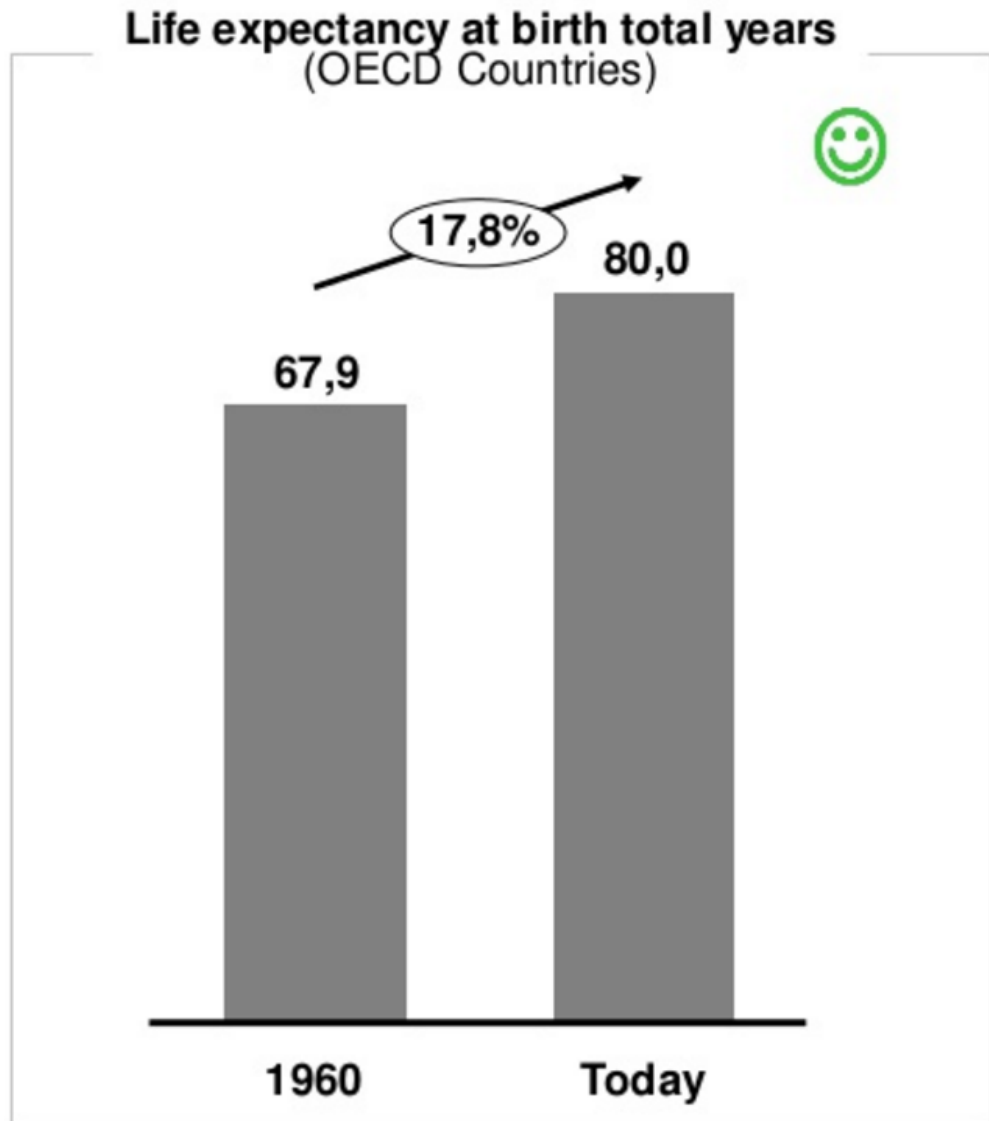


# Millennials: the largest generation in history





# Aging population...



# Millennials and Banking

**53%**

don't think their bank offers  
anything different than others

**1 in 3**

are open to **switching** banks  
in the next 90 days

**33%**

believe they won't need  
a bank at all



# DIGITAL TRANSFORMATION

*“It’s no longer the big beating the small, but the fast beating the slow.”*

Eric Pearson, CIO, International Hotel Group (IHG)

# Digital Transformation...

**...is like teenage sex:**

- Everyone talks about it
- Nobody really knows how to do it
- Everyone thinks that everyone else is already doing it
- So, everyone claims they're doing it

*Dan Ariely (paraphrased)*



# New business models disintermediate existing ones



U B E R

Largest taxi company / no vehicles



Most popular media owner / no content



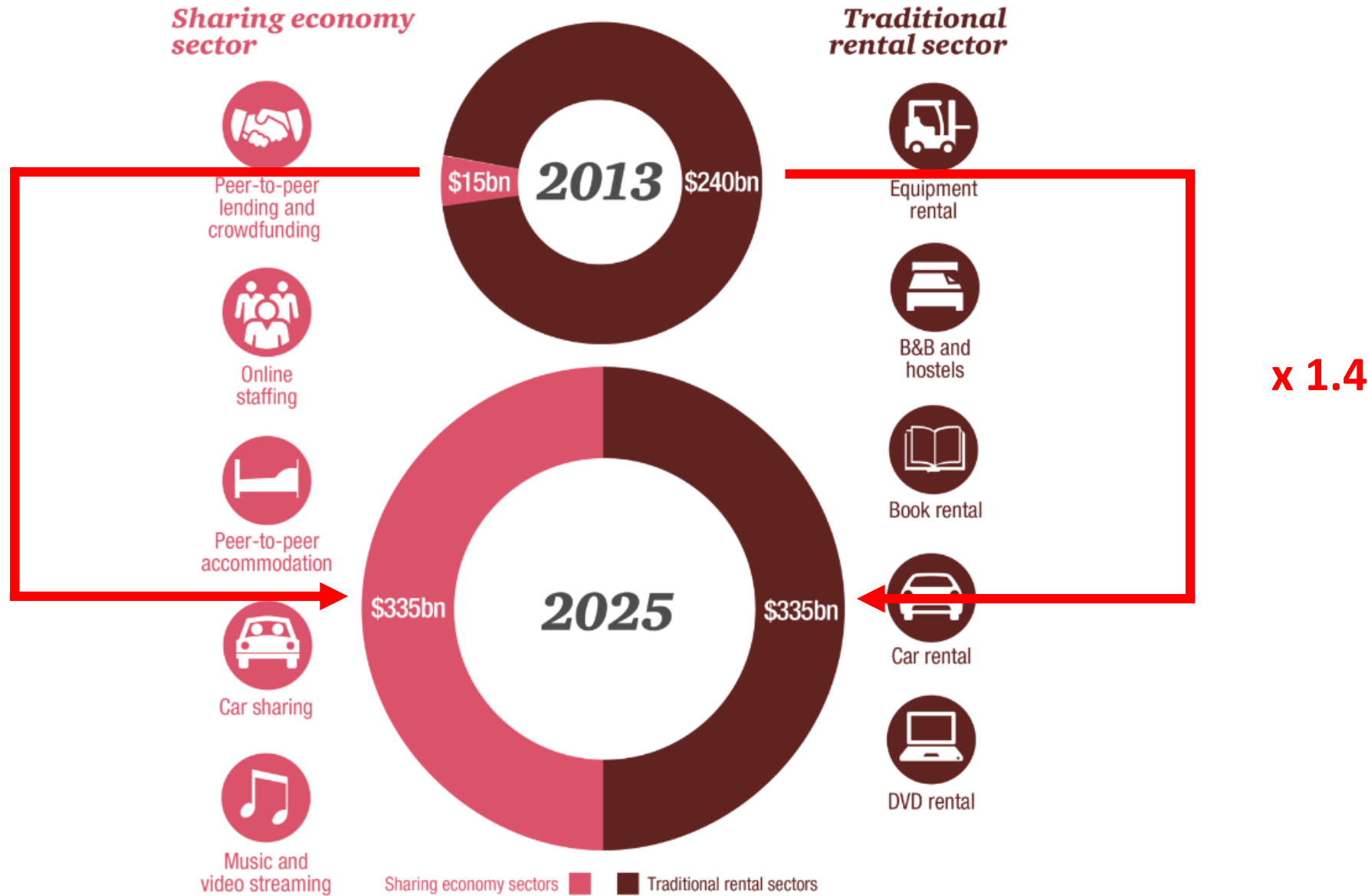
Most valuable retailer / no inventory



Largest accommodation provider / no real estate

# The sharing economy (+ the reputation economy)

x 22.3



# The economics of Digital

Growth rates will plummet. To survive, companies must be first movers.

Percentage-point change in 3-year revenue growth



You've grown comfortable with a steady state of revenue growth



# A perfect storm enables the emergence of startups

**Customer Demand**

**Accelerated Pace of  
Technological Evolution**

**Barriers of Entry**

**VC Funding**

# Startups jump out of every corner

## European unicorns landscape

	Realised unicorns: 110	Unrealised unicorns: 50
The UK (62)		<p><b>New in 2018/2019</b></p>
Germany (27)		
Netherlands (13)		
Sweden (11)		
Rest of Europe (47)		

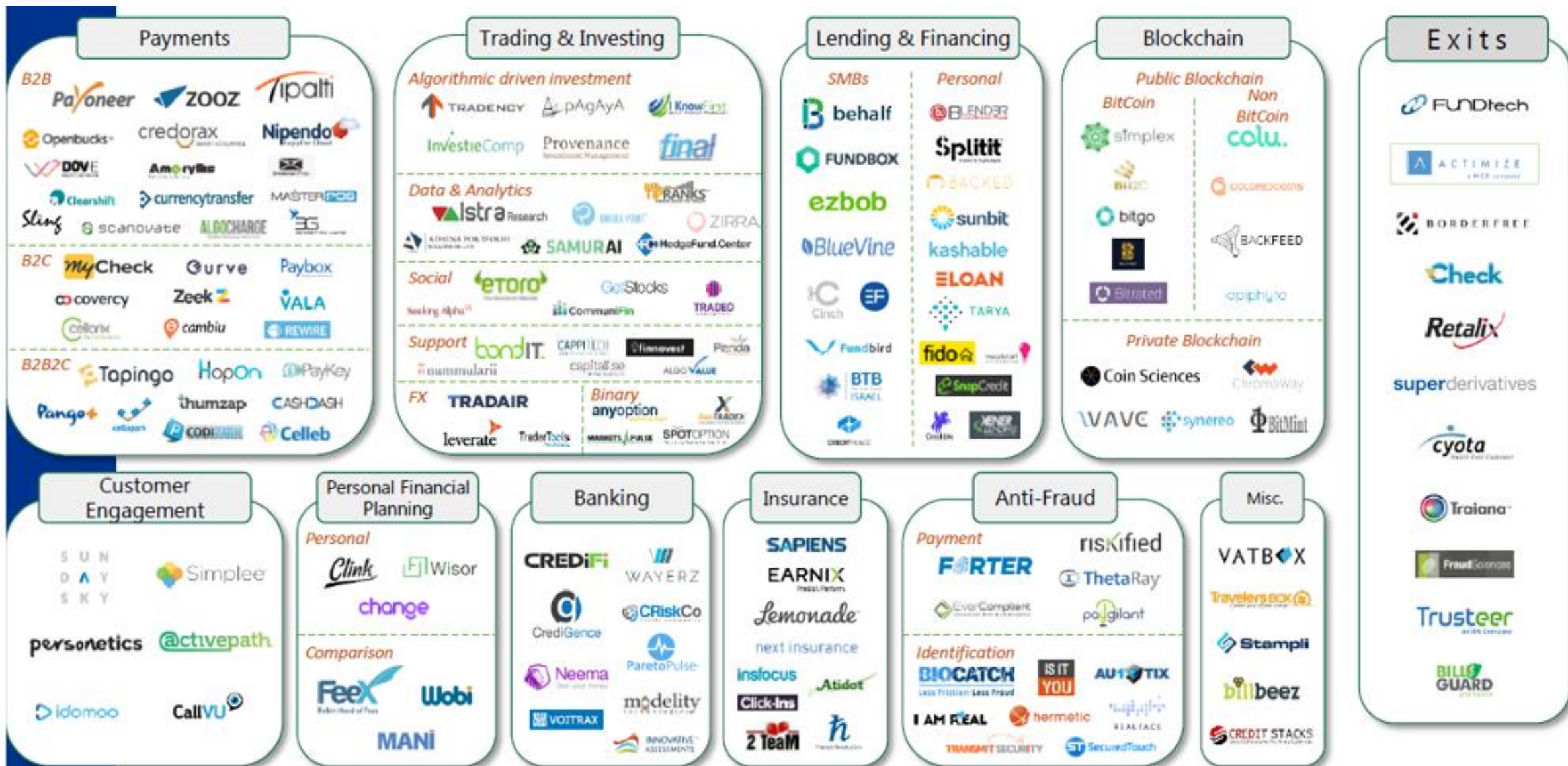
# FinTech startups jump out of every corner



Venture Scanner



# 450+ FinTech startups in Israel alone



# New banks enter the market: the Challenger Banks

Aldermore

N26

TANDEM

PCFBANK

 Tinkoff Bank

 fidor  
BANK

 Hello  
bank!  
by BNL  
GRUPPO BNP PARIBAS

  
monzo

 imagin  
bank

 Atom bank

 CheBanca!  
Gruppo Mediobanca

 widiba

 monese

Tide

 SIMPLE

 one  
Savings Bank

Revolut

 OakNorth  
Bank

 BABB  
EVERYONE IS A BANK  
BANK ACCOUNT BASED BLOCKCHAIN

 zopa

pocket

  
STARLING  
BANK

  
Hampden & Co.  
BANKERS

 digibank  
by DBS

 METRO  
BANK

 civilisedBank

2010

2011

2012

2013

2014

2015

2016

2017

2018

# FinTech scene in China and SE Asia



**Tencent 腾讯**

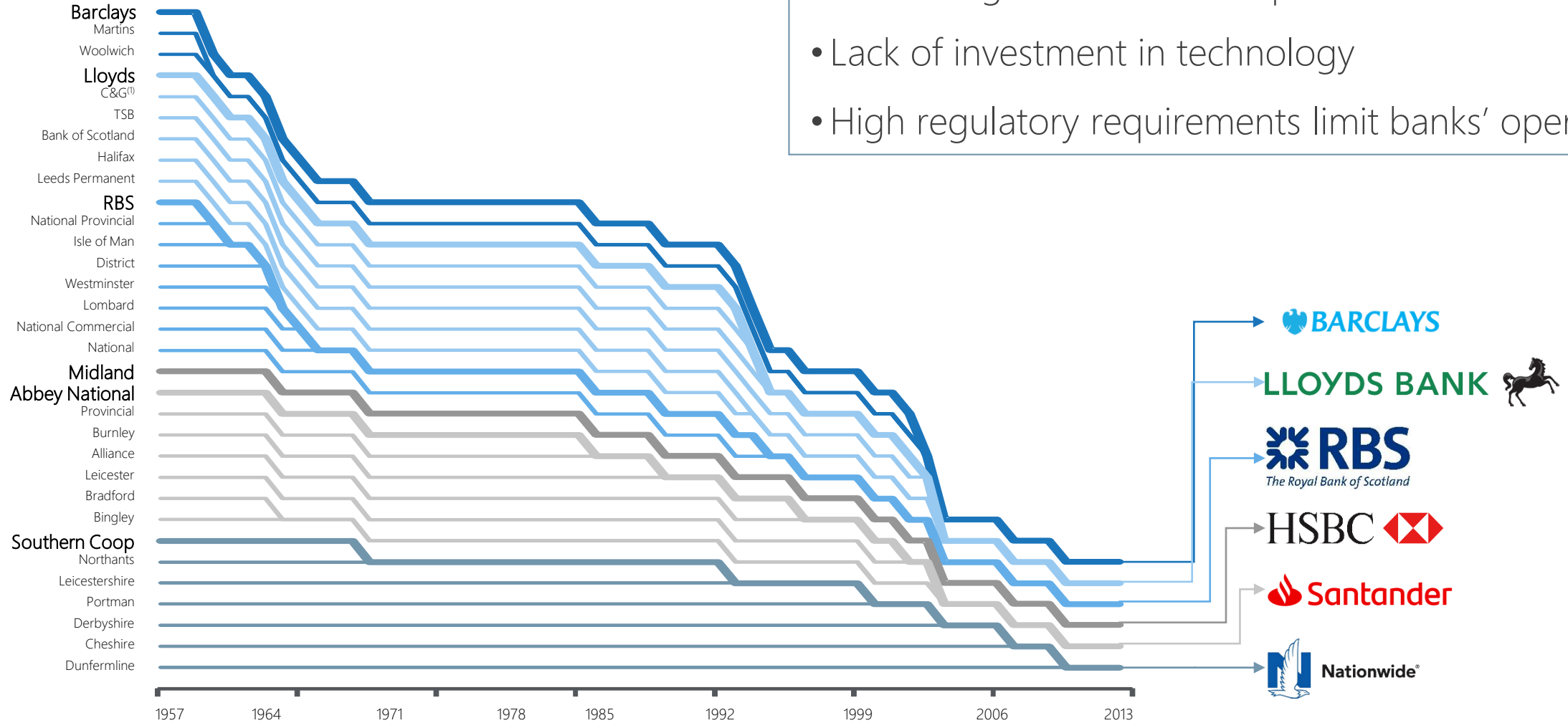




# Case Study: The UK Challenger Bank Precedent

## UK Bank Consolidation Over 60 Years

- Low customer satisfaction
- Worsening client relationships with SMEs
- Lack of investment in technology
- High regulatory requirements limit banks' operations



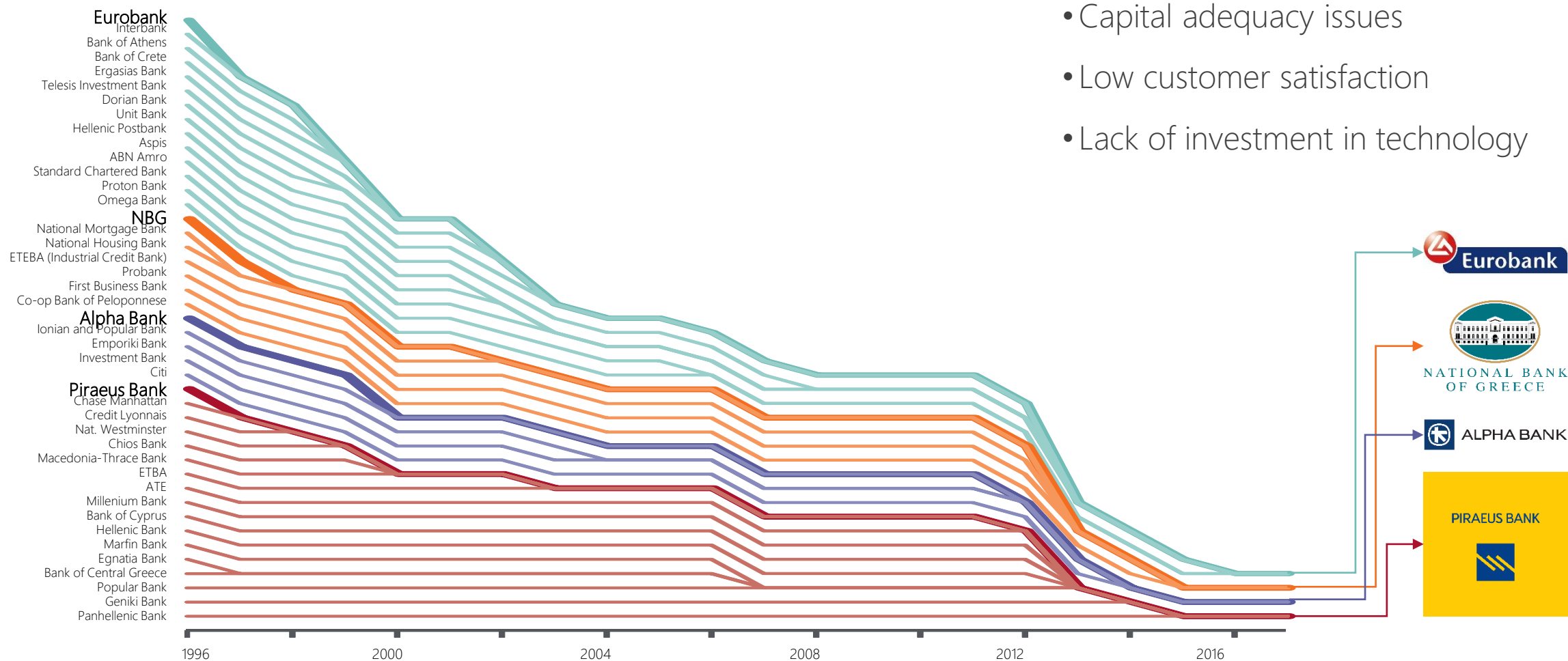
Sources: PwC, Deloitte, Greek press.  
Note: (1) Stands for Cheltenham and Gloucester.

# Case Study: Banks consolidation in Greece

The Greek Banking industry resembles that of the UK: via M&A, the market has become the most concentrated in Europe

## Greek Bank Consolidation Over 20 Years

- Asset quality
- Capital adequacy issues
- Low customer satisfaction
- Lack of investment in technology



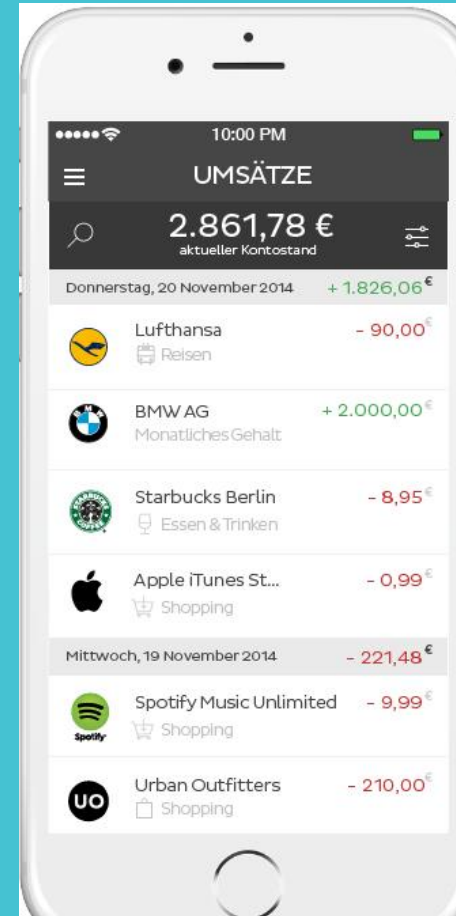
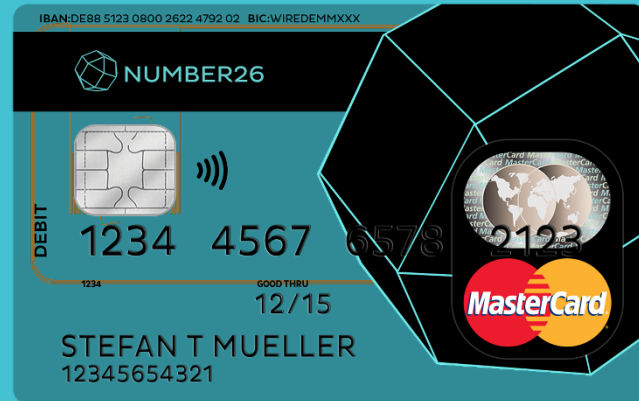
Sources: PwC, Deloitte, Greek press.

# Challenger banks: 5 Raisons d' être

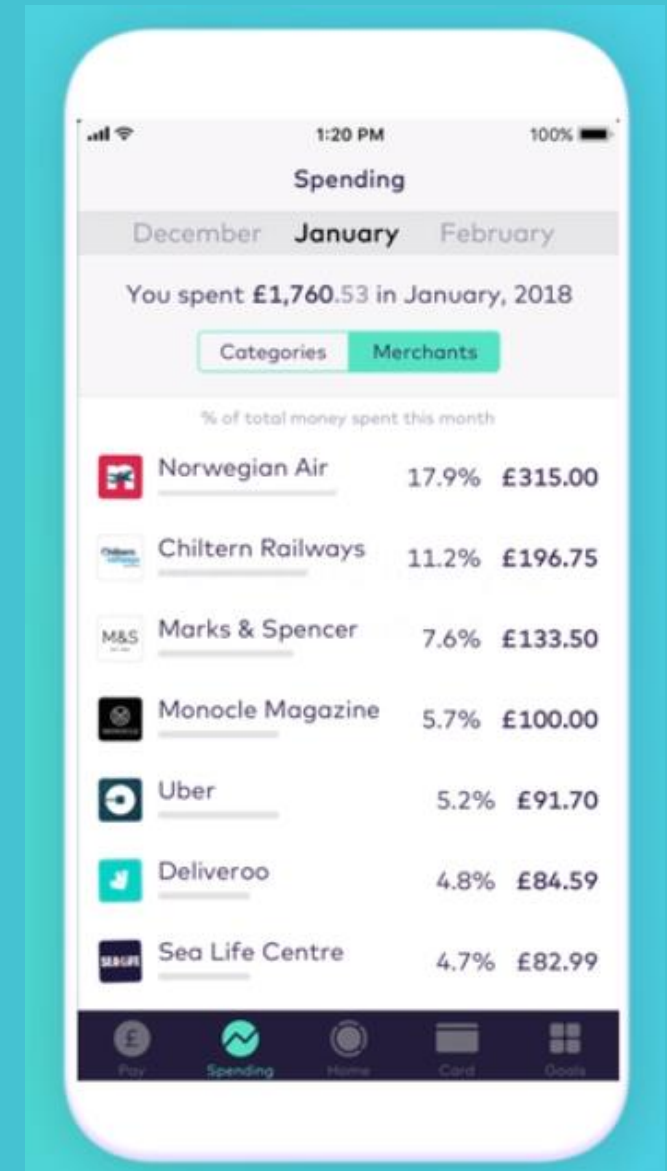
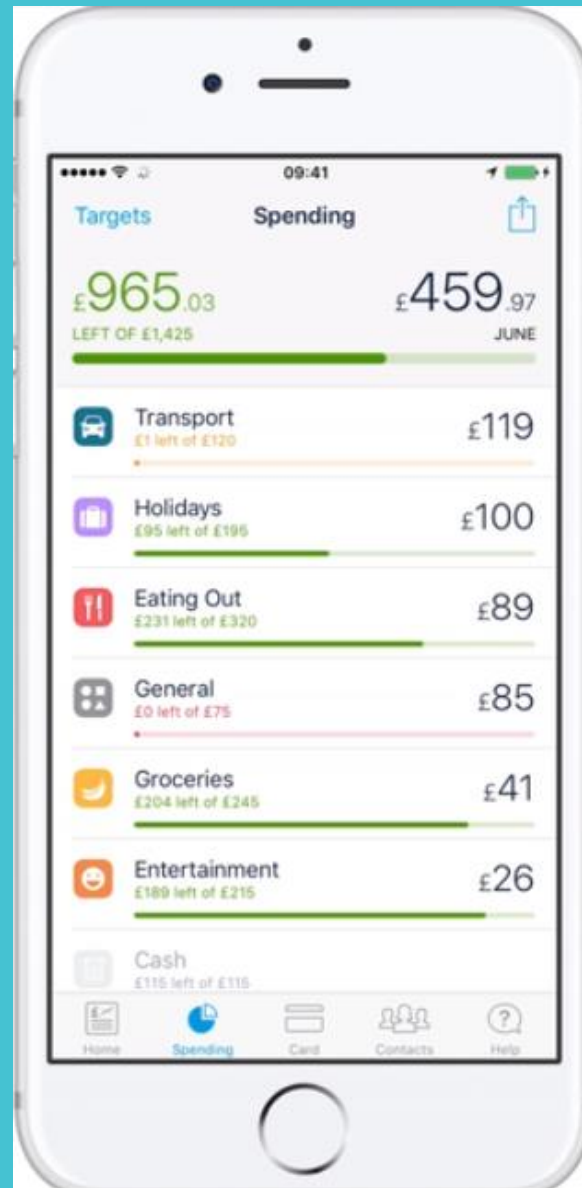
- 1 Shift in Demographics**
- 2 Smartphone and Mobile Banking Penetration**
- 3 Customer Confidence in Banking**
- 4 Geography**
- 5 New regulations**



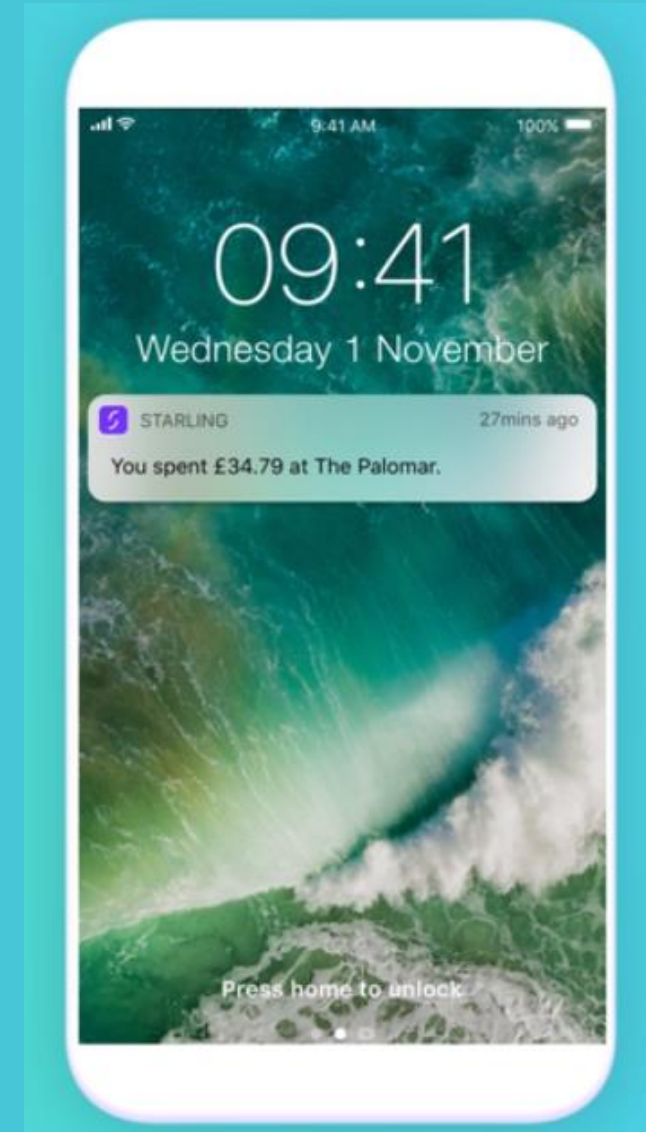
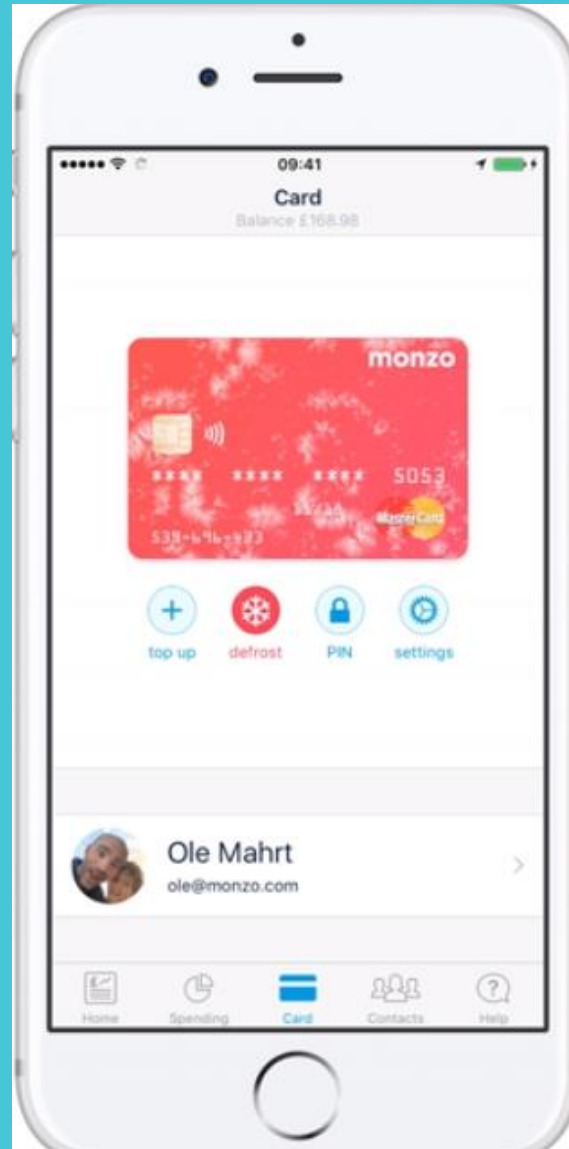
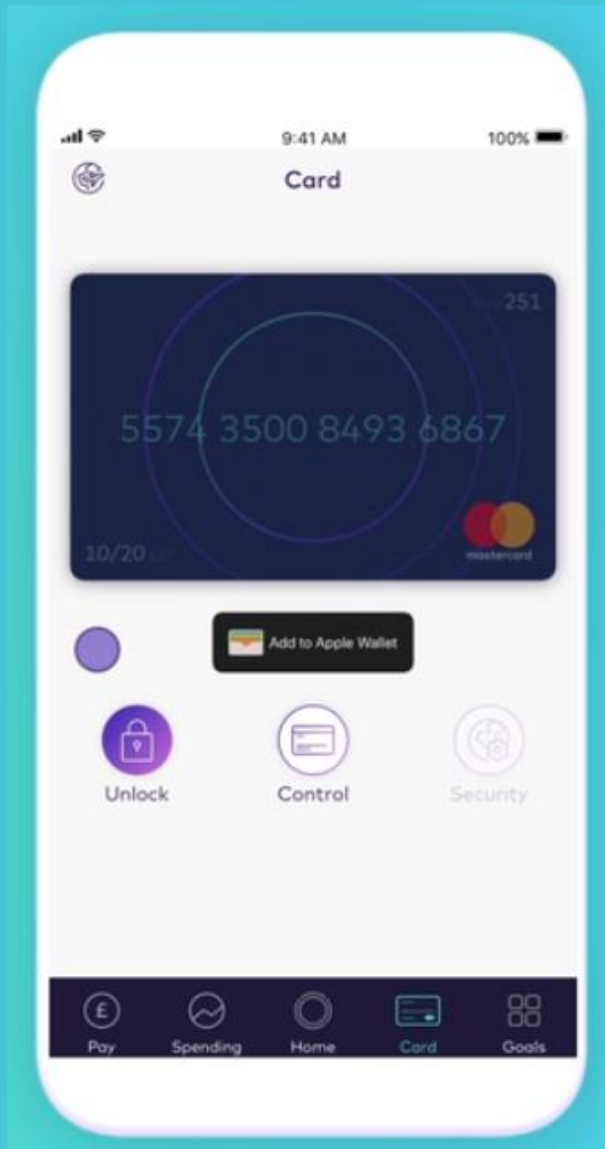
# Digital customer onboarding



# Personal Finance Management

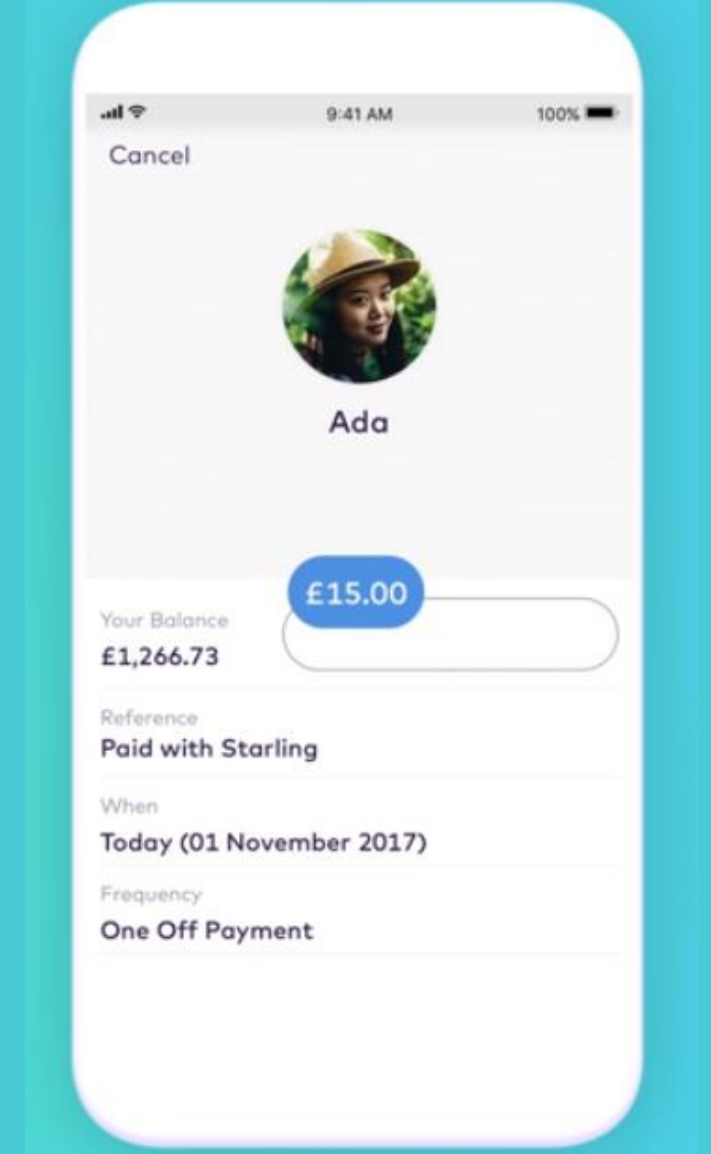
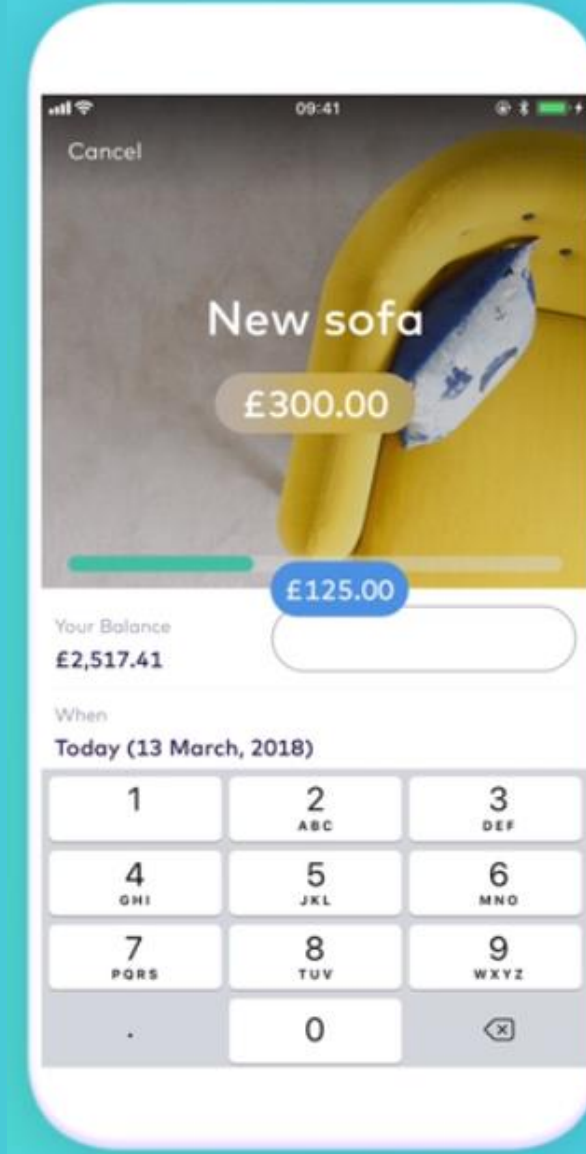
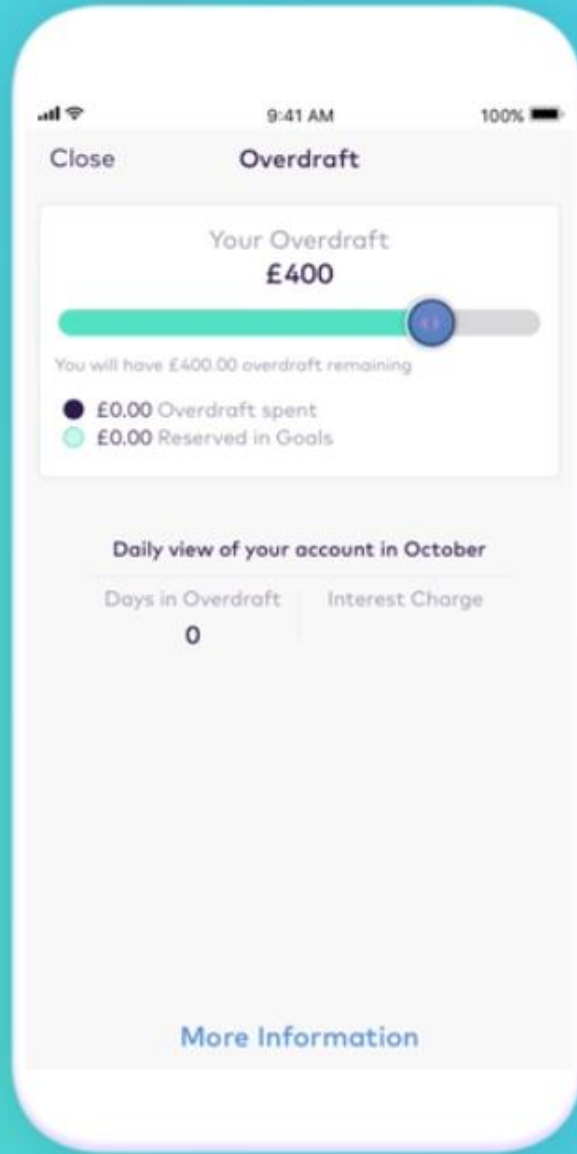


# Card lock/unlock & notifications

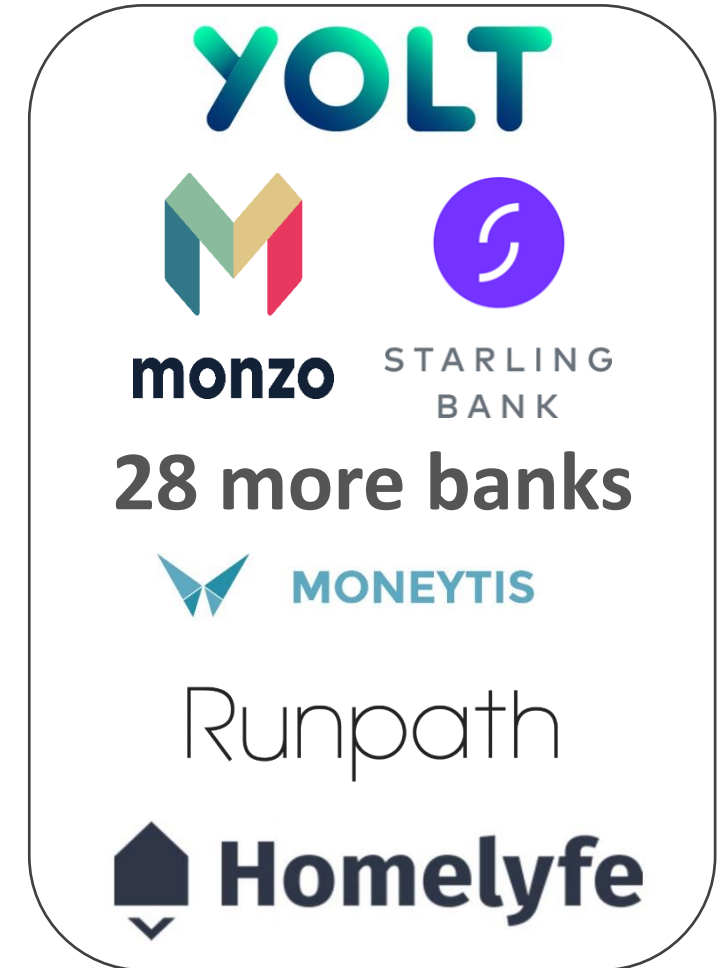
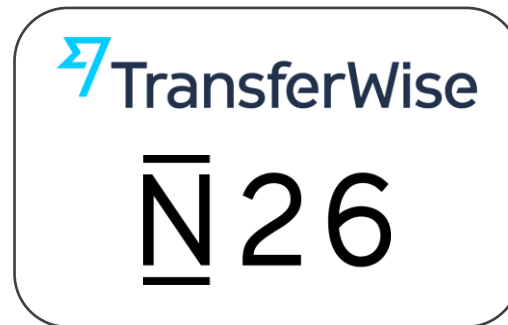




# Control, savings, P2P payments, ...



# Partnerships: disrupting the notion of competition itself



N 26

 TransferWise

wirecard bank

 vaamo

Fintechs cooperate to  
create larger challenges

---

 raisin.









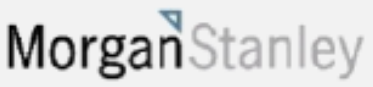







# Tech giants disrupt banks...



# Digitize or Die

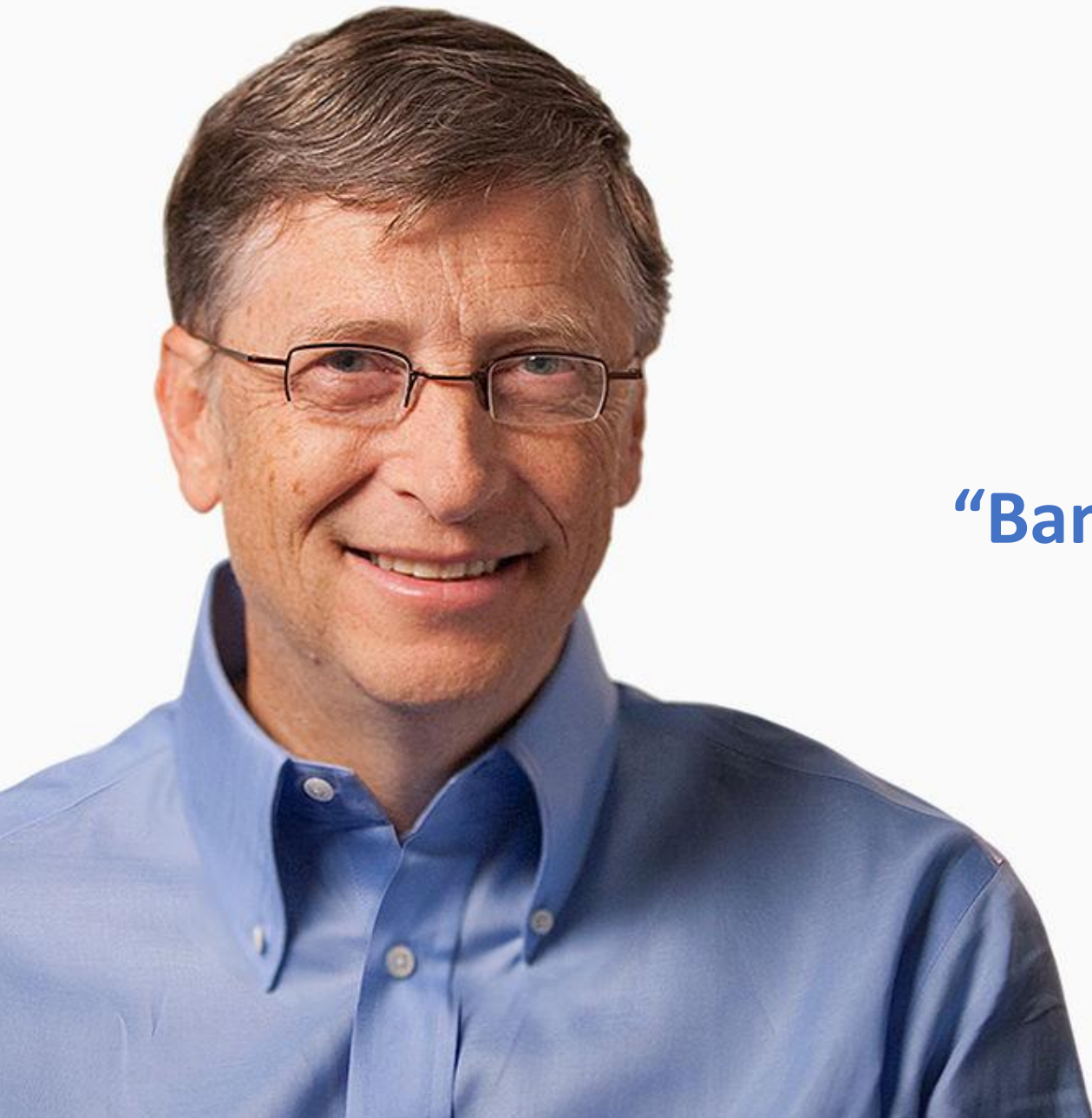
## Rank Fortune 500<sup>2</sup>

Company	2000	2015	 
	284	5	
	-	29	
	-	40	
	30	82	
	37	363	
	124	-	

## Unicorns by industry



(# - 100%=140)



**“Banking is essential. Banks are not.”**

*Bill Gates, 1994*





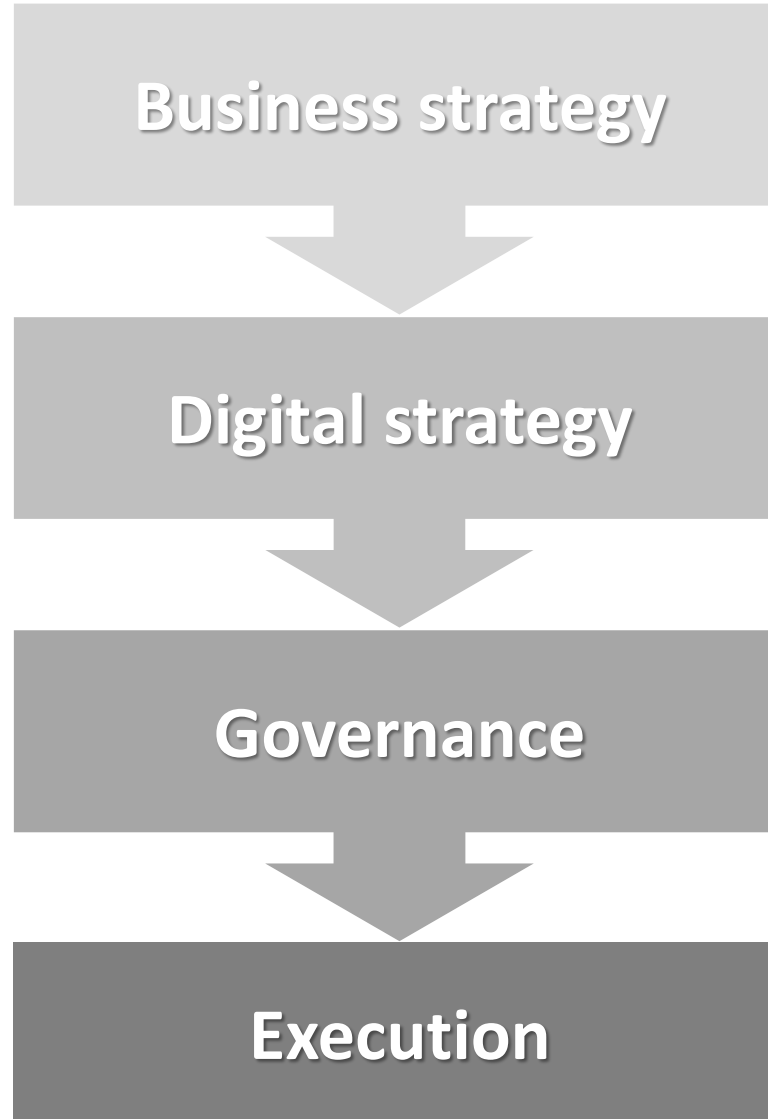
**“In the future,  
BBVA will be a software company”**

*Francisco Gonzalez, BBVA CEO, Mar 2015*

# Indications that maybe you are doing it wrong

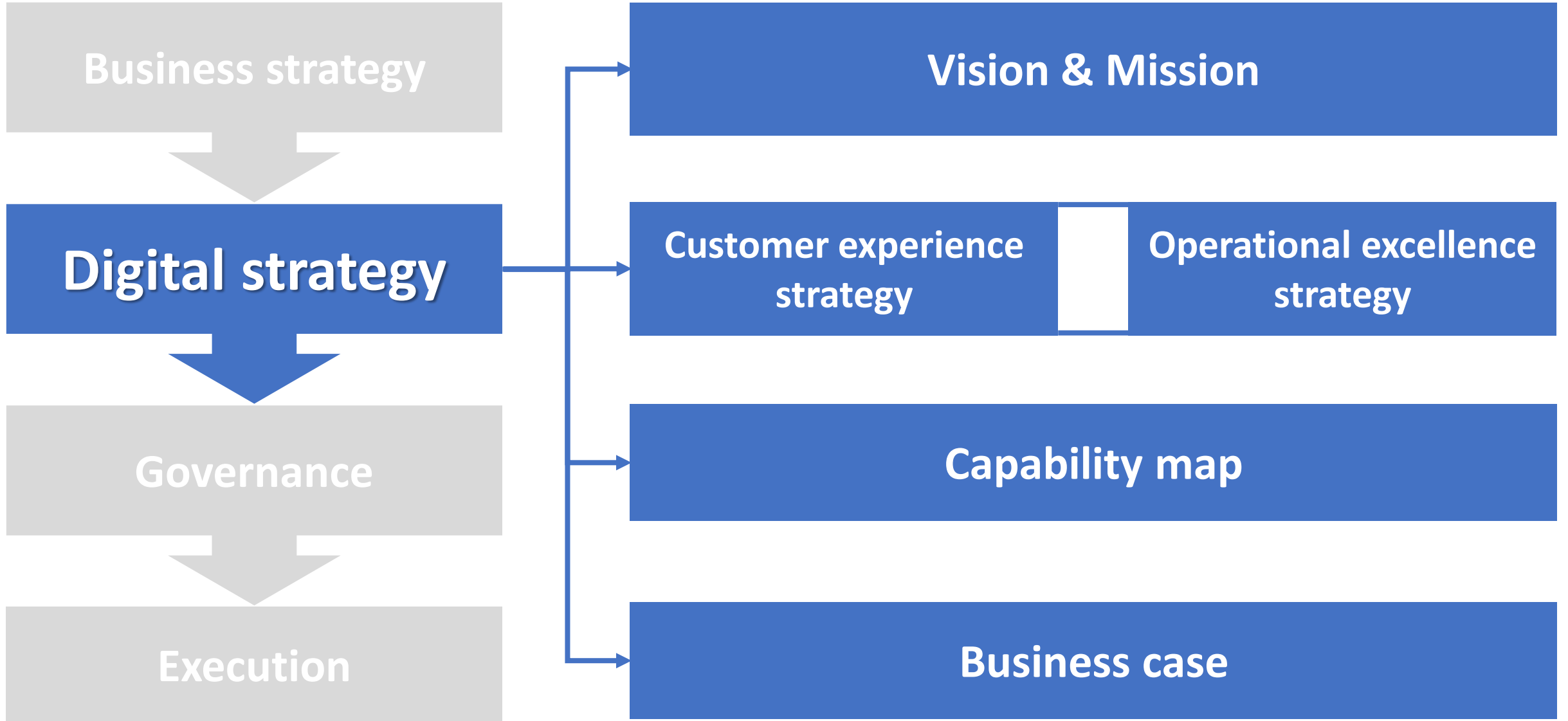
1. **Feature-obsessed:** “Our product should have this, this and that feature.”
2. **Relentless Copycats:** “Look at this feature that the competition has. We have to have it, too.”
3. **Authority bias:** Beware of the **Highest Paid Person** in the room (“The boss says that this feature is a killer”)
4. **Over-optimistic roadmap. No MVP.** “Since we can’t hit the deadline, let’s phase out the most important features that will take the longer to implement”
5. **Cool tech as a guidance:** “That tech is hot these days. Let’s build one, anything, as long as we do it first!”

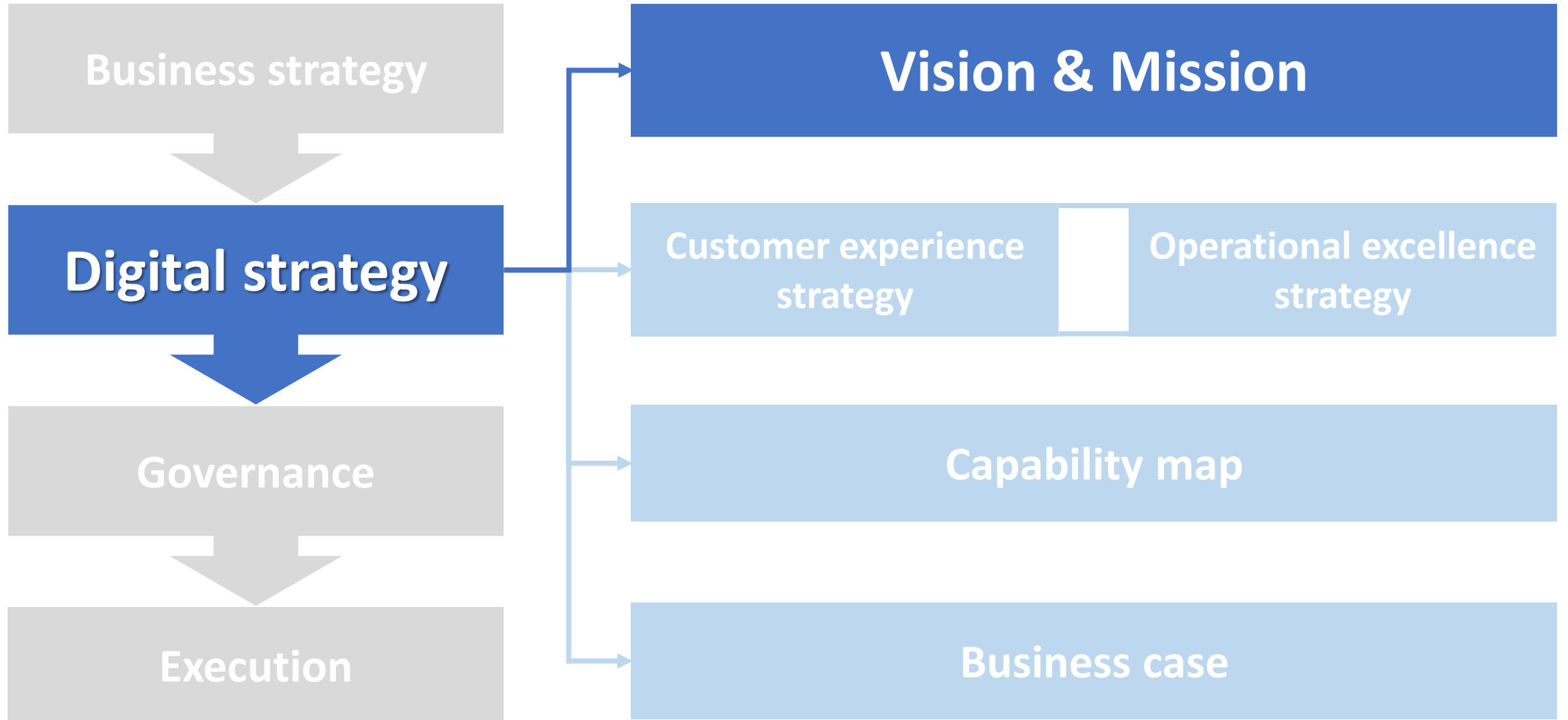
# Adopt digital strategy to business strategy





# Digital Transformation Components





## Find your Northern Star

it has to be:

Big

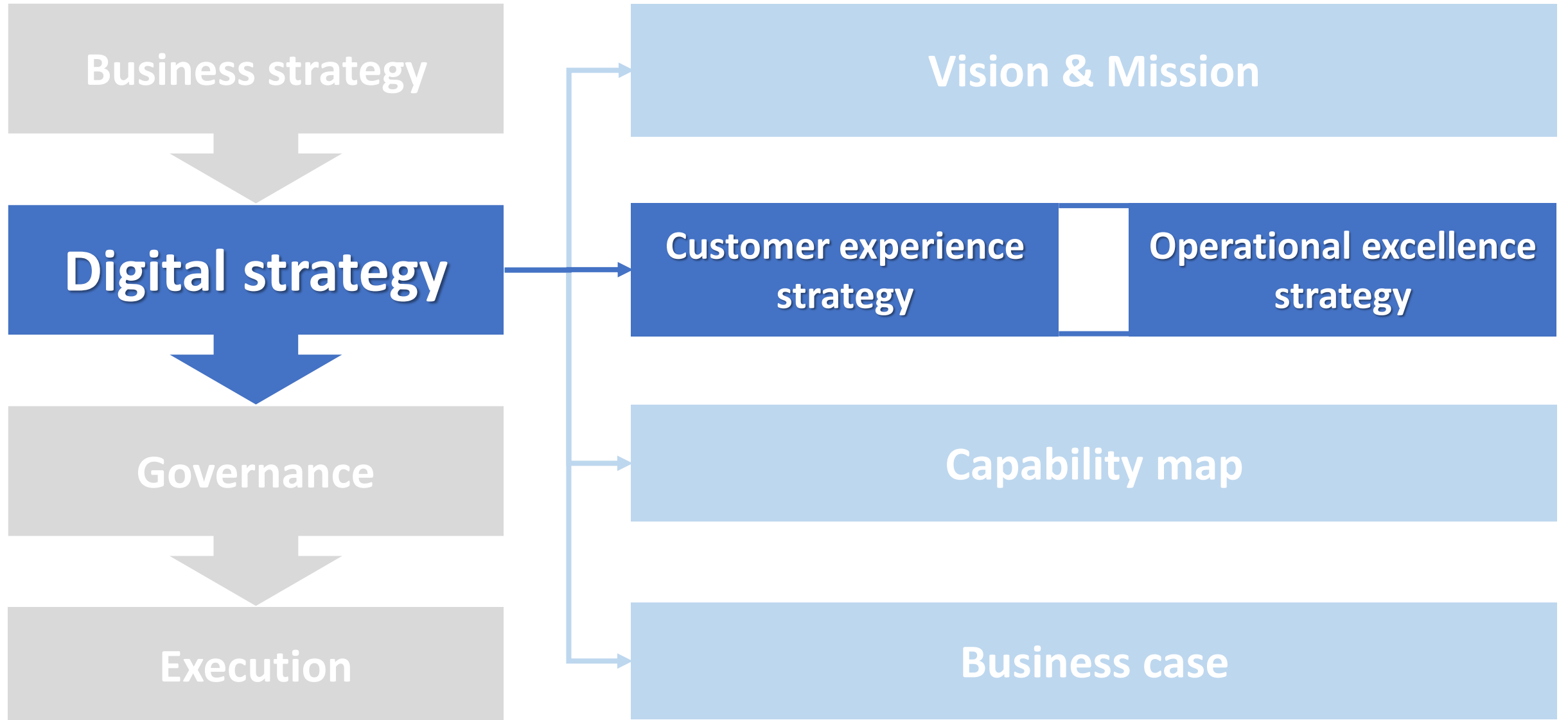
Bold

Expansive

Future-proof



# Digital Strategy | Customer Experience & Operational Excellence

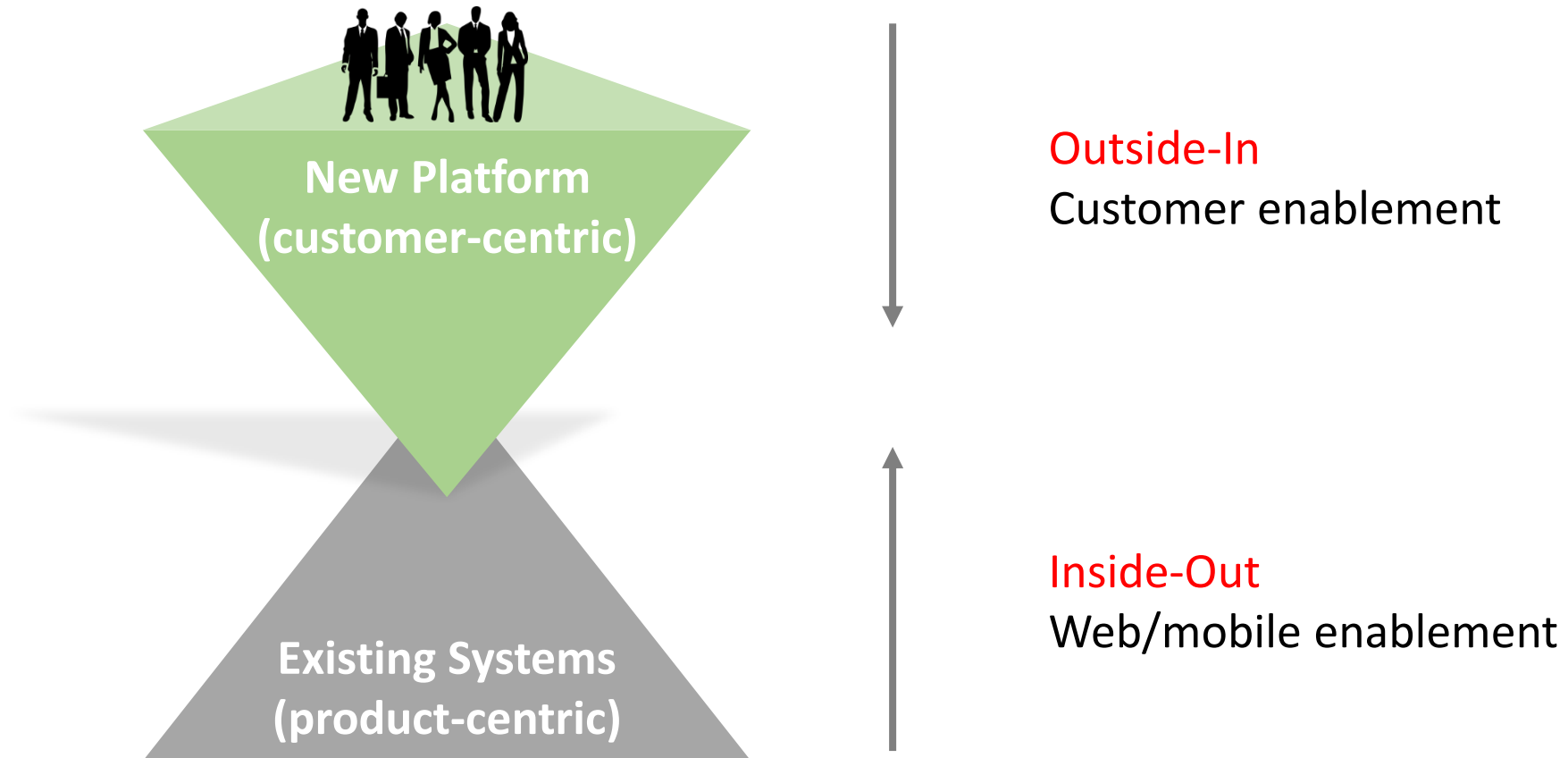




**“No business plan survives  
first contact with customers”**

**Steve Blank**

# Inside-Out vs. Outside-In



# Customer Experience Strategy | Mobile-1<sup>st</sup>



**Embracing mobile as the platform,  
lets the opportunities of interaction grow exponentially**



An aerial night view of Athens, Greece, showing the city lights and the illuminated Parthenon on the Acropolis. The text is overlaid in white on the image.

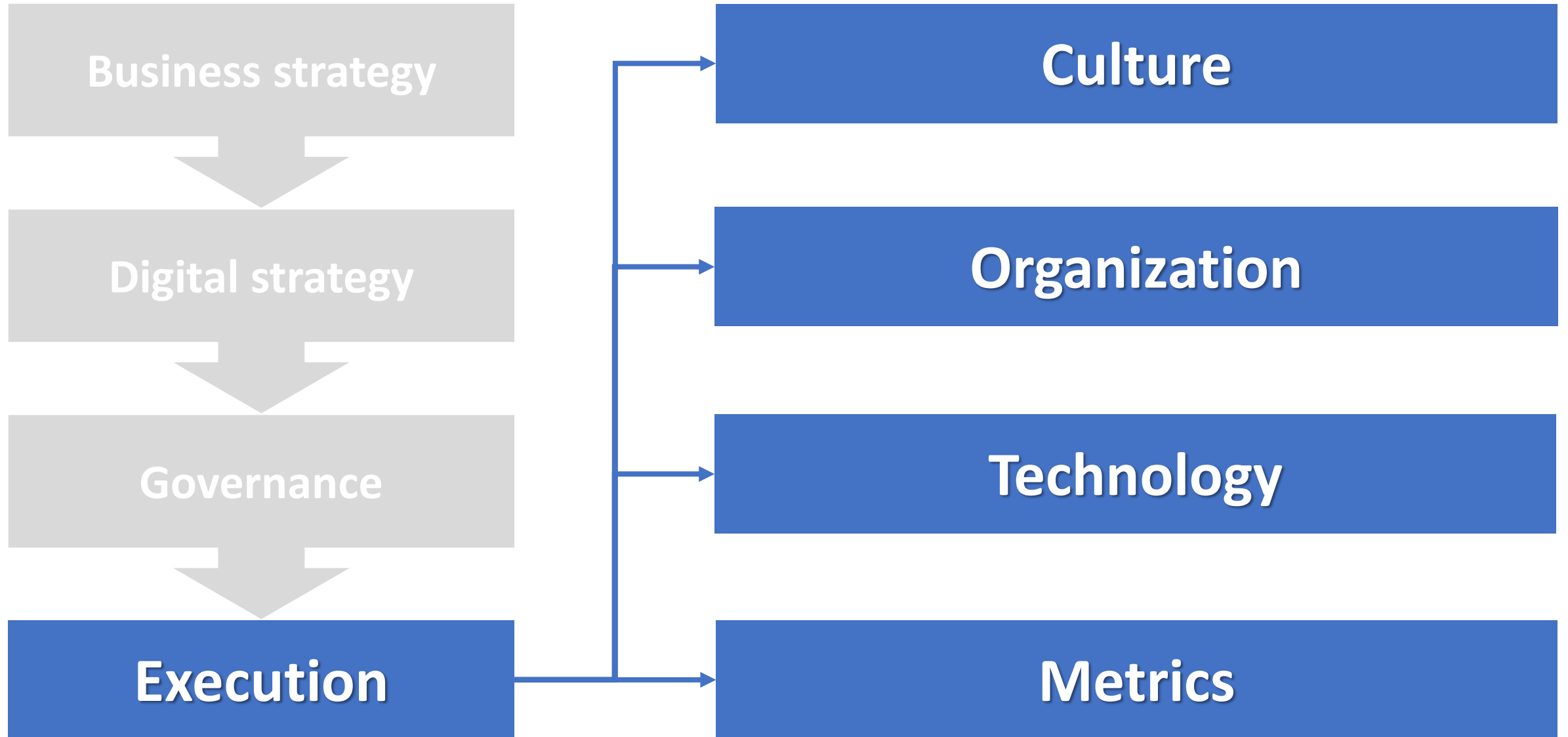
**When we think about digital experiences,  
the comparative set is not a competitor's app.**

**It's the last app our user opened**

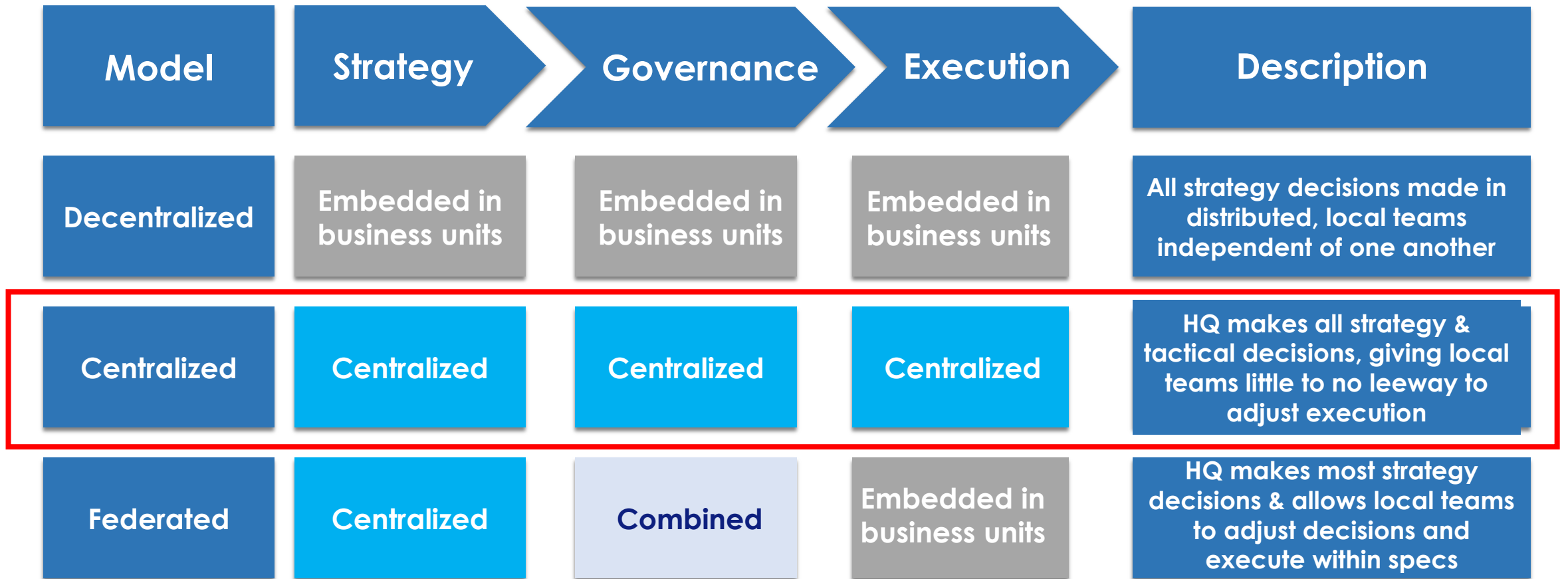


**Take care of the processes  
that affect the experience**

# Execution

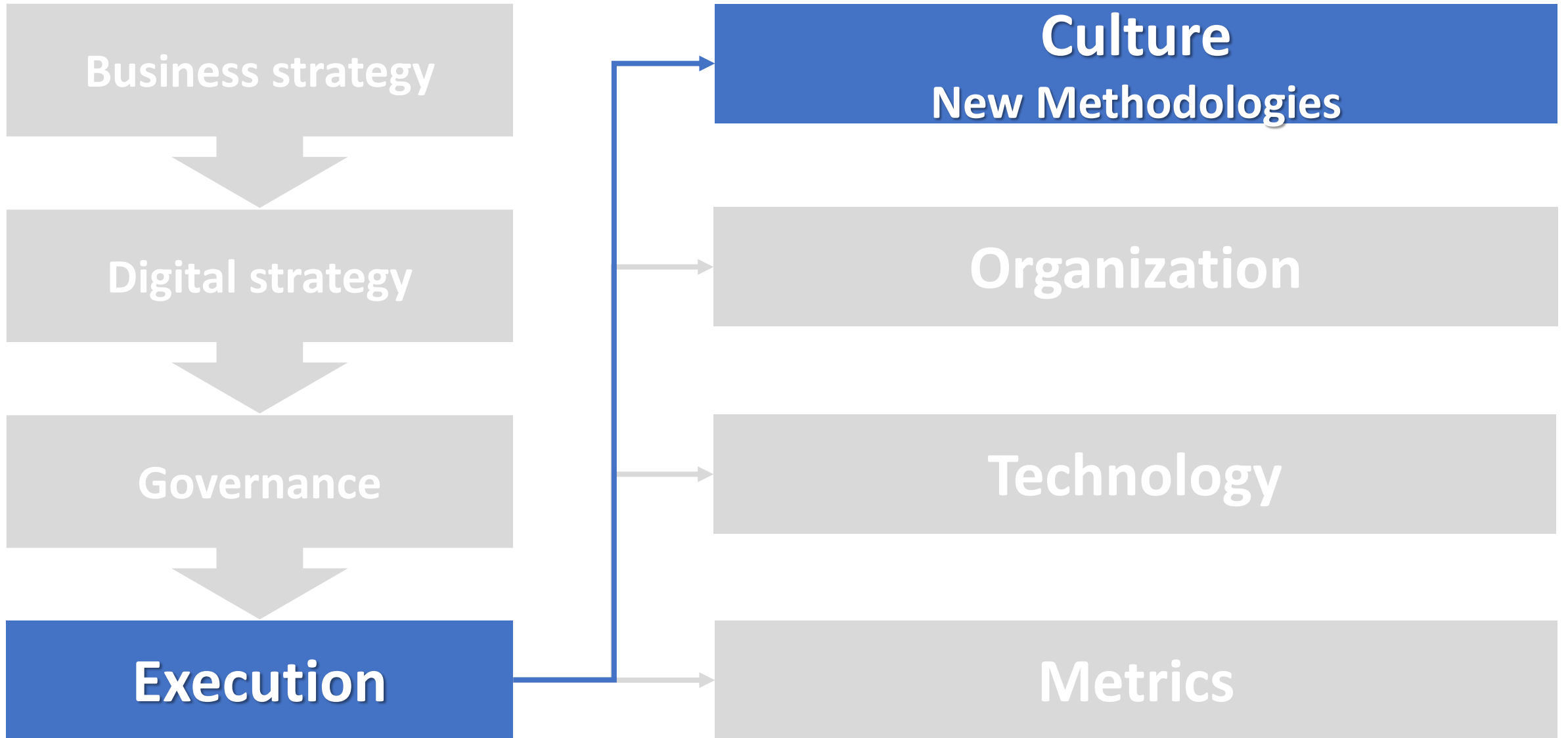


# The ever-present organizational structure question

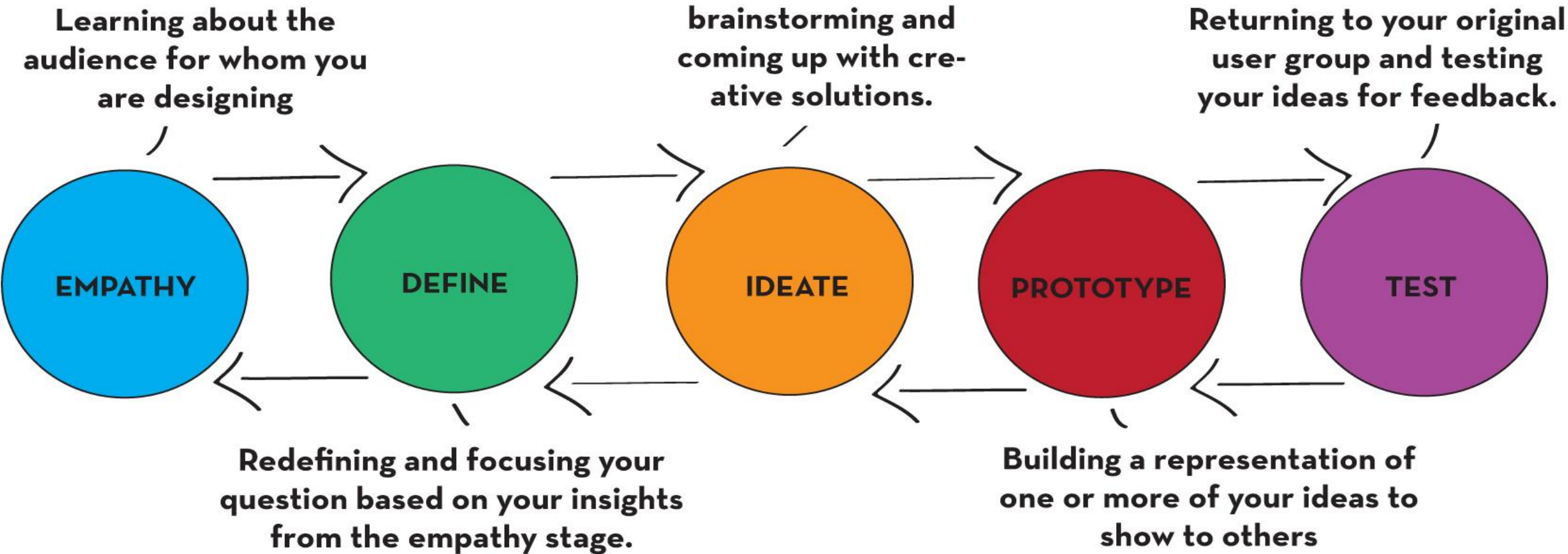




# Execution



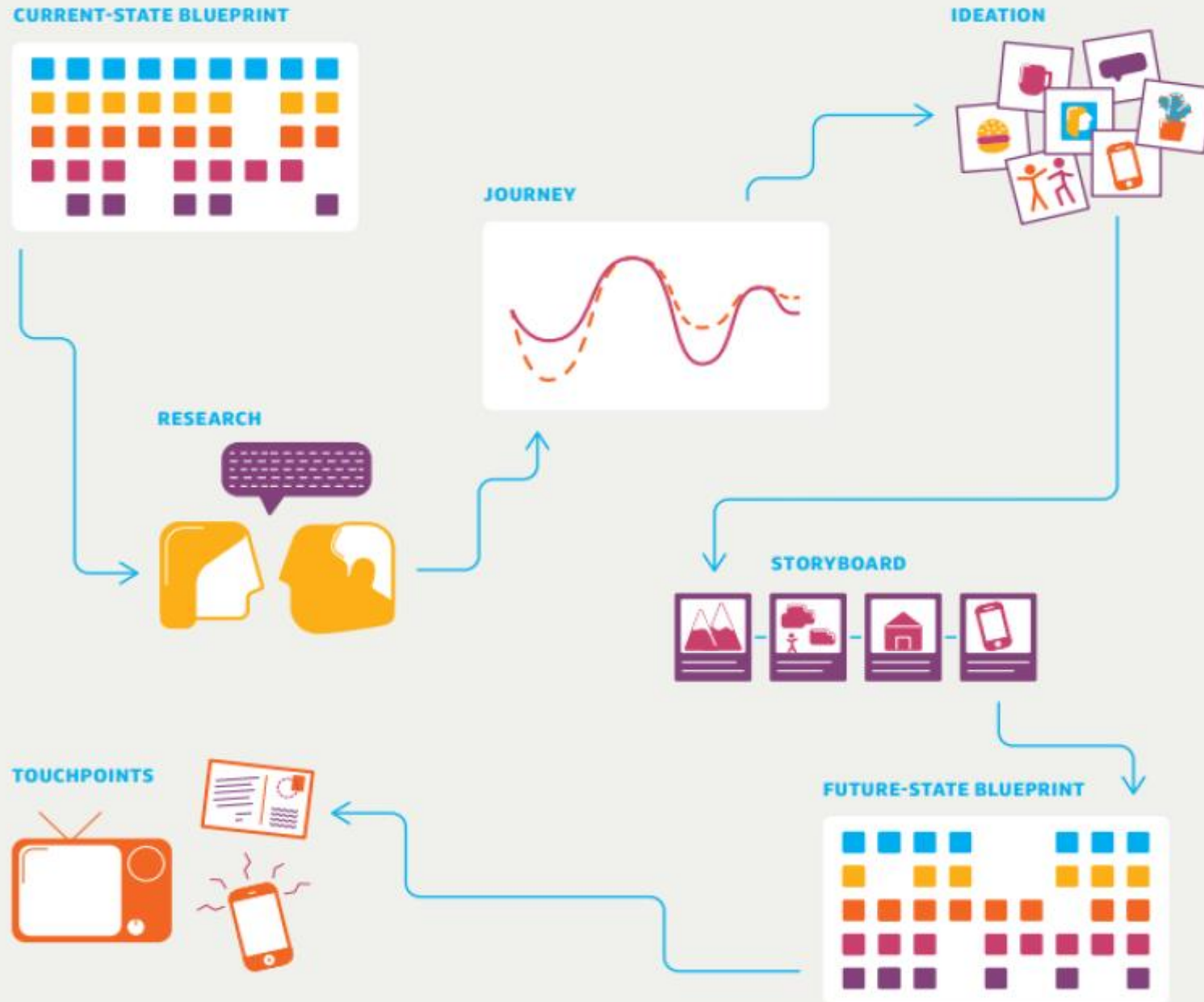
# Design Thinking



# Design Thinking ➡ Service Design

**Service design** is the approach through which we understand the whole ecosystem to choreograph a seamless and compelling experience

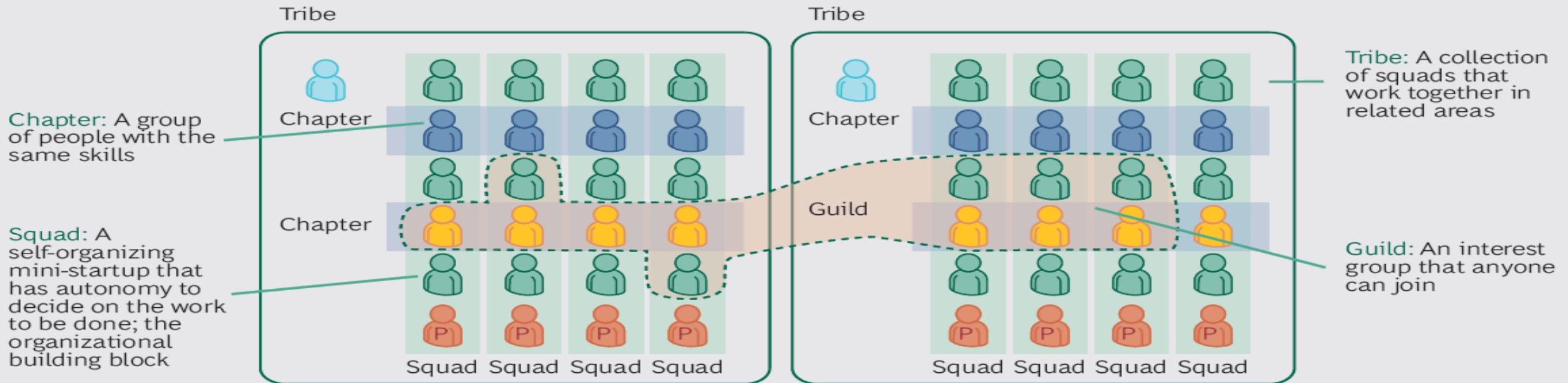
# Service Design





# Agile methodology

## HOW SPOTIFY ORGANIZES ITSELF



## EXAMPLES OF POTENTIAL TRIBES AT BANKS

### CUSTOMER EXPERIENCE TRIBE

- **Scope:** Starts with the first point of contact with a potential customer until a product is chosen
- **Typical staff composition:** one-third technology, two-thirds business
- **Example:** Omnichannel marketing

### ENABLING TRIBE

- **Scope:** Enables squads in other tribes to work independently by providing systems, applications, and architecture
- **Typical staff composition:** Heavily weighted toward technology
- **Example:** Building an omnichannel technology infrastructure

### CUSTOMER SERVICE TRIBE

- **Scope:** Starts when a product is chosen and extends through fulfillment and management
- **Typical staff composition:** Two-thirds technology, one-third business
- **Example:** Mortgages

**Source:** Spotify.

**Note:** P = product owners, who lead product development sprints.

# Lean or Design Thinking or Agile?

Work in short cycles

Hold regular retrospectives

Put the customer at the center of everything

Go and see

At the end of the day **your customers don't care** whether you're agile, lean or practice design thinking. They care about **great products and services that solve meaningful problems** for them in effective ways.

The more you can focus your teams on these things the better their process will be.

# Start thinking like a disruptor

**Focus**

on unmet customer  
needs

**Experiment**

with new business  
models

**Choose**

speed  
over perfection

**Think**

like  
an ecosystem player

**Face**

the  
non-believers

**Be ruthless**

about  
your liabilities

**Innovate**

the  
adjacent possible

**Maximize**

the use of existing  
technology

**Place**

a few selective  
big bets

**Digital business transformation is a journey,  
not a destination**





# HEALTHCARE DIGITAL TRANSFORMATION

**MISSION: IMPOSSIBLE ?**

Thank you!