Επιτροπή Ψηφιακής Οικονομίας ΣΕΒ

Γ' Κύκλος: Χρηματοπιστωτικές Υπηρεσίες



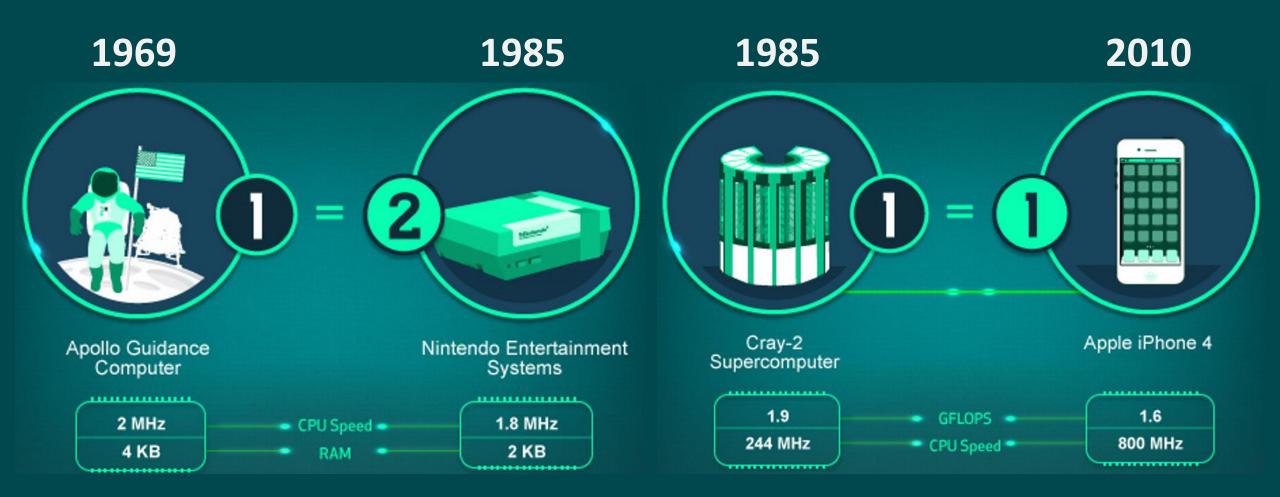




PROCESSING POWER COMPARED

Visualizing a 1 trillion-fold increase in computing performance.

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



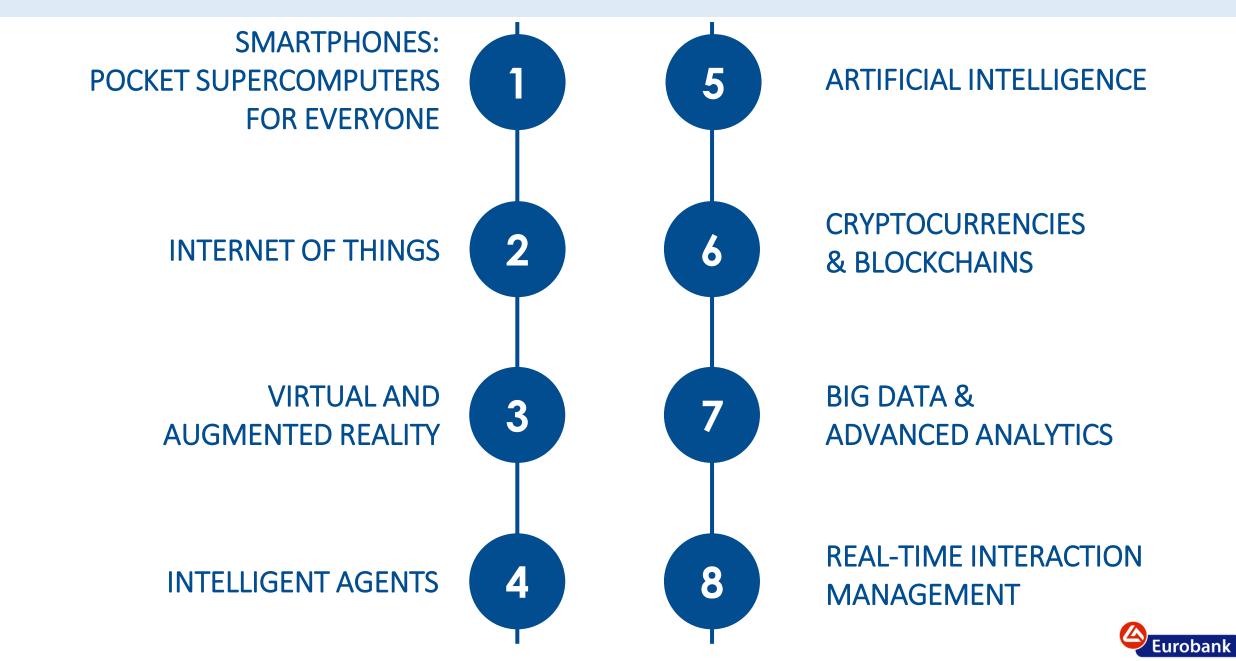


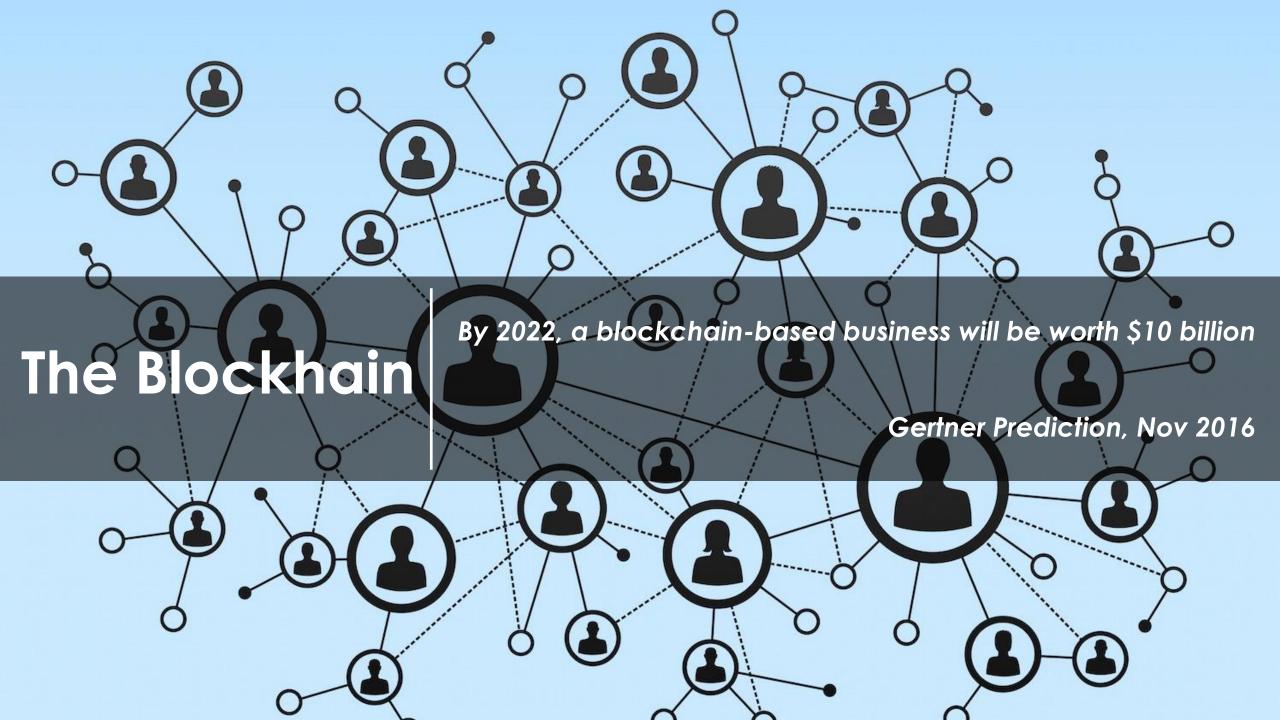
TECHNOLOGY

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

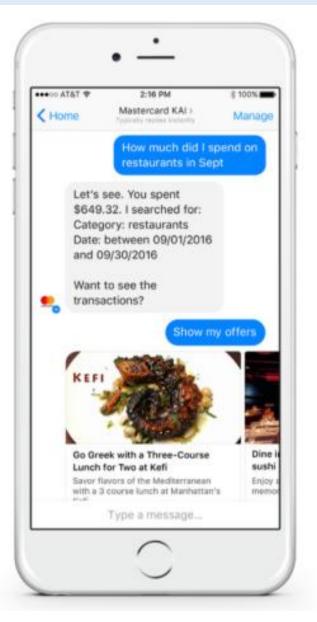
The Economist

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

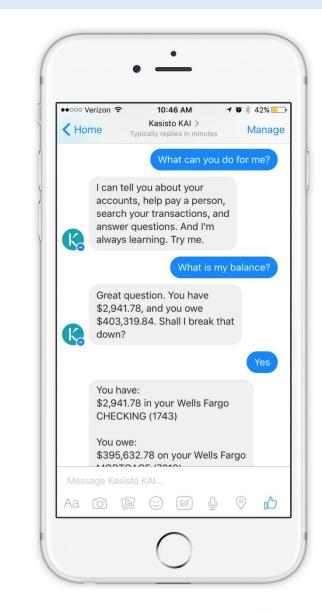




Al: chatbots in action today









Sotiris Sirmakezis



Mobile Devices

Pocket Supercomputers

Our customers

Smartphone users

82%

1 in 3

consult their phones on purchases they're about to make in a store have purchased from a company or brand other than the one they intended to because of information provided in the moment they needed it

"How mobile has redefined the consumer decision journey for shoppers", July 2016, ThinkWithGoogle.com Consumers in the Micro-Moment, Wave 3, Google/Ipsos, U.S., August 2015, n=1291 online smartphone users 18+



Sotiris Sirmakezis

Complaints by bank customers

60%

of complaints about banks online are about **non-digital** experiences like bank visits and phone calls

75%

of all emotive conversation around non-digital are negative

Analyzes 31,237 conversations around bank services on social media. Experiences were segmentation using Brandwatch's Rules and Categories features.



Smartphone users

It's less important for a customer to be present in the bank branch

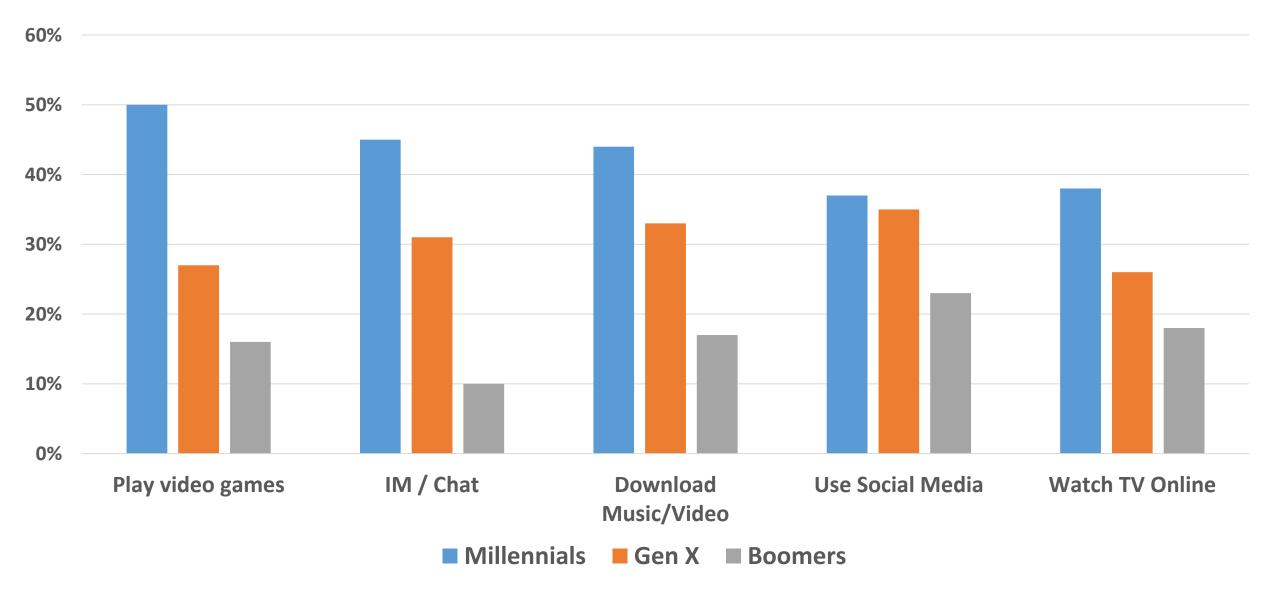
than for

the bank to be present wherever and whenever a customer needs it



Sotiris Sirmakezis

Millennials V technology



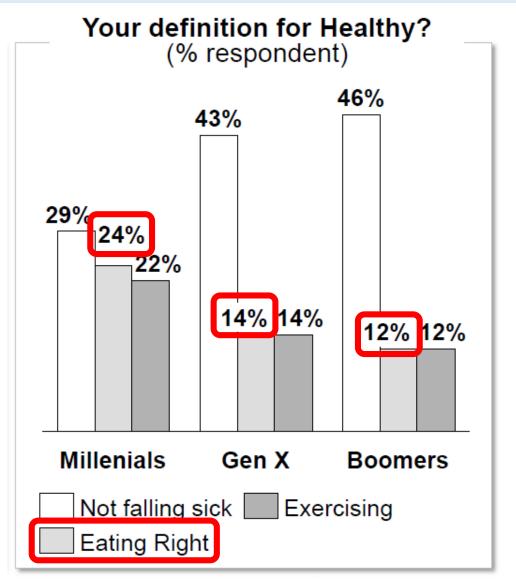
Sotiris Sirmakezis

Goldman Sachs | Our Thinking | Macroeconomic Insights | Data Story: Millennials, 2016

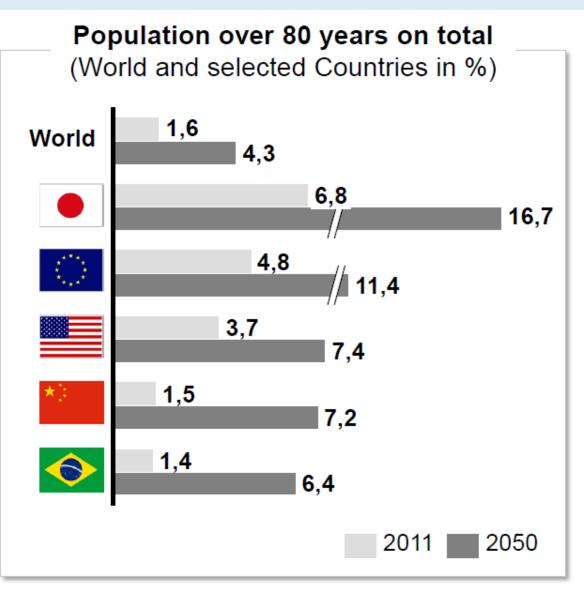




Millennials: they are developing a "healthy lifestyle"



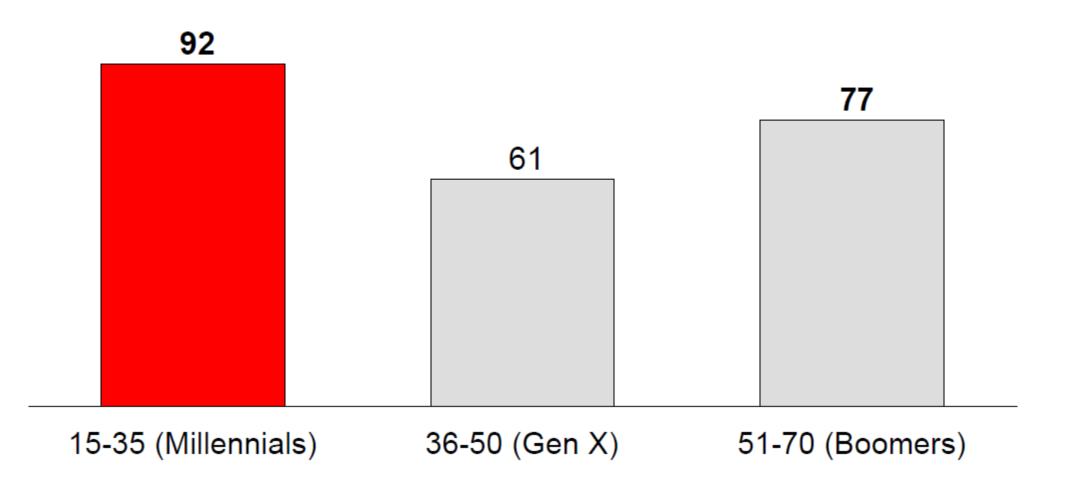
Goldman Sachs | Our Thinking | Macroeconomic Insights | Data Story: Millennials, 2016



OECD, Economic Outlook and Interim Economic Outlook, Sept. 2016



Millennials: the largest generation in history



Goldman Sachs | Our Thinking | Macroeconomic Insights | Data Story: Millennials, 2016



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



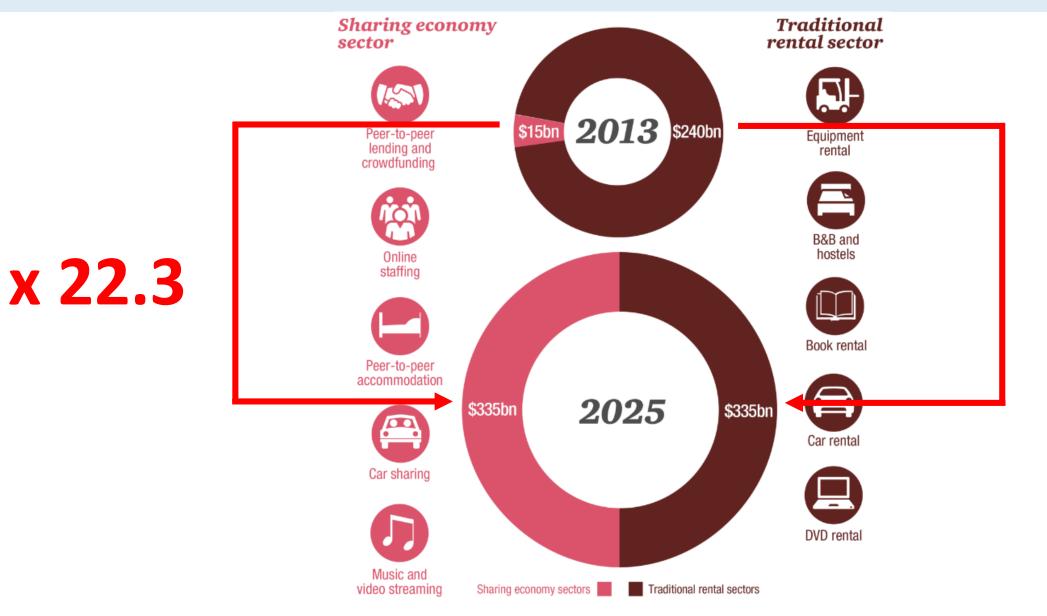
Sotiris Sirmakezis

"The Millennial Disruption Index", Viacom Media Networks, 2013

DIGITAL TRANSFORMATION

"It's no longer the big beating the small, but the fast beating the slow." Eric Pearson, CIO, International Hotel Group (IHG)

The sharing economy (+ the reputation economy)



x 1.4



PwC, Sharing Economy: sizing the revenue opportunity



New business models disintermediate existing ones



Largest taxi company / no vehicles

Most popular media owner / no content



Most valuable retailer / no inventory

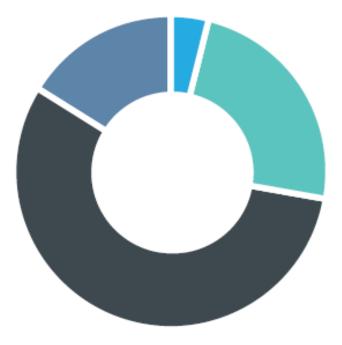


Largest accommodation provider / no real estate



Digital inflection point is imminent

Percentage indicating their industry has already reached its point of disruption or will within the next three years



4% PRIOR TO 2010

24% 2010-2016

56% 2017-2020

16% BEYOND 2020 47%

believe their traditional business model will be obsolete by 2020





Disruption considered "very likely" for some industries

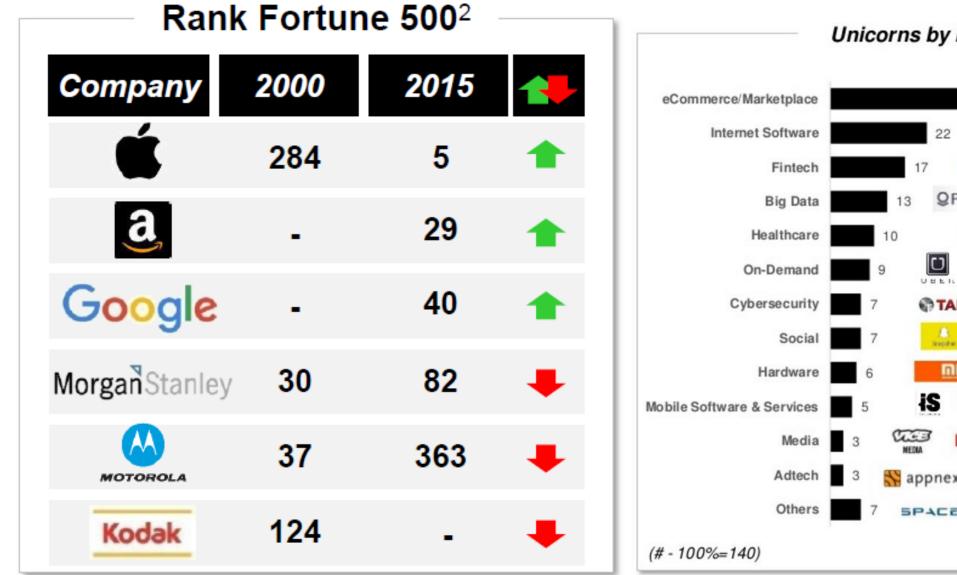
Percentage indicating how likely it is that their industry will be disrupted by digital trends

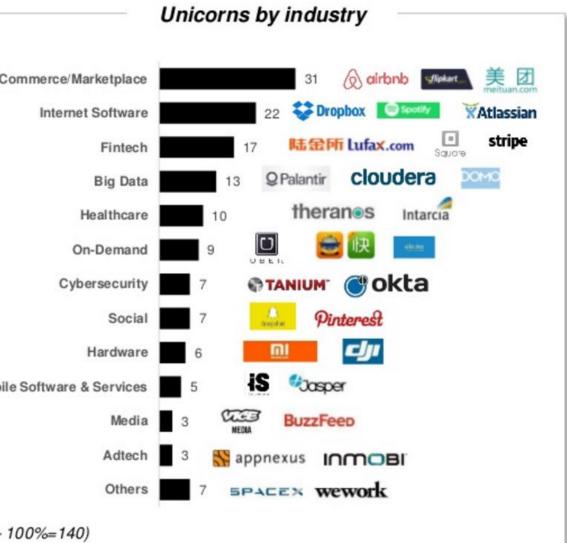
Communications/media				67
Financial services				62
Technology			54	
Professional services			51	
Education		4	3	
Retail		41		
Healthcare		36		
Government		36		
Manufacturing	27			

Sotiris Sirmakezis

Analytics Services Survey, Harvard Business Review, December 2016

Business models replaced, innovation necessary







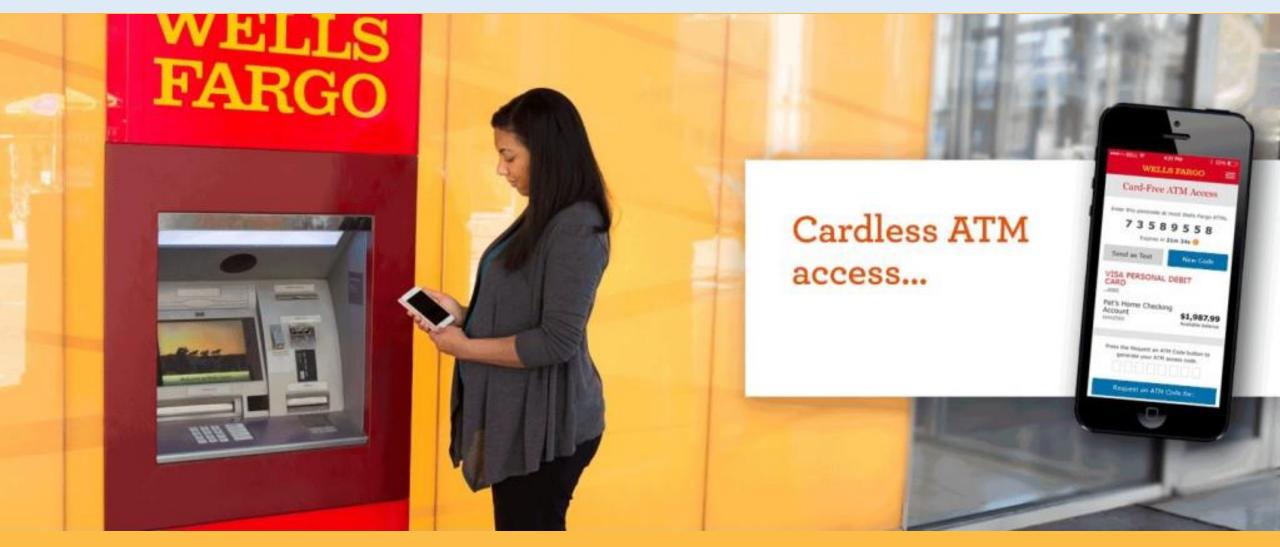
Sotiris Sirmakezis

"Banking is essential. Banks are not."

Bill Gates, 1994



Cardless ATM transactions by Wells Fargo, 2017





A perfect storm enables the emergence of FinTech

Customer Demand

Accelerated Pace of Technological Evolution

Barriers of Entry

VC Funding



Sotiris Sirmakezis

Financial Services Analysis, CapGemini, 2016

Tech giants disrupt banks...









samsung pay

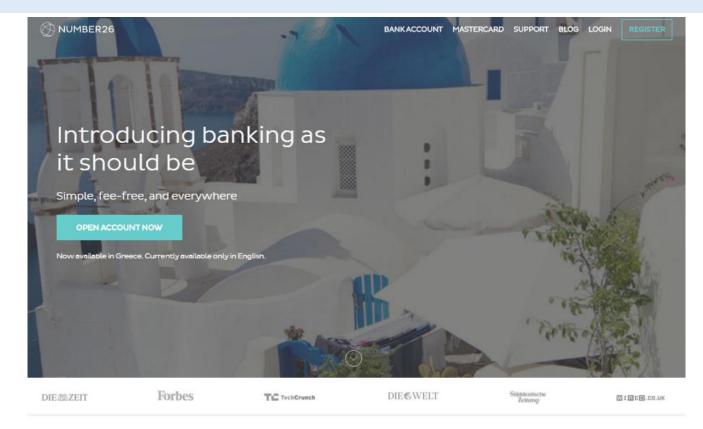
P PayPal



Sotiris Sirmakezis

The "Uberization" of banking





Your bank account just as mobile as you are.

Banking everywhere Take care of banking with your full-fledged bank account

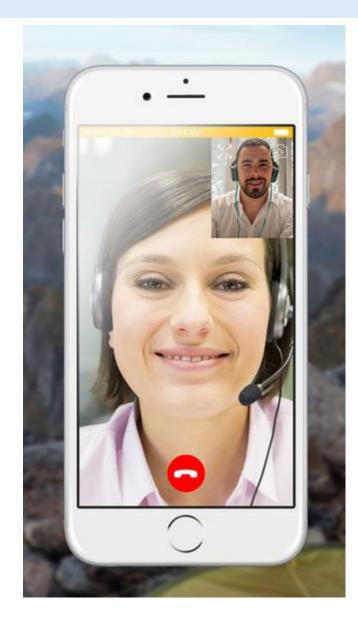
Always fully informed Receive realtime push notifications on all transactions on your bank account.



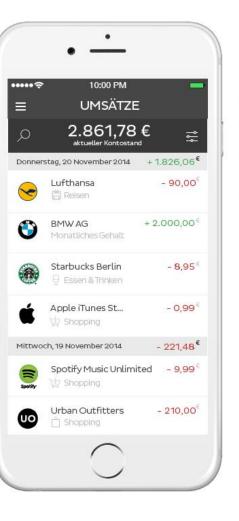
k



N26 experience











FinTech startups jump out of every corner



Venture Scanner



Challenger banks in UK





450+ FinTech startups in Israel alone





FinTech scene in China and SE Asia





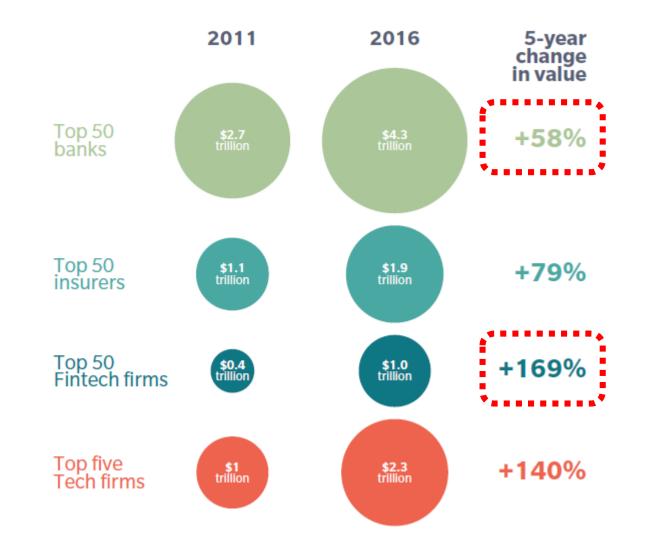
Fintechs cooperate to create larger challenges





Digital disruptors grow much faster than incumbents

COMBINED VALUATION OF TOP GLOBAL FIRMS IN EACH CATEGORY





"The state of the financial services industry 2017", Oliver Wyman, 2017

Regulation favours non-banking players



Payment Systems Directive (PSD2) & APIs

Green Paper on Retail Financial Services

Consultation on FinTech



Sotiris Sirmakezis

Manifesto for the impact of PSD2 on European Fintech



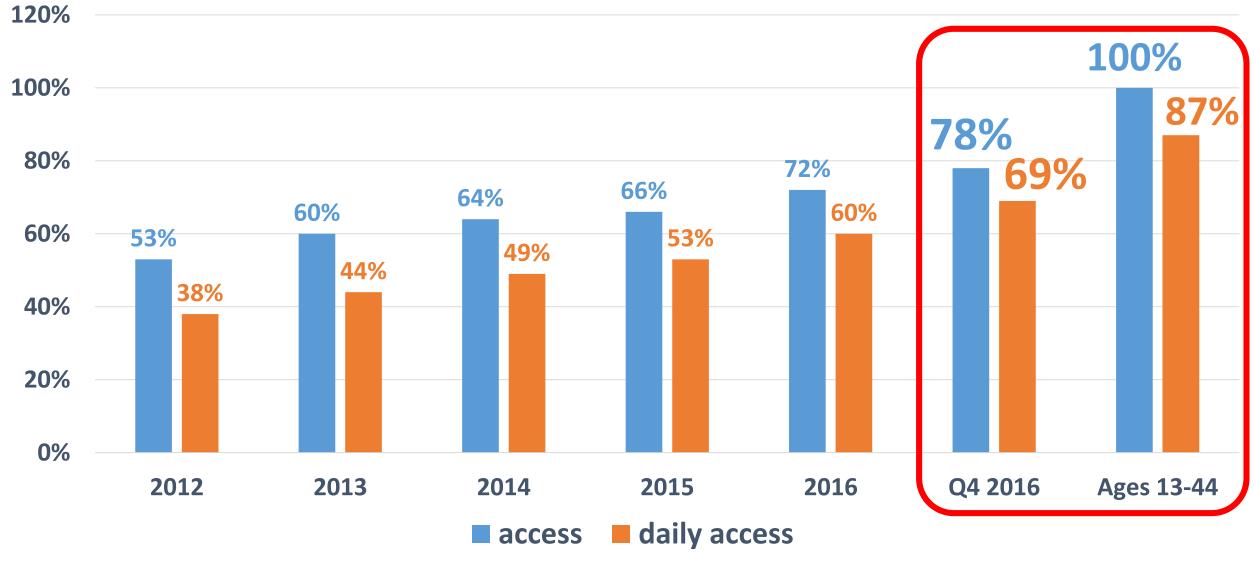
Therefore, we request for the RTS to

be amended so that TPPs can identify themselves at the customer-facing online banking interface and use Secure Authenticated Direct Access even if the Bank (ASPSP) provides a dedicated interface.



Digital Greece

Greece: online usage

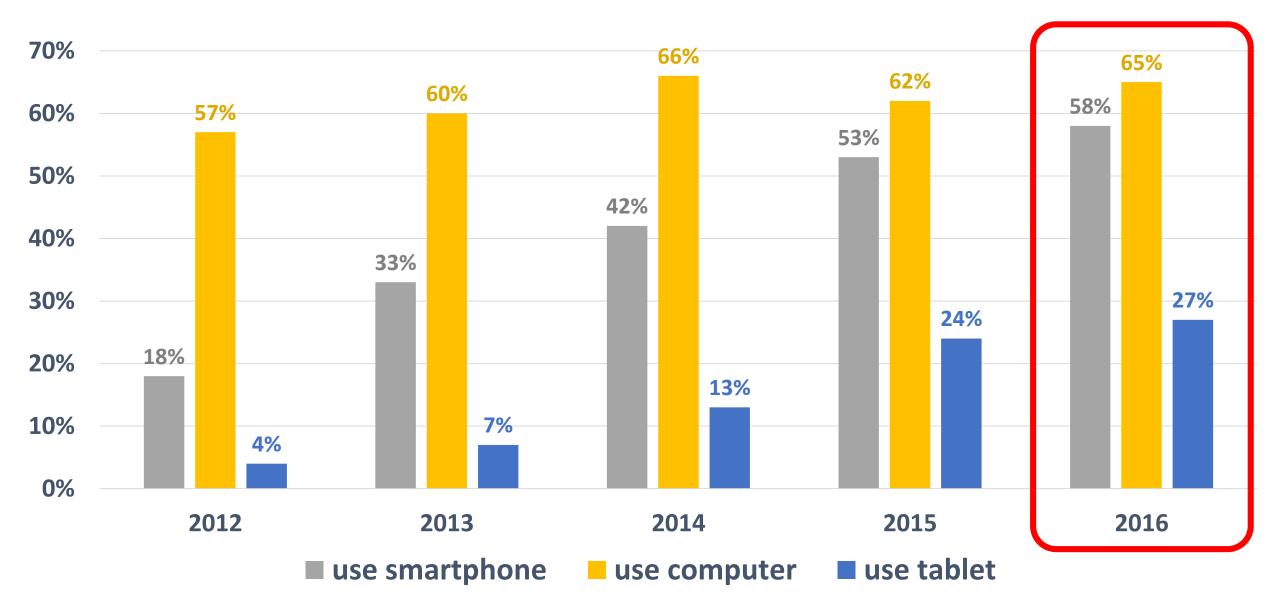


Google/TNS/Hive/IAB, Consumer Barometer, 2016

WebID, Focus Bari, 2016

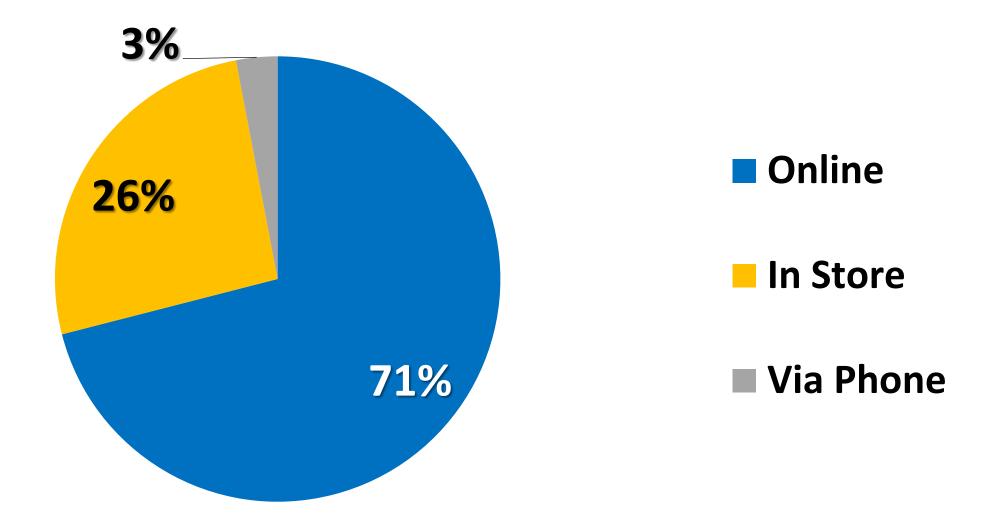


Device usage



Google/TNS/Hive/IAB, Consumer Barometer, 2016

First Source of Product Awareness During Pre-Purchase Research





Social Media usage



4.8M users monthly

3.1 M daily users

85% mobile





5.5 M users monthly

2.5 M daily users

1.5 B views per month

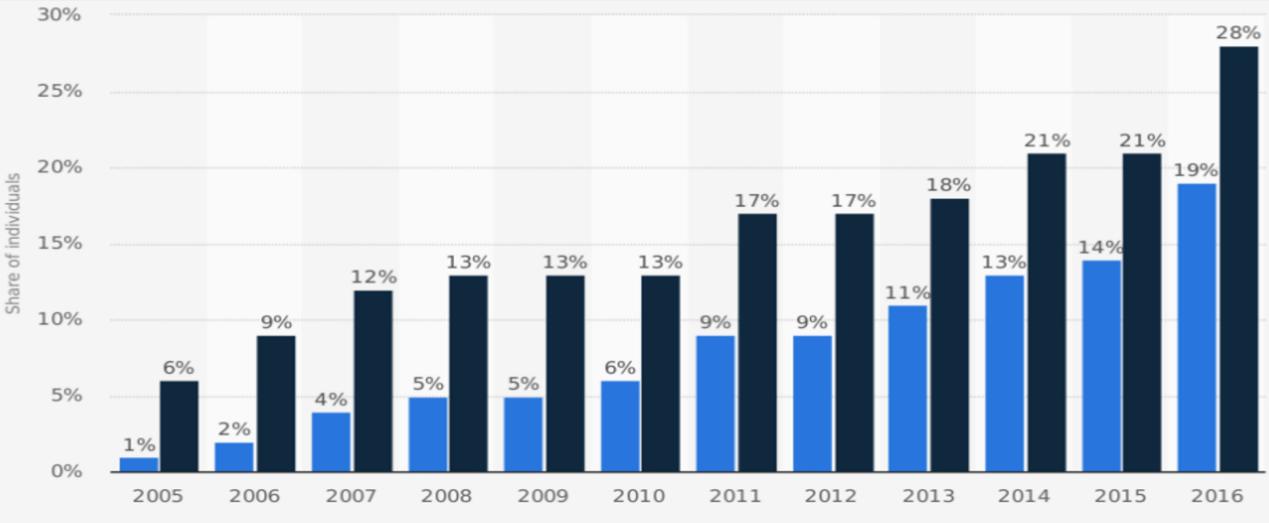


1M users

500k active users



Greece: online banking penetration, 2005-2016



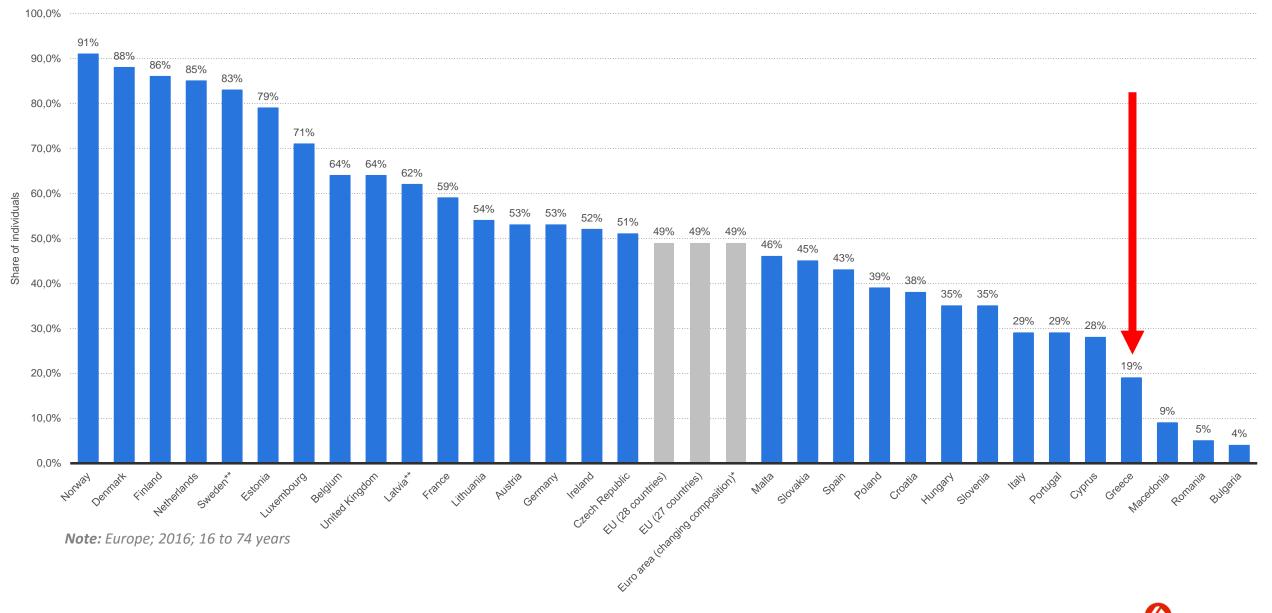
Note: Europe; 2016; 16 to 74 years

Share of all individuals Share of individuals who used the internet in the last 3 months

Statista, Eurostat

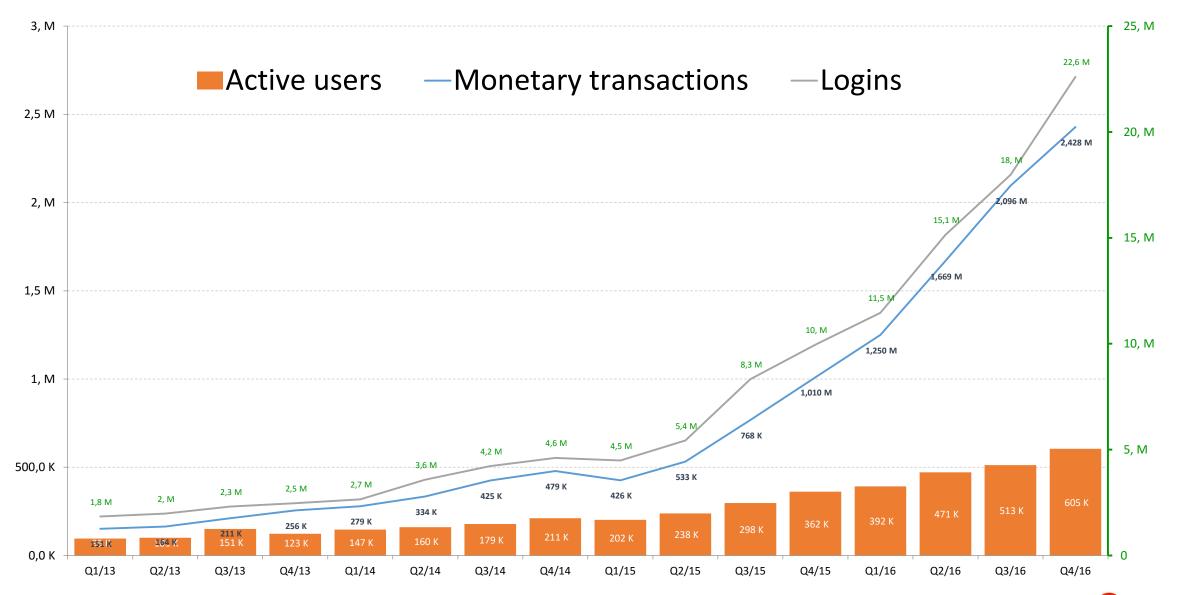


Europe: online banking penetration, 2016



Eurobank

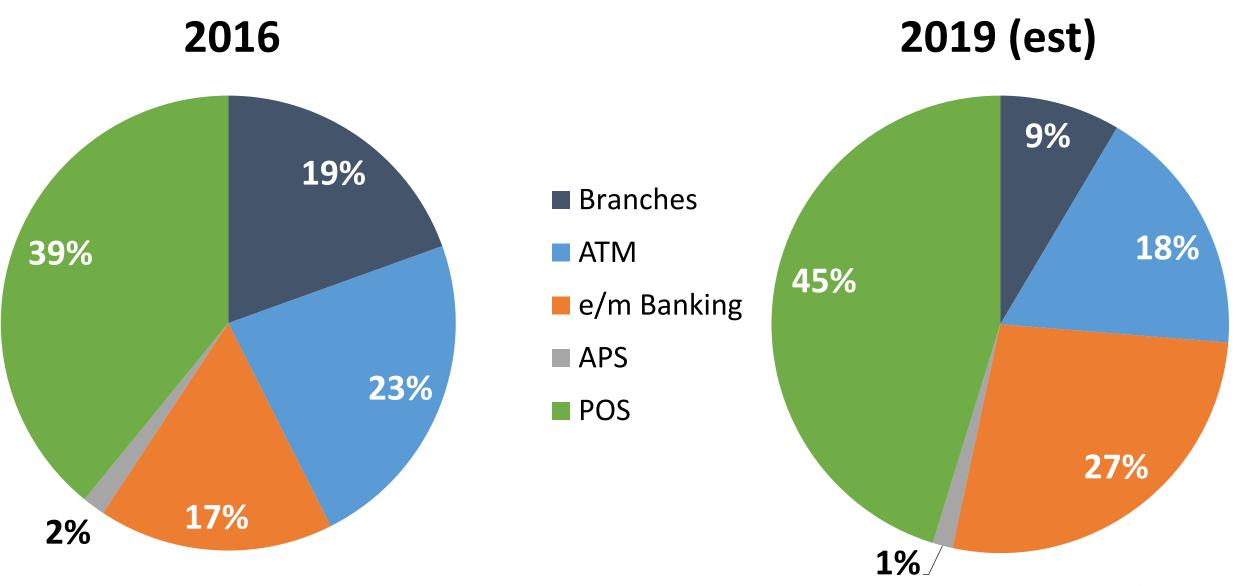
Greece: mobile banking growth



Sotiris Sirmakezis



Greece: banking transactions per channel





Digital Banking Committee





cardlink Viva wallet





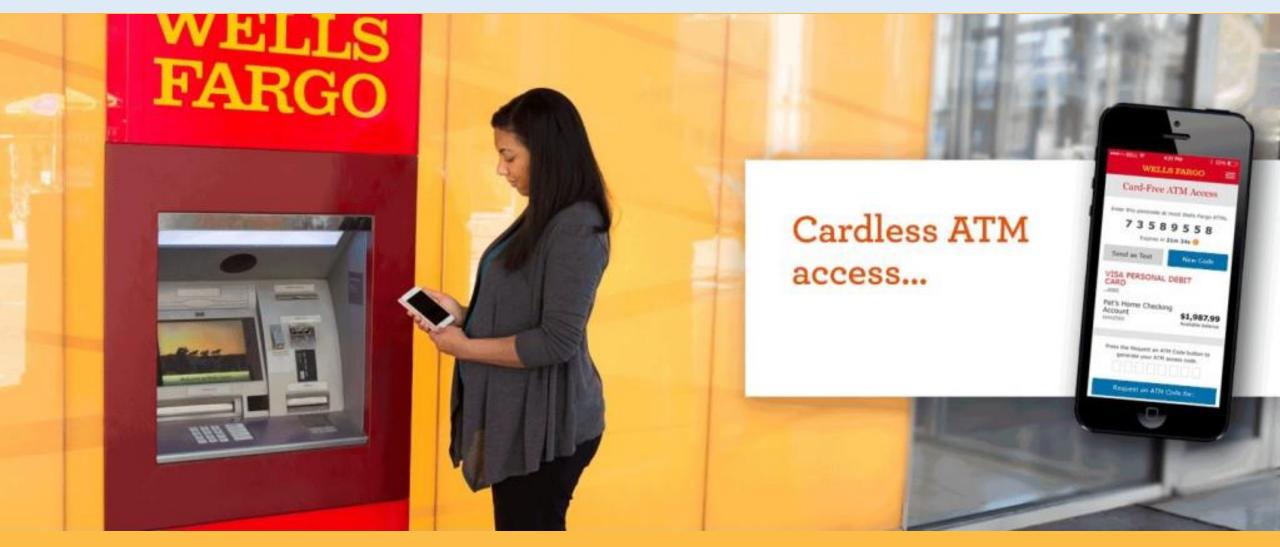
Sotiris Sirmakezis

Accenture Digital Maturity Study

- Industry scores reasonable
- Ambitions are here
- Structural inhibitors
- Area to focus: customer experience & interaction



Cardless ATM transactions by Wells Fargo, 2017





Cardless ATM transactions by Piraeus Bank, 2007



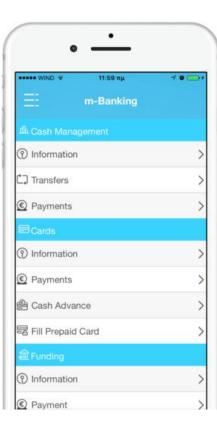






P2P & P2B payments by Eurobank

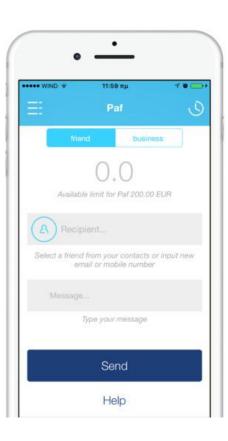
Perform banking transactions on the go



See the amount you have gathered from your digital transactions that contribute to your tax-free balance



Send money to friends or businesses via mobile number, eMail, Facebook or QR Code



The new mobile payment service for professionals & small businesses





Person to person payments by NBG



Now, i-bank Pay is everywhere!

You may pay through QR code in more than 40,000 spots that display i-bank POS or ibank Pay banners.

Pay all your i-bank Pay Friends & nearby businesses





Sofia

Kalari



Danaos Boulgaris

Get all your friend and business payments into one place Carrier 🖘 12:44 PM • Today Το Εσηρεσσάκι € 3,70 rom Εύα Κοντολέων € 21,10 in ago for Dinner Το Μάριος Αναστασιάδης € 5,20 at 20:27 For καφεδάκι Monday, 10/05/2016 rom Βασίλης Μπλέτσας € 25,20 in ago for Dinner From Εύα Κοντολέων € 25,20 min ago for Dinner Το Εσπρεσσάκι € 12,20 Το Ελένη Κομνηνού EK €10 at 15:47 for Cinema Το Ελένη Κομνηνού EK

You can now split the bill with your friends, instantly!

×		Split-the-bil	ί	>
	You		x1	€9
	Bill Mpletsas		x1	€9
	Marios Anastasiad	dis	x1	€9
		Choose Friend		
I _				
		Request for dine	ſ	
		Request for dine €27	r	
	1		r	③ 3
		€27	r	
	1	€ 27 2	r	3



Digital Banking Committee

Collaborate to create infrastructure for Greece's digitization

- **Embrace digital themes**
- **Innovative cross-organizational initiatives**
- **Cooperate with the domestic regulators and authorities**
- Cooperation with the State should aid to this direction
- **Open dialogue with other Greek industries** (i.e. Retail) to understand their needs
- Collaborate with other flagship Greek industries (i.e. Tourism) and create a national ecosystem



Explore and initiate infrastructural initiatives

- Interoperability between the Greek institutional banks and other FS players
- Remote KYC initiative
- Explore blockchain technology
- Create a common mobile payment platform
- Login through e-banking



Digital Banking Committee

Address and remove structural inhibitors

- Lack of continuity in the implementation of digital initiatives by the relevant governmental bodies.
- Lack of an e-invoicing platform, designed and introduced by the Government, is a major disabler towards the digitization of the Greek industries.
- Online connection of cash registers with the General Secretariat of Public Revenues



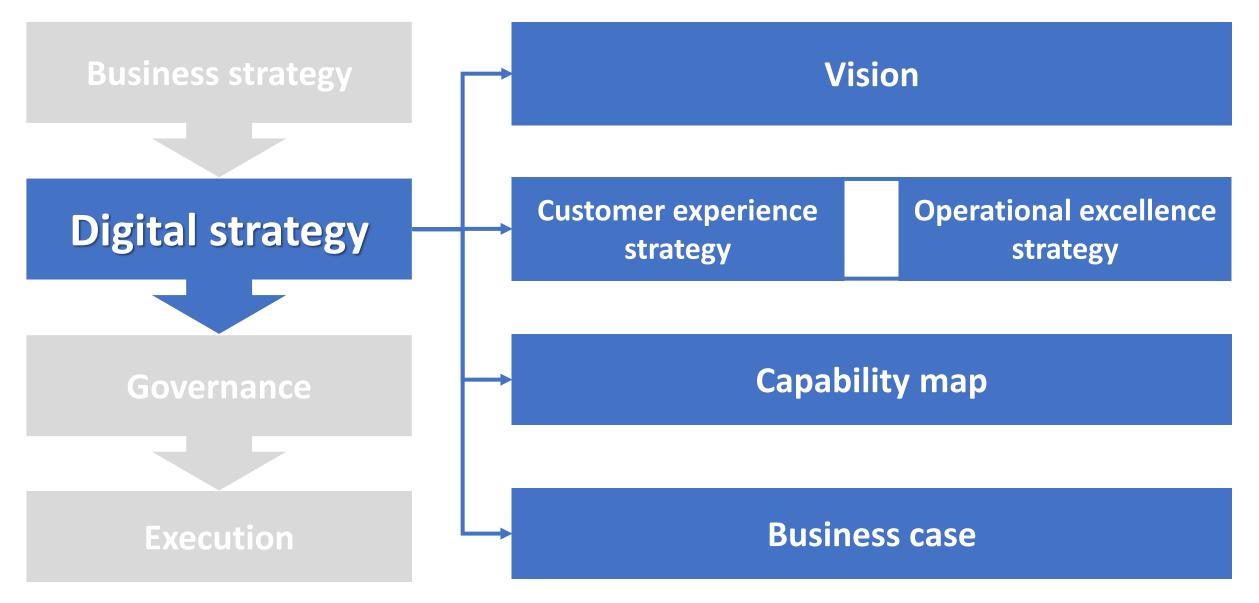


We must become digital businesses

Digital businesses continuously exploit digital technologies to create new sources of value for customers and increase operational agility in service of customers



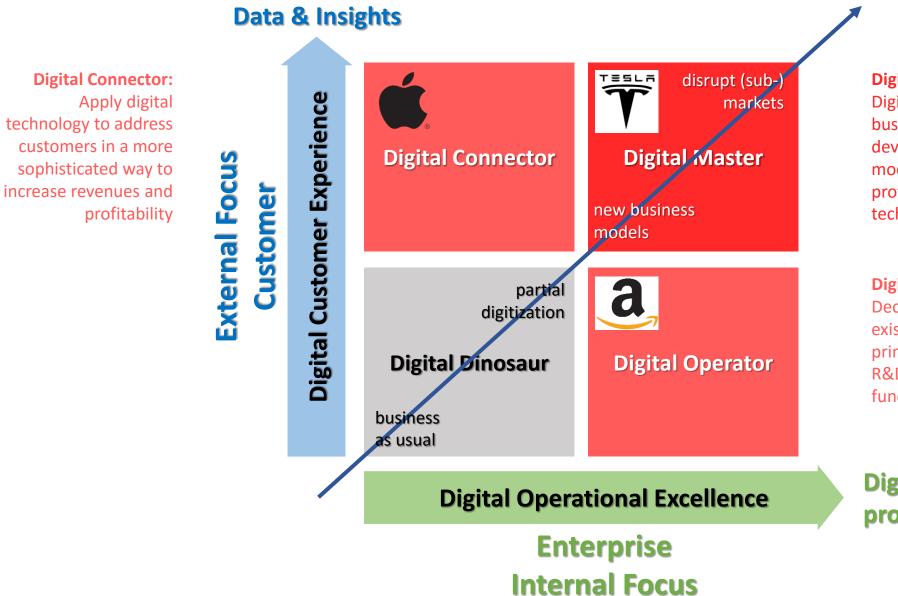
Digital Strategy





Sotiris Sirmakezis

Digital Strategy | Customer experience & Operational excellence



Digital Master:

Digitize your current business model or develop new business models generating profits based on digital technology

Digital Operator: Decrease cost of the existing value chain's primary functions (e.g. R&D) as well as support functions (e.g. HR)

Digitally enhanced products & services



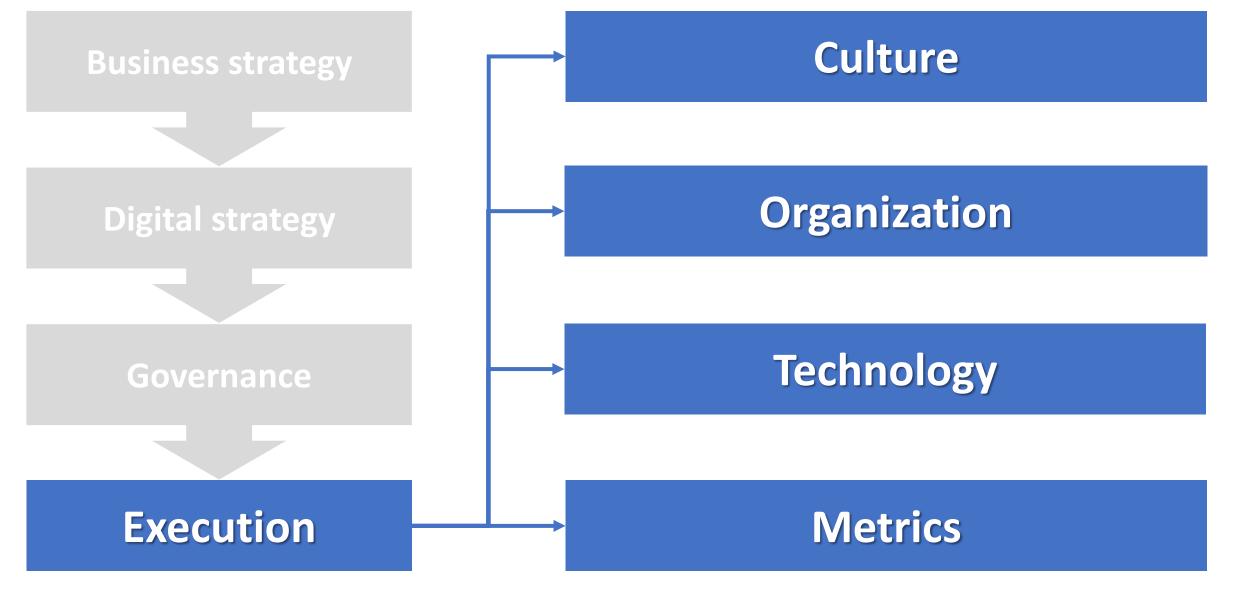
Customer Experience Strategy | Mobile-1st

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

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

It's the last app our user opened

Execution



Sotiris Sirmakezis



Support fintech entrepreneurship

- Help teams accelerate their idea to a business plan
- Incubate startups and grow them into companies
- Run hackathons and competitions, identify and attract talent
- Cooperate with universities













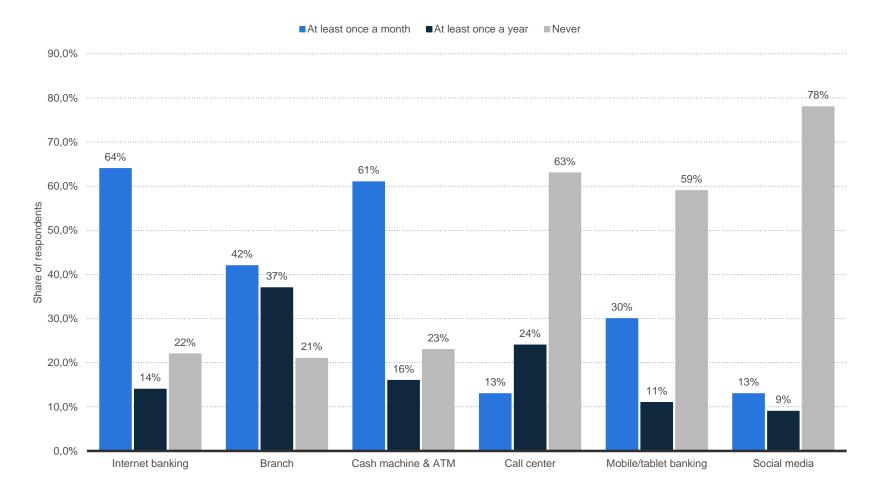
New ideas? We turn them into business!

DIGITAL TRANSFORMATION IN GREECE



Thank you!

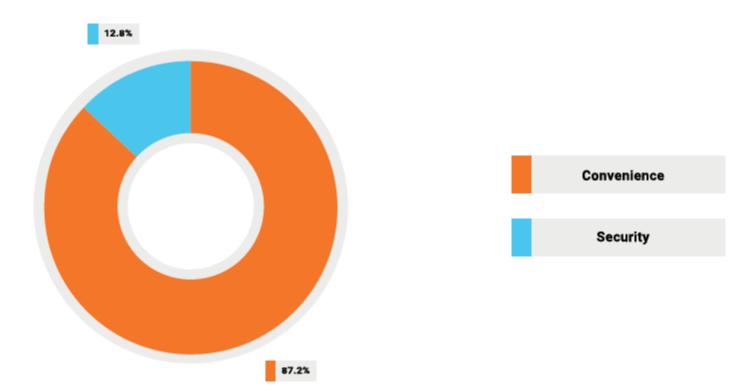
Channels used to access banking services worldwide in 2016, by frequency



Note: Worldwide; over 9,000

Source: Accenture; ID 560375

Consumer Priorities for Financial Institutions



Foot traffic in retail stores has declined by 57% in the past five years,¹ but the *value* of every visit has nearly tripled.²

1 ShopperTrak 2015 holiday, U.S. retail sales.

2 MasterCard SpendingPulse 2010–2015, U.S. retail sales.

Many consumers aren't brand-committed. Ninety percent of smartphone users are not absolutely certain of the specific brand they want to buy when they begin looking for information online.

Consumers in the Micro-Moment, Wave 3, Google/Ipsos, U.S., August 2015, n=1291 online smartphone users 18+

- You get a shot at your competitor's customers. One in
- three smartphone users have purchased from a company or brand other than the one they intended to because of
- information provided in the moment they needed it.

Consumers in the Micro-Moment, Wave 3, Google/Ipsos, U.S., August 2015, n=1291 online smartphone users 18+

- your presence can drive brand awareness goals. Studies have shown that you can increase unaided brand
- awareness by 46% (or 6.9 percentage points) simply by
- showing up in mobile search ad results.¹And more than half (51%) of smartphone users have discovered a new company or product when conducting a search on their smartphones.²

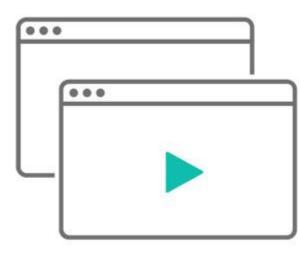
¹ Consumers in the Micro-Moment, Wave 3, Google/Ipsos, U.S., August 2015, n=1291 online smartphone users 18+ ² Google/Ipsos MediaCT, Search for Brands Industry Research Meta-analysis, 2013–2015



61%

of smartphone users are more likely to buy from mobile sites and apps that customize information to their location.

Consumers in the Micro-Moment, Wave 3, Google/Ipsos, U.S., August 2015, n=1291 online smartphone users 18+



48%

of smartphone users are more likely to buy from companies whose mobile sites or apps provide instructional video content.

Consumers in the Micro-Moment, Wave 3, Google/Ipsos, U.S., August 2015, n=1291 online smartphone users 18+

Millennials and Banking

68%

say that in 5 years, the way we access our money will be totally different

70%

say that in 5 years, the way we pay for things will be totally different

Sotiris Sirmakezis



What's Wechat?

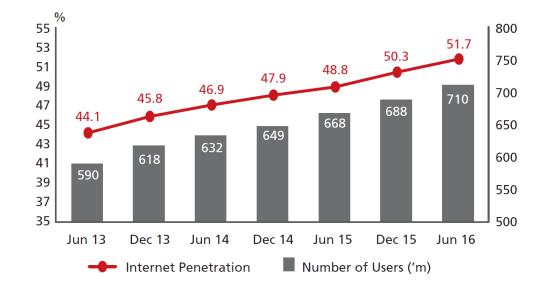
WeChat is a smartphone application that consists of...

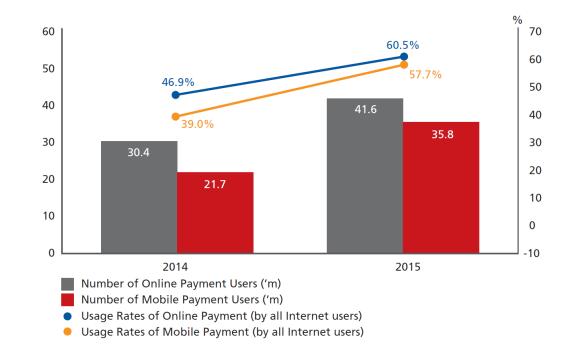




Online payment/mobile payment users and usage rate in China, 2014-2015

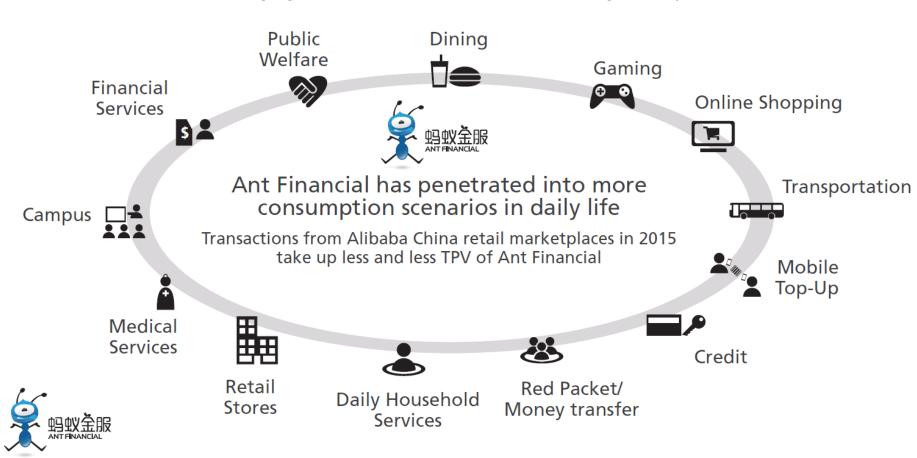
Internet users and internet penetration rate in China





CNNIC (Statistical Survey on Internet Development in China), Dec 2015

CNNIC, June 2016

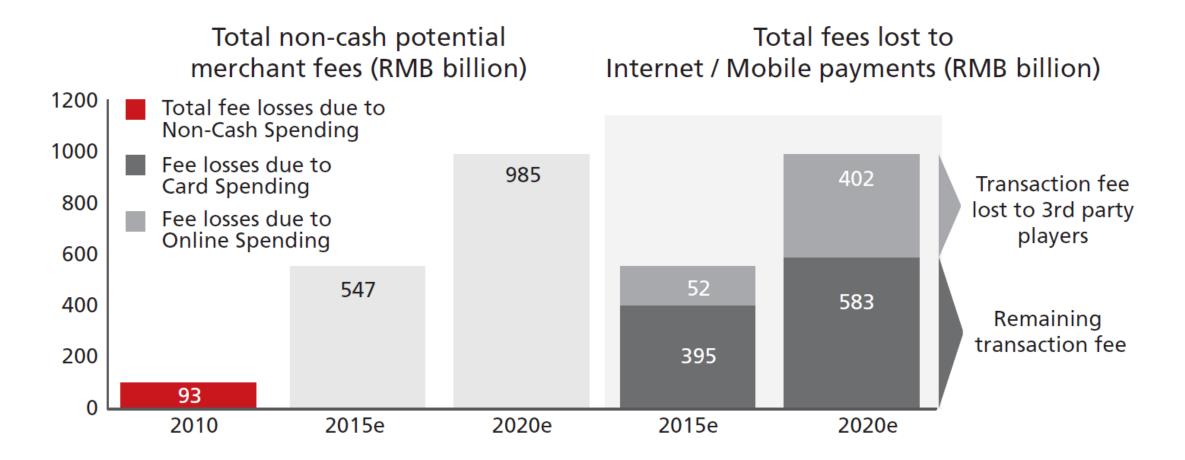


User engagement across Ant's expanding ecosystem

Alibaba Group Investor Day, June 2016

The Rise of Fintech in China, EY & DBS, Nov 2016

Bank fees lost to digital payments in 2015



Assumes 0.78% transaction fee Source: EuroMonitor, iResearch, Kapronasia Analysis, July 2016

The Rise of Fintech in China, EY & DBS, Nov 2016



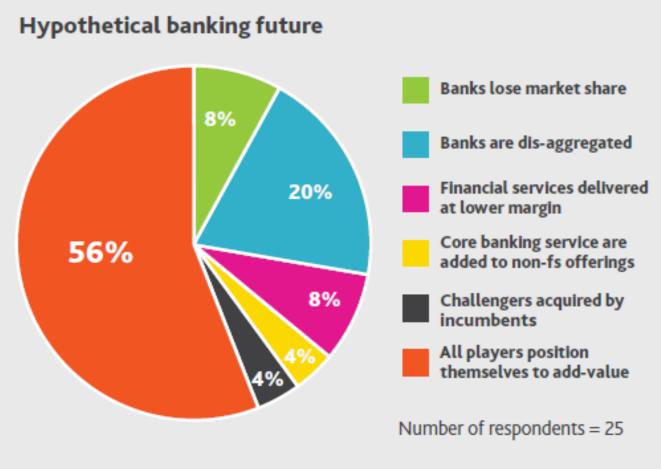
Percentage of banking/financial services customers using FinTech services

Service type	China	India	Singapore	Indonesia	Malaysia	Thailand
Payments/ remittances	40%	20% ⁵	4%	1%	1%	1%
Lending	14%	5%	2%	2%	2%	2%
Personal wealth management	5%	3%	1%*	2%	1%	1%
Insurance	35%	2%	2%	1%	1%	1%
	Highly Disrupti	ve Mate			erging reat	Remote possibility of disruption

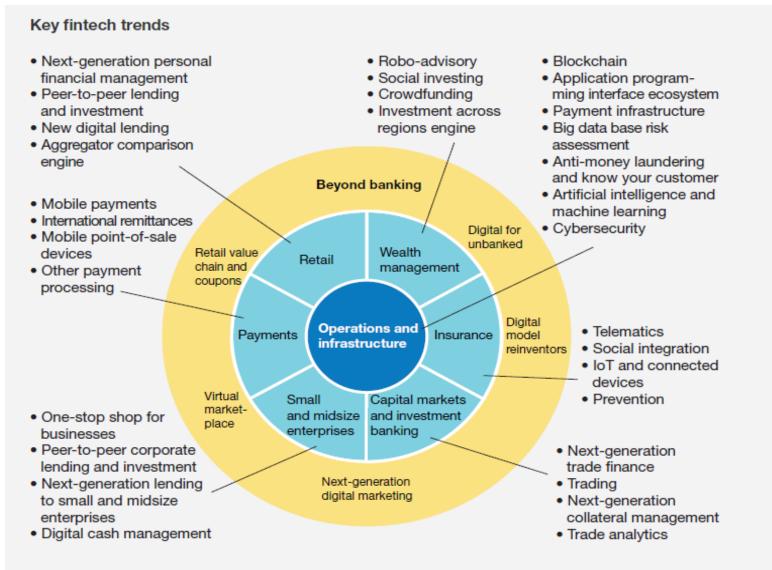
The Rise of Fintech in China, EY & DBS, Nov 2016





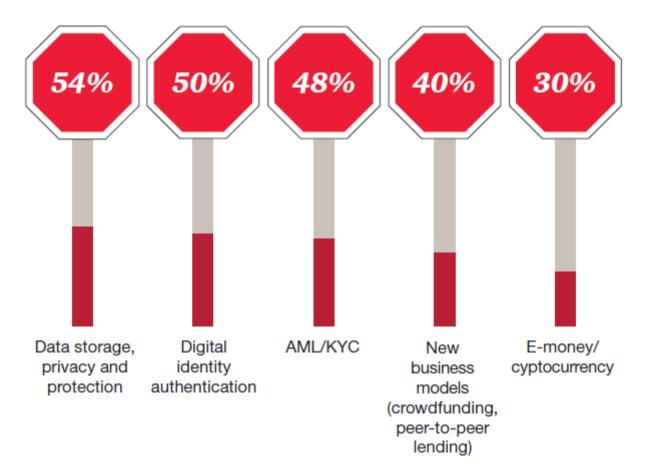


Source: The Future of FinTech and Banking: Digitally disrupted or reimagined? - Accenture



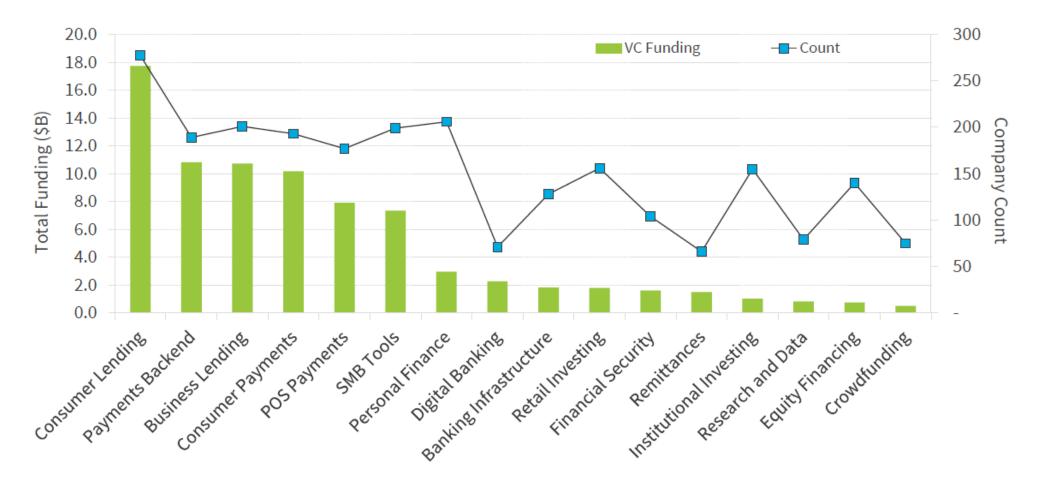
Regulatory barriers to innovation

In which areas do you see regulatory barriers to innovation in FinTech?



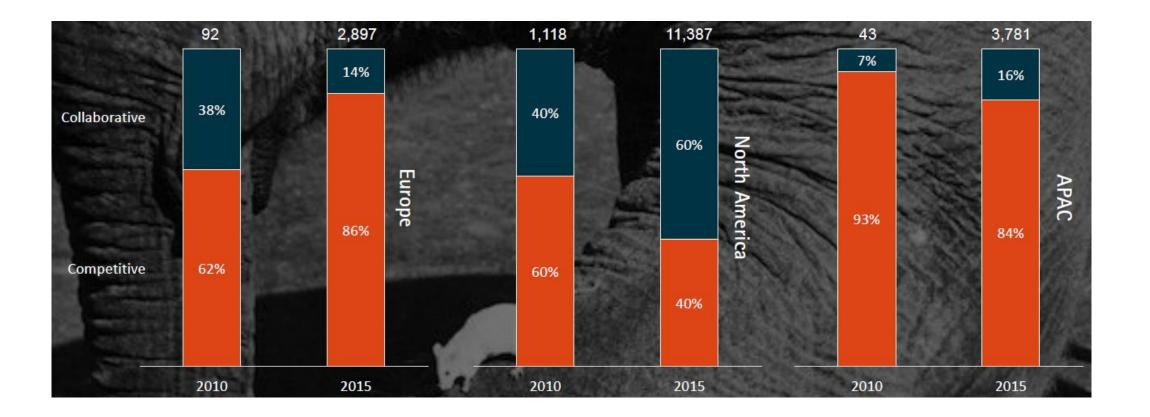
Venture investing in fintechs

The payments and lending categories account for **72% of all venture funding** and **43% of total companies** in the fintech startup sector





Venture Scanner, Fintech Report Q1 2017



BARRIERS TO FUTURE TRANSFORMATION

Percentage of respondents citing obstacles to digital transformation

Organizational restructure challenges	5
Resistance to change	52
38 Lack of key digital skills	
36 Challenge of asset shift away from legacy	
22 Cost/complexity of new cyber threat management	
22 Regulatory constraints	
21 Sensitive nature of data/business	
18 Lack of right technology	
8 Consumer/political disquiet	
8 Lack of necessary market relationships	

Analytics Services Survey, Harvard Business Review, December 2016

MOST IMPORTANT SKILLS FOR 2020

Percentage of respondents who cite how important each will be for their organization's success in 2020

VERY IMPORTANT SOMEWHAT IMPORTANT

	69	20
Ability to work with data and analytics		
	67	2
Ability to collaborate		
	53	31
Specialized data skills		
47		34
Process automation		
43		31
User experience design		
39		41
More knowledge of IT across the business		
37	3	5
Mobile development expertise		
36	3	6
Social media skills		

The reshape agenda: strategic priorities for banks in 2017*

Top three reshape priorities - all banksImage: Structuring business operations or legal entitiesImage: Structuring business operations or legal entitiesImage: Structuring business operations or loint industry disruptors/ inTech companiesImage: Structuring business operations or loint industry disruptors/ inTech companiesImage: Structuring business operations or loint industry disruptors/ inTech companies

G-SIBs

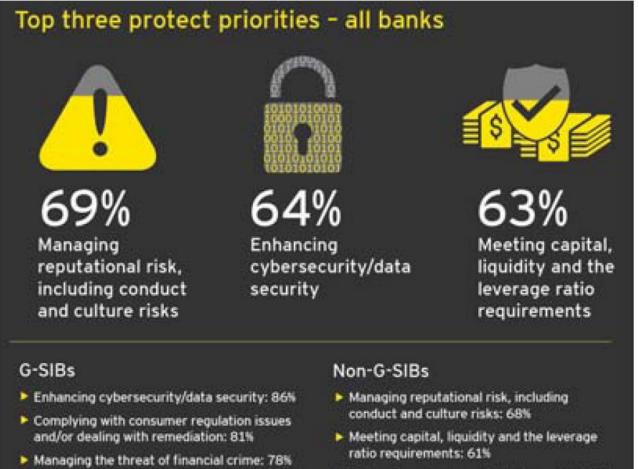
- Developing partnerships with industry disruptors/FinTech companies: 68%
- Simplifying/restructuring business operations or legal entities: 64%
- Collaborating with peers to develop industry utilities: 41%

Non-G-SIBs

- Simplifying/restructuring business operations or legal entities: 40%
- Developing partnerships with industry disruptors/FinTech companies: 33%
- Developing partnerships or joint ventures with other financial organizations: 24%

% ranking strategic initiatives 8,9,10 on a scale of importance

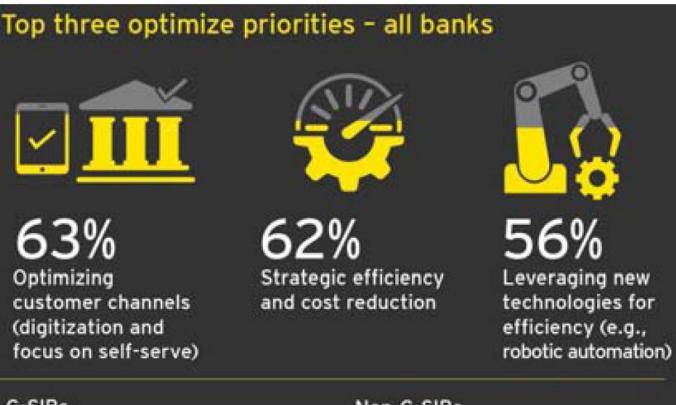
The protect agenda: strategic priorities for banks in 2017*



Enhancing cybersecurity/data security: 60%

% ranking strategic initiatives 8,9,10 on a scale of importance

The optimize agenda: strategic priorities for banks in 2017*



G-SIBs

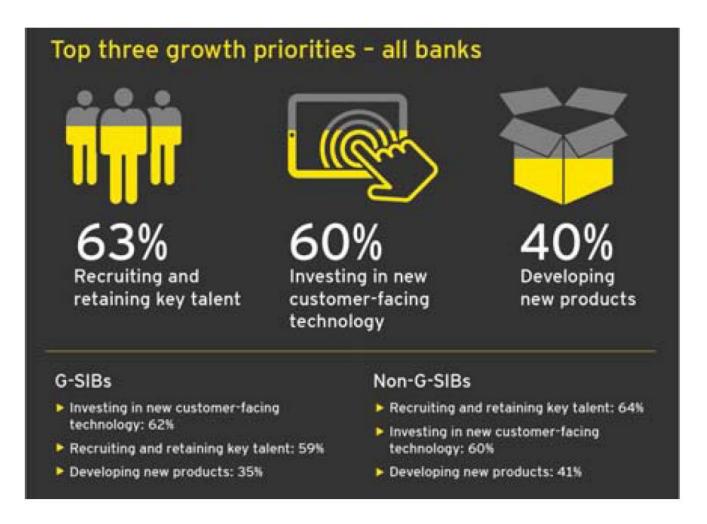
- Optimizing customer channels: 74%
- Rationalizing physical footprint: 63%
- Strategic efficiency and cost reduction: 62%

Non-G-SIBs

- Strategic efficiency and cost reduction: 62%
- Optimizing customer channels: 60%
- Leveraging new technologies for efficiency (e.g., robotic automation): 56%

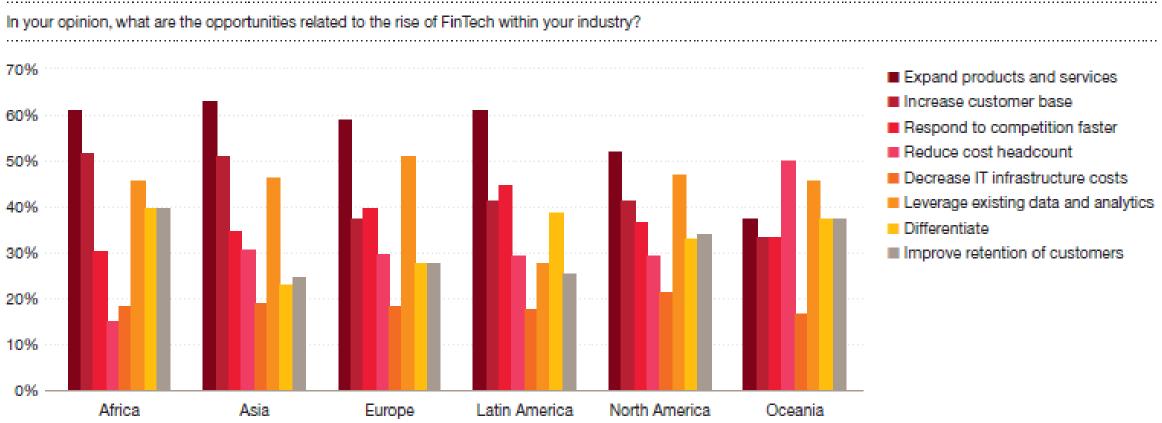
% ranking strategic initiatives 8,9,10 on a scale of importance

The grow agenda: strategic priorities for banks in 2017*



% ranking strategic initiatives 8,9,10 on a scale of importance

Opportunities related to the rise of FinTech



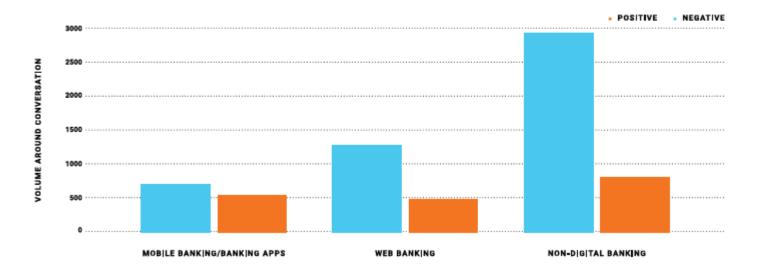
EXCEPTIONAL CUSTOMER EXPERIENCE IS HIGHEST DIGITAL PRIORITY

Percentage of respondents who ranked the following as a priority for their organization

● 1 = HIGHEST PRIORITY ● 2 ● 3 ● 4 = LOW PRIORITY									
	40	28		20	13				
Create exceptional, highly relevant customer experience									
24		26	25		25				
Enhance operations for intelligence and speed									
23		28	29		20				
Transform existing products to be more information/services based									
13	19	26			42				
Transcend traditional products/business models									

Analytics Services Survey, Harvard Business Review, December 2016

Sentiment Around Banking Experiences



60% of complaints about banks online are about nondigital experiences like bank visits and phone calls

Over three-fourths of all emotive conversation around non-digital are negative, with customers frequently complaining about negative banker interactions and extremely long waittimes.

Analyzes 31,237 conversations around bank services on social media. Experiences were segmentation using Brandwatch's Rules and Categories features.

Millennials and Banking

53%

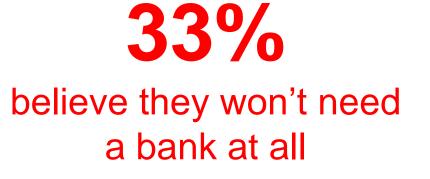
don't think their bank offers anything different than others

1 in 3

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

71%

would rather go to the **dentist** than listen to what banks are saying





"The Millennial Disruption Index", Viacom Media Networks, 2013

Opportunities related to the rise of FinTech

- Expand products and services
- Increase customer base
- Respond to competition faster
- Reduce cost
- Decrease IT infrastructure cost
- Leverage existing data and analytics
- Differentiate
- Improve retention of customers

Digital transformation

DISCOVER: Set the ambition for the business

1. Where the business should go?

DESIGN: Create a plan for digital transformation

2. Who will lead the effort?

3. How to "sell" the vision to key stakeholders

4. Where to position the firm within the digital ecosystem

5. How to decide during the transformation

DELIVER: Execute the transformation plan, allowing for ongoing adaptation and adjustment

6. How to allocate funds rapidly and dynamically

DE-RISK: Increase the transformation's prospects for success

7. What to do when

"Scaling a transformative culture through a digital factory", McKinsey & Co, April 2017

Building a digital culture through a digital factory

Act like venture capitalists

- Get creative to attract top talent
- Build 'squads' of working teams
- Model collaboration in your workplace
- Build with clear purpose
- Invest enough for impact
- Develop a change-management plan to incorporate the new product into the business
- Measure the change
- Find leaders with the right combination of skills

"Scaling a transformative culture through a digital factory", McKinsey & Co, April 2017

Demand aggregators: differentiate by providing all-encompassing experiences that remove friction for customers, centered on their needs and goals

Component suppliers: differentiate by crafting efficient products that plug in to a range of customer experiences, inside and beyond current industry boundaries

Platform providers: differentiate by providing platforms that underpin and over time broker services between many players across emerging digital ecosystems.

TRANSFORM <u>CAPABILITIES</u> WITH CUSTOMER SELFSERVICE, 'BOTS' AND ANALYTIC

SELFSERVICE, 'BOTS' AND ANALYTI ENGINES

Reprioritize and streamline activities with data-driven insights and customer self-service preferences Reengineer with the objective of eliminating unnecessary activities and interactions that are no longer relevant to digitally-savvy customers

Substitute software for activities where

- computerized eciency and
- consistency can drive step-level
- improvements
- Reinvent activities with
- machine learning algorithms and artificial intelligence
- applied to rich data sets

PEOPLE RESET HUMAN CAPITAL MODEL TO EMPHASIZE AGILITY AND RAPID LEARNING

Integrate different disciplines

REDESIGN BUSINESS ARCHITECTURE FOR SIMPLICITY AND LEVERAGE

Converge business, technology and operations into integrated definition of capabilities Create taxonomy with protocols for flexible assembly and recombinations of key capabilities "Utilitize" common capabilities across activity sets for eciency and eectiveness Externalize non-core capabilities to refocus internal resources on most value-adding activities

"The state of the financial services industry 2017", Oliver Wyman, 2017

RETHINK GOVERNANCE FOR SPEED AND SYSTEMATIC INNOVATION Compartmentalize

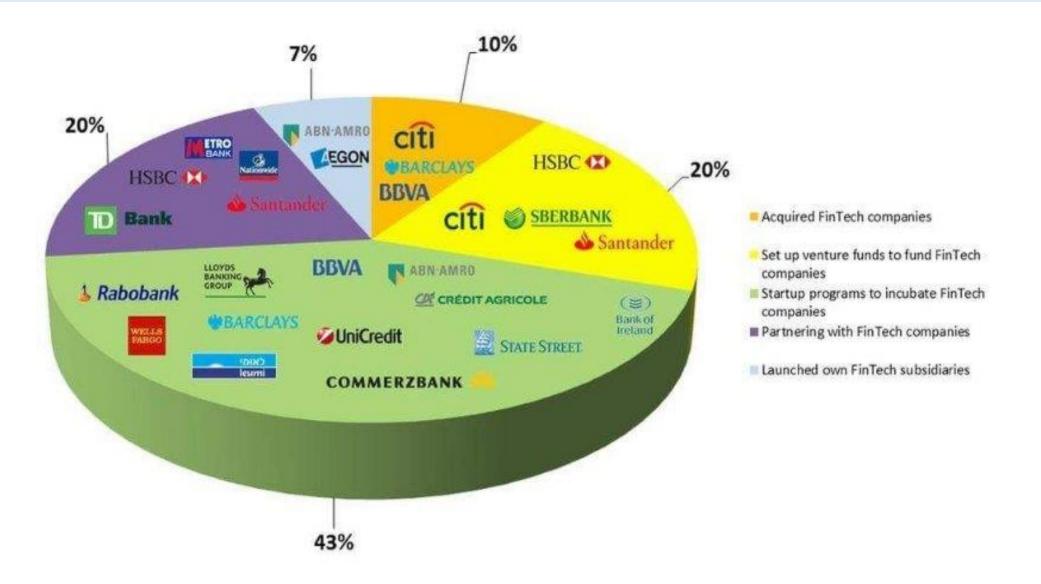
Compartmentalize management attention and

Barriers to future transformation

Organizational restructure challenges Resistance to change Lack of key digital skills Challenge of asset shift away from legacy Cost/complexity of new cyber threat management Regulatory constraints Sensitive nature of data/business Lack of right technology Consumer/political disquiet Lack of necessary market relationships Most important skills for 2020

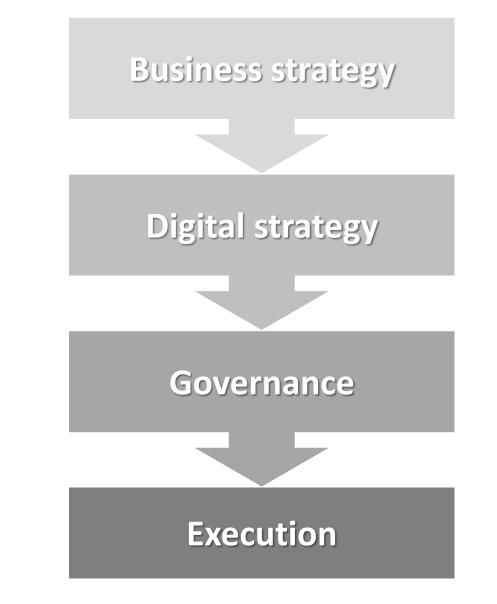
Ability to work with data and analytics Ability to collaborate Specialized data skills Process automation User experience design More knowledge of IT across the business Mobile development expertise Social media skills

Banks "embrace" the startup ecosystem





Adopt digital strategy to business strategy





BANKS THINK

ABOUT HOW THEY CAN PROFIT

PEOPLE THINK

ABOUT HOW THEY CAN BENEFIT

BANKS THINK

ECONOMIC VALUE

PEOPLE THINK

PERSONAL VALUE

BANKS THINK

PEOPLE THINK

ABOUT THE PRODUCTSABOUT HOW THEY'RETHEY OFFERTREATED

BANKS ARE FORCING PEOPLE Tobe someone they'renot

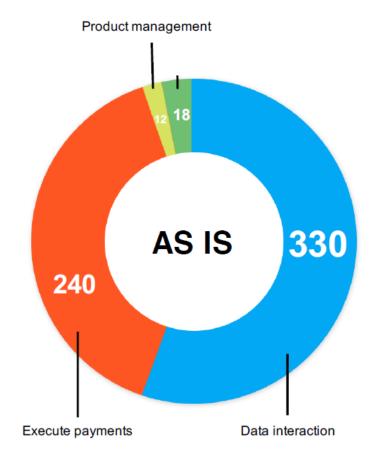
(AND THEY DON'TLIKEIT)

BANKS JUST HAVE TO BETTER UNDERSTAND HOW THEY THINK

(not your ordinary segmentation methodology)

Digital Strategy

Customer Experience Strategy | Typical vs. future online banking session





Customer Experience Strategy | Give customers quality time

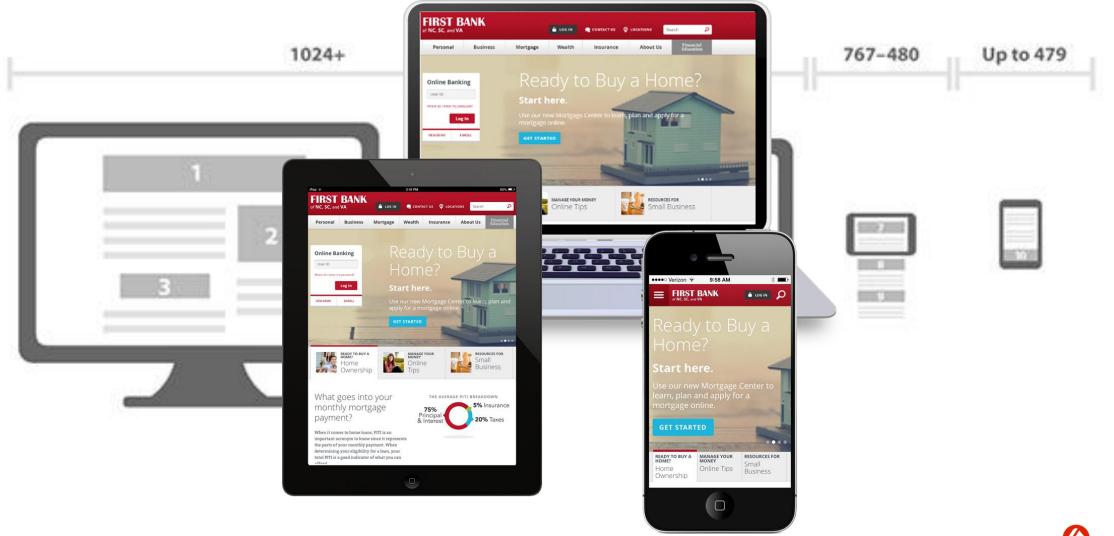




Your culture is your brand.

TONY HSIEH CEO, ZAPPOS.COM

Responsive Design



Eurobank

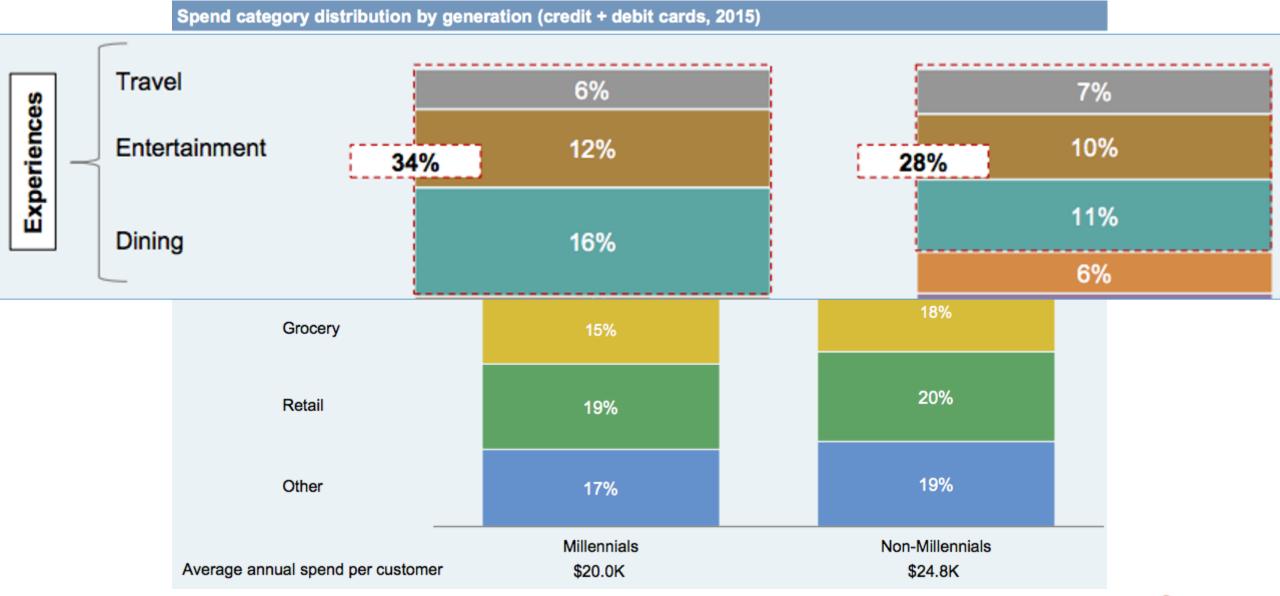
Digital business transformation is a journey, not a destination

MALE!





Millennials: they spend more on experiences

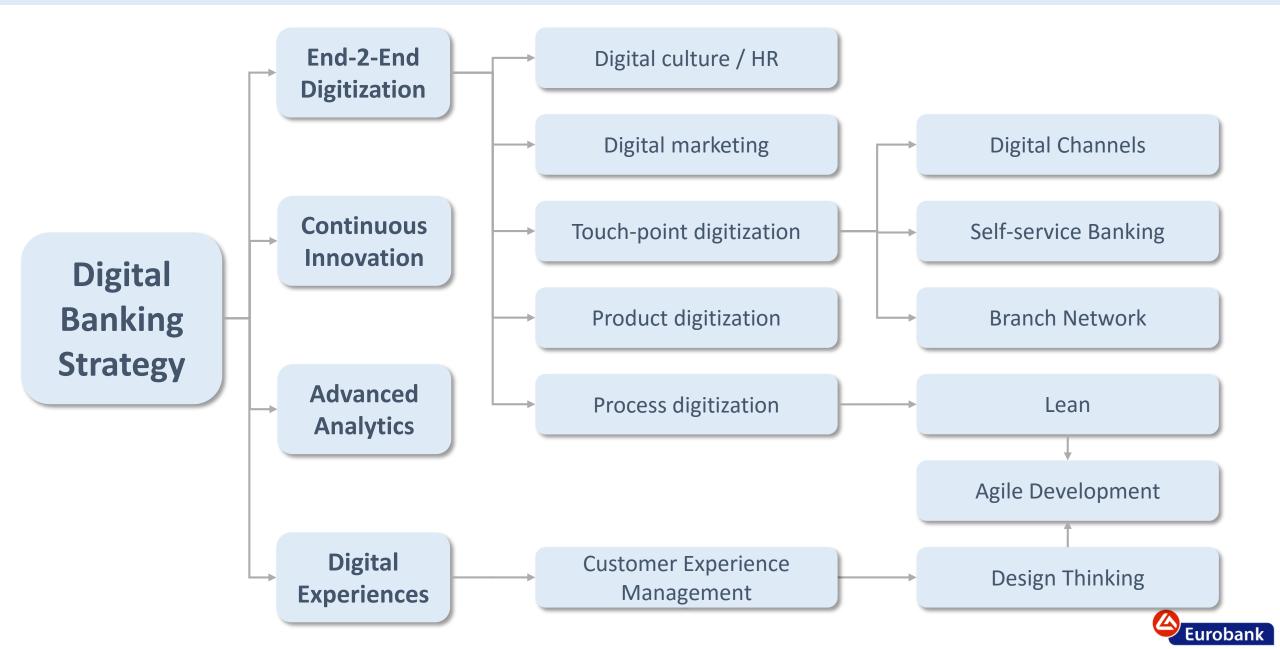


Sotiris Sirmakezis

JP Morgan Chase & Co. | State of the US Consumer | Barclays Global Financial Services Conference, Sep 2016



Digital Banking Strategy



European Banks' digital readiness

Retail banks have digitized only 20% - 40% of their processes

90% of European banks invest less than 0.5% of their total spending on digital

Poor digital offerings



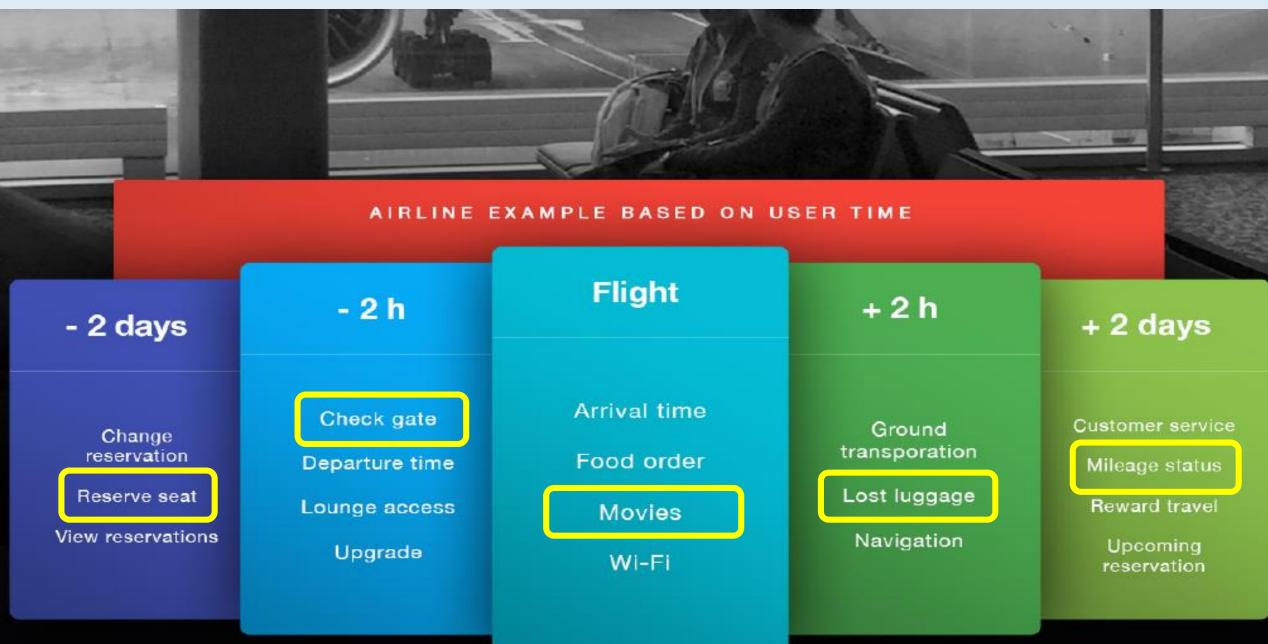
BANK CUSTOMERS ARE JUST PEOPLE



Customer Experience Strategy | Mobile-1st



Customer Experience Strategy | Mobile moments

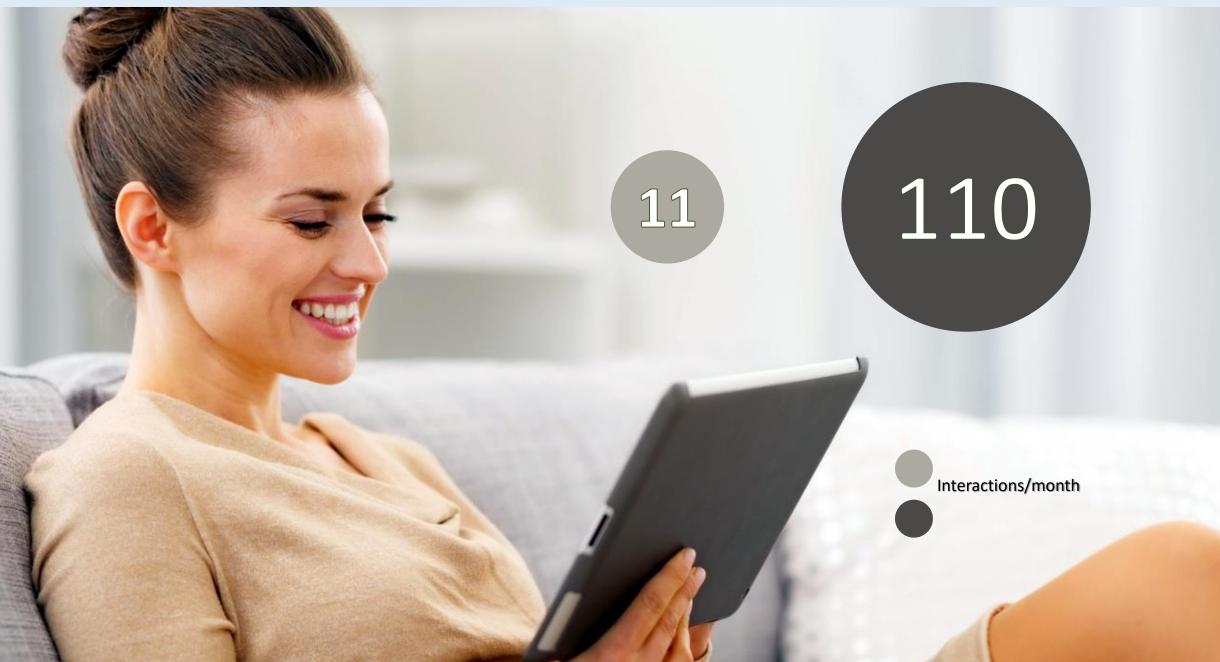


Courtesy: Husson, Forrester, 2015

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

It's the last app our user opened

Customer Experience Strategy | Today's limited interactions are not enough



Start thinking like a disruptor

Focus	Experiment	Choose
on unmet customer	with new business	speed
needs	models	over perfection
Think	Face	Be ruthless
like	the	about
an ecosystem player	non-believers	your liabilities
Innovate	Maximize	Place
the	the use of existing	a few selective
adjacent possible	technology	big bets



Digital Organization | enter • grow • go







Sotiris Sirmakezis

Beyond Hackathon

The 1st Regional FinTech Hackathon in Greece

0

24-26 June, 2016

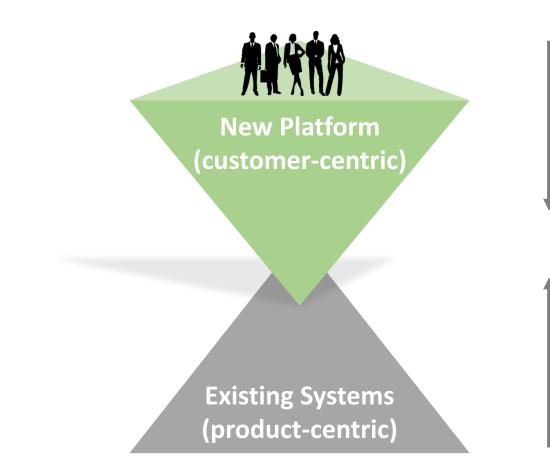
(•

17 teams, 3 prizes





Inside-Out vs. Outside-In

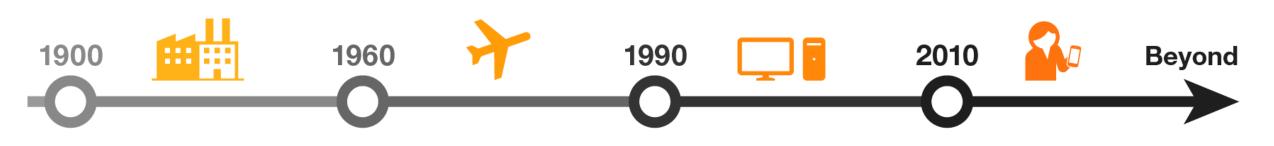


Outside-In Customer enablement

Inside-Out Web/mobile enablement



Empowered customers have given rise to a new era



Age of manufacturing

Mass manufacturing makes industrial powerhouses successful Age of distribution Global connections and transportation systems make distribution key

Age of information

Connected PCs and supply chains mean those that control information flow dominate

Age of the customer

Empowered buyers demand a new level of customer obsession

