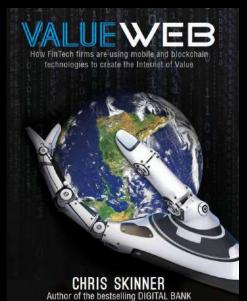
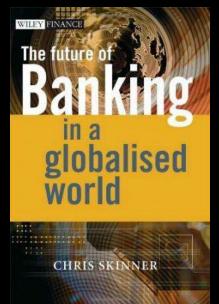
# "Chris Skinner: one of the most authoritative voices on Fintech anywhere"

SETH WHEELER
FORMER ECONOMICS ADVISOR TO THE US PRESIDENT AND
THE WHITE HOUSE









### www.thefinanser.com









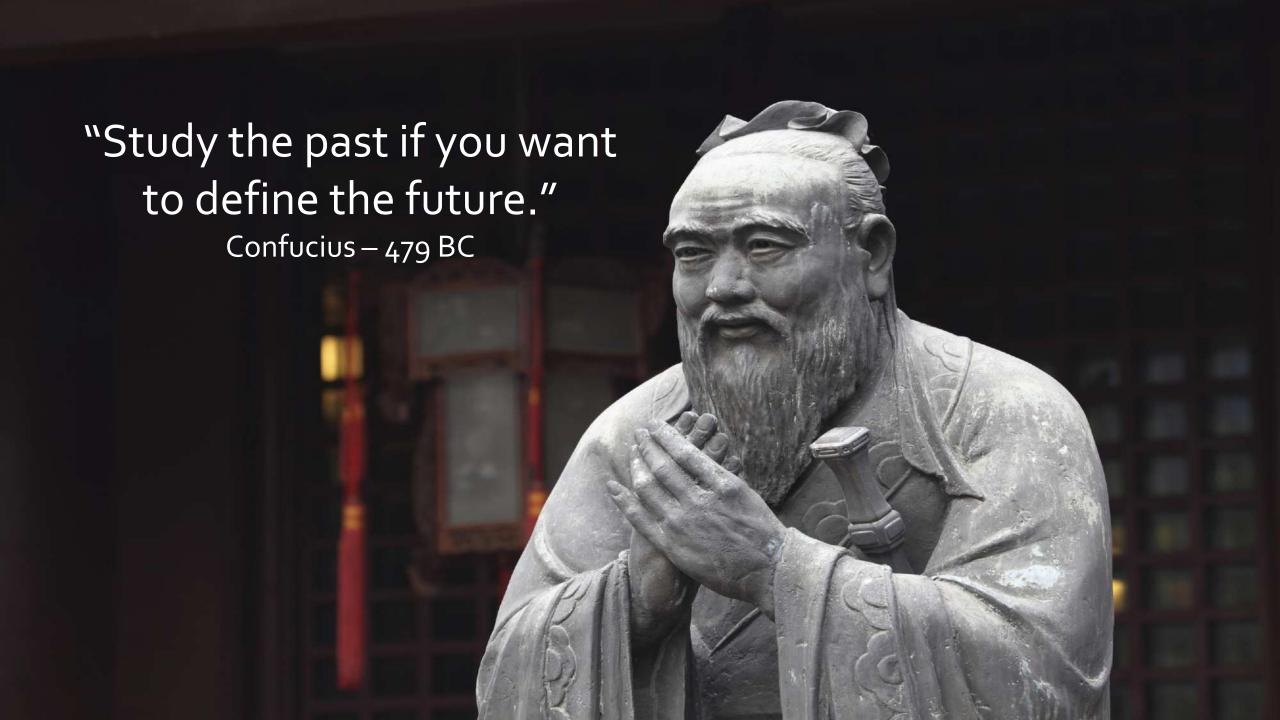








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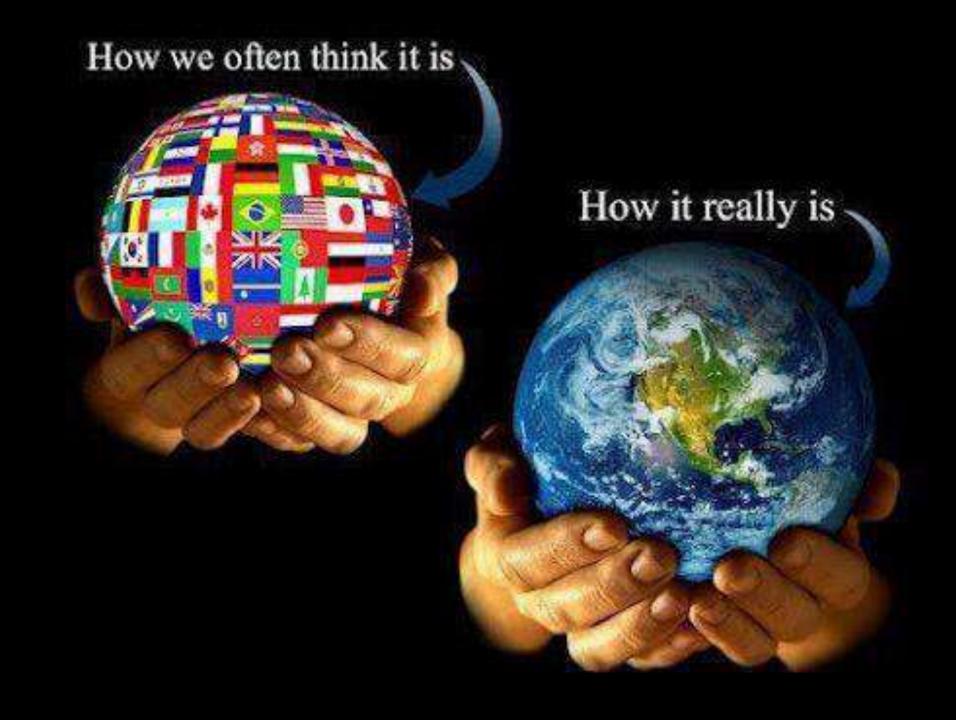










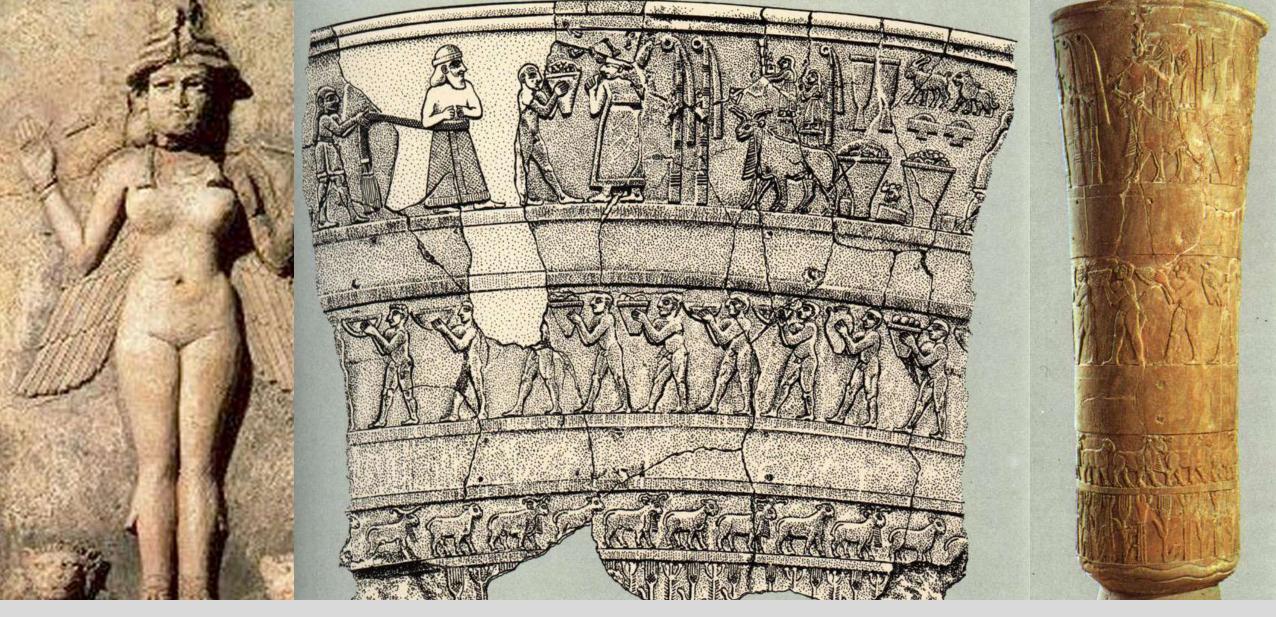






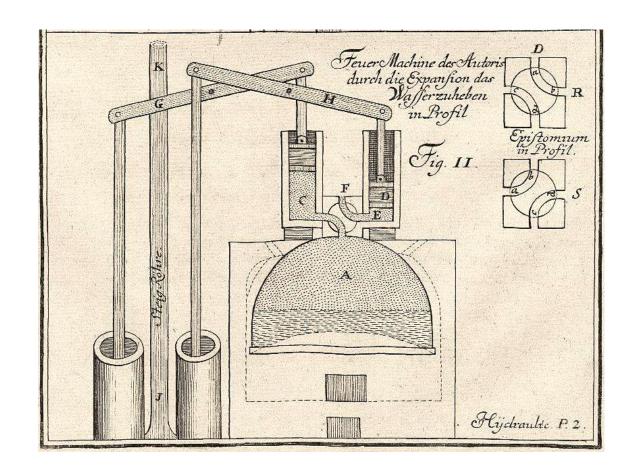






Money as a control mechanism (5,000 years)







1606

Jerónimo de Ayanz y Beaumont files first patent for a steam-powered device that pumps water out of mines

1933

George and William Besler are the first aviators to successfully fly on steam power















Office New London Northern Kailroad Co. New London, Febry 121 1864 Bankof Commerce)





**SLOW** 

## **EXPENSIVE**











### GLOBAL DIGITAL SNAPSHOT

KEY STATISTICAL INDICATORS FOR THE WORLD'S INTERNET, MOBILE, AND SOCIAL MEDIA USERS

TOTAL **POPULATION** 



INTERNET **USERS** 



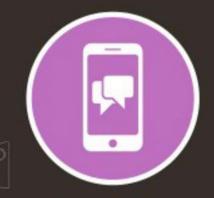
**ACTIVE SOCIAL** MEDIA USERS



UNIQUE MOBILE USERS



**ACTIVE MOBILE** SOCIAL USERS



7.476 BILLION

**URBANISATION:** 

54%

3.773 BILLION

PENETRATION:

**50%** 

2.789 BILLION

PENETRATION:

37%

BILLION

PENETRATION:

66%

BILLION

PENETRATION:

34%

### INTERNET PENETRATION BY REGION

REGIONAL PENETRATION FIGURES, COMPARING INTERNET USERS TO TOTAL POPULATION





JAN 2012

# INTERNET PENETRATION





COMPILED BY @ESKIMON AND @HICAIS AT WE ARE SOCIAL IN SINGAPORE. FOR MORE SOCIAL MEDIA ANALYSIS AND INSIGHTS, VISIT OUR WEBSITE AT HTTP://WEARESOCIAL.SG, OR SAY HELLO ON TWITTER VIA @WEARESOCIALSG. DATA SOURCES: POPULATION AND URBANISATION: UN (2010); INTERNET USERS: INTERNETWORLDSTATS.COM (LATEST AVAILABLE DATA, ACCESSED JANUARY 2012); SOCIAL NETWORK USERS: LATEST SITE REPORTED DATA FOR THE LARGEST SOCIAL NETWORK IN EACH COUNTRY (AS AT JANUARY 2012); MOBILE DATA: EXTRAPOLATED FROM ITU (2010)

### MOBILE CONNECTIVITY BY REGION

THE NUMBER OF MOBILE CONNECTIONS COMPARED TO POPULATION





JAN 2012

# MOBILE PENETRATION

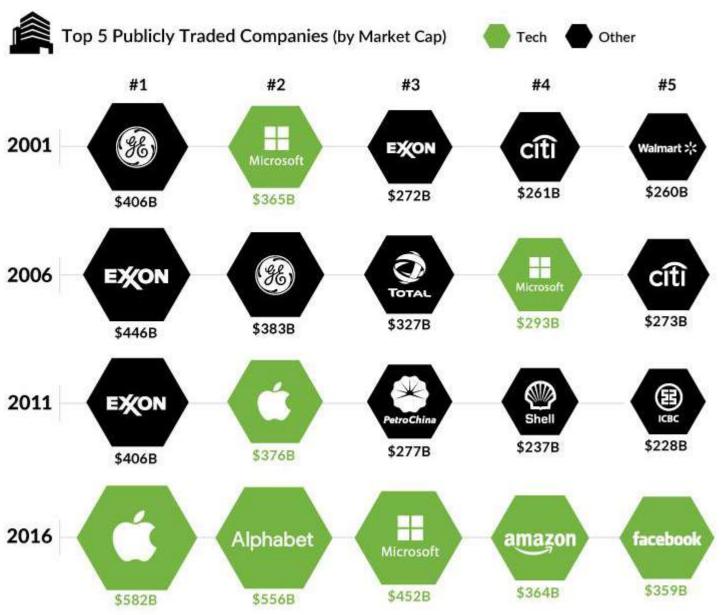




COMPILED BY @ESKIMON AND @HICAIS AT WE ARE SOCIAL IN SINGAPORE. FOR MORE SOCIAL MEDIA ANALYSIS AND INSIGHTS, VISIT OUR WEBSITE AT HTTP://WEARESOCIAL.SG, OR SAY HELLO ON TWITTER VIA @WEARESOCIALSG. DATA SOURCES: POPULATION AND URBANISATION: UN (2010); INTERNET USERS: INTERNETWORLDSTATS.COM (LATEST AVAILABLE DATA, ACCESSED JANUARY 2012); SOCIAL NETWORK USERS: LATEST SITE REPORTED DATA FOR THE LARGEST SOCIAL NETWORK IN EACH COUNTRY (AS AT JANUARY 2012); MOBILE DATA: EXTRAPOLATED FROM ITU (2010)

#### THE LARGEST COMPANIES BY MARKET CAP

The oil barons have been replaced by the whiz kids of Silicon Valley

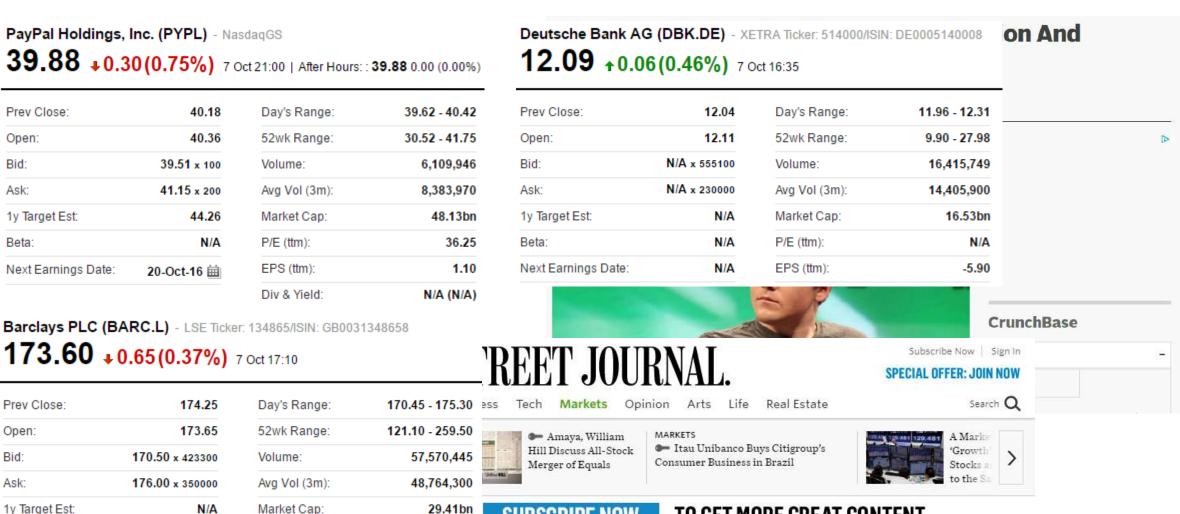


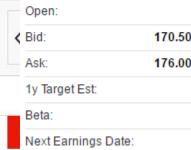
http://www.visualcapitalist.com/chart-largest-companies-market-cap-15-years/

# Something has changed ....

FIRM	YEAR	EMPLOYEES	MKT CAP
BMW	1916	116,000	\$53B
UBER	2009	7,000	\$60B
MARRIOT	1927	200,000	\$17B
AIRBNB	2008	5,000	\$21B
WALT DISNEY	1923	185,000	\$165B
FACEBOOK	2004	12,691	\$315B
KODAK	1888	145,000	\$30B (peak)
INSTAGRAM	2010	13	\$1B (acquired)

Source: Geoffrey Parker





N/A

N/A

Market Cap: 29.41bn P/E (ttm): N/A EPS (ttm): -0.05



TO GET MORE GREAT CONTENT.

apport I'm getting is unbelievable







China's Ant Financial, Now Valued at \$60 Billion, Draws Mighty





Company tapped state lenders and financial firms for most of its record-breaking \$4.5 billion funding round

Date: October 8 2016

## Something is changing ....

FIRM	YEAR	EMPLOYEES	MKT CAP
BARCLAYS BANK	1692	130,000	\$30B
PAYPAL	1999	13,000	\$48B
DEUTSCHE BANK	1870	101,000	\$17B
ANT FINANCIAL	2015	5,000	\$60B
STRIPE	2011	400	\$9B
JPM CHASE	1799	235,000	\$245B

JPM CHASE STRIPE 217 years 5 years

\$1m/employee \$22m/employee

Date: October 8 2016

#### **Biometrics Digital Currencies** The FinTech Wave InsurTech (bitcoin, ether, zCash, etc) © Chris Skinner, The Finanser RegTech **Distributed Ledgers and** WealthTech **Blockchain Payments** (Stripe, Klarna, Adyen, etc) **Platforms Neobanking Mobile Wallets** (Venmo, Alipay, Paytm, etc) Roboadvice AI, Analytics and **Financial Mobile POS** Machine (Square, iZettle, Sumup, etc) **Inclusion** Learning **SME** P2P **Finance** Lending **Digital Identity**

The Hype Cycle

The Wave of Gloom

The Trough of Disillusionment

**The Mainstream** 















**BACK OFFICE** 

manufacturing product focused upon innovation

**MIDDLE OFFICE** 

processing transactions focused upon quality

**FRONT OFFICE** 

retailing experiences focused upon intimacy

RETAIL BANKING

**COMMERCIAL BANKING** 

**PAYMENTS** 

WEALTH MANAGEMENT

**INVESTMENT BANKING** 

**INSURANCE** 



**BACK OFFICE** 

manufacturing product

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focused upon quality



retailing experiences focused upon intimacy





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**COMMERCIAL BANKING** 

**PAYMENTS** 

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#### PayPal: Venmo Keeps Growing In Q2

Jul.31.16 | About: PayPal Holdings, (PYPL)

Get Alerts

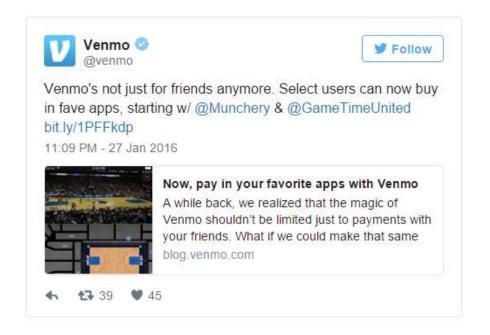


Simple Qualitative Follow Long/short equity, healthcare, growth Send Message

#### Summary

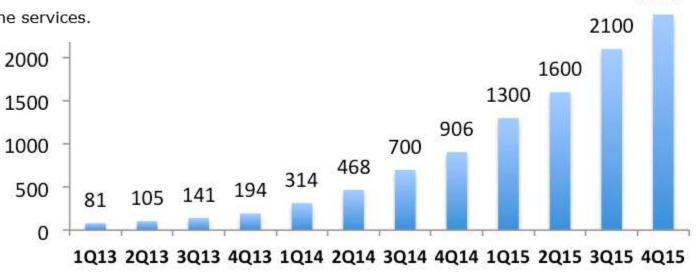
- Venmo processed over \$4 billion to person-to-person payments, roughly 140% growth from the second quarter of last year.
- Venmo added eight more applications to Pay with Venmo.
- PayPal and Venmo users with Visa debit cards linked to a bank account will also be able to move money instantly in and out of the services.





2500

#### Venmo Payment Volume (\$millions)



### Is Google's new mobile payments product a Venmo killer?

Mar 15, 2017, 2:50pm PDT Updated Mar 15, 2017, 3:06pm PDT

INDUSTRIES & TAGS Technology

#### PayPal's Venmo Beats Back Facebook; Next Rival **Google Breaks Out**



Autoplay: On | Off









acebook's (FB) integration of a payments feature in its Messenger app didn't slow down PayPal's (PYPL) Venmo service and Google's new Gmail-based wallet likely won't do much damage either, analysts say.



\$5.6B

Venmo Payment Volume

up 126% YoY



### THE END OF BANK QUEUES? CHINA, KOREA, INDIA WELCOME THE DIGITAL-**ONLY REVOLUTION**

Many of the region's social media giants are about to launch services that enable customers to smartphone-away their banking nightmares

BY COCO LIU

3 APR 2017

31 SHARES

















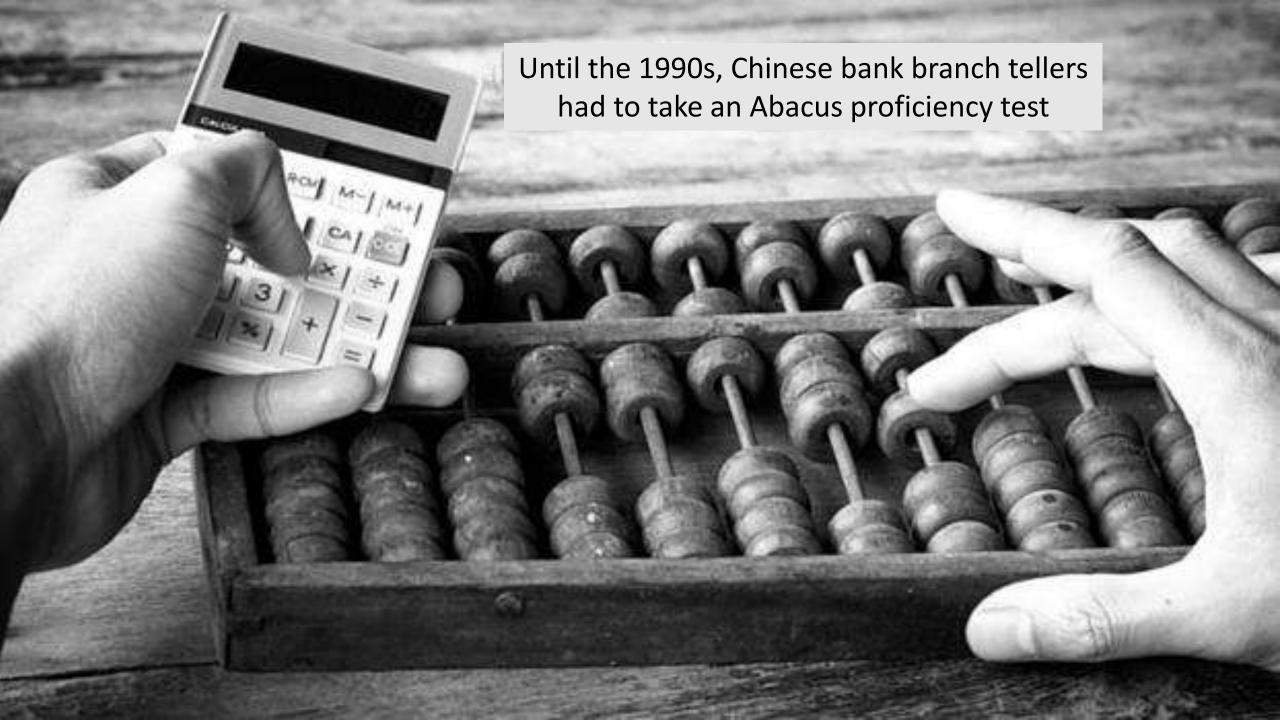
Chinese mobile payments reached 38tn yuan (US\$5.5tn) last year – whereas only US\$112bn went through mobile payments in the United States in 2016



China had 469 million mobile payment users last year, a 30% increase compared to 2015, and representing two-thirds of all mobile phone users ..

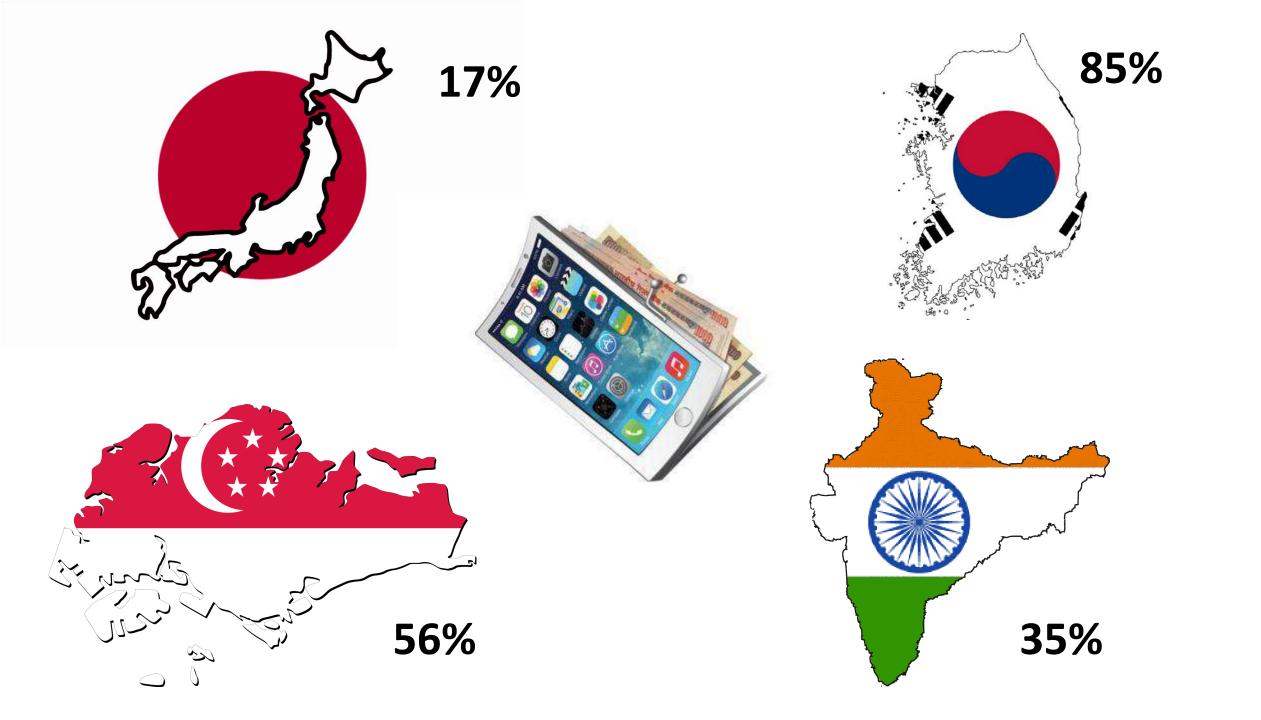
While online payments grew from 12 trillion yuan to 19 trillion yuan (US\$2.7tn) last year, mobile payments soared from the same base to 38.6 trillion yuan (US\$5.5tn), a jump of more than 200% ...

40% of Chinese consumers are using new payment methods compared to just 4% in Singapore.









# Ant Financial invests in Thailand's Ascend Money as

Saheli Roy Choudhury | @sahelirc Tuesday, 1 Nov 2016 | 1:20 AM ET

Ant Financial and A Corporation to Pro Equal Access to Fir Services in the Phil with Investment in Telecom's Mynt



February 17, 2017 | 09:47 AM

### Paytm employees get windfall, sell shares worth \$15.3 mn

part of global exp Alibaba's Ant Financial merges with helloPay Group

7 hours ago | 2171 views | 0 🚍



HelloPay Group, the online payments platform used on South East Asian e-commerce platform Lazada, is to merge with Alibaba's Ant Financial and be rebranded into AliPay.

it One97 Communications Ltd, which rtm, have sold their shares worth Rs 100 internal and external buyers, a report in citing people aware of the development.

I the shareholding of Paytm's founders m. Chinese Internet giant Alibaba Group, Financial, Paytm's early investor SAIF Vijay Shekhar Sharma now collectively in the company, *The Economic Times* 

Korea with \$200M

Under the terms of the agreement, helloPay will be rebranded as Alipay Singapore, Alipay Malaysia, Alipay Indonesia and Alipay Philippines.

### Alibaba's Ant Financial to develop services in Indonesia as global expansion continues

Posted 1 hour ago by Jon Russell (@jonrussell)

First Data, Alipay Partner to Bring Popular Chinese Mobile

Payment Option to U.S.

24 Oct 2016

# Ant Financial's Get Access To E Merchants That

China's Ant Financial raises offer for MoneyGram to \$1.2 billion

Monday, 17 Apr 2017 | 4:46 PM ET





Posted on August 10, 2016

Posted on 12/11/2015 at 11:00

Wirecard and Alipay agreement for innovation payment acceptance



# Euronet out Paul Thomas | Bloomberg | Getty Images Offer for MoneyGram

Posted Mar 14, 2017 by Jon Russell (@jonrussell)

#### t Financial to buy

"Euronet derives only 28 per cent of its

sales in the US and has avoided paying

facts."

he US," said Doug Feagin, Ant's

is plan to increase jobs in the US,

is proposing to cut \$60m in costs

ires MoneyGram . . . These are not

t. "Now, in contrast to Ant

Fram has little chance of obtaining US nilitary bases of many of the cashin its latest attempt to gatecrash the



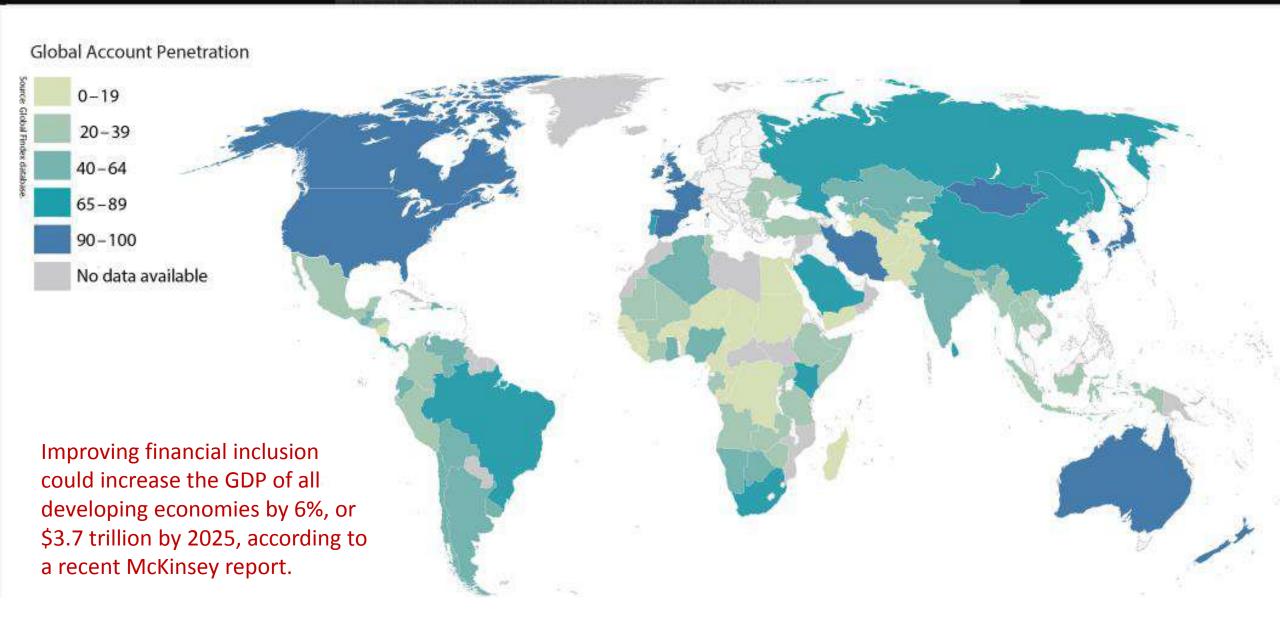
What we want to do is to solve the problem of a lack of inclusiveness Jack Ma



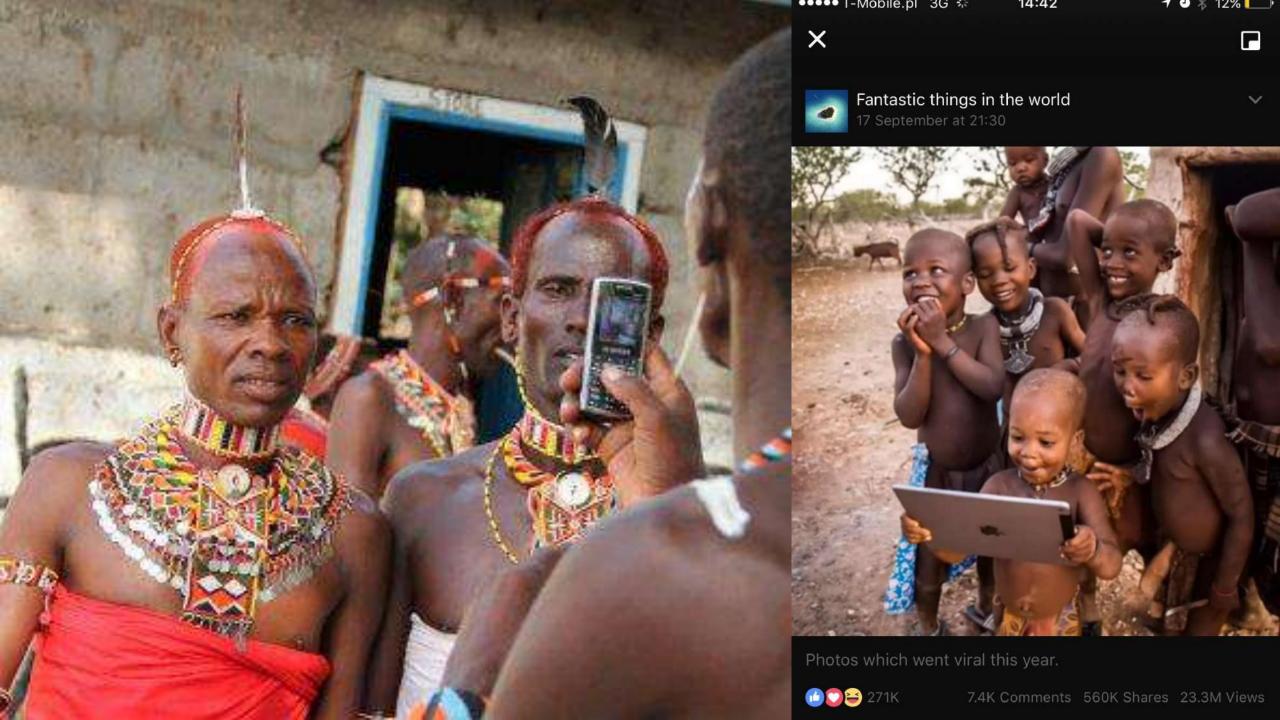




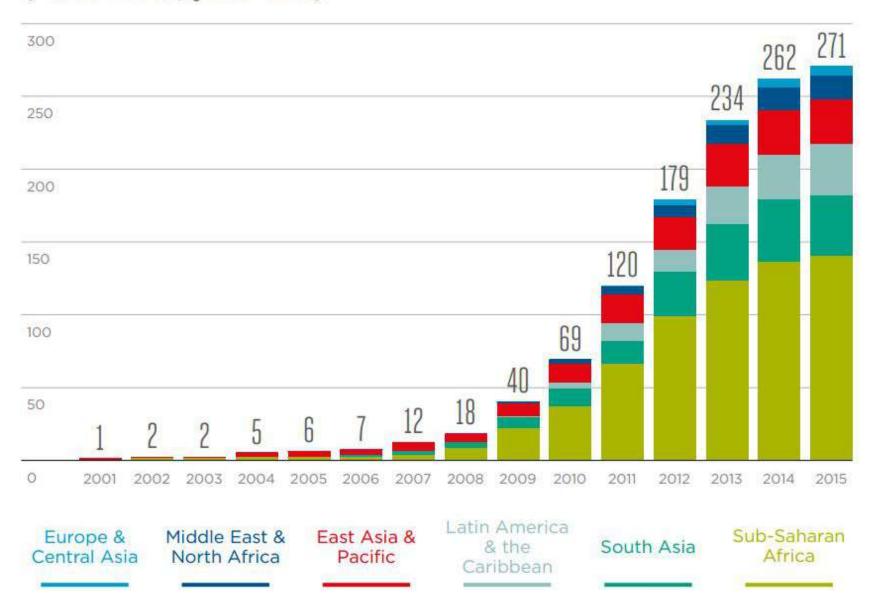




40 percent of the world's adult population still do not have an account with a bank or authorised non-bank service provider



# Number of live mobile money services by region (2001-2015, year-end)

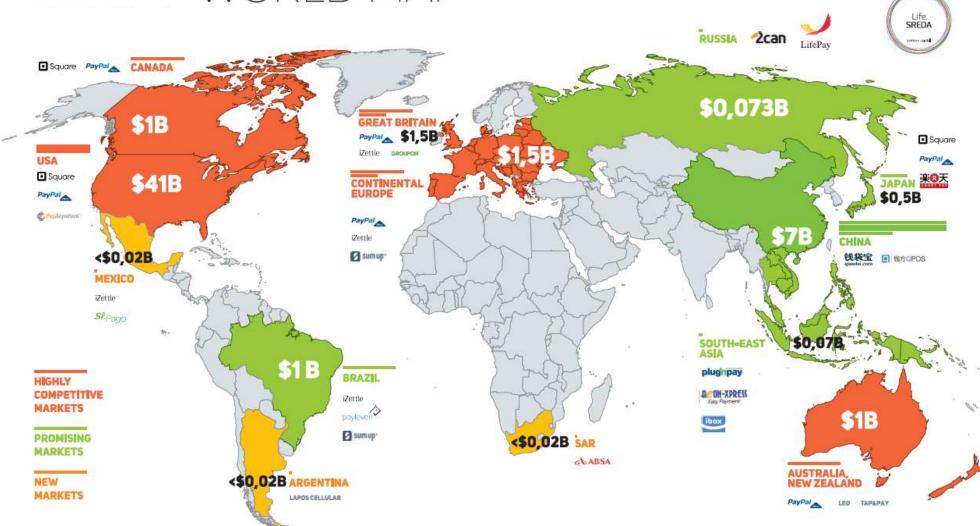






# MPOS WORLD MAP

# \$55B +70% TRANSACTION GROWTH IN 2014





A STATE OF THE PARTY OF THE PAR		ner @Chris_ ali econom	and the same of th	rough Ora	ange #PFF17	`
	45	<b>17</b> 2	٧	ilti		
	In Cote D'		of Orange	revenue	s from banking servio	ces; 35%
	4	<b>₹</b> ₹ 2	<b>¥</b> 2	ill		
	Orang		30m		e money user month #PFF	
	4	<b>43</b> 3	₩ 6	di		

			<b>§</b>





Orange CEO: we have 650 branches and 29 million customers in France, so we'd be silly not to open a bank here





1:36 PM - 25 Jan 2017 from Paris, France

£7 1





Orange CEO: we have 650 branches and 29 million customers in France, so we'd be silly not to open a bank here



ETWEET LIKES

m. 👰 🍇

1:36 PM - 25 Jan 2017 from Paris, France

A 1

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**₩** 2

ill





Chris Skinner @Chris\_Skinner - 3h

"We will launch a bank in France first, then consider Belgium and Spain"
@srichard Orange CEO #PFF17 #ParisFintechForum





Orange CEO: we have 650 branches and 29 million customers in France, so we'd be silly not to open a bank here





@srichard Orange CEO #PFF17 #ParisFintechForum







"I don't think we will mostly be a bank, rather than a telco ... but smartphones, NFC and Orange Cash makes this attractive" Orange #PFF17







**BACK OFFICE** 

manufacturing product focused upon innovation

**MIDDLE OFFICE** 

processing transactions focused upon quality

#### **FRONT OFFICE**

retailing experiences focused upon intimacy





RETAIL BANKING

**COMMERCIAL BANKING** 

**PAYMENTS** 

WEALTH MANAGEMENT

**INVESTMENT BANKING** 

**INSURANCE** 





















\* SPECTRE

Payments APIs



### Trading APIs





**Kite Connect** 



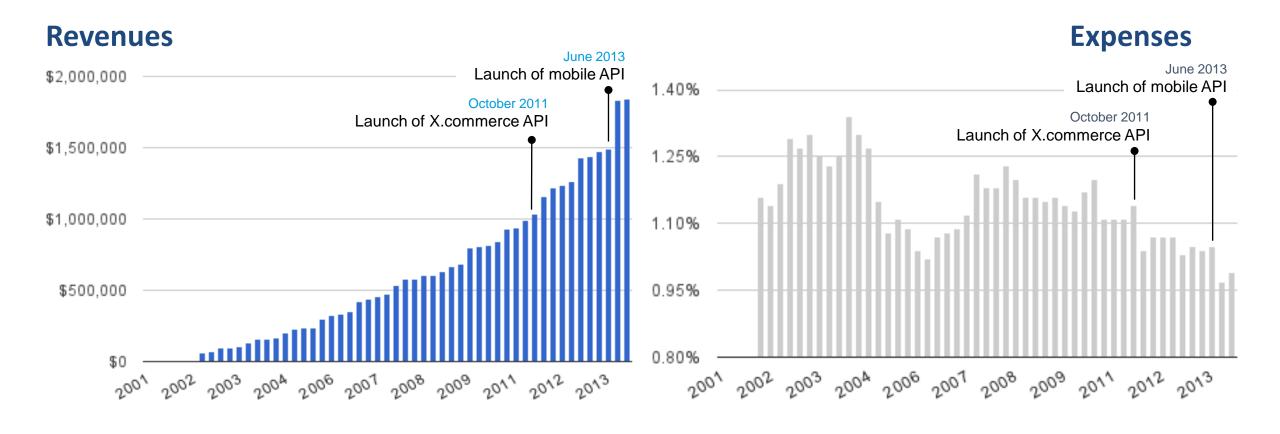
#### **Authentication APIs**

## YODLEE

## otrulia









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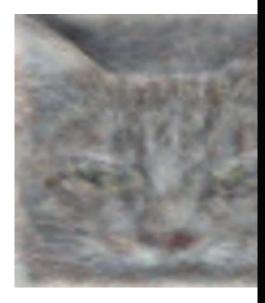


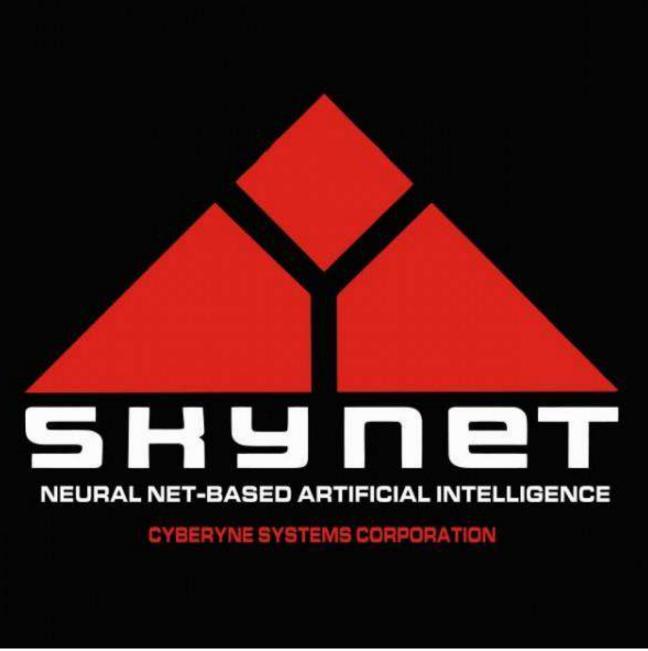






2012





2016

ches "AIs" to invent their own avoid eavesdropping

good at devising crypto methods; less good at codebreaking.



# JPMorgan Software Does in Seconds What Took Lawyers 360,000 Hours

by Hugh Son

February 28, 2017, 12:31 AM GMT Updated on February 28, 2017, 12:24 PM GMT

- ... the program has helped JPMorgan cut down on loanservicing mistakes, most of which stemmed from human error in interpreting 12,000 new wholesale contracts per year ...
- ... Bots are expected to handle 1.7 million access requests this year, doing the work of 140 people ...

## Will robots turn on humans? Cybersecurity experts warn that hacked machines could attack us and even burgle our homes

- Experts warn that some robots available today are vulnerable to hacking
- · Firm claims that hacked robots could mix toxic substances into food and drinks
- · And bots could be hacked into to unlock doors and disable alarms for burglars
- · As robots get smaller, they will pose greater risks, the researchers claim

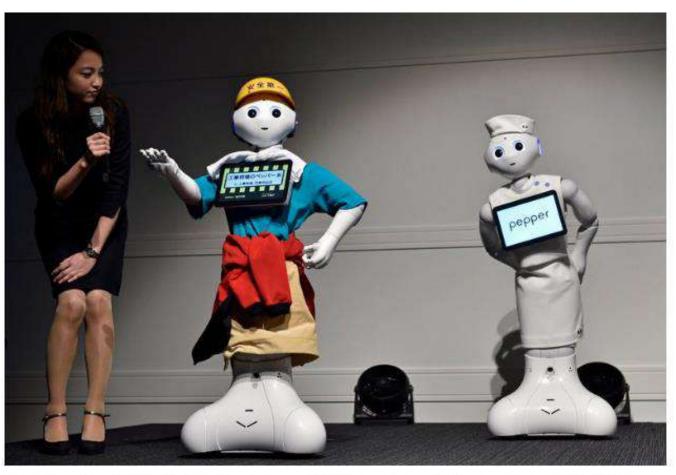
#### By HARRY PETTIT FOR MAILONLINE

PUBLISHED: 14:25, 1 March 2017 | UPDATED: 16:14, 1 March 2017

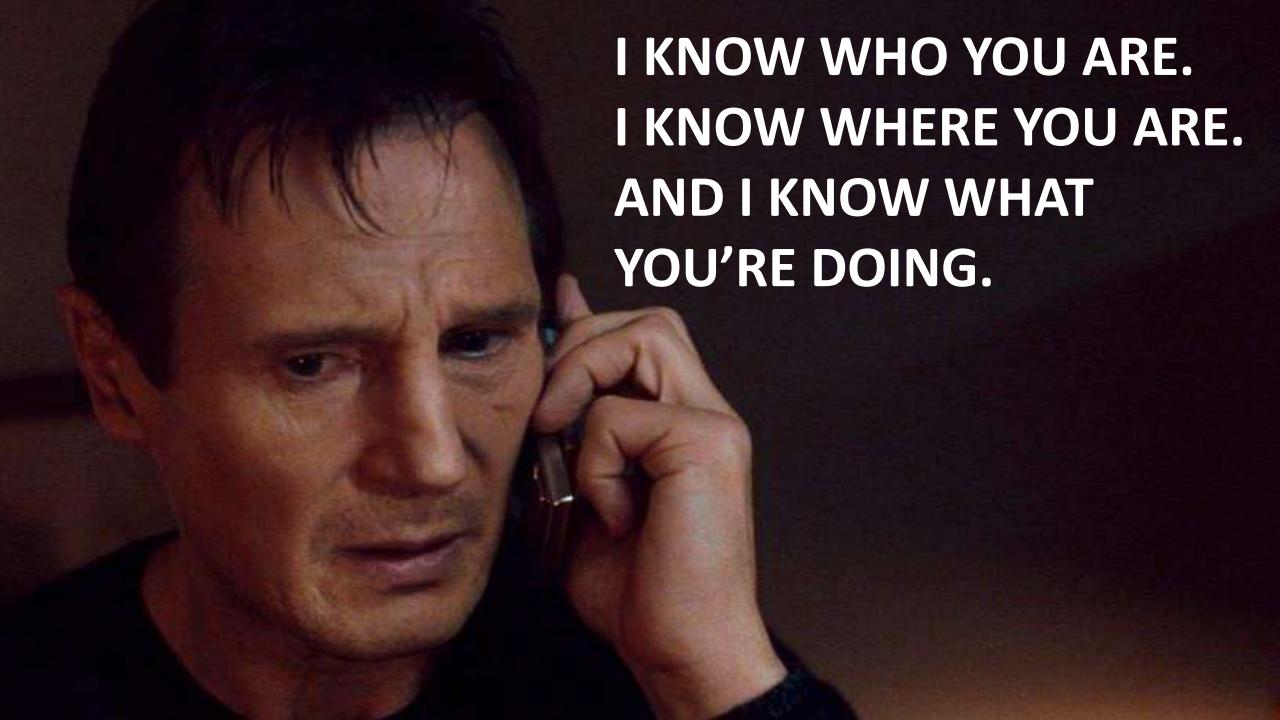


#### That Cool Robot May Be a Security Risk

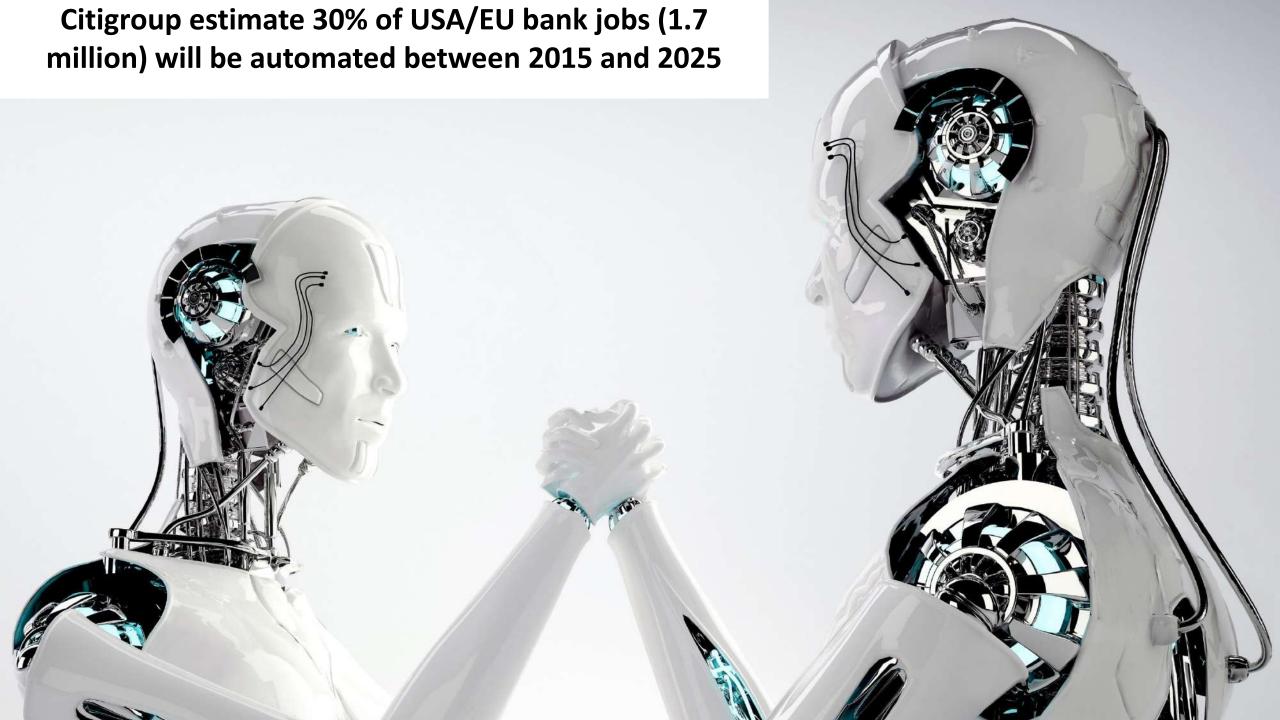
By JOHN MARKOFF MARCH 1, 2017



A fashion contest in Tokyo last month featured Pepper robots. A report by IOActive cited security flaws in some of these kind of robots. Franck Robichon/European Pressphoto Agency









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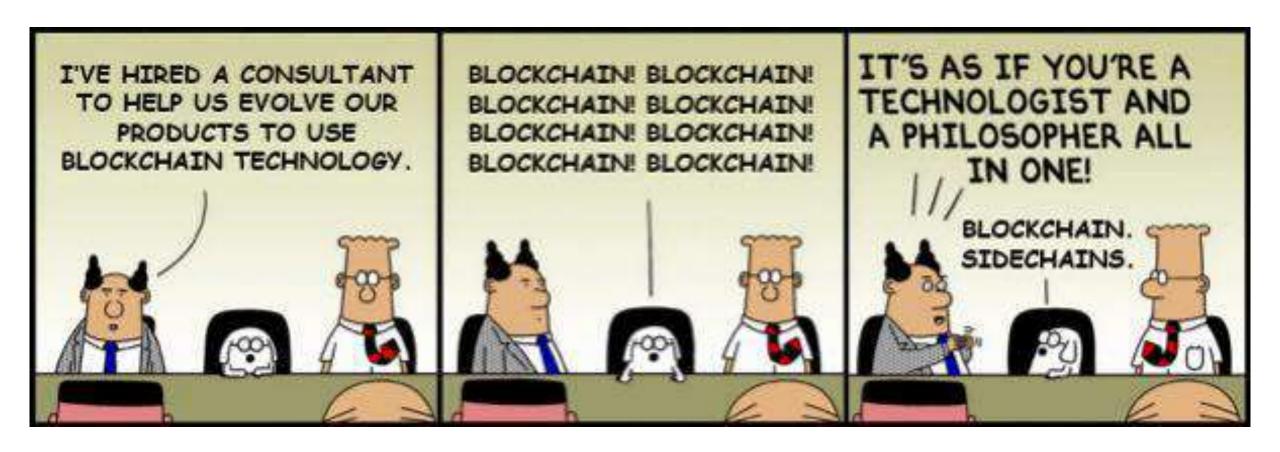






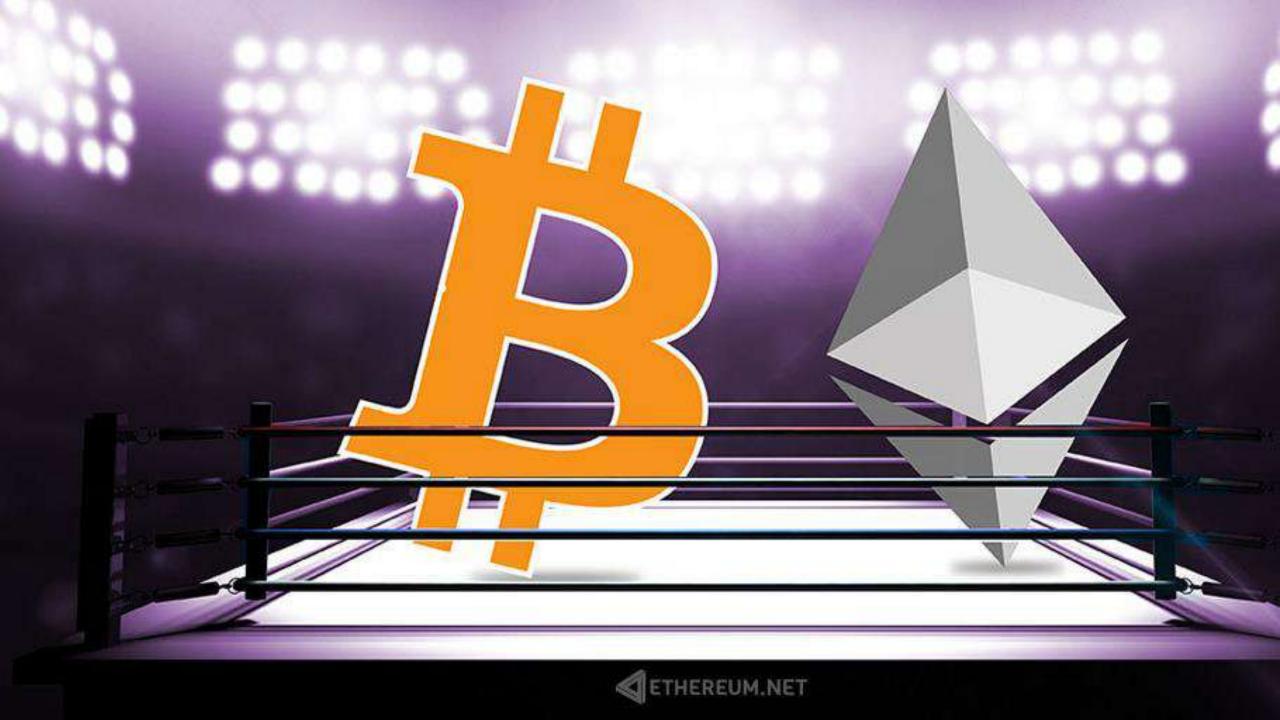








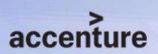






www.entethalliance.org







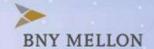


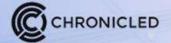


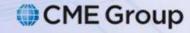








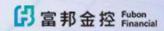












































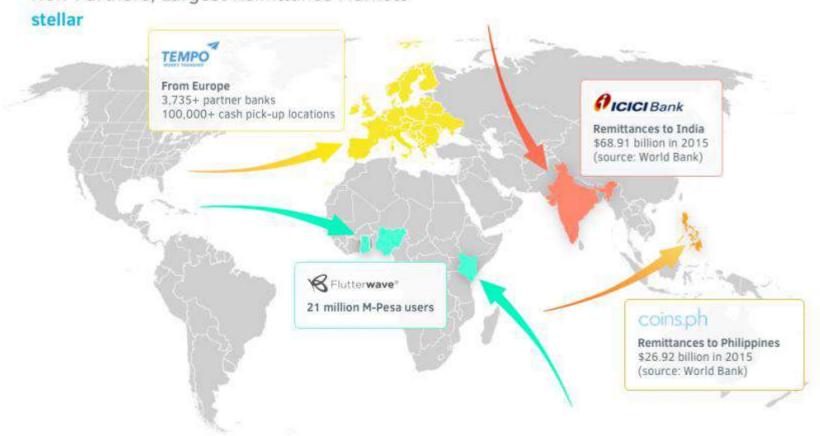




The firm published estimates declaring that, by using XRP, banks would <u>save 42%</u> in cross-border payments costs, a figure that was higher than the 33% that using Ripple without XRP would save.



New Partners, Largest Remittance Markets





## STOP PRESS: Corda Isn't a Traditional Blockchain Platform (Oh wait...It Never Was!)\*

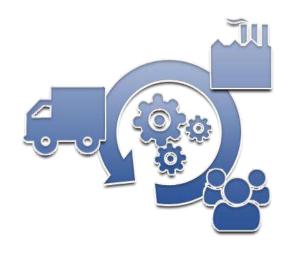
- Corda is a distributed ledger platform, not a traditional blockchain platform.
- Blockchains are specific pieces of software built to handle virtual currency transactions.
- They cannot be applied unchanged to wholesale financial markets: changes must be made to satisfy regulatory, privacy and scalability concerns.
- Corda was designed from the ground up to address the specific needs of the financial services industry.
- 5. It is heavily inspired by and captures the benefits of blockchain systems, but with design choices that make it able to meet the needs of regulated financial institutions.



#### **Supply Chain**

#### **Smart Assets**

#### **Digital Identity**







**Trade Finance** 

#### **Smart Contracts**

(programmed transactions)





#### **Payments**



#### **Trade Finance Use Case Start-Ups**















#### **Payments Use Case Start-Ups**

















#### **Digital Identity Use Case Start-Ups**





















#### **Clearing and Settlement Use Case Start-Ups**

epiphyte













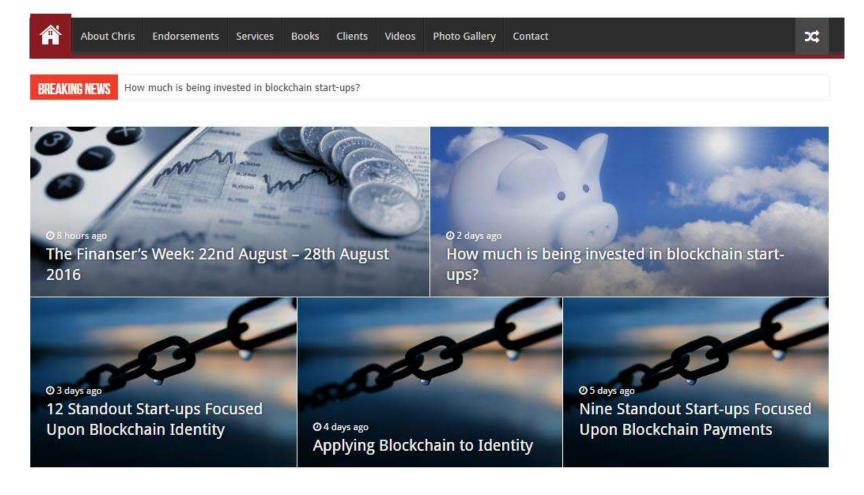








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CIO JOURNAL.

## The Internet, Blockchain, and the Evolution of Foundational Innovations

Blockchain is a foundational technology, like electricity and the internet, whose transformational impact takes much longer

By IRVING WLADAWSKY-BERGER

O COMMENTS

Jan 20, 2017 1:25 pm ET



"Foundational innovations must overcome many barriers – technological, organizational, governance, political." By Joseph Young

### Suddenly, Dubai Aims to Become First Blockchain-Powered City by 2020

14345 Total views

1984 Total shares



In October 2016, Smart Dubai Office, hereinafter SDO, a technology initiative developed by the UAE government and Startup Incubator and Seed Fund 1776, launched the SDO Blockchain Challenge to discover Blockchain startups that can lead Dubai's Blockchain strategy.

#### Dubai Government Taps IBM For City-Wide Blockchain Pilot Push

Pete Rizzo (@pete\_rizzo\_) | Published on March 14, 2017 at 09:30 GMT





FEB 21, 2017



















The city of Dubai has unveiled new strategic partnerships as part of its bid to become the world's first "blockchain-powered government".



# INTERNET OF THINGS









**BACK OFFICE MIDDLE OFFICE FRONT OFFICE** 

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**COMMERCIAL BANKING** 

**PAYMENTS** 

WEALTH MANAGEMENT

**INVESTMENT BANKING** 

**INSURANCE** 





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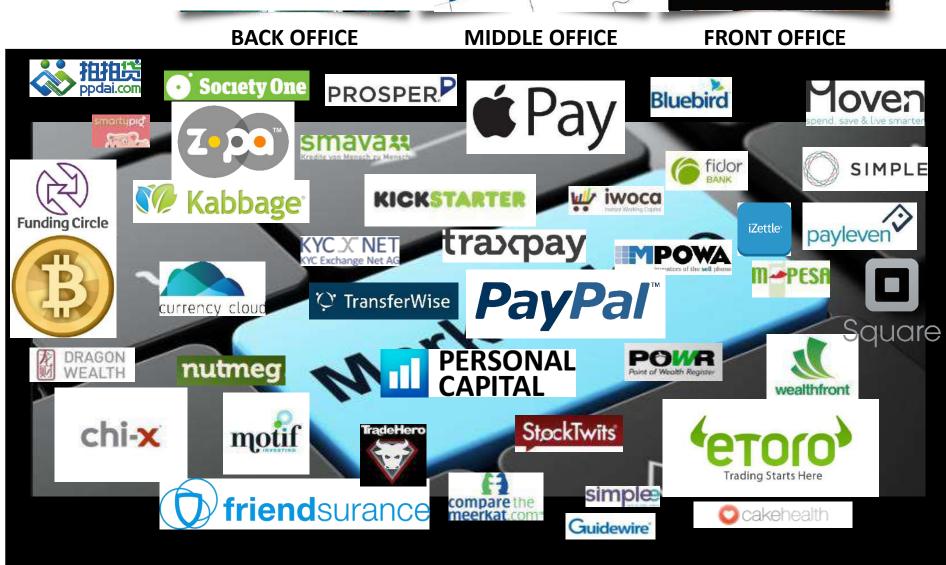
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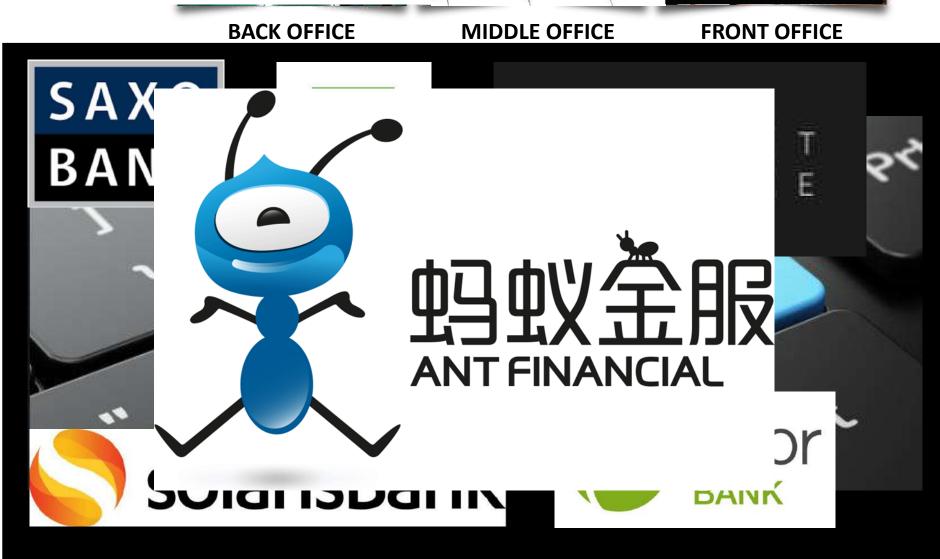
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# "My three year old son likes to play with dinosaurs ... so do we" FinTech CEO announcing bank partnership







Only 3% of CEOs of leading banks have professional technology experience;

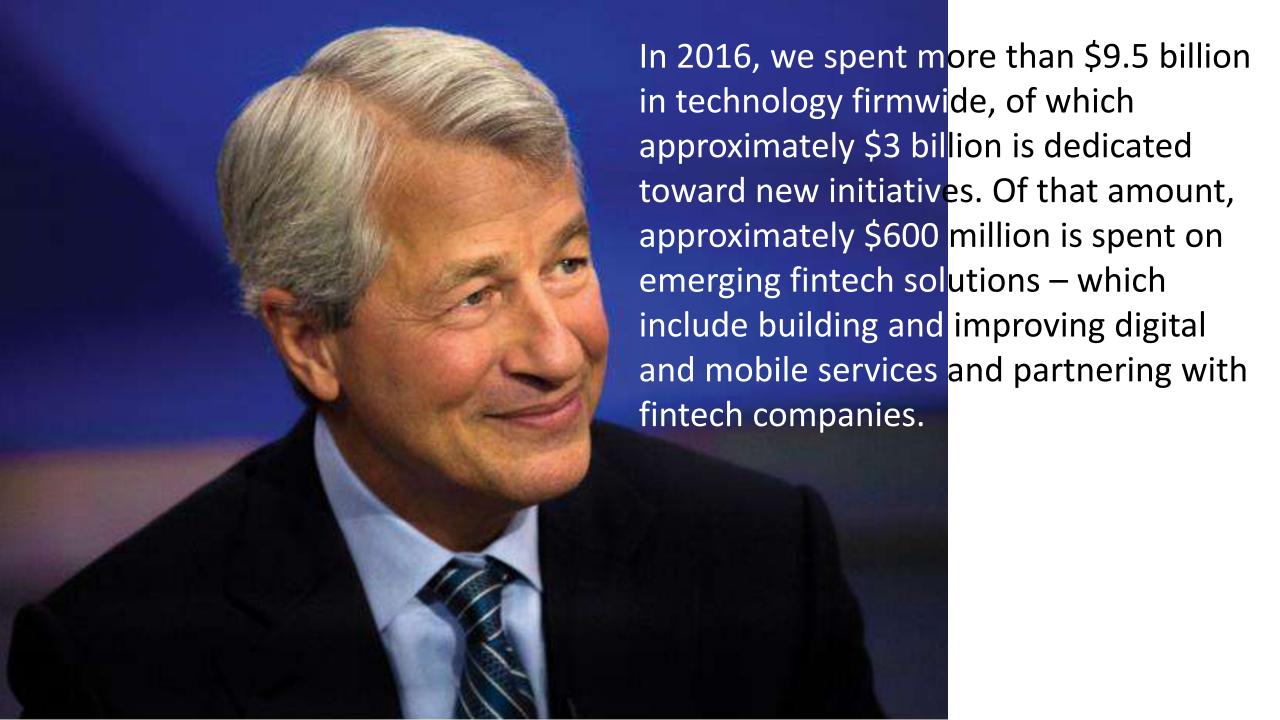
Only 6% of board directors have professional technology experience;

40% of banks have no board members with any professional technology experience in their career.











Gartner found 76% of banks don't believe their business model has to change because of digitalisation #MEFTECH <- shocker



### French bank BNP Paribas is spending €3 billion to 'build the bank of tomorrow'



### Lloyds Bank's £1.75BN bet on the future of banking



**30 JANUARY 2017** 

### Century-Old Bank Plans Digital Revamp to Fight Fintech Risk

### by Anuchit Nguyen

28 March 2017, 22:00 BST Updated on 29 March 2017, 04:59 BST

- → Siam Commercial Bank's CEO working on a lifestyle app
- → Lender also increasing its focus on wealth management

### **20<sup>th</sup> Century Bank**

Physical
Paper
Buildings and Humans
Proprietary
Closed
Tightly coupled
Slow
Capital intensive
Regulation as a barrier

### 21st Century Bank

Digital
Data
Software and Servers
Standardised
Open
Loosely coupled
Fast
Cheap
Regulation as an enabler







Being human

Forming civilisations

Creating industry

Going digital









Being human

Forming civilisations

Creating industry

Going digital









Shared beliefs

Forming civilisations

Creating industry

Going digital









Shared beliefs

Money for control

Creating industry

Going digital









Shared beliefs

Money for control

Bank to cross borders

Going digital









Shared beliefs

Money for control

Bank to cross borders

Open sourced to go global

















### Ford: 'We assume Apple is working on a car'



© 25 April 2016 Business

Tesla got 200,000 orders for the Model 3 in first day



Ford is in the technology

### By Keith Naughton | October 29, 2015 Illustrations by Bratislav Milenkovic From Bloomberg Businessweek Recommend 16K (S) (f) (y) (in) (\*\* Social Surge - What's Trending Vho gets Prince's ou can now open a Goldman Sachs account with \$1 Saudi Arabia tries to break 'dangerous' AUDEMARS PIGUET

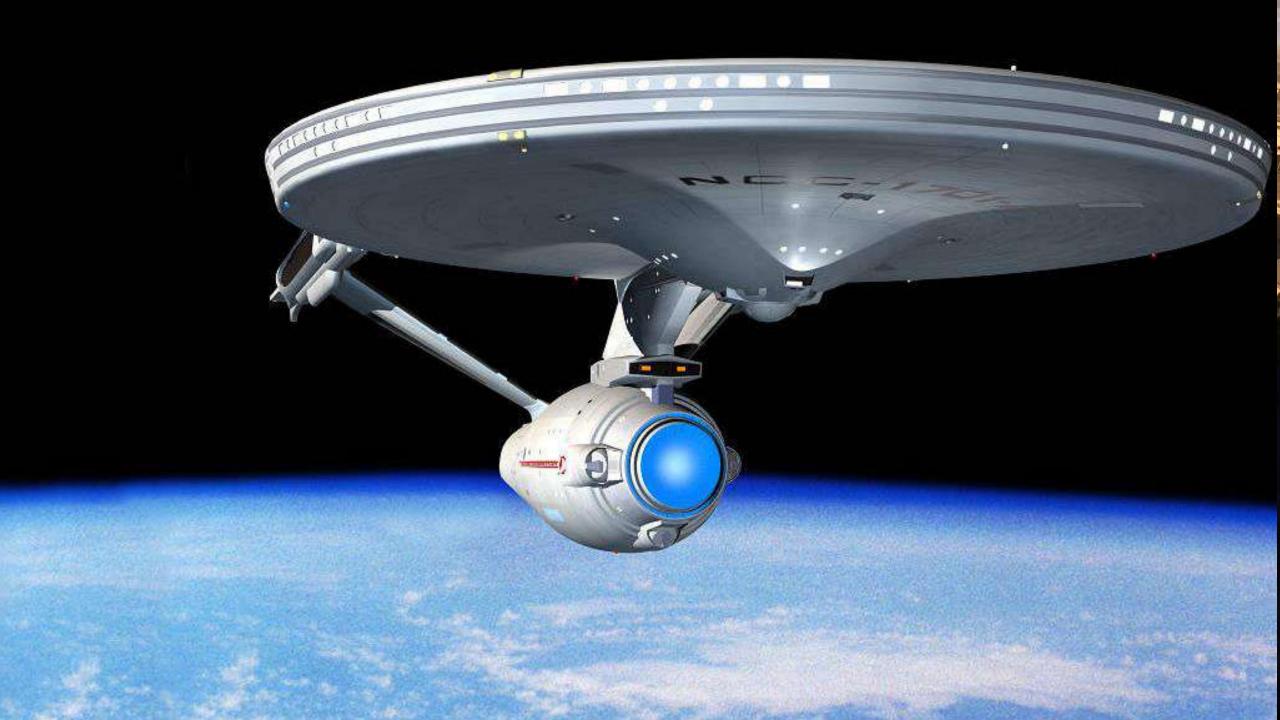
## Can Detroit Beat Google to the Self-Driving Car?

Inside GM's fight to get to the future first.

### evelopment chief at General

e's sitting in the driver's seat, with big Cadillac that's driving itself

l Michigan, hidden from the pefitting a prison. The company's ant, sunny autumn afternoon—a on, though it appears that his is



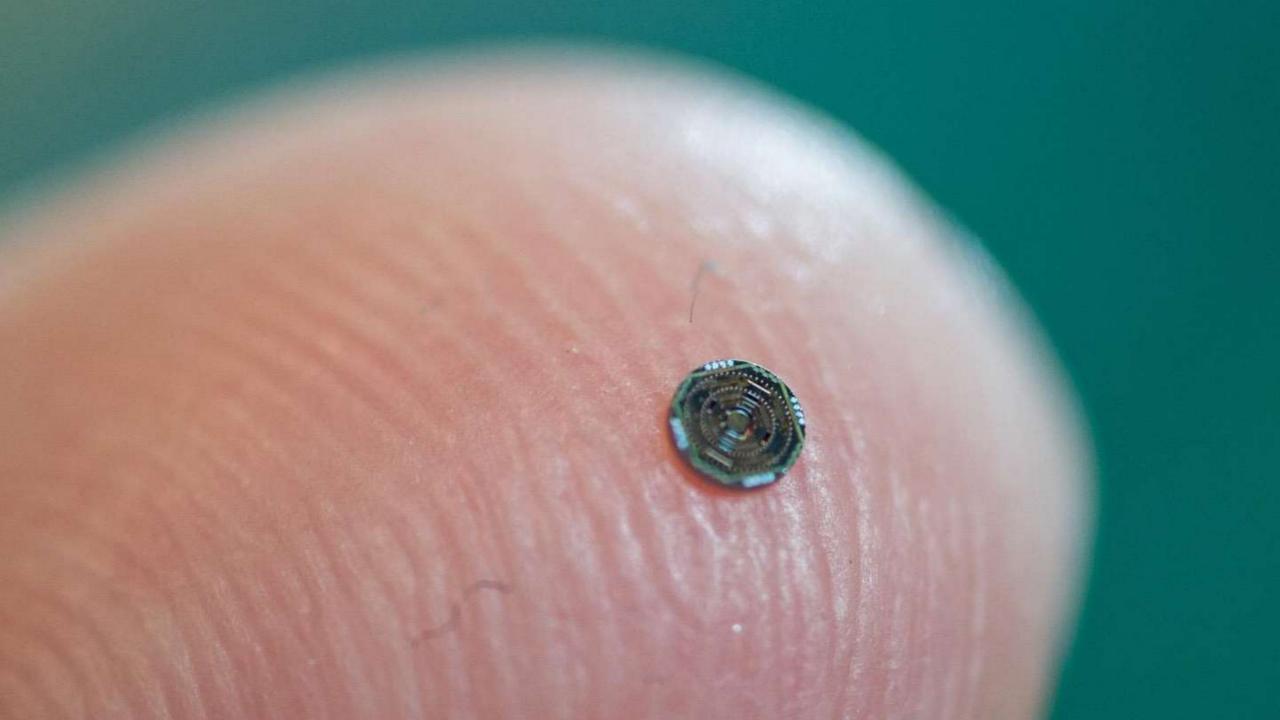




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### Science

Science

### Three-parent baby born to infertile couple in world first



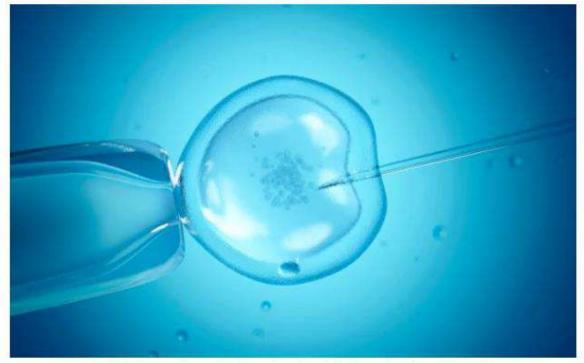






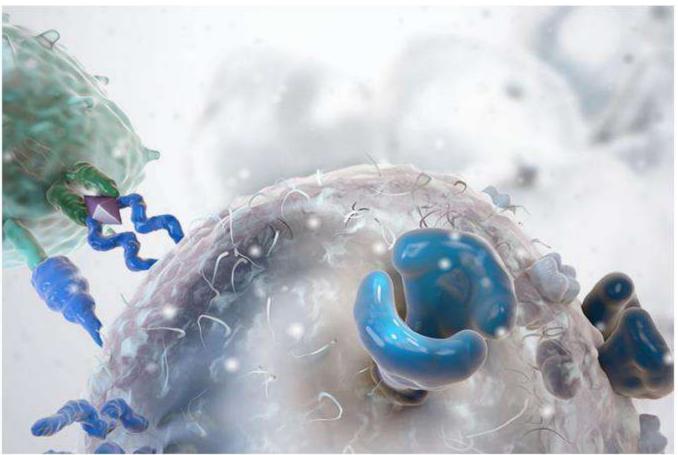






Pronuclear transfer took place after four failed rounds of IVF CREDIT: SEBASTIAN KAULITZKI

### Gene editing has saved the lives of two children with leukaemia



Immune cells can be edited to target cancer Val Altounian / Science Translational Medicine (2017)

### No Donor Required: 5 Body Parts You Can Make With 3-D Printers



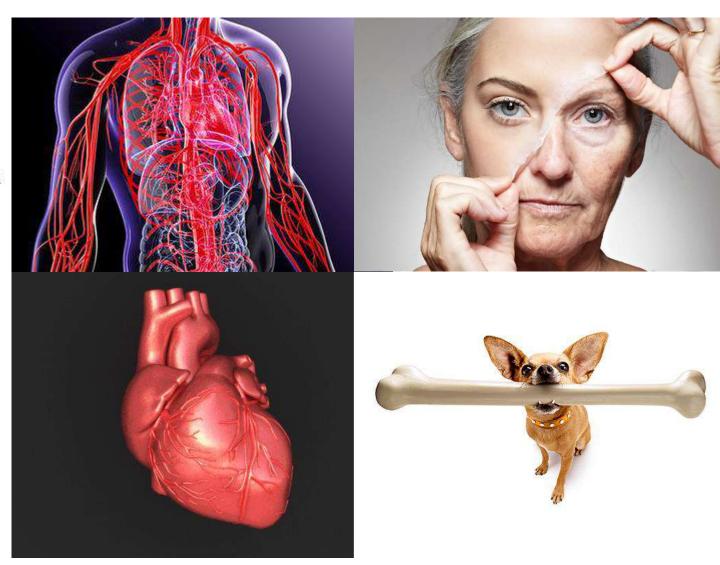
Robert J. Szczerba, CONTRIBUTOR

Exploring the future of science and tech FULL BIO 
Opinions expressed by Forbes Contributors are their own.

3-D printing has been around in various forms since the 1980s, originally as a means of quickly producing affordable prototypes for the manufacturing industry. Recently, researchers have found some amazing healthcare and biological applications for 3-D printing technology, called bioprinting. As a result, the 3-D printing market for healthcare is predicted to reach roughly 4.04 billion by 2018. From custom prosthetics to living tissue, 3-D printing is a versatile means of providing cost effective and individualized care to patients.

### Scientists Successfully Transplanted 3D Printed Human Body Parts Into Rats

February 15, 2016 // 11:00 AM EST



Health & Medicine

### 'The first person to live to 150 has already been born.'

Innovation Hub

August 08, 2015 - 8:15 AM EDT

By Matt Purdy (follow)

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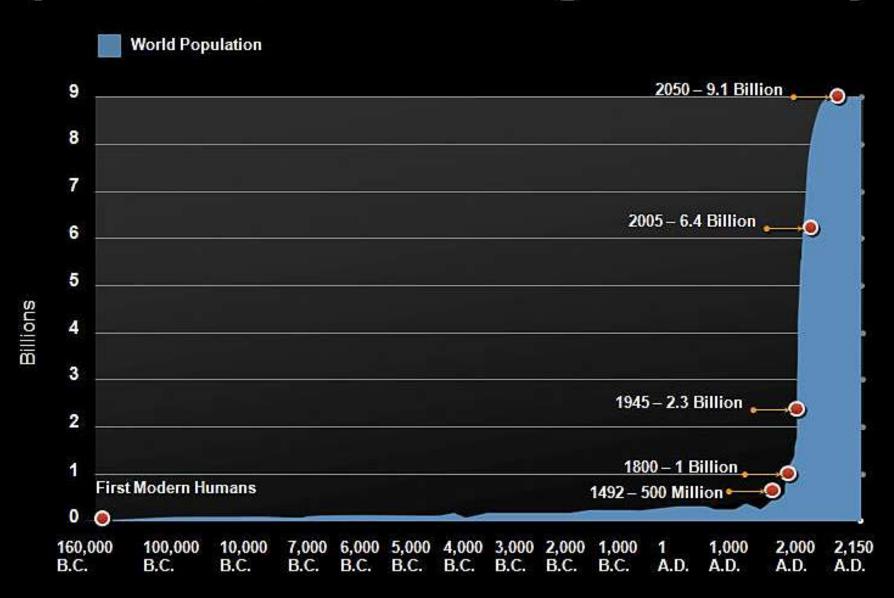


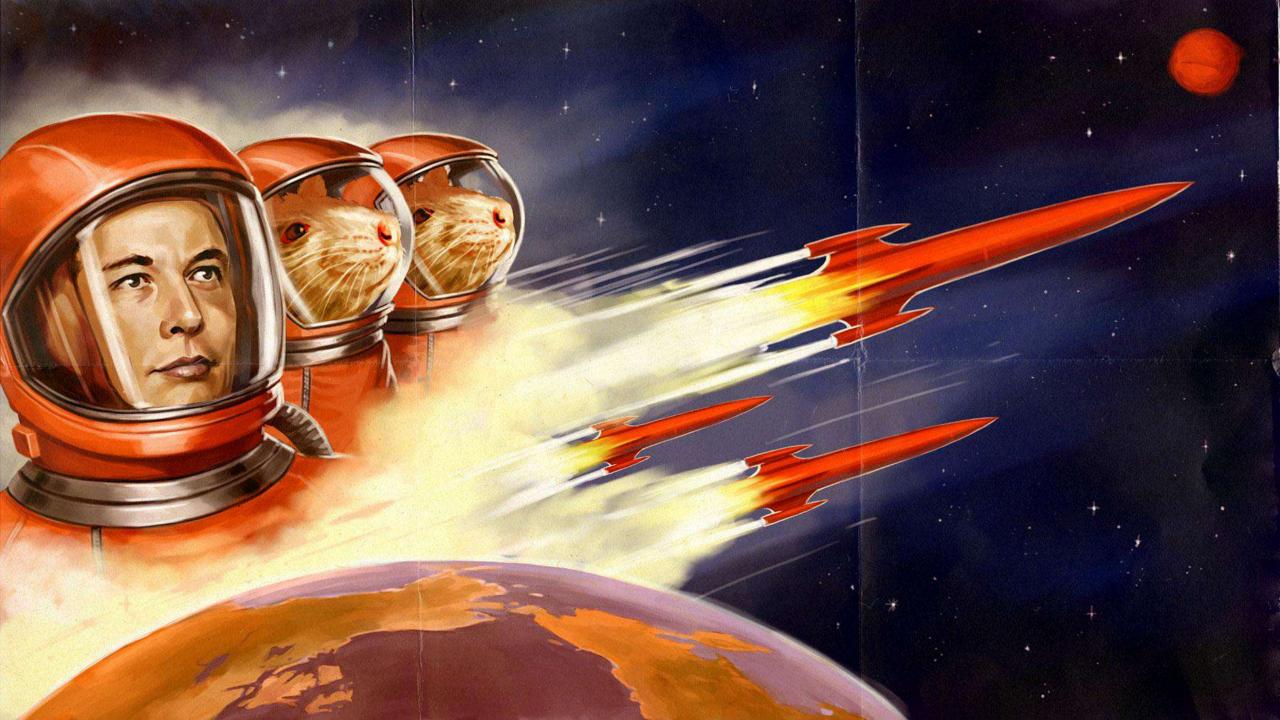
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Globally, the number of 00-year-olds s set to increase 10-fold e next 35 years.

### **Population Growth Throughout History**





Space.com > Spaceflight

### Now Is the Time to Colonize Mars, Elon Musk Says

By Mike Wall, Space.com Senior Writer | December 16, 2015 07:00am ET

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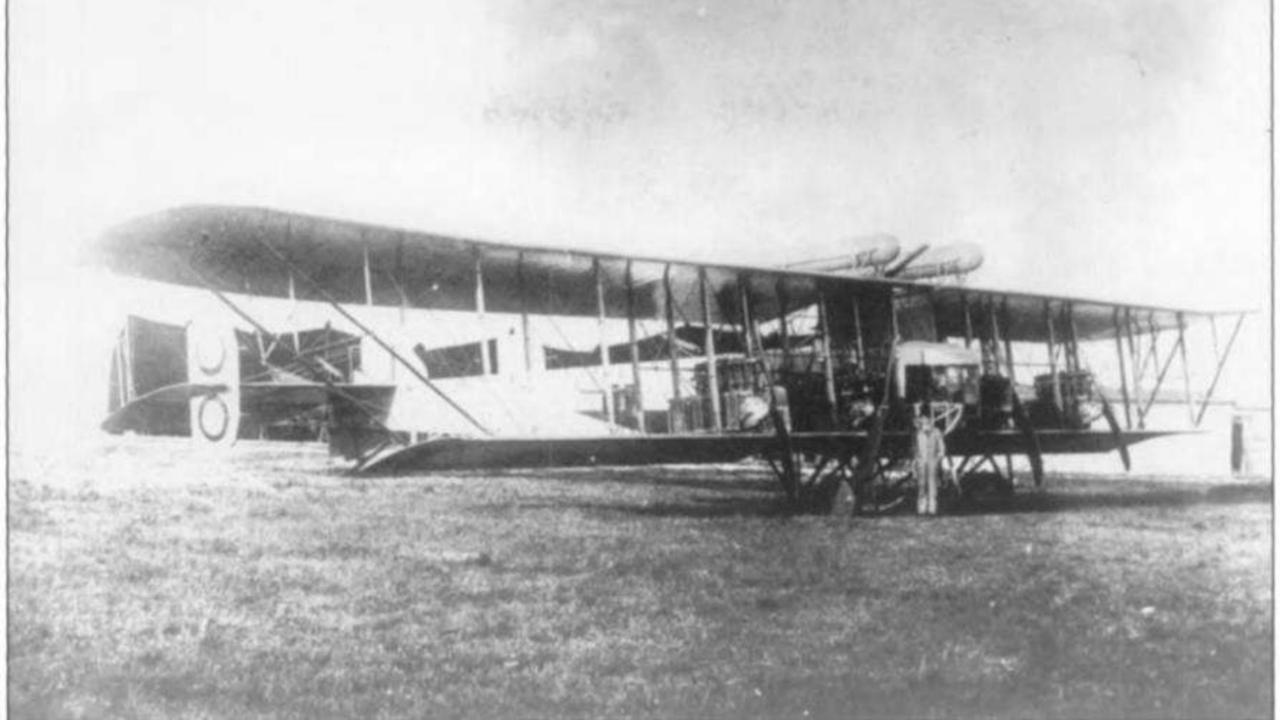
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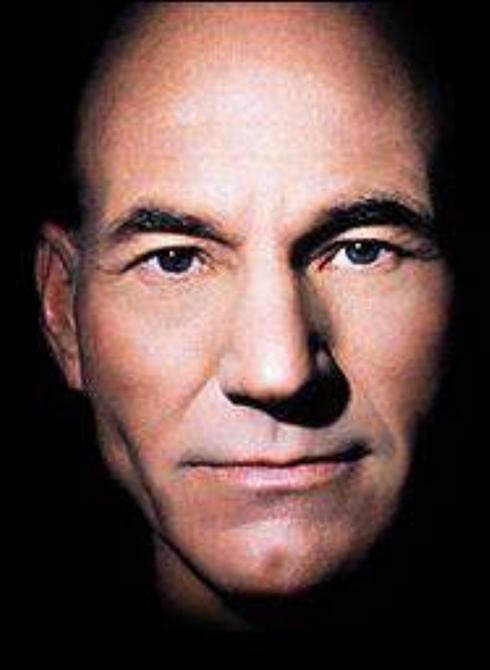








The acquisition of wealth is no longer the driving force in our lives ...



... we work to better ourselves and the rest of humanity.

I would like to die thinking that humanity has a bright future.

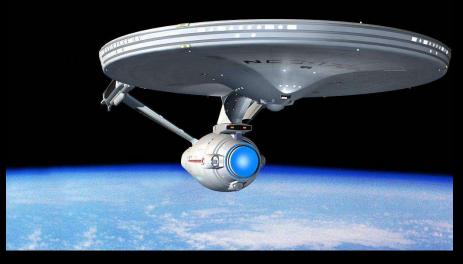
If we can solve sustainable energy ...



... becoming a multiplanetary species with a self-sustaining civilization on another, then I think that would be really good.







Shared beliefs

Money for control

Bank to cross borders

Open sourced to go global

Humanity, not wealth



















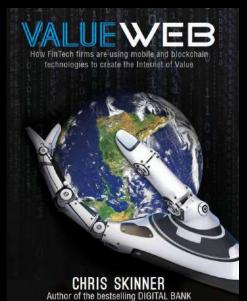


# But why four feet eight and a half inches?

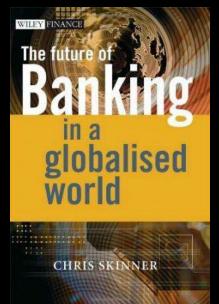


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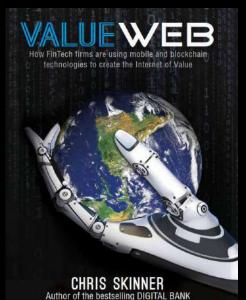




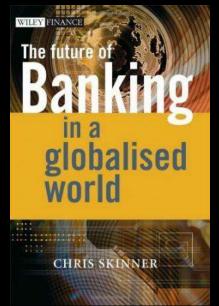


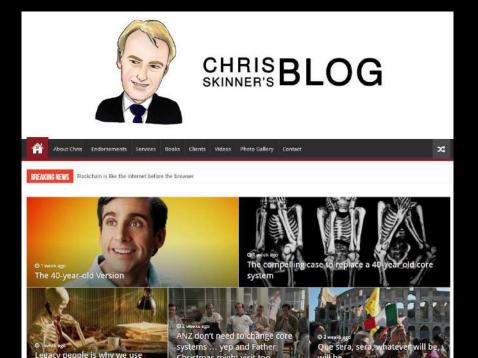
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