

# The Rise of China's Cashless Society - The overall picture and cases -

Weilin Zhao Economic Research Center Fujitsu Research Institute 24 May 2018



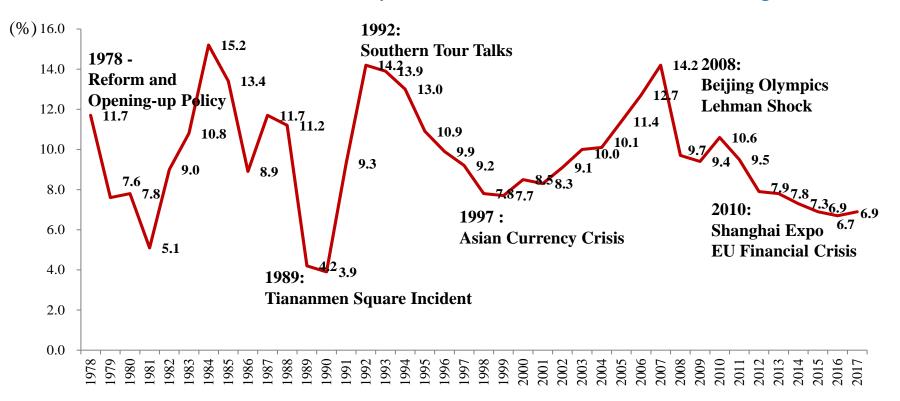
# Content

- 1. China Moving Towards a Cashless Society
- 2. Expansion of Mobile Payments and Main Players
- 3. Diffusion in Public Services

## 1.1 China's Economic Growth



- Rapid economic growth after 1978, government-led growth model
- Average economic growth rate of 9.65% (1978-2016), world's second-largest economic power in 2010, economic slowdown from 2012
- The shift of economic development model, innovation-driven growth



Source: National Bureau of Statistics of China.

## 1.2 The Goal of an Innovation Nation



- Released in 2006: become an *innovation nation by 2020*
- The specific targets of realizing an innovation nation

	R&D expenditure / GDP	Patent Registration	Academic Papers	Total Factor Productivity
2020	> 2.5%	At least 5 <sup>th</sup>	At least 5 <sup>th</sup>	> 60%
		worldwide	worldwide	
2015	2.06%	1.1 million	1.58 million, 2 <sup>nd</sup>	
	(1.4 trillion yuan)	domestic patent	worldwide from	55%
		applications, 1st in	2005 to	3070
		the world	September 2015	

(Source) Based on data of the Chinese Government and other published reports

- ■When examining the 2015 data, it can be seen that some of the numerical targets of the innovation nation have already been realized, and others are nearing their targets
- Promotion of digital innovation

## 1.3 Important Policies



- ■China Manufacturing 2025 (May, 2015)
  - ■A strategy for upgrading the manufacturing industry form 2016 to 2025
  - ■Digitalization of the manufacturing industry
- ■Internet Plus (July, 2015)
  - New business, employment,
    value from [Internet + industries]
  - ■Digital transformation based on ICT



(資料) Baidu Picture

# 1.4 Chinese People's Lifestyle is Changing



- A lifestyle reliant on smartphone
- ■In the morning:
  - China's UBER: Didi;
  - Bike-sharing service: Mobike or ofo
- Lunch time
  - Order the lunch by Ele
  - (Ele means "Are you Hungry?")
- In the evening:



Online shopping and paid by mobile payment

For the payment, not cash or cards, but Alipay or WechatPay

Smartphone as a virtual wallet



## 1.5 China is Embracing Cashless



- Cash is rapidly becoming obsolete
  - Diffusion of mobile payment: an important part of Chinese people's everyday life
  - Cashless city emerging: a cashless lifestyle
  - <u>US\$15.4 trillion in 2017</u>: China's mobile payment market is the largest





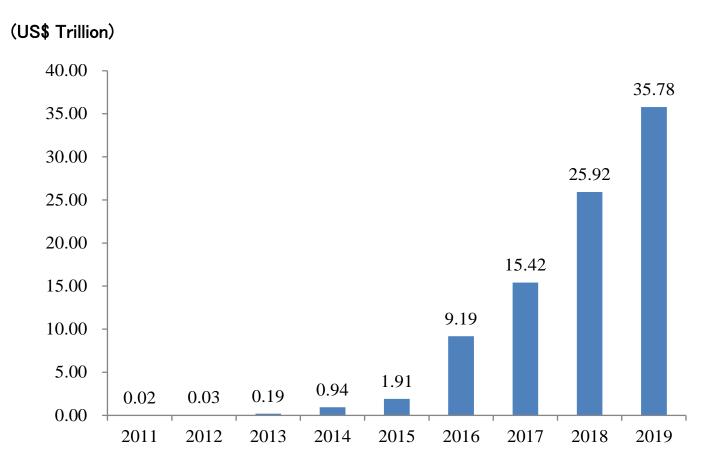


(Source) The mobile payment is wildly used in China (Photo by Zhao, Beijing/China, Shenyang/China, Tokyo/Japan)

# 2.1 Rapid Growth of Mobile Payment



### Mobile payment transaction volume in China



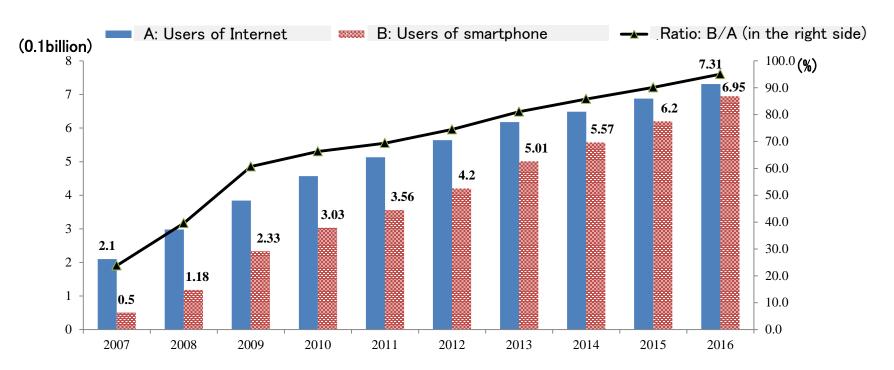
(Source) iResearch (2017)
Note: 2018, 2019 with an estimation
1US\$ = 6.4 RMB

## 2.2 Diffusion of Internet and Smartphone



- Users of Internet: 0.77billion (2017)
- Users of smartphone and mobile internet are increasing

#### Users of Internet and mobile internet in China



(Source) Report on Internet Development in China, China Internet Network Information Center (2016)

## 2.3 Factors Contributing to the Shift



#### Behind in financial sector

- ➤ Credit card penetration rate: low (Credit card 0.43 billion in 2015)
- Unionpay's role in promoting cashless
   (Debit card "Unionpay" 6.2 billion in 2016)
- Mobile payment: fast and easy to use Bank infrastructure / 100 thousand people

#### **Security**

- Counterfeit Money as a serious problem
- ➤ <u>US\$0.1 billion</u> in 2014

	市 4	0人民報	B C	
EFE	1110	100	TE.	
	020-	設面圆		
QAS54148	104			

(Source) Counterfeit money (Baidu picture)

	China	North America	Europe	
Branch	8.1	28.2	28	
ATMs	55	222	81	
(Source) World Bank (2014)				

#### Low cost

- Expensive card readervs a simple printout of a QR code
- No charge for personal money transfer
- 0.6% charge for business transactions

## 2.4 Key Players: Alipay and WechatPay



- Alipay: a new ecosystem of financial services
  - Both payment services and diverse financial services
  - Base of many services provided by Alibaba



- WechatPay: rapid growth
  - a function of Wechat, which is a popular free messaging application
  - Number of users is increasing
- Two important payment platforms
  - Have conquered the service sector
  - Dominate elsewhere, which do you want to use?
  - More than 90% of the mobile payment market
  - Intense competition, Apple pay, JD pay, Unionpay Quick...
  - Expand to public services and beyond China to overseas markets



## 3.1 An Important Gateway to Other Services Fujitsu



- Fast and easy to use for consumers' convenience
- Increase the users of many other services
- A case of mobile payment and bike-sharing service







(Source) People can ride Mobike or of by Alipay or WechatPay (photo by Zhao, Beijing/China, Guangzhou/China)

## 3.2 Cashless in Transportation Systems



- From cash to card and smartphone application
  - Shift in payment method

	Description	Cash	(Bank / Credit ) Card	Mobile Payment
Bus	common, popular public transport tools	<b>V</b>	n.a. (Bus card)	(some cities)
Subway	increasing in megacities and bigger cities	n.a.	<b>✓</b>	(some cities)
Railway	becoming convenient	•	•	<b>✓</b>



(Source) No cash mark when buying the tickets in the subway station (photo by Zhao, Shanghai/China)



(Source) Mobile payment as a payment method (photo by Zhao, Hangzhou/China)

## 3.3 Diffusion of Mobile Payment



- Not only as a payment method to buy tickets
- A new style: **scan, pay and pass**
- More cities begin using QR code services to allow passengers quicker entry and exit via the mobile payment in public transport
- To push the public transport to card-less and cashless



(Source) People are going to scan the QR code to pass in the subway (photo by Zhao, Hangzhou/China)

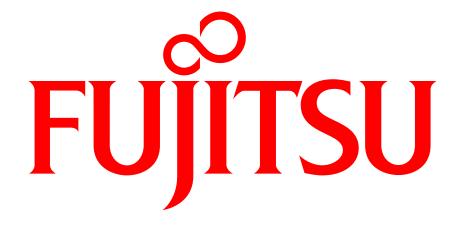


(Source)Promotion of the use of Alipay when passing the gates of Shanghai's subway (photo by Zhao, Shanghai/China)

## At Last...



- The rise of China's cashless society
  - Mobile payment is growing fast
  - Advantage and disadvantage
  - Security of transaction, data protection
- Expand to public services for a more efficient/smart society
  - ■To improve the efficiency of payment
  - ■To give impact to business model
  - ■Public transport as a new battlefield
  - ■More public services (hospital, government services)
  - Possibility of going broad
  - Balance of regulation and deregulation



shaping tomorrow with you