



# Examples of the **IT** **G**overnance **C**omponent of **C**yber **R**isks

Global IT Governance Day 2021

18<sup>th</sup> of **F**ebruary **2**021

# David Gyori: Banking Innovation and Financial Technology

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- **Financial Technology Trainer**
  - **Banking Innovation Trainer**
  - **Consultant, Writer, Researcher**
  - **CEO of Banking Reports London**
  - **Director of The Asian Banker Group**
  - **Co-Author of Five Books**
- 
- Founding Member of the World FinTech Association
  - Top 50 Global Thought Leader and Influencer on FinTech
  - Member of the Panel of Judges of the Financial Technology Innovation Awards Program
  - Member of the Panel of Judges of the International Excellence in Retail Financial Services Program





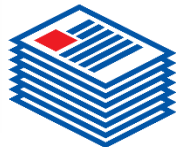
# David Gyori: Banking Innovation and Financial Technology



**World Fintech Association**

**THE ASIAN BANKER**

STRATEGIC BUSINESS INTELLIGENCE FOR ASIA'S FINANCIAL SERVICES COMMUNITY



**BANKING REPORTS**



BANKING REPORTS



# David Gyori: Banking Innovation and Financial Technology



## World Fintech Association



# WealthTech

WEALTH AND ASSET MANAGEMENT IN THE FINTECH AGE



Edited by  
**Patrick Schueffel**

**WealthTech: Wealth and Asset Management in the FinTech Age** is the primary resource for the wealth and asset management technology revolution. It examines the rise of financial technology and its growing impact on the wealth and asset management industry. Written by thought leaders in the global WealthTech space, this volume offers an analysis of the current tectonic shifts happening in wealth and asset management and aggregates diverse industry expertise into a single informative book. It provides practitioners such as wealth managers, bankers and investors with the answers they need to capitalize on this lucrative market. As a primer on WealthTech it offers academics clear insight into the repercussions of profoundly changing business models. It furthermore highlights the concept of the ongoing democratization of wealth management towards a more efficient and client-centric advisory process, free of entry hurdles.

This book aggregates facts, expertise, insights and acumen from industry experts to provide answers on various questions including: Who are the key players in WealthTech? What is fueling its exponential growth? What are the key technologies behind WealthTech? How do regulators respond? What are the risks? What is the reaction of incumbent players? This book not only seeks to answer these questions but also touches on a series of related topics:

- Get up to speed on the latest industry developments
- Understand the driving forces behind the rise of WealthTech
- Realize the depth and breadth of WealthTech
- Discover how investors react to the growth in WealthTech
- Learn how regulators influence the evolution of WealthTech business models
- Examine the market dynamics of the WealthTech revolution
- Grasp the industry's potential and its effects on connected sectors
- Build acumen on investment and entrepreneurial opportunities



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# Driving Forces of Digital Transition: ICT is GPT

ICT is the **GPT** of the **21<sup>st</sup>** Century

Writing  
3500 BC

Printing  
1500 AD

Steam Engine  
1790 AD

Electricity  
1890 AD

What is holding  
FinTech back?

REGULATORY  
PATCHWORK

COMPLIANCE

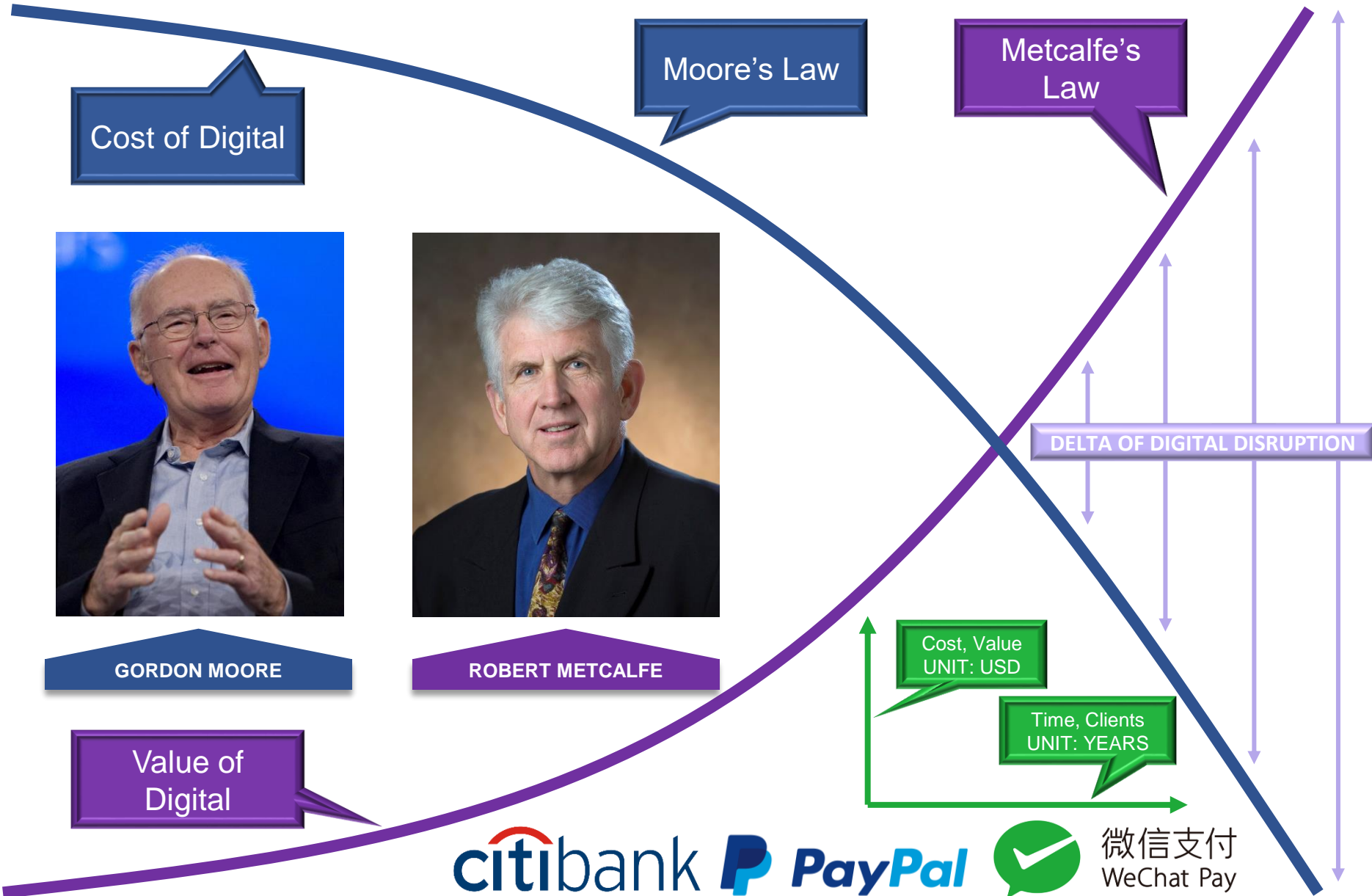
DIGITAL FINITY

TECH: GAFA



# METCALFE AND MOORE TOGETHER

## EXPONENTIAL DELTA OF DIGITAL DISRUPTION



**CORPORATE CULTURE**



100 / 25 000

**STRATEGY**



10 000 / 25 000

**TACTICS**

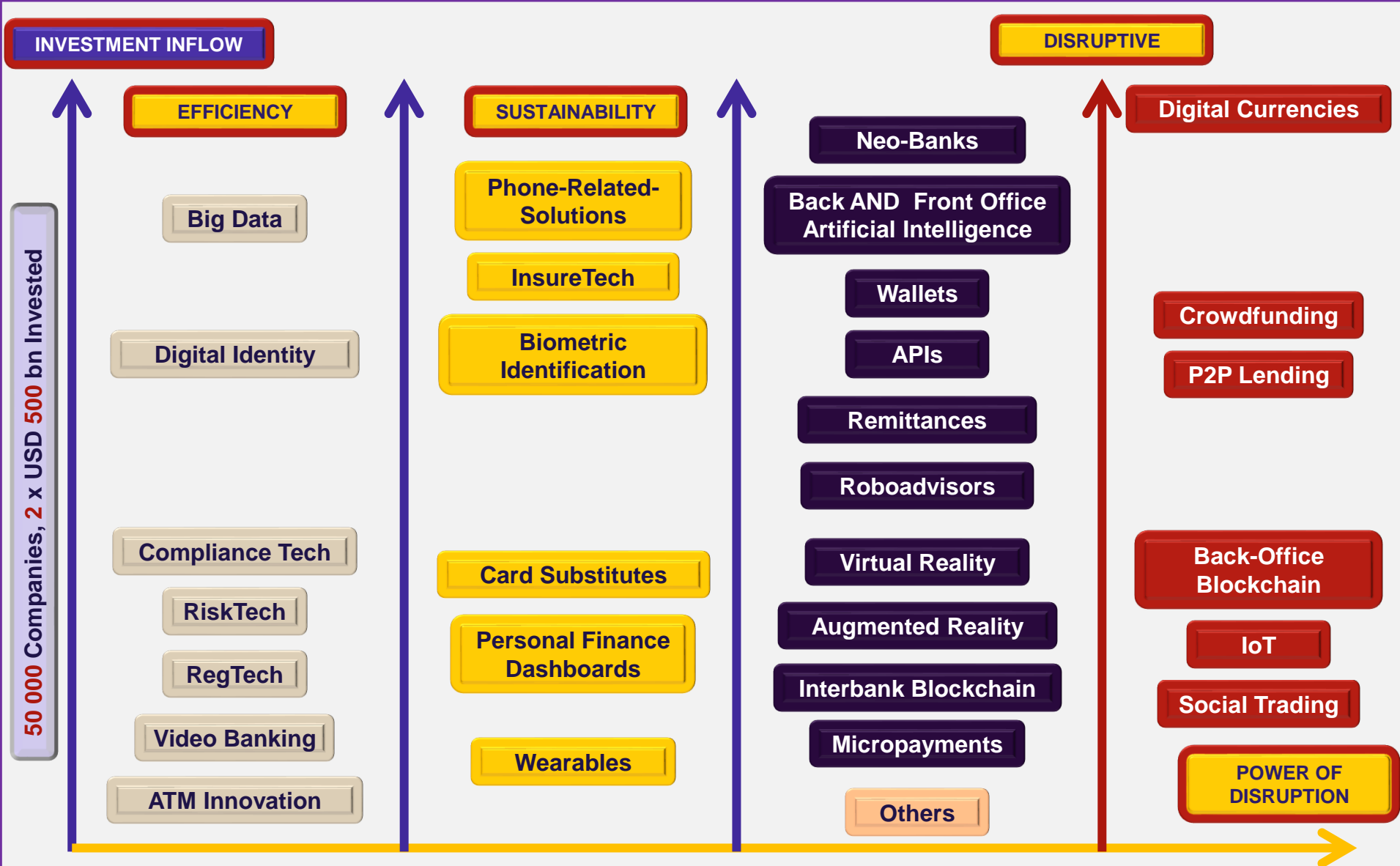


20 000 / 25 000

**OPERATIVE  
EXCELLENCE**

# 30 AREAS OF FINTECH IN

## CATEGORIES OF EFFICIENCY, SUSTAINABILITY, DISRUPTIVE INNOVATION

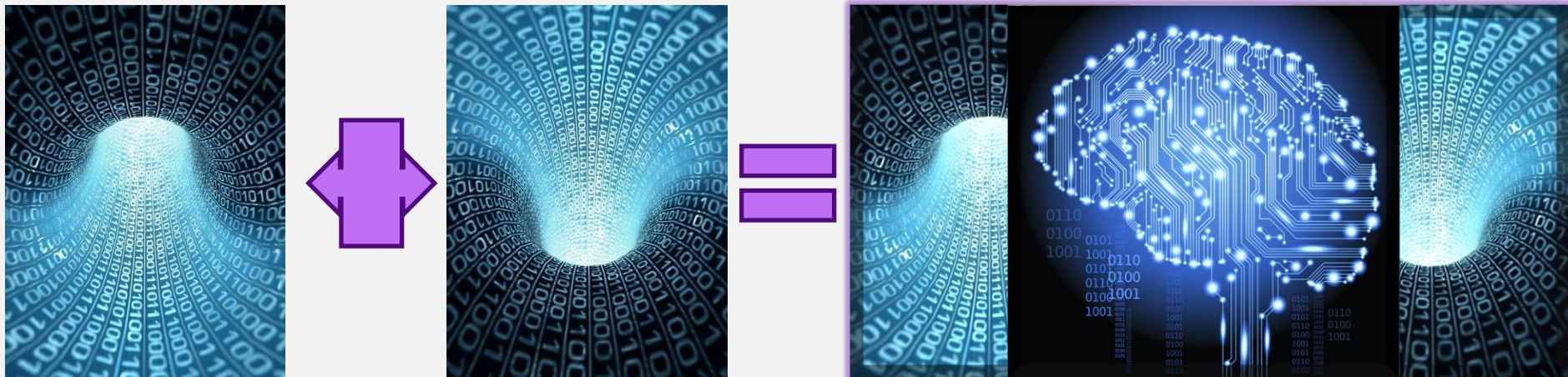
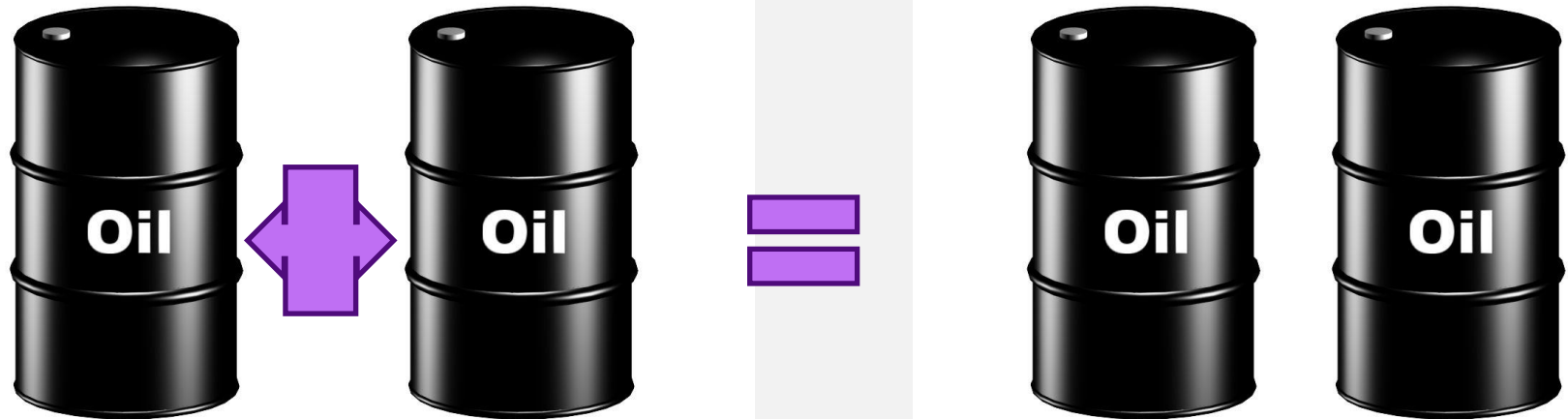


- ✓ M COMMERCE
- ✓ STREAMING
- ✓ SOCIAL MEDIA
- ✓ VIRTUAL REALITY
- ✓ SMART PHONES
- ✓ DRONE DELIVERY
- ✓ SMART PHONE
- ✓ SELF DRIVING CAR
- ✓ SELF DRIVING CAR
- ✓ MUSIC STREAMING
- ✓ HALOGEN BULBS
- ✓ STREAMING
- ✓ SMART PHONES
- ✓ FOOD DELIVERY
- ✓ FAST FASHION
- ✓ ELECTRIC CARS
- ✓ SMART LENSES
- ✓ ?
- ✓ **SOCIAL TRADING**
- ✓ SOCIAL TRADING
- ✓ 3D PRINTING
- ✓ RENEWABLE ENERGY
- ✓ AI-PAEDIA
- ✓ KINDLE
- ✓ DRONE DELIVERY
- ✓ HOME OFFICE
- ✓ **BLOCKCHAIN**
- ✓ SMART PHONE
- ✓ **MOBILE WALLET**

- ✓ E COMMERCE
- ✓ TORRENT
- ✓ ONLINE NEWS
- ✓ ULCC AIRLINES
- ✓ MOBILE PHONES
- ✓ COURIER DELIVERY
- ✓ DIGITAL CAMERA
- ✓ RIDE SHARING
- ✓ CARS
- ✓ YOUTUBE
- ✓ BULBS
- ✓ TELEVISION
- ✓ PERSONAL COMPUTERS
- ✓ FAST FOOD
- ✓ FASHION STORES
- ✓ HYBRID CARS
- ✓ SMART PHONE
- ✓ GOOGLE
- ✓ **DISCOUNT BROKERAGES**
- ✓ ROBOADVISORS
- ✓ IKEA
- ✓ NUCLEAR ENERGY
- ✓ WIKIPEDIA
- ✓ AMAZON BOOK DELIVERY
- ✓ FRIDGE
- ✓ ELEVATORS
- ✓ **CLOUD**
- ✓ GPS
- ✓ **PLASTIC CARD**

- PHYSICAL RETAIL
- TELEVISION
- PRINT MEDIA
- NATIONAL AIRLINES
- LANDLINES
- POSTAL SERVICE
- PHOTO CAMERA
- TAXI
- HORSES
- CD
- CANDLES
- CINEMA
- TYPEWRITERS
- RESTAURANT
- TAILORS
- PETROL CARS
- PERSONAL COMPUTER\*
- WINDOWS
- **BROKERAGES**
- WEALTH MANAGEMENT
- FURNITURE
- CARBON ENERGY
- ENCYCLOPAEDIAS
- BOOKSTORES
- ICE
- STAIRS
- **LOCAL DATA STORAGE**
- MAP AND COMPASS
- **CASH**

# INDUSTRIAL CAPITALISM VS DATA ECONOMY



# One of the three key types of API BANKING



STARLING BANK



Investment



Savings



Mortgages



Bills & Expenses



Insurance



P2P Investing

## Platformification



# 3 key types of API BANKING

## Front to Back Platformification



## Open Banking Platformification



## Full Platformification



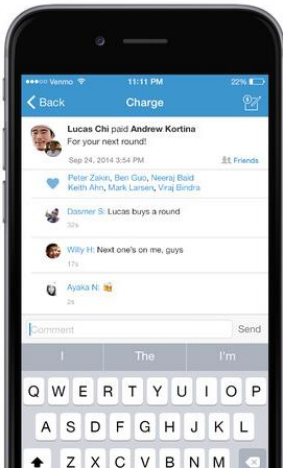
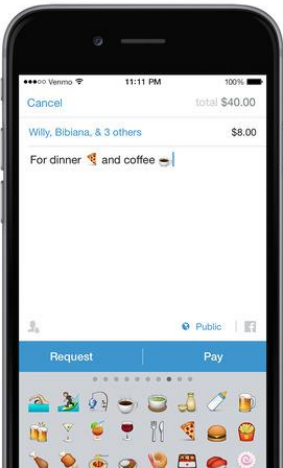
## Social is Stronger than Privacy



Request money from multiple people at once

See payments your friends share

Have fun with friends on Venmo



Portfolio

ACTION	INVESTED	P/L (\$)	P/L (%)	VALUE	
Naomi70 Naomi stevens	\$1,170.00	\$636.53	54.40%	\$1,817.75	
Kms178					
Kms178 John kor	\$1,750.00	\$222.99	\$1,972.99		
MARKET (37)	UNITS	INVESTED	P/L (%)	P/L (\$)	VALUE
FB Facebook	0.08	\$100.00	50.00%	\$100.00	\$200.00
NFLX Netflix	0.12	\$500.00	50.00%	\$100.00	\$200.00
AAPL Apple	0.08	\$250.00	50.00%	\$100.00	\$200.00

# Intrapreneurship: Google the Best Practice

Google  
20%  
Time

## Intrapreneurship:

Intrapreneurship is the act of **behaving like an entrepreneur while working within a large organization**. Intrapreneurship is known as the practice of a corporate management style that integrates risk-taking and innovation approaches, as well as the reward and motivational techniques, that are more traditionally thought of as being the province of entrepreneurship. 3M, Google, FB, Virgin Group...

Time off for Innovation  
20% for individual projects

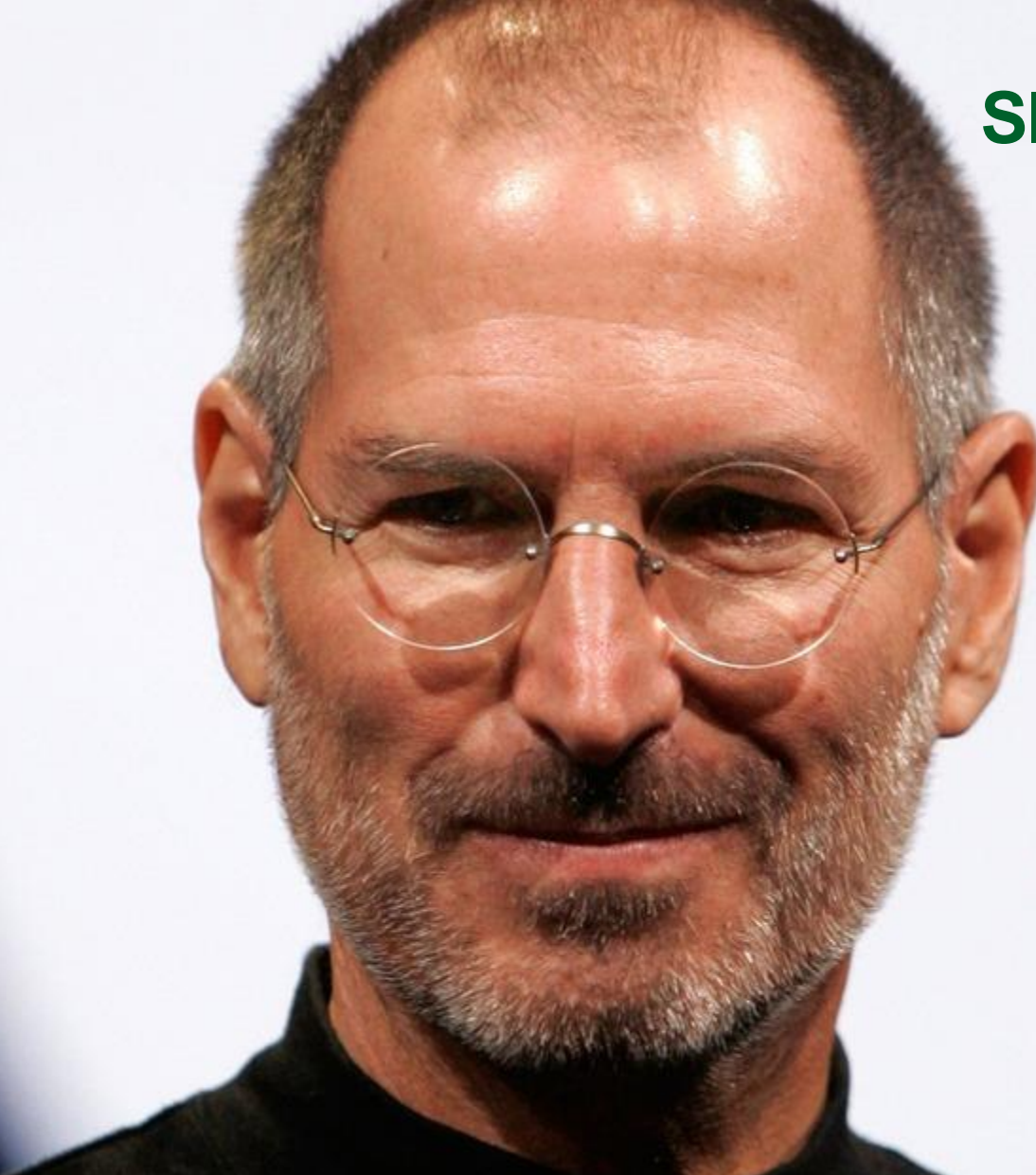
Half of all new products including:



Source: Google Images  
Copyright © 2015, TFI - MiniTrends

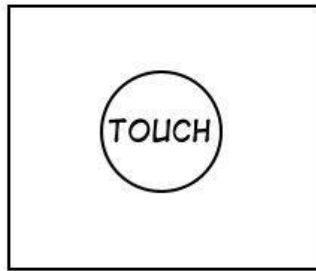


# SIMPLICITY

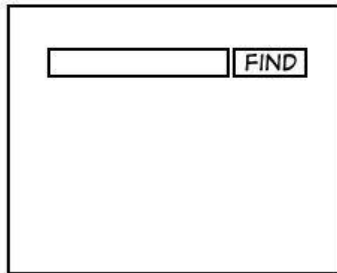


”Design is not just what it looks like and feels like. **Design is how it works.**”

TYPICAL APPLE PRODUCT...



A GOOGLE PRODUCT...



YOUR COMPANY'S APP...

FIRST NAME: <input type="text"/>	TYPE CD: <input type="text"/>	4 - K
LAST NAME: <input type="text"/>	TQP STAT: <input type="checkbox"/>	AA2-
SSN: <input type="text"/>	VER: <input type="text"/>	DK9B
ID: <input type="text"/>	FT/PT: <input checked="" type="checkbox"/>	KKA?
PHONE 1: <input type="text"/>	CAT CD: <input type="text"/>	CN3
PHONE 2: <input type="text"/>	CITY: <input type="text"/>	AA-9
ADDR 1: <input type="text"/>	STATE: <input type="text"/>	NEW
ACCT #: <input type="text"/>	ZIP: <input type="text"/>	DEL
	ORD #: <input type="text"/>	
OKAY APPLY SAVE UNDO HELP DELETE EDIT		
SELECT BROWSE ERRORS		

**SIMPLICITY**

**A USER  
INTERFACE  
IS LIKE A JOKE.  
IF YOU HAVE TO  
EXPLAIN IT, IT'S  
NOT THAT  
GOOD.**

STARTUPVITAMINS

# HACKATHON: SOLVEATHON, DATATHON, HACKCELERATOR



**Hackathon:** An event in which many people meet to engage in simultaneous (sometimes collaborative) computer programming.

A new style: women-only hackathon.



# SHADOW BOARD(S): MILLENNIALS AND GEN Z AT THE TABLE

# CRISIS DRIVEN INNOVATION STRATEGY



**When In Quarantine**  
PEOPLE who are in quarantine are not isolated if they have a Bell Telephone. The Bell Service brings cheer and encouragement to the sick, and is of value in countless other ways. Friends, whether close at hand or far away, can be easily reached, because Bell Service is universal service.

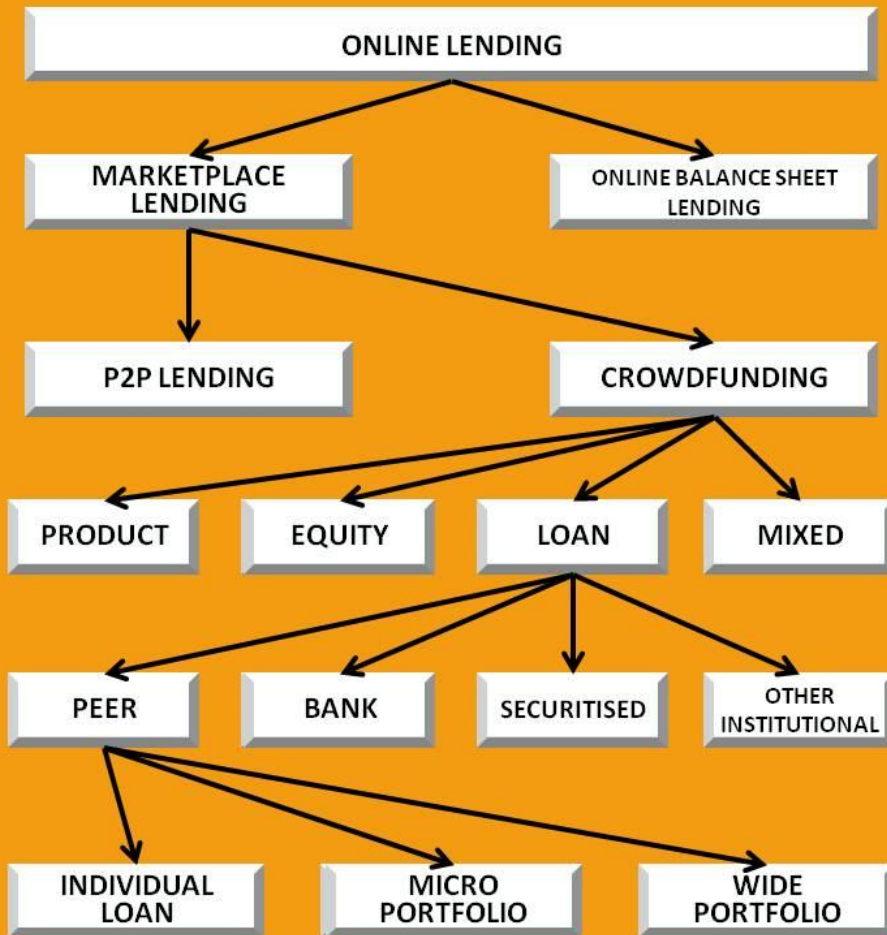


NEW YORK TELEPHONE CO.

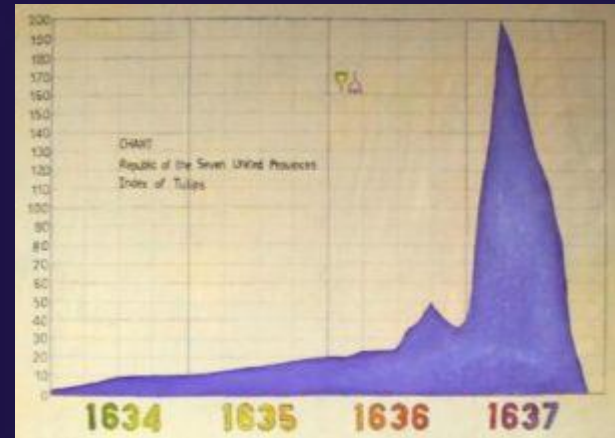
Why Constraints Are Good for Innovation  
By Oguz A. Acar, Murat Tarakci, Daan van Knippenberg  
What 145 empirical studies conclude.

## FinTech was BORN OUT OF A CRISIS





”Peer-to-peer crash will make bankers look like lending geniuses!”  
 (Lord Turner, February, 2016.)



### XS2A: Access to Account, 3rd Parties Appear

Banks have to open up their client accounts to Third Party Providers (TPP) upon PSD2 is transposed into national law (early 2017). Account Information Services (AIS) and Payment Initiation Services (PIS) will basically gain direct access to the clients (i.e. client accounts).

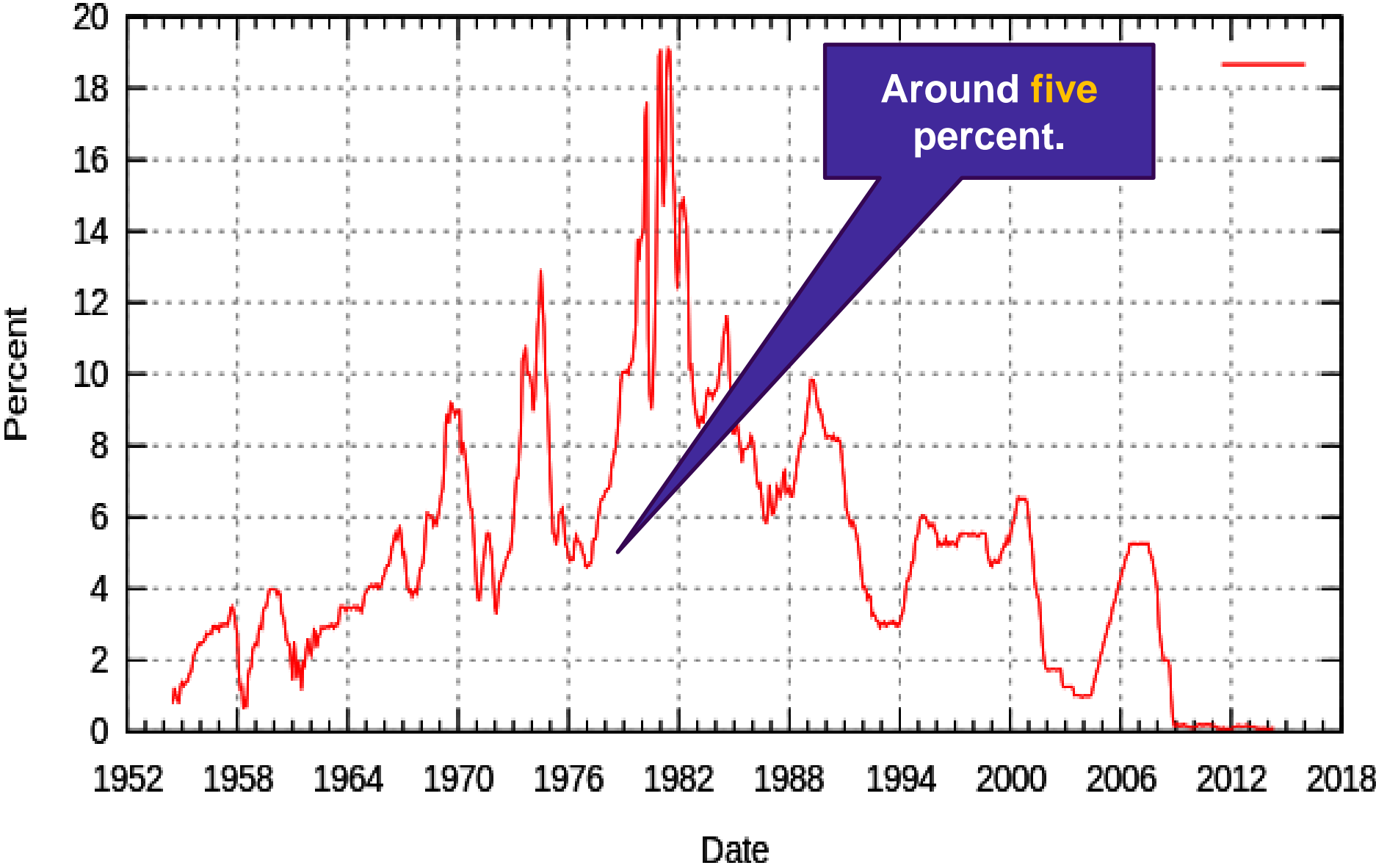


# INTEREST<sup>AV</sup> RATES<sup>ST</sup>



“I cannot perceive that we can maintain these levels of interest rates for very much longer, they have to start to move up and when they do they could move up and surprise us with the degree of rapidity which may occur.”

Federal Funds Rate (effective)  
1954-06 to 2014-05



# CAN THE SUBSIDIARY OF A SUBSIDIARY OF A SUBSIDIARY MAKE A DIFFERENCE? YES!



蚂蚁金服  
ANT FINANCIAL



支付宝  
ALIPAY



500 million users  
100 million trees  
100 thousand hectares

Make the Planet Greener One Tree at a Time | 支 Alipay | ANT FOREST

**500 million users**  
Equivalent to the combined populations of the US, Germany and France

**100 million trees, covering 933 sq km, have been planted**  
Equivalent to 500 times the number of trees in Central Park, New York  
Equivalent to 130,000 soccer pitches combined

**Beneficial regions**

- Inner Mongolia
- Gansu
- Qinghai
- Shanxi

**Other fun features**

- Co-planting with family, friends and loved ones
- Collecting energy from friends
- Watering trees for friends

**How to grow a virtual tree and make it real**

- Engage in low-carbon activities
- Earn green energy points
- With enough points, Ant Forest and their philanthropic partners will plant a real tree

Activities shown: Using shared bikes (5g, 20g), Green takeout (5g), Walking (60g), Online payment (20g), Public transport (5g).

- Created in August 2016
- The first 3 years in numbers:

5 percent carbon emission in China



# MOVE IN A VIRTUAL BANK BRANCH LIKE IN A COMPUTER GAME



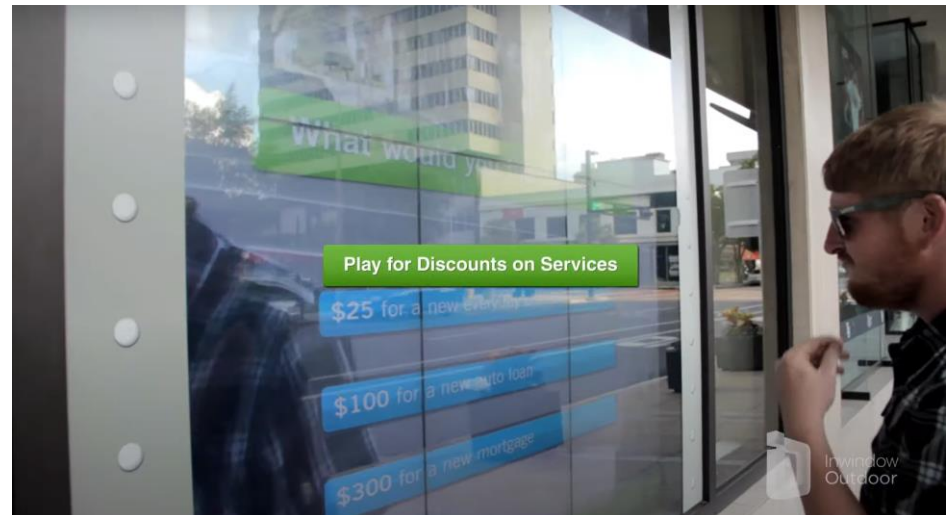
- 3D virtual space
- Game-like environment
- Lobby: tutorial
- Vault: log in, balance, transfer
- Support Area: KBC Live Chat
- Cybersecurity Quest
- Points, Levels



# THE TOY TRAIN TRICK REIMAGINED CYSEC LEARNING BRANCH WALL



- Touch Screen Wall
- Street facing wall of branch
- Prizes, rewards
- \$25 for a checking account
- \$100 for an auto loan
- \$300 for a home loan
- Charity
- Mobile version
- Social media version
- Word of mouth
- People see people play



BBVA Bank awards prizes for watching product videos



PNC Bank creates mobile “shaking” for deposits



mBank gives badges for learning product features



## 10 BEST PRACTICES



Enjoy it and share the joy.



Cooperate gaming, E-sports\*.



Target Millennials, GEN Z.



Add wellness and awareness.



Link to IoT, AR, VR & CSR.



Create product data synergy.



Attract media attention.



Think big, start small.



Fuel competition.



Include MSMEs, Startups, Entrepreneurs, Solopreneurs, Self Employed, Gig Economy and Digital Nomads.

# Screen Size Transition: A long term trend



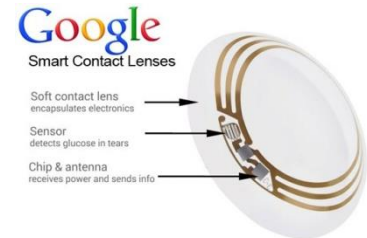
**CINEMA**

**TV**

**DESKTOP**

**LAPTOP**

**TABLET**



**SMARTPHONE**

**SMARTWATCH**

**VR**

**AR**

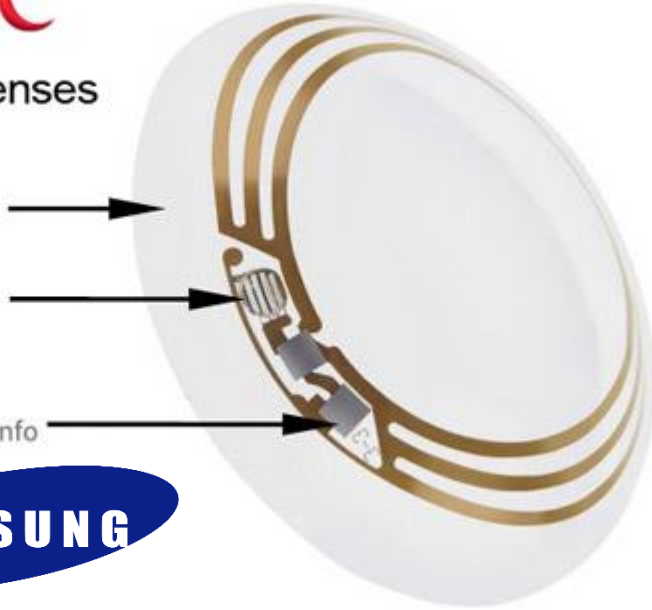
# Google

## Smart Contact Lenses

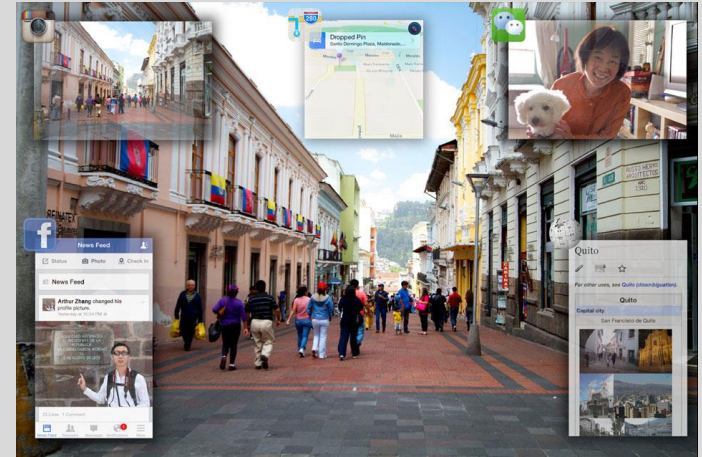
Soft contact lens  
encapsulates electronics

Sensor  
detects glucose in tears

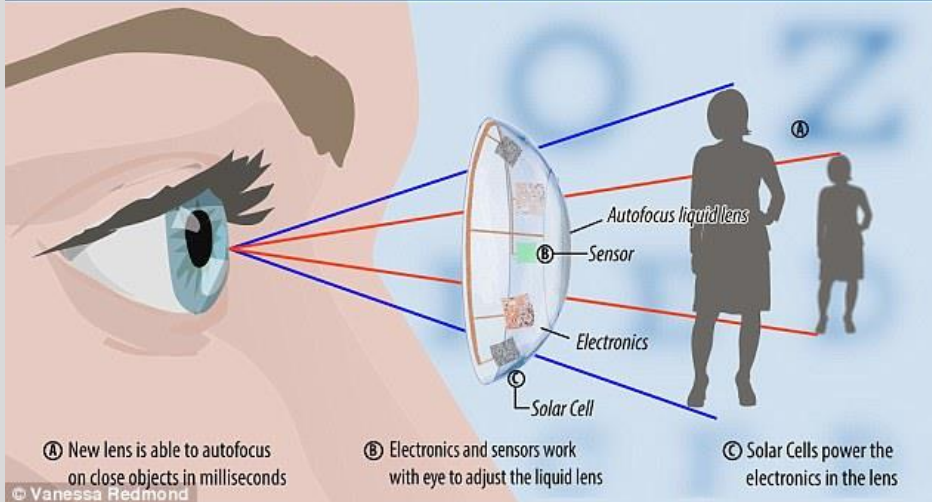
Chip & antenna  
receives power and sends info



**SAMSUNG**



## HOW IT WORKS





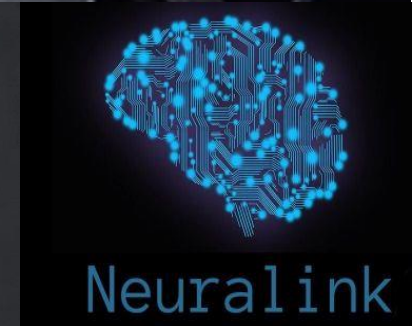
1. FINGERPRINT
2. FACE ID
3. BLOOD OXYGEN
4. SLEEP TRACKING
5. WIRELESS CHARGING
6. SLIMMER → ANTENNA IN BAND
7. MICRO LED → LESS BATTERY THAN OLED
8. LIQUID INTAKE AND REMINDER
9. BETTER SYNCING
10. 5G
11. BETTER HEART RATE MONITOR
12. ELECTROCARDIOGRAPHY
13. BODY TEMPERATURE
14. CAR LOCK
15. BLOOD SUGAR
16. BLOOD PRESSURE



 **Glass**



# NEURALINK BY ELON MUSK: UTOPIA OR DYSTOPIA OF BRAIN-COMPUTER INTERFACES



# THE 5 STEPS OF CHANNEL-EVOLUTION: BEYOND OMNICHANNEL

**(1) Face to Face:** Before the Dotcom Bubble started to brew – until 1995 – the consensus among experts and consultants was that the more the bank sees the client face to face the better chances there are to X-sell, Upsell and increase loyalty.

**(2) Digital:** Between 1995 and 2005 the dominant bon mot was ‘From Bricks to Clicks’. Bankers and consultants worked hard to channel clients towards online-only. The consensus back then was that within a decade branches will be useless. This dramatic shift never happened. The Dotcom Bubble burst and after the correction within some years it became obvious that hybrid models (online and offline) will prevail. This led to the next step in channel-history: the concept of multichannel.

**(3) Multichannel:** The ‘Multichannel’ concept was dominant between 2005 and 2010. After the facts became clear that online only banks typically did not reach large enough size and that branches did not go out of business in spite of the widespread usage of online banking experts had to coin a new paradigm. And it was the concept of ‘Multichannel’: customers using all sorts of online and offline communication and transaction channels - online banking, traditional phone banking, smartphone banking, branches, email, postal mail, text messages, television, printed posters, radio, online advertisements, social media, webchat, NFC, ATM and more - and in every instance they select and focus on one of these.

**(4) Omnichannel:** Between 2010 and 2015 – and to some extent even today – the focus was on serving clients who started to use not only multiple channels, but a number of them parallel. Omnichannel is about the compatibility and consistence of the user experience between multiple channels being used parallel. The ‘Omnichannel’ concept revolves around clients wanting to be in constant contact with a company through multiple channels at the same time. The buzzwords in this category are ‘channel-integration’ and ‘cross-channel experience’.

**(5) Optichannel:** After 2015 a new concept started to rise which addresses the complexity and difficulties of ‘Omnichannel’. The problem with ‘Omnichannel’ is that banks typically try to serve 15 or more channels parallel, which have literally hundreds of thousands of potential ‘Omnichannel’ combinations. The ‘Optichannel’ paradigm states that it is better to only offer a narrower selection instead of the typical full palette of 15 channels but to make sure that all individual channels and all combination of channels perform absolutely optimally. So instead of the quantitative focus of the Multichannel and Omnichannel eras, the new ‘Optichannel’ paradigm starts to focus the perfection of the user experience.



**THANK YOU FOR  
YOUR ATTENTION!**