



WORLD BANK GROUP
Finance, Competitiveness & Innovation

Digital Wallets / E-Money Providers

Arab Regional Fintech Working Group

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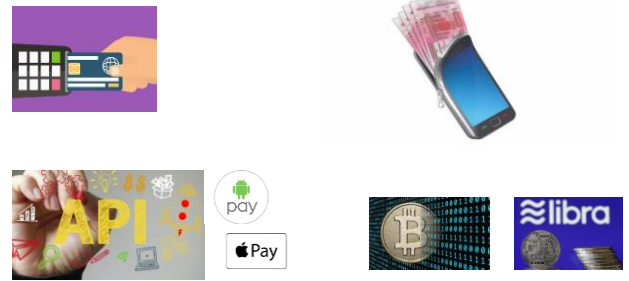
Digital Wallets / E-money providers - overview of topics for discussion

1. **Ongoing evolution of e-money services**
2. Role of E-money at in-person merchant payments and E-commerce
3. Policy and regulatory implications

E-money to Wallets - Changes interaction with account, processing & business model

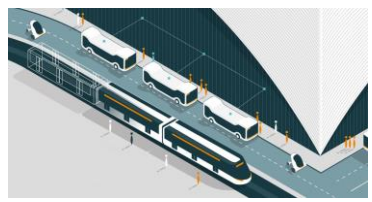
Interaction with "Account"

1. Introduction of digital access to bank accounts
2. Creation of prepaid concept and entry of non-banks
3. De-linking of initiation of payment from maintenance of account
4. Delinking of account from payment



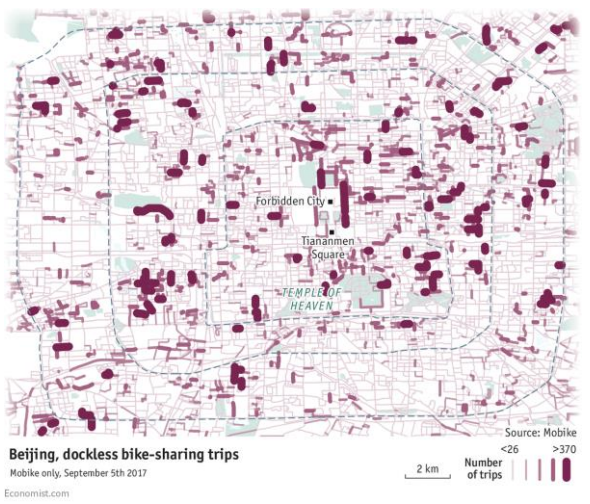
Changes in processing

- Faster Payments
- DLT
- Integration with ID
- QR codes



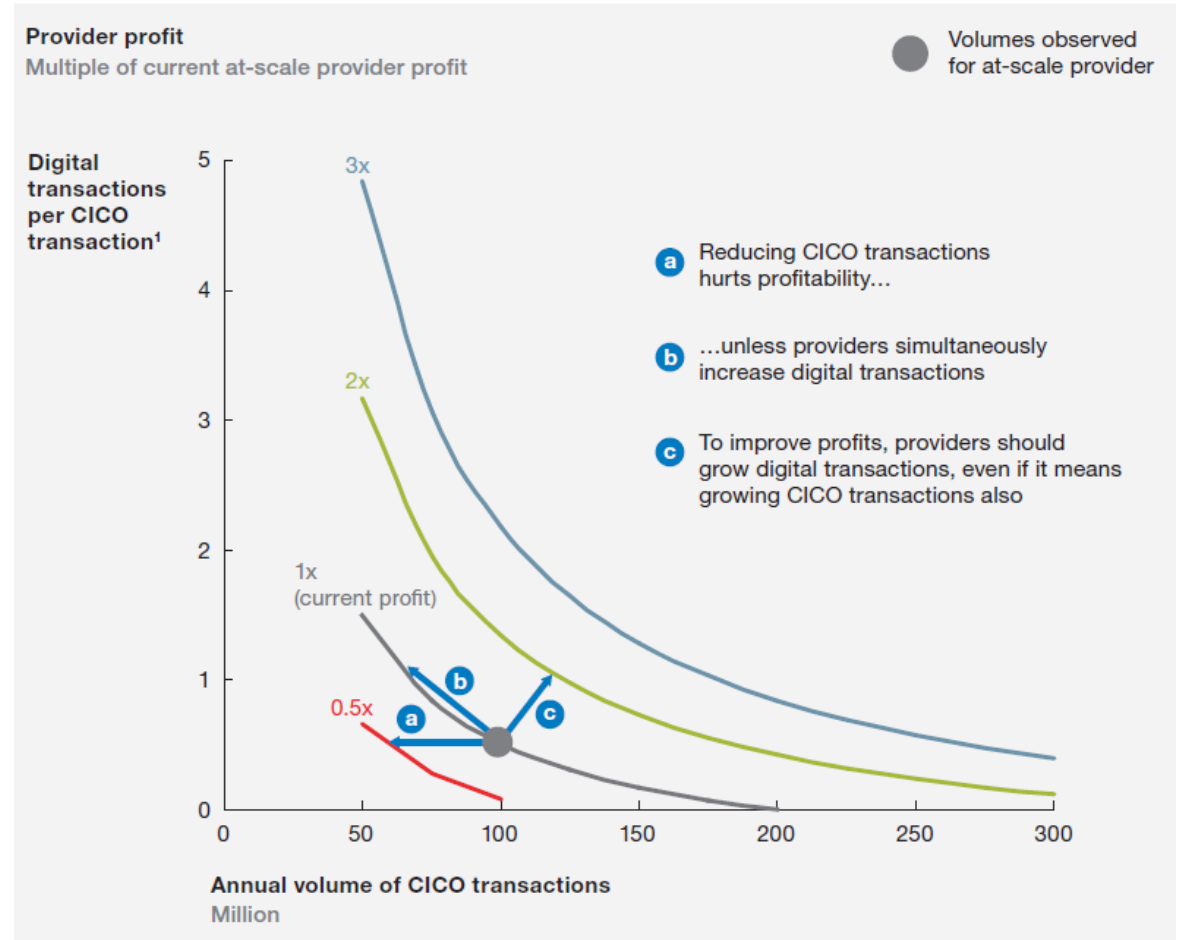
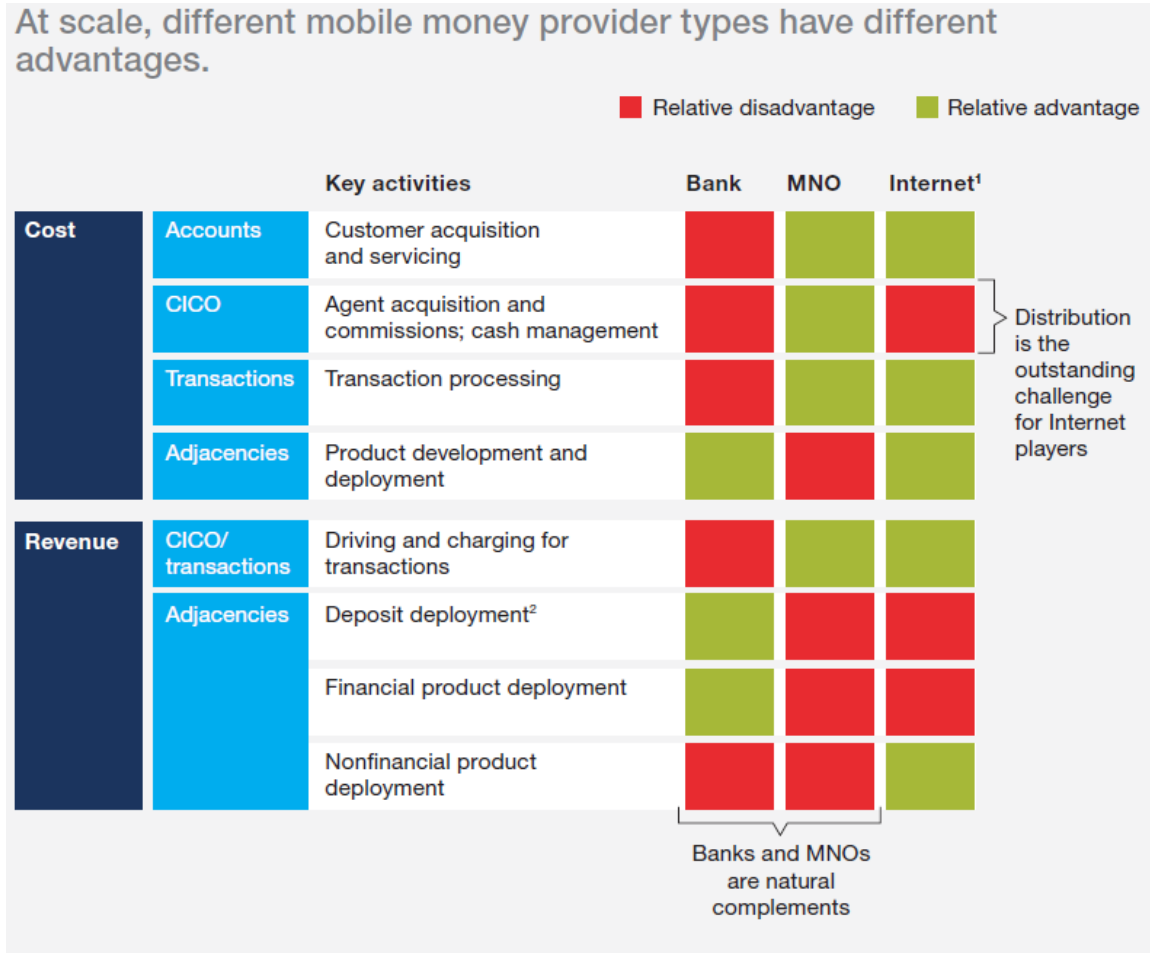
Changes in user engagement and business model

- Integration with day-to-day interactions
- Invisible payments



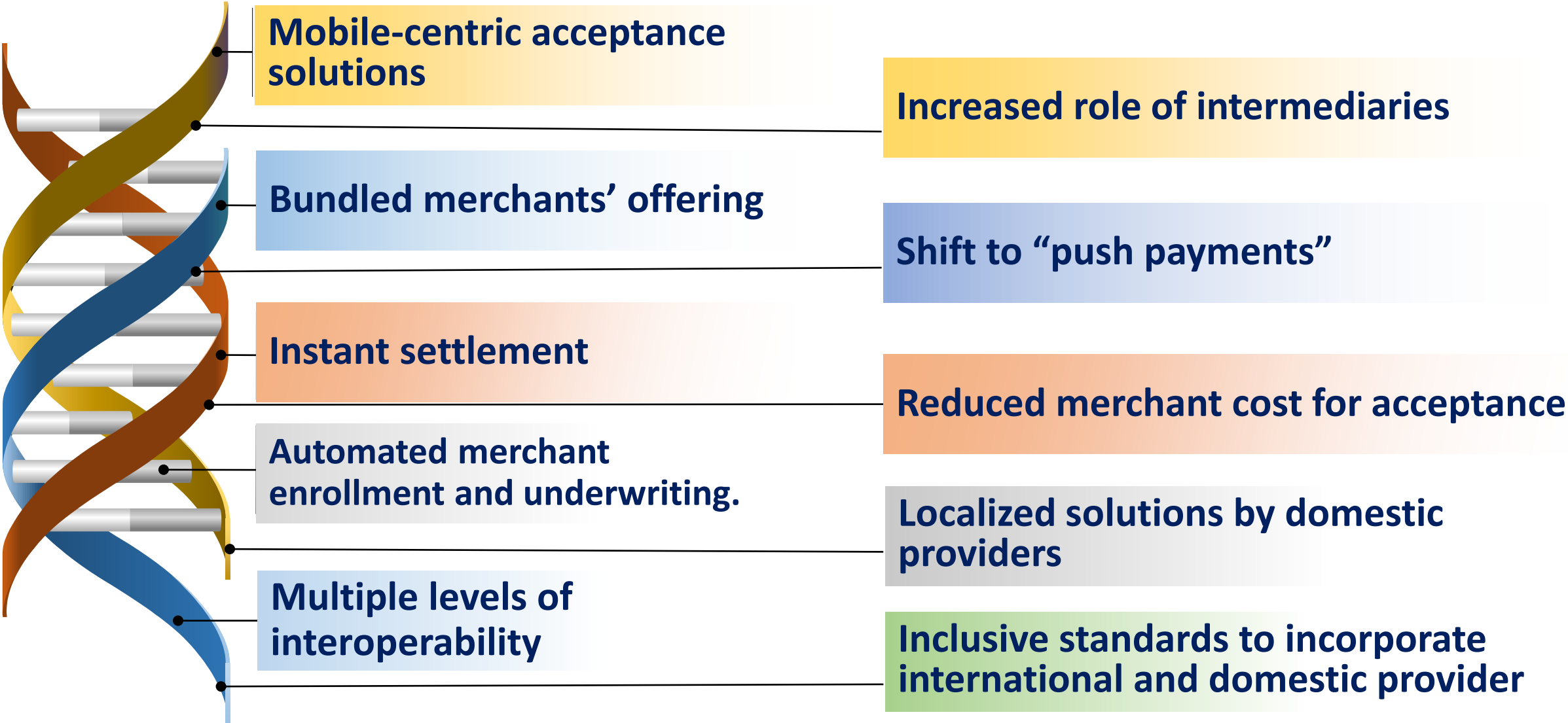
Potential Shifts in market structure - Squeeze on pure-play e-money providers

Increasing usage of digital payments could play to the advantage of BigTechs and reduce reliance on physical infrastructure
4 Sources of revenue: Account maintenance, Cash-in and out, Transactions and Adjacencies [ACTA]



1. Ongoing evolution of e-money services
- 2. Role of E-money at in-person merchant payments and E-commerce**
3. Policy and regulatory implications

Trends in Acquiring Business Model



1. Ongoing evolution of e-money services
2. Role of E-money at in-person merchant payments and E-commerce
3. **Policy and regulatory implications**

1. Regulations for e-money issuers Vs Wallet Providers

- **Safety of customer funds not a major concern with Wallets – implications for prudential requirements**
- **Open Banking and Open APIs**
- **Tokenization**
- **Competition aspects**
- **Outsourcing regulations**
- **Legal presence**
- **Integration into crypto ecosystem**

2. Access to PS by E-Money providers and non-banks

India

- The RBI expanded access to the RTGS system to non-bank PSPs and Payment Clearing Entities
- 4 types of membership are allowed (Regular Participant-A, Restricted Participant-B, Clearing House-C and all other Clearing Entities-D)
- Available facilities and transactions depend on type of membership
- Direct members can facilitate settlement in central bank money to non-bank payment system operators that do not participate in the RTGS

Mexico

- Direct access to the Fast Payments System can be granted to regulated financial entities (**Including regulated E-Money providers – which are required to participate in the FPS once they reached certain level of transactions/accounts**)
- All participants must comply with BC, Cybersecurity and protection of funds requirements
- The Central Bank (Operator of the FPS) will be issuing rules for indirect participation in the coming months

UK

- Authorized payment and e-money institution payment service providers can be direct members of the CHAPS (RTGS system), Faster Payments, Bacs, LINK, and Visa and can open settlement accounts at BoE
- Motivation was to support financial stability through greater diversity and risk-reducing payment technologies

	Access to RTGS for Issuers of e-money							
	No access allowed		Direct access to settlement account and central bank credit		Direct access to a settlement account but not to credit		Indirect access to RTGS services through a direct participant	
	#	%	#	%	#	%	#	%
Global	38	40%	2	2%	6	6%	15	16%
By Income								
High Income	10	40%	0	0%	1	4%	6	24%
Upper-middle Income	13	37%	1	3%	4	11%	3	9%
Lower-Middle Income	10	38%	1	4%	1	4%	5	19%
Low Income	5	56%	0	0%	0	0%	1	11%

Source: World Bank Global Payment Systems Survey

	Access to ACH to supervised non-bank financial entities					
	Indirect access		No access allowed		Direct access	
	#	%	#	%	#	%
Global	33	33%	#	30%	#	23%
By Income						
High income	12	36%	7	21%	8	24%
Upper middle income	10	26%	#	36%	#	28%
Lower middle income	7	41%	7	41%	2	12%
Low income	4	40%	2	20%	2	20%

Source: World Bank Global Payment Systems Survey

3. Standardization of QR, Transaction Flows and APIs

QR codes, transaction flows and APIs need to be implemented through standards

- Provides a centralized framework for regulation, oversight and supervision
- Design process allows to capture needs of multiple stakeholders
- Simplifies development and allows faster implementation
- Facilitates interoperability across Payment Systems and instruments
- Reduces latency and friction during transaction flow
- Helps to promote competition and avoid exclusionary practices
- Supports the implementation of security mechanisms and the implementation of industry-wide initiatives for fraud prevention and response
- **QR code standards:** Malaysia, Thailand, Singapore, Hong Kong, Peru, Argentina
- **API Standards:** Australia, UK, India, Korea
- **Transaction Flows:** Request to Pay, 3D-Secure, SRC

	For Service Providers facilitating Acceptance via QR Code regulations enforce EMV or other Interoperability standard			
	No		Yes	
	#	%	#	%
Global	74	71%	30	29%
By Income				
High income	29	76%	9	24%
Upper middle income	24	77%	7	23%
Lower middle income	15	56%	12	44%
Low income	6	75%	2	25%
By Region				
Europe & Central Asia	12	86%	2	14%
Latin America & Caribbean	15	79%	4	21%
Sub-Saharan Africa	9	53%	8	47%
High income OECD	24	80%	6	20%
East Asia & Pacific	7	64%	4	36%
Middle East & North Africa	4	50%	4	50%
South Asia	3	60%	2	40%

Source: World Bank Global Payment Systems Survey

4. Protection of Customer Funds from Frauds and Provider failure

Prevention and detection measures

- Strong **customer onboarding** and **KYC** checks
- **Customer behavior profiling**
- Introduction of **two-factor authentication**
- PSPs can centralize **fraud alert** handling and customer interaction - One central risk engine for profiling and scoring transactions across services, including real-time fraud detection features
- Ensure that customers are made aware of and educated about fraud-related risks and prevention measures
- Industry collaborative forum

Incident response measures

- Implement methodologies that adequately capture and quantify exposure to fraud and other related risks (Cybersecurity)
- Government-Industry cyberattack response centers and protocols

In addition to segregation of funds, make customer funds bankruptcy remote

- Customer funds held by intermediaries need to be legally protected and ring-fenced from bankruptcy of the intermediary or fund holding institution

5. Regulation of New Acceptance Models

- Clarify regulatory requirements for acquiring
- Onboarding Micro and Small merchants becomes critical
- New intermediaries
- Need to establish tiered KYC and CDD procedures
- Competition aspects; AML/CFT; Cyber; Data Protection and privacy

Guidelines on Regulation of Payment Aggregators and Payment Gateways – RBI; Indonesia

Applicability of KYC/ AML/ CFT provisions
Merchant Onboarding
Capital Requirements

Security, fraud prevention and risk management framework

Implications for Oversight

- Increased understanding and mapping of new models and new participants
- Increased oversight and supervisory powers, including powers to regulate non-financial entities – *For example, BigTechs and large retailers operate as Payment facilitators*
- Increased oversight and supervisory capacity

5. Regulation of New Acceptance Models [continued]

- **Establish a regulatory framework** – Objectives and Mechanisms.
 - **Objectives** – Safety, Efficiency , Reliability and Affordability
 - **Mechanisms:** Could be varied by type of non-bank
 - Registration <<Front-End Services>>
 - Licensing <<Payment System Operator and Independent service provider>>
 - Making Licensed Entity responsible for non-banks used by it, establish reporting and minimum requirements for monitoring. <<Back-end Services>>
 - Powers to audit <<All>>
 - Data collection and Analysis <<All, with differing levels>>
- **Establish Oversight Framework**
 - Which entities to oversee ?
 - **Tools:**
 - Establish standards as part of licensing or independently
 - Data collection and analysis
 - Ongoing discussions through forums like National Payments Council

Thank you