



Retail payments in Indonesia

**Who will drive the
cashless revolution?**

January 2017

KPMG Siddharta Advisory
kpmg.com/id





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Introduction

With a young growing population of over 250¹ million people and around 5² million people entering the consumer class each year, Indonesia has seen significant attention from global and local technology companies, which in the last two or so years revolutionized the retail and transportation sectors.

At present transactions are largely cash based due to a number of obstacles, which include:

- A high unbanked population
- Limited (but rapidly expanding) internet connectivity
- Undeveloped and fragmented payment infrastructure
- Certain banks looking to protect their customer base and networks leading to limited inter-operability
- Low trust in electronic payments

We believe banks and their payments networks will be disrupted by technology firms, just as the local taxi

providers have been disrupted by players such as PT Go-Jek Indonesia ("Go-Jek"), PT GrabTaxi Indonesia ("Grab") and Uber.

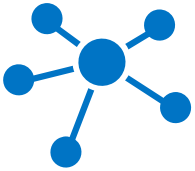
With 21 electronic money licenses issued, and potentially more to follow, banks, switching networks, teleco companies, specialist eWallet, eCommerce and other participants are all jostling to gain pre-eminence in developing 'the' platform to channel domestic electronic payments in Indonesia.

This publication is an attempt to capture the landscape, emerging regulatory developments and an early view on which players may prevail.

We hope that strategic and financial players looking at the Indonesian payments market will find this publication useful. We, at KPMG Indonesia, wish all participants all the best in their journey to change the face of payments in Indonesia.



Barnaby Robson
Deal Advisory



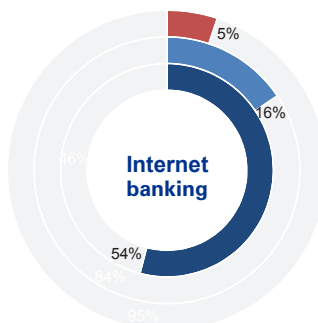
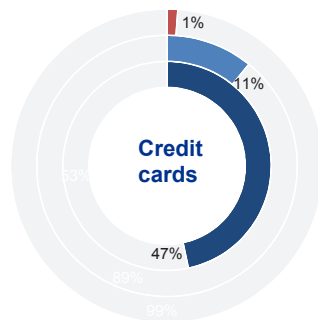
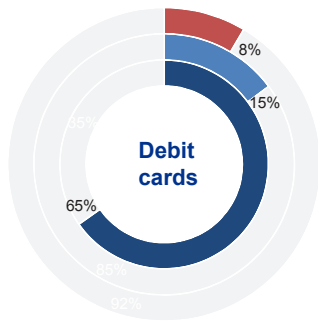
The state of play

Indonesia is the second³ largest cash based economy in the world.

Although 36%⁴ of Indonesian's have a bank account, adoption of non-cash payments is around 10%⁵.

While other developing markets have taken advantage of digital payments, cash dominates in Indonesia

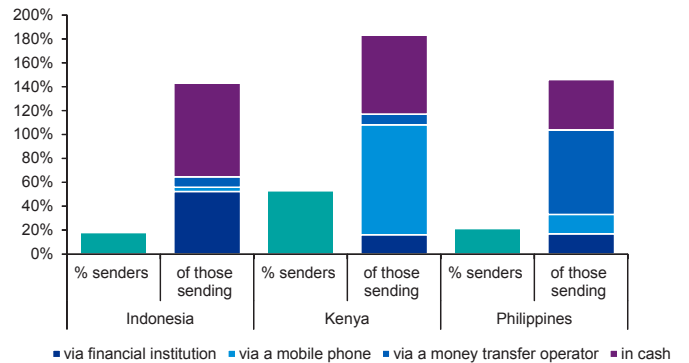
% of adults (age 15+) making payments using:



- Indonesia
- East Asia and Pacific (a)
- High income OECD (b)

Note: (a) Cambodia, China, Indonesia, Lao People's Democratic Republic, Malaysia, Mongolia, Myanmar, Philippines, Thailand, Vietnam
 (b) Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Israel, Italy, Japan, Republic of Korea, Luxembourg, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom, United States
 Source: The World Bank, 2014 data

How people send domestic remittances in selected countries






Note: Respondents could list more than one method (hence > 100%)
 Source: The World Bank, 2014 data












Key players

The consumer payments landscape is fragmented and complicated.

Players	Challenges	Example Competitors
<p>Consumers</p> 	<p>64%⁴ of the population over 15+ years is unbanked.</p> <p>Approximately 96%⁶ of the population do not have credit cards.</p> <p>Low financial literacy.</p> <p>Fear of fraud limits receptiveness to online payments.</p>	<p>n/a</p>
<p>Payments infrastructure providers</p> 	<p>There are four main competing domestic switching networks / debit card schemes:</p> <ul style="list-style-type: none"> PT Artajasa Pembayaran Elektronik (“ATM Bersama”) - controlled by PT Indosat Tbk (“Indosat”), one of the biggest telcos in Indonesia, and the Bank Indonesia (“BI”) pension fund. PT Rintis Sejahtera (“ATM Prima”) – controlled by the Bank of Central Asia (“BCA”) PT Daya Network Lestari (ATM ALTO) - controlled by Seven Bank, Japan PT Sigma Cipta Caraka (ATM Link) - controlled by four state-owned lenders - Bank Mandiri, Bank Rakyat Indonesia (“BRI”), Bank Negara Indonesia (“BNI”) and Bank Tabungan Negara (“BTN”) - under the Association of State-Owned Banks (“Himbara”) (collectively “the Himbara Banks”). <p>These networks are primarily focussed on switching services provided through their member banks’ ATMs or POS devices; however, they also are starting to provide billing, remittance, eWallet and other payment services. Cards not on their networks currently have limited interconnectivity.</p>	<p>ATM Bersama, ATM Link, ATM Prima, ATM ALTO</p>
<p>Banks</p> 	<p>Banks in Indonesia often do not issue customers with a debit card with a 16-digit number that can be used on global card networks. If 16-digit cards are issued, often customers need to go through several extra and onerous steps to enable the card for online transactions.</p> <p>Payment through internet banking platforms requires users to enter multiple codes often using a physical secure code device. The user experience is poor and not mobile-friendly.</p> <p>Banks are trying to develop their own eWallets with no standardization. Often they agree exclusive relationships for certain services (e.g. toll road payments), blocking other providers.</p>	<p>Internet banking: Klik BCA. Click Pay (PT Bank Mandiri (Persero) Tbk (“Mandiri”)), i Bank (PT Bank Rakyat Indonesia Tbk (“BRI”))</p> <p>Licensed bank eWallets platforms: Mandiri eCash, ePay BRI, sakuku (BCA)</p> <p>eCards: BCA Flazz, wallet (PT Bank Negara Indonesia Tbk (“BNI”)), BRIZZI (BRI), and many more</p>

Players	Challenges	Example Competitors
<p>Bank Indonesia (“BI”)</p> 	<p>The Central Bank, Bank Indonesia (“BI”), is responsible for regulation and supervision of the payments system, including the issuance of licenses.</p> <p>There are separate licenses for credit cards, ATM/debit cards, electronic money, money transfer, payment gateways and eWallets.</p> <p>BI also operates the Real Time Gross Settlement (“RTGS”) system for high value payments.</p>	<p>n/a</p>
<p>Private and public billers</p> 	<p>The most significant billers, by transaction volumes are probably the Telco operators, the state monopoly utility providers: PT Perusahaan Listrik Negara (“PLN”) – electricity provider, and PT Perusahaan Gas Negara (“PGN”) - gas provider; and Badan Penyelenggara Jaminan Sosial (“BPJS”) – the state mandatory social security agency.</p> <p>Due to widespread non-payment of bills, most billers request prepayment.</p> <p>We believe most post-pay billing payments is debit transfers via banks through ATM and online banking, with cash payment through non-bank collecting agents also significant. Use of direct debits is limited.</p>	<p>n/a</p>
<p>Teleco operators</p> 	<p>Three teleco operators dominate with c 80%⁷ market share of subscriptions: PT Telekomunikasi Indonesia Tbk (“Telkomsel”), Indosat and PT XL Axiata Tbk (“XL Axiata”).</p> <p>99%⁸ of customers have a prepaid account. Prepaid mobile credit (“Pulsa”) can be used to purchase digital content. The lack of sign up or log in before purchase makes the experience better than most other payment channels. However, it can only be used for small value digital purchases.</p> <p>Teleco companies are trying to develop their own eWallets (see below).</p>	<p>Pulsa: Sepulsa (Telkomsel), IM3 (Indosat), Isi pulsa (XL Axiata)</p> <p>eWallets: T-Cash from Telkomsel, Dompetku from Indosat, XL Tunai from XL Axiata</p> <p>gateways : Finpay from Telkomsel</p>
<p>eWallets and Payment gateways</p> 	<p>There are multiple eWallets and gateways, but no outright leader.</p> <p>BI listed 21⁹ licensed electronic money operators as of August 2016 (refer to Appendix). Most licensed eWallets are owned by teleco companies and banks with a few specialist providers. Only licensed operators can be used for the purchase of physical goods. Other eWallets can only be used for the purchase of digital content.</p> <p>Overall, user experience is poor, as :</p> <ul style="list-style-type: none"> (a) there is no cross platform wallet or gateway (perhaps due to no dominant eCommerce platform) (b) customers must add credit to an account before they can transact, and (c) online payment requires a redirect away from the merchant site and login to the eWallet or gateway. 	<p>Specialist eWallets and gateways with electronic money licenses: DOKU wallet, Skyemobile money, Ponsel pay</p> <p>Other specialist eWallets and gateways: Veritrans, Faspay, Ipay88</p>

Players	Challenges	Example Competitors
<p>Credit card networks</p> 	<p>Low level of credit card adoption is in part due to strict rules around credit card issuance imposed by BI including stipulating that only customers with relatively high incomes are eligible for a credit card.</p> <p>At present, only international credit card networks have credit card principal licenses, but new regulation is expected to be implemented in 2019, which may force credit card transaction settlements to be managed through domestic players.</p>	<p>Visa, Mastercard, China Union Pay, Japan Credit Bureau (“JCB”), American Express (“AMEX”)</p>
<p>eCommerce platforms</p> 	<p>There is no single dominant domestic eCommerce platform. The low ePayments penetration and logistics issues (poor infrastructure) is holding back growth in eCommerce.</p> <p>In the past, foreign ownership requirements around eCommerce, logistics and warehousing prevented entry of the large international eCommerce platforms (eBay, TaoBao, Amazon, etc). In May 2016, the Indonesian government opened eCommerce, logistics and warehousing to foreign investment which may change the landscape with a knock-on impact on payments.</p> <p>In many markets, adoption of digital payments has been driven by payments platforms attached to eRetailers (Alipay, Paypal, Apple Pay, etc). However, licensing requirements (and other barriers – e.g. requirement to onshore data centers) have inhibited the entry of these established international payments platforms.</p>	<p>Hello pay (Lazada Group (“Lazada")), Kaspay (PT Darta Media Indonesia (“Kaskus")), go-pay (Go-Jek), Saldo Tokopedia (PT Tokopedia)</p> <p>Lippo Group (owner of Matahari Mall) and Grab announced they were partnering to develop a payments platform in July 2016</p>
<p>Non bank collection agents</p> 	<p>A growing payment channel is cash payments at convenience stores and other non bank collecting agents. Customers initiate a purchase online and then make payment over the counter using cash.</p>	<p>PT Indomarco Prismatama (“Indomaret”), PT Modern Sevel Indonesia (“7-eleven”), PT Sumber Alfaria Trijaya (“Alfamart”), PT Pos Indonesia, PT Pegadaian</p>

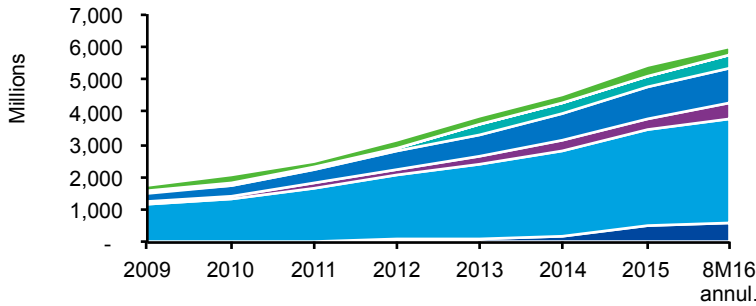




Transaction Statistics

Volumes grew at 19% CAGR from 2009 to 8M16 (annualized).

Transaction volumes

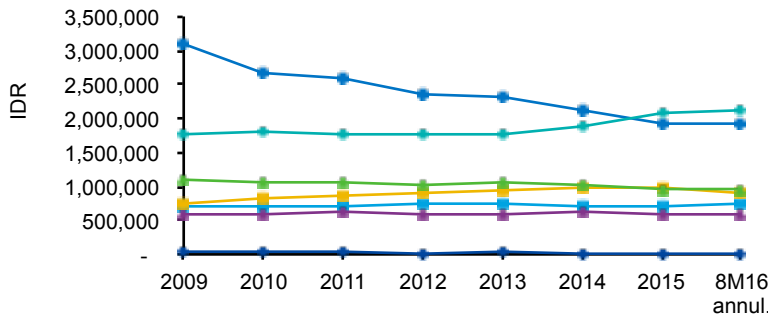


ATM cash withdrawals and intrabank transfers represented the majority of electronic transactions by volume (and value), across the period, but the mix is changing with interbank transactions, eMoney (prepaid cards) and debit purchases growing faster than other payment types.

We expect these trends to continue, with:

- more people entering the banking system,
- more retail customers adopting digital payments at point of sale, and
- the growth of eCommerce and eMoney infrastructure.

Average transaction value



As the number of banked has increased, we are seeing reductions in average transaction values (despite price inflation), presumably as the mass affluent entering the cashless payment system, transact at lower values, bringing down weighted average payment sizes.

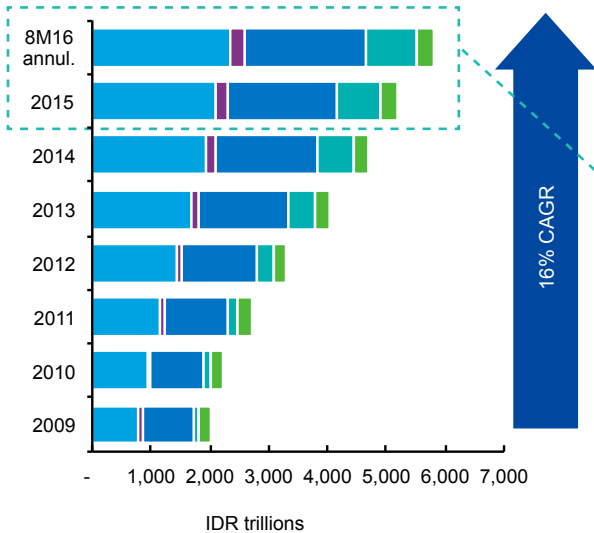
Note: (a) 8M16 annul. is the annualized data for the 8 months ending August 2016
 Source: Bank Indonesia, <http://www.bi.go.id/en/statistik/sistem-pembayaran/apmk/contents/transaksi.asp>

Key		
■ eMoney (prepaid cards)	■ ATM/Debit card – Intrabank transfer	■ Credit card – Cash withdrawal
■ ATM/Debit card – Cash withdrawal	■ Credit card – Purchase	
■ ATM/Debit card – Purchase		
■ ATM/Debit card – Interbank transfer		

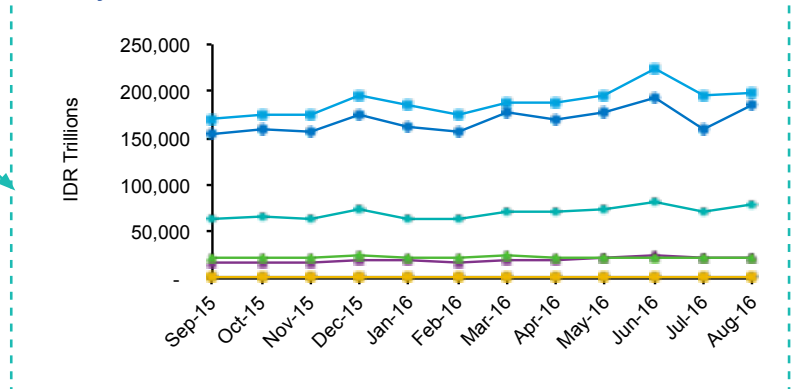


Transaction value growth is accelerating. Certain transaction types grew at over 30% between September 2015 and August 2016.

Transaction values



Monthly transaction values



Note: (a) 8M16 annual. is the annualized data for the 8 months ending August 2016
 Source: Bank Indonesia, <http://www.bi.go.id/en/statistik/sistem-pembayaran/apmk/contents/transaksi.aspx>

Credit card transaction values only grew 3.6% between September 2015 and August 2016, while the value of all other forms of cashless transactions saw double digit growth. We believe this is a consequence of:

- Consumer protection regulations issued by Bank Indonesia, effective 1 January 2015, which specified age and income based restrictions around credit card ownership, which is limiting issuance of new cards

- A new government decree, effective 31 May 2016, requiring credit card providers to submit transaction details (including customer identity) to the Indonesian Tax Office, which is discouraging the use of credit cards due to privacy concerns

ATM/Debit Card purchases, eMoney and ATM/Debit inter-bank transfer transaction values grew by 32.5%, 30.7% and 25.1%, respectively, between September 2015 and August 2016. eWallet transactions are not separately identified, but we believe may be driving some of the inter and intra-bank transfer growth.



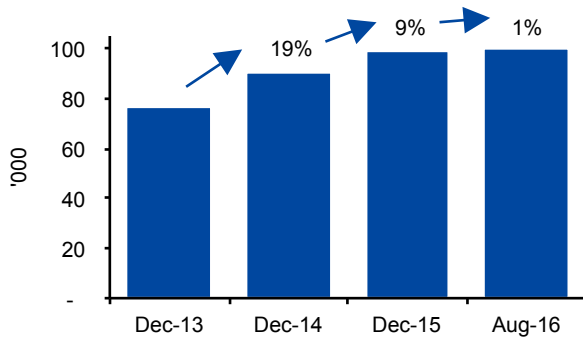
Traditional payments infrastructure

Access point statistics

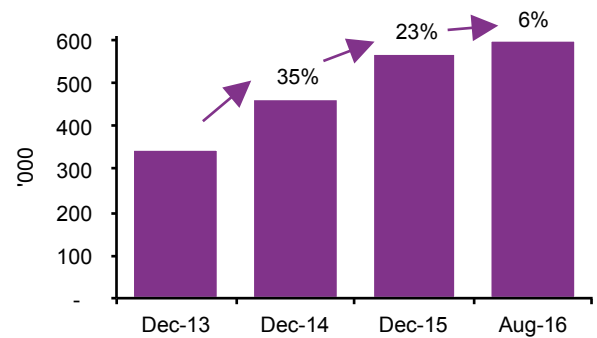
KPMG View:

Because of past limitations in domestic payments inter-operability, banks and other payments players have all sought to roll-out their own payments infrastructure, and so it's very common to see four or five different EDC devices or ATMs at points of sale/ access. Recent years have seen a slowdown in the growth of investment in access points. With growth in inter-operability, we expected to see consolidation of payments infrastructure assets. In December 2015, the Himbara banks announced plans to consolidate their ATM infrastructure¹².

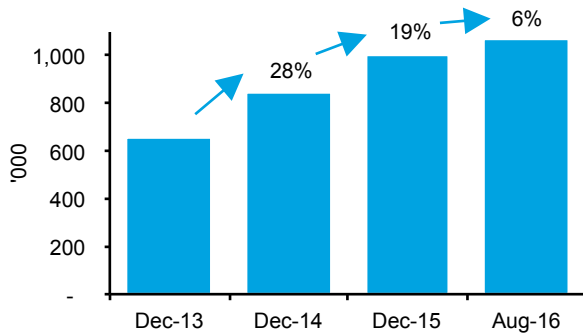
ATM terminals



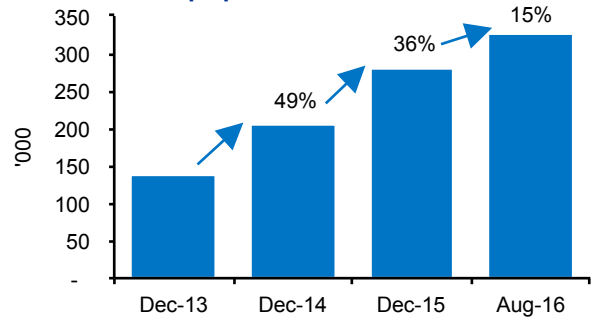
Merchants



POS / EDC terminals



eMoney readers (prepaid cards)



Source: Bank Indonesia, <http://www.bi.go.id/en/statistik/sistem-pembayaran/apmk/contents/transaksi.aspx>

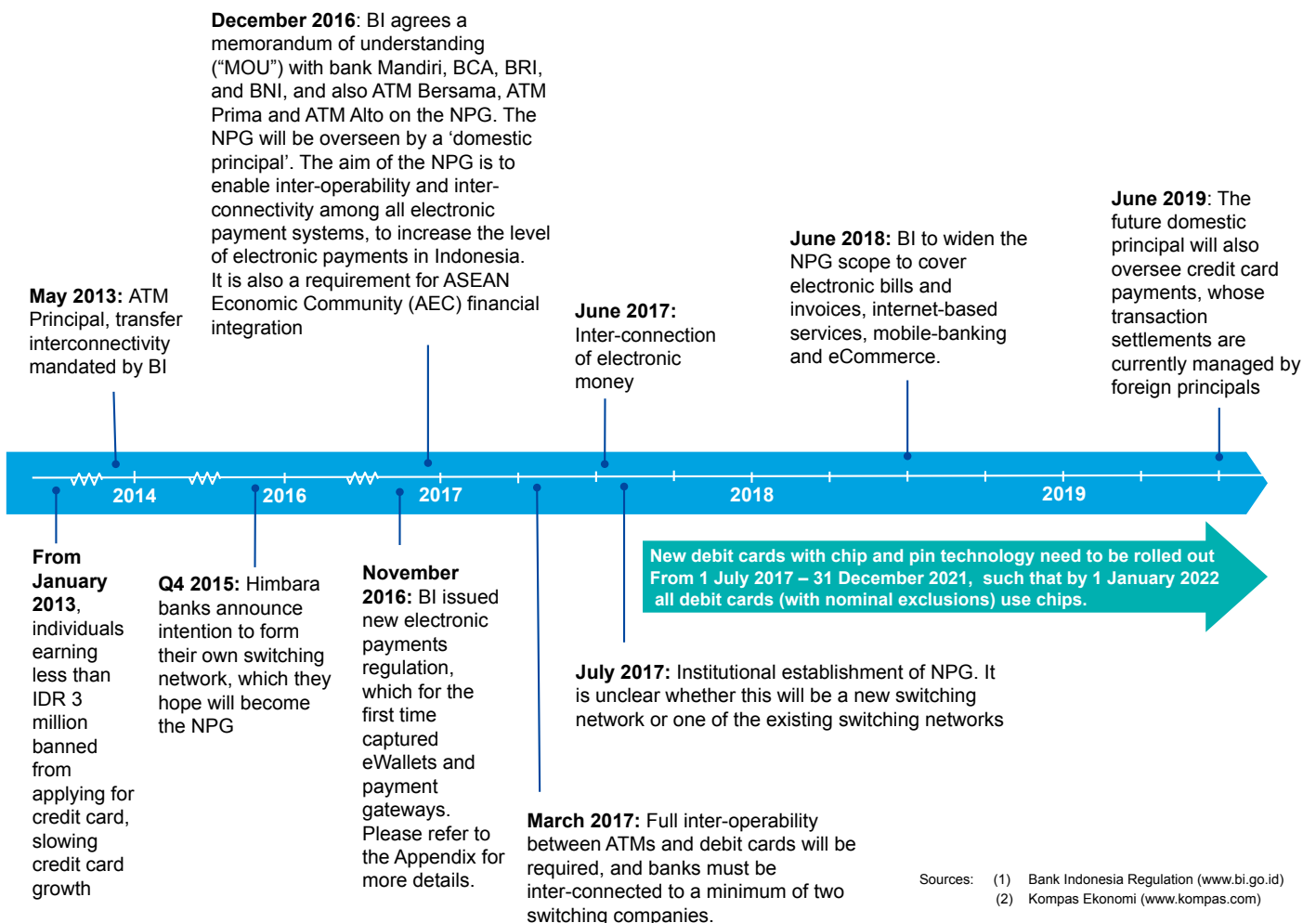


The regulatory road map for development of a National Payment Gateway

KPMG View:

The central payments infrastructure is not currently fully inter-operable and inter-connected. In China and the United Kingdom, the creation of a single dominant interbank switching network (China Union Pay and LINK, respectively) accelerated the adoption and development of electronic payments by simplifying and accelerating the acceptance process. We expect new BI regulation and creation of a national payment gateway (“NPG”) will similarly accelerate adoption of electronic payments in Indonesia. The regulatory focus is on debit card inter-connectivity first, then internet based services and credit cards.

In the longer run we believe BI should consider developing a central addressing system which would allow payments using the recipients mobile number, identity number, social network account or other proxies which are currently more prevalent than bank accounts.

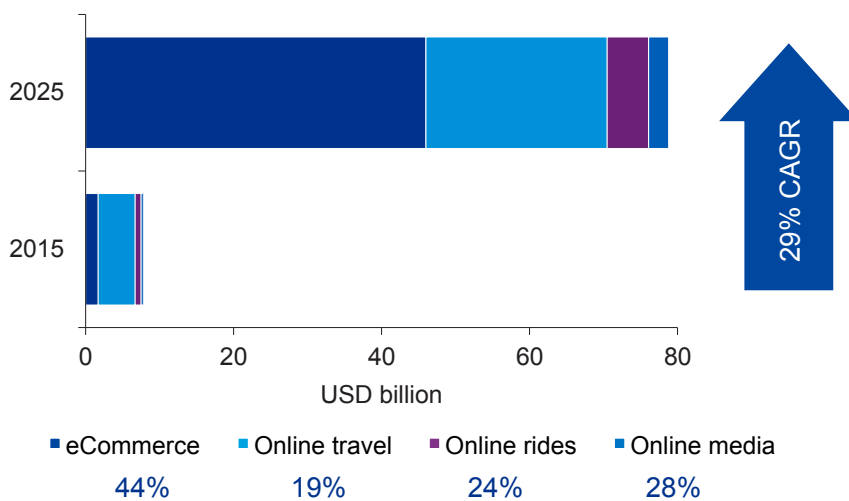




Projected eEconomy growth and the implications for payments

The eEconomy is projected to grow at CAGR 29% from 2015 to 2025, and this growth should drive cashless transactions and the development of alternative payment channels.

Indonesia projected eEconomy growth



Note: (a) percentages show CAGR from 2015 to 2025

Source: Google/Temasek, unlocking the USD 200 billion digital opportunity in South East Asia

Indonesia has a young and rapidly evolving eEconomy with an estimated 2,033¹¹ startups.

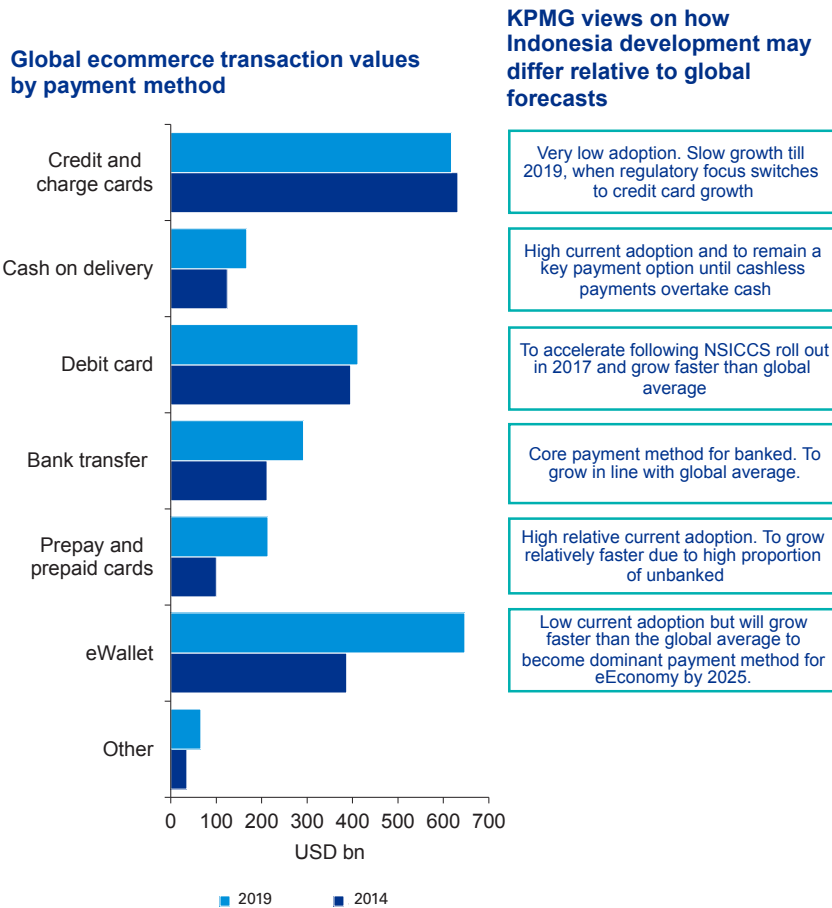
The Indonesian eEconomy is projected to grow from around USD 7.8 billion in 2015 to USD 78.8 billion in 2025, with the strongest growth being in eCommerce. This growth would make Indonesia the largest eEconomy in South East Asia.

In China and the US alternative payments providers have 'piggy-backed' off growth in the eEconomy with PayPal (subsidiary of eBay) and Alipay (subsidiary of the Alibaba Group) and WeChat Wallet (subsidiary of Tencent Holdings) the largest global eWallets.

In Indonesia, we're starting to see eEconomy providers develop their own payment services. To date, the ones with most traction appear to be 'HelloPay' (from the Lazarda group, an eCommerce site recently acquired by the Alibaba Group) and Go-Pay (from the Go-Jek group, an online ride group with other eEconomy offerings)



Global eEconomy transactions are shifting from credit and debit card payments to eWallets and alternative payment methods. We expect to see a similar end game in Indonesia.



Note: (a) Other includes direct debit, post pay, eInvoices and Other
 Source: WorldPay,

Indonesia is following a different payments development path to other global markets, due to low credit card adoption and high number of unbanked, but we believe it will leapfrog to a similar end point with alternative mobile ePayments overcoming legacy infrastructure issues.

Credit cards: In developed global markets, credit cards have been the dominating payment type, due to the security and relative convenience offered. As explored previously in this paper, credit card adoption is low in Indonesia, and growth has fallen behind other payment methods.

Cash on delivery: Because of the high number of unbanked, eEconomy payments are currently often on a cash on delivery basis or via cash payment at convenience stores. Cash on delivery is problematic for merchants, due to high instances of fraud – orders originating from Indonesia are estimated to be 12 times more likely¹⁴ to be fraudulent than the global average.

Debit cards: Adoption of 3D secure/chip and pin debit cards, which is mandated from July 2017, should increase debit card use for eEconomy transactions.

eWallets and prepay: For the unbanked and emerging classes, we expect eEconomy payments to grow through prepay solutions and eWallets. Certain eWallets such as go-pay allow top up through cash payment to drivers or at convenience stores.

Overall, Indonesia is a mobile-first eEconomy with double-digit growth in smartphone ownership filling a shortfall in home internet access. This means payments providers will need to pioneer



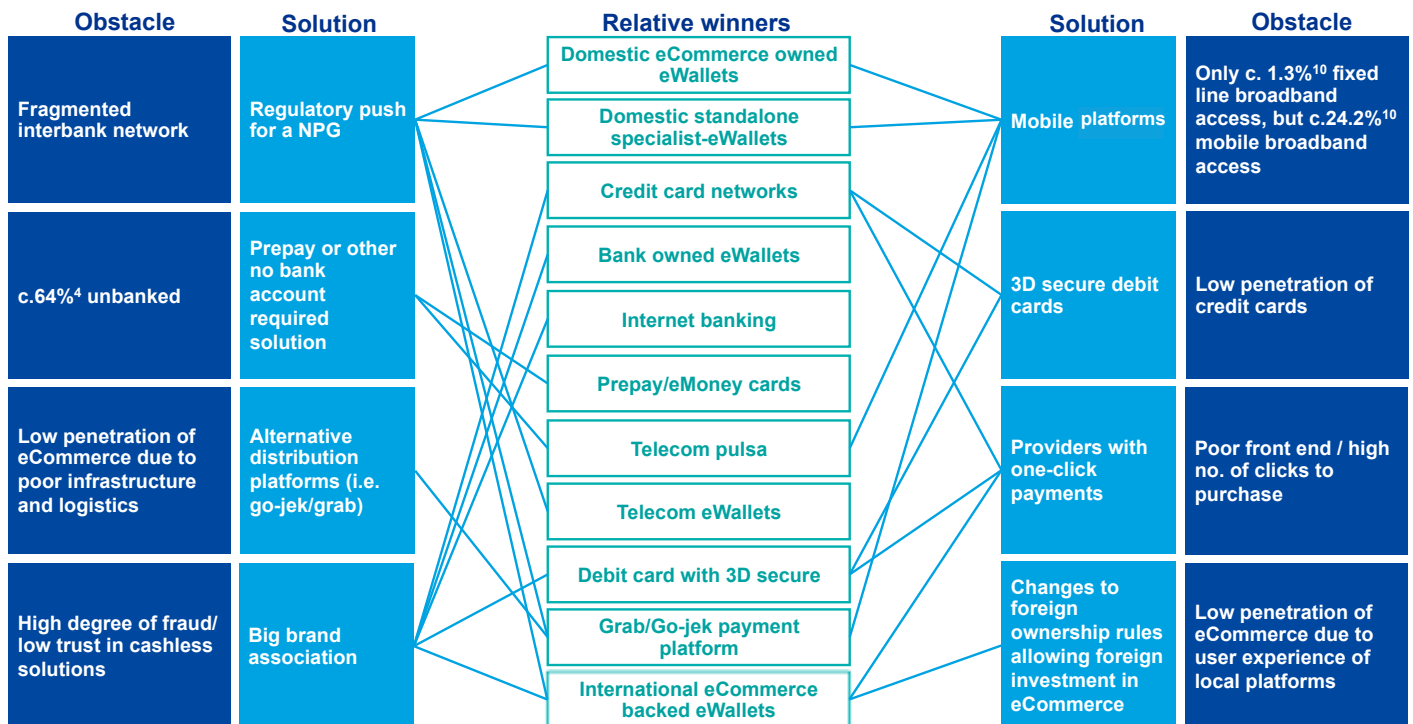


A view on who may become the winning cashless payments player

KPMG View: How do we see the cashless payments market developing?

To date, the large domestic banks, switching networks, teleco companies and other stakeholders have not been able to reach agreement on standardized payment infrastructure. All major players are also trying to develop their own customer facing payment proposition, leaving the payments market fragmented with no established market leader for retail users.

Licensing restrictions are slowing the entry of established international payment providers. Therefore, at present, the most capable of delivering a payments platform which will gain the critical mass to become the dominant eEconomy payment player, would appear to be a local solution from online ride providers Grab ("grab-pay") or Go-Jek ("go-pay") – given the volume of retail transactions they process (est. at > 500,000 a day¹³).





Our vision for the future

As this report clearly illustrates, the opportunities in cashless payments in Indonesia are immense. The underlying demographic and economic drivers point towards a rapid shift from cash based payments to alternative payments through mobile devices - with credit card networks and banking networks at risk of being side-stepped, as an emerging youthful middle class embraces new ways to pay.

Indonesia appears to be on the verge of a cashless payments boom, and we believe there are significant opportunities for companies willing to invest in alternative payment platforms. Many of the players set out in this report are already committing significant resources to pioneering new solutions to overcome the obstacles in a market with such a low proportion of unbanked and other infrastructure shortcomings.

Looking ahead we expect significant investment and deal activity in the payments space, including:

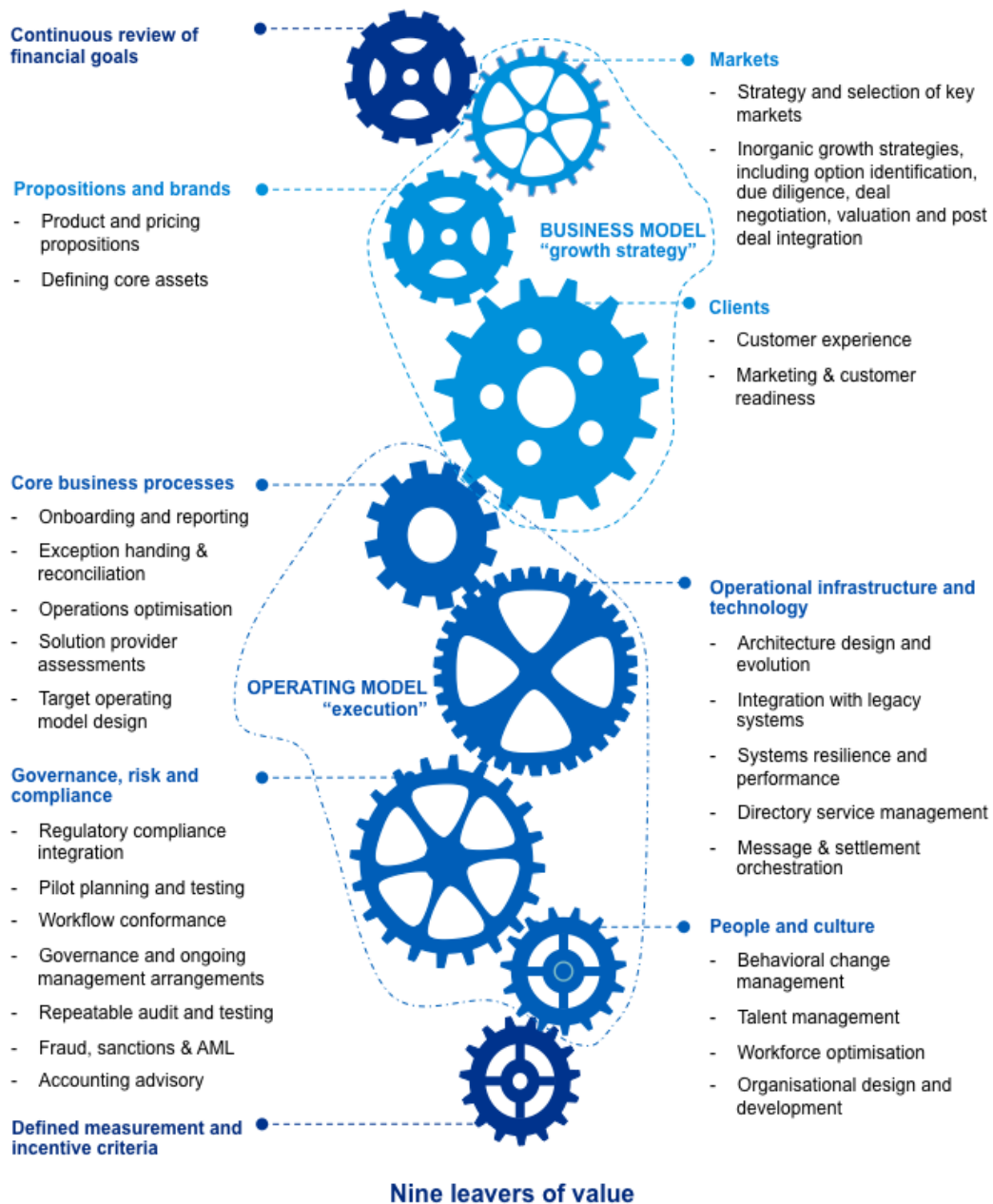
- Regulatory driven consolidation of the various interbank switching networks to deliver on interoperability and reduce transaction costs
- Strategic acquisitions of smaller local independent eWallets/mWallets and payment gateways, which have demonstrated innovative ability to overcome structural issues unique to Indonesia
- Consolidation and outsourcing for the provision of traditional payments infrastructure, as banks look to cut costs
- Partnerships between eEconomy platforms, dedicated payment providers and consolidation of telecoms and bank owned platforms, in efforts to gain critical mass
- Entry of large global payment players through partnerships/joint ventures with local licensed operators.
- Successful eCommerce backed eWallets expanding from inline payments provision, to third party merchant payment gateway provision.





How KPMG Financial Services Advisory can help

KPMG member firms are working with many of the leading payments providers to plan, execute and implement their growth strategies and optimize their operating models, leveraging a comprehensive range of services. A selection of the services we can offer to help you meet your objectives are set out below.



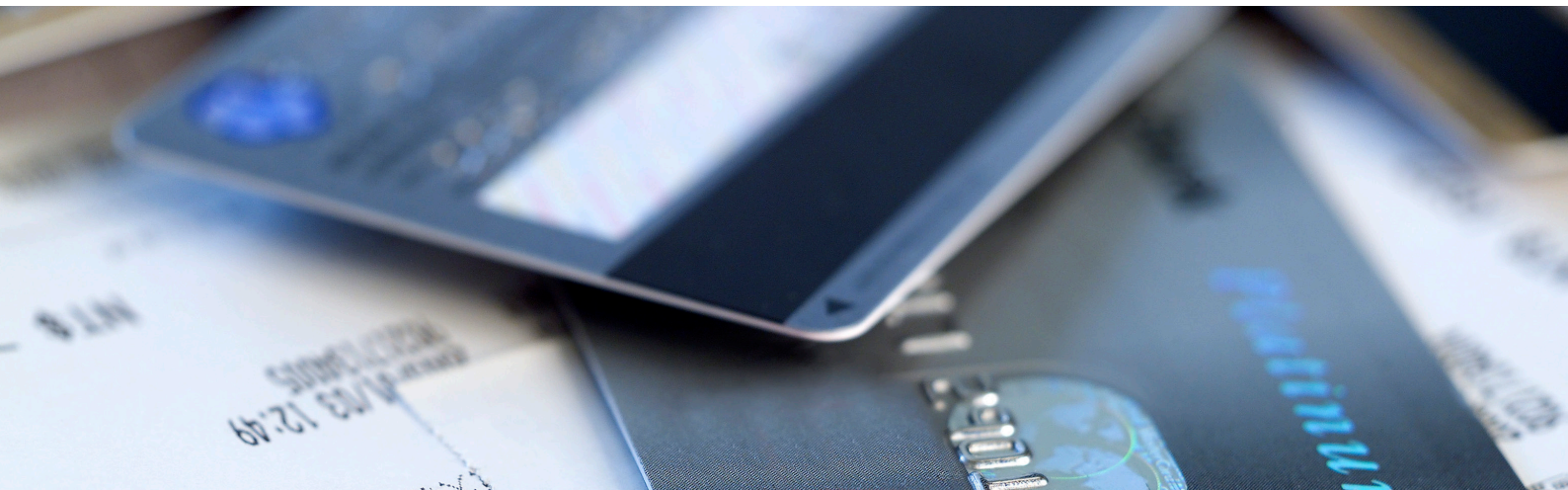
Appendices



Bank Indonesia electronic payments regulations

In November 2016, Bank Indonesia introduced new electronic payments regulations which, for the first time, captured eWallets, payment gateways and other payment system supporting services. Licensing, approval and reporting requirements will now apply to eWallets and payment gateways. Further guidance is expected in forthcoming circulars.

Significant recent Bank Indonesia regulations on electronic payment providers								
Year	Regulation No.	Payment services						
		Switching, clearing, settlement services	Card based payments	eMoney operators	Fund transfer operators	eWallet operators	Payment gateway operators	Payment system supporting services
04/2009 01/2012	11/11/PBI/2009 and 14/2/PBI/2012 – on card based payments	✓ ①	✓ ①					
04/2009 09/2014	11/12/PBI/2009 and 16/8/PBI/2014 – on eMoney			✓ ②				
12/2012	14/23/PBI/2012 – on Conduct of Fund Transfers				✓			
11/2016	18/40/PBI/2016 – on Implementation of payment transaction processing ③ ⑥	✓ ⑤	✓	✓	✓	✓ ⑦	✓	✓ ④



Notes on key features of BI payments regulations:

1. Widens scope of BI payments regulatory oversight, from banking institutions, to other payments institutions including: principals, switching companies, issuers, acquirers, clearing houses and settlement agencies (collectively, Payment System Service Providers (“PSSPs”)) – with separate licenses required for ATM/Debit/Credit services. The 2012 amendment introduced restrictions on credit card issuance and acceptance requirements.
2. Defines two types of eMoney: ‘identified’ (issuers know identity of holder) and ‘anonymous’. Restricts usage of anonymous eMoney to top-ups, transactions and bill payments. Mandates that all eMoney must be in IDR. eMoney PSSPs must obtain relevant eMoney licenses.
3. Broadens the scope of PSSPs under BI regulation to include eWallets, and payment gateways. Foreign PSSPs operating in Indonesia will need to adhere to BI regulations.

eWallet service providers with “active users” of under 300,000 are exempt from BI licensing, but must file regular reports to BI on user numbers, revenues, etc.

All other PSSPs must:

- (a) obtain a license from Bank Indonesia, and
- (b) obtain approvals for development of new payment system activities, products and alliances with other parties
- (c) submit periodic reports to BI which must be audited by an external auditor at least once every three years

Existing eWallets (with active users over 300,000) and payment gateway providers must obtain the new e-wallet and payment gateway licenses within six months (i.e. by 9 May 2017).

All PSSPs must implement:

- (i) effective and consistent risk management
- (ii) security standards
- (iii) domestic processing of payments
- (iv) consumer protection measures

4. Payment system supporting services (“PSSS”) include: card printing, personalized payment, the provision of data centers and / or disaster recovery centers, providing ATM/EDC devices and readers, provision of security features for payment instruments / transactions; provision of assistive technologies, contactless transactions and / or forwarding (routing) supporting data processing payment transactions. PSSPs are responsible for oversight and operations of any outsourced PSSS.
5. Principals, switching, clearing and settlement agencies must be a limited liability company that is at least 80% owned by: a. Indonesian citizens; and / or b. Indonesian legal entity. The calculation of the 20% Foreign ownership cap includes direct and indirect ownership.

No foreign ownership restrictions listed for other PSSPs such as eWallets and payment gateways.
6. Prohibits the use of virtual currencies
7. eWallet maximum balances are expected to be IDR 10 million, based on FAQ provided with Regulation No. 18/40/PBI/2016



Licensed electronic money operators

No	Legal entity name	Entity Type	Date operational	eMoney offering name	Purpose of eMoney offering
1	PT. Artajasa Pembayaran Elektronis	Switching	November 2012	Mynt	Prepay card for digital purchases. Artajasa, also owns ATM Bersama, one of the largest switching networks
2	PT. Bank Central Asia Tbk	Bank	July 2009	Flazz	Prepaid card which can be used at multiple POS
3	PT. Bank CIMB Niaga	Bank	March 2013	Rekening Ponsel	eWallet
4	PT. Bank DKI	Bank	July 2009	JakCard	Prepay card for public transport
5	PT. Bank Mandiri (Persero) Tbk	Bank	July 2009	Mandiri eCash, and various prepaid cards in partnerships with retailers	Prepaid cards and eWallets for a variety of payments (toll roads, convenience stores, petrol purchase, etc)
6	PT. Bank Mega Tbk	Bank	July 2009	Mega Cash and Mega Virtual	Prepaid debit cards and eWallet
7	PT. Bank Negara Indonesia (Persero) Tbk	Bank	July 2009	TapCash and Kartuku	Prepaid cards and payment service provider
8	PT. Bank National Nobu	Bank	April 2013	Nobu eMoney	Prepaid cards
9	PT. Bank Permata	Bank	January 2013	BBM Money	eWallet in partnership with Blackberry
10	PT. Bank Rakyat Indonesia (Persero) Tbk	Bank	December 2010	BRIZZI	Prepaid card which can be used at multiple POS
11	PT. Finnet Indonesia (part of Telkomsel)	Switching	June 2012	Finpay	Prepaid cards, switching, remittance and other payment services
12	PT. Indosat Tbk	Teleco	July 2009	Dometku	eWallet
13	PT. Nusa Satu Inti Artha	Switching	March 2013	DokuPay and DokuWallet	payment gateway and eWallet

No	Legal entity name	Entity Type	Date operational	eMoney offering name	Purpose of eMoney offering
14	PT. Skye Sab Indonesia	Switching	July 2009	Skye Card and BEAT	eWallet
15	PT. Telekomunikasi Indonesia Tbk	Teleco	July 2009	T-Money	mWallet
16	PT. Telekomunikasi Seluler	Teleco	July 2009	T-Cash	mWallet
17	PT. XL Axiata Tbk	Teleco	March 2011	XL Tunai	mWallet
18	PT. Smartfren Telecom Tbk	Teleco	June 2014	Uangku	Payment gateway and eWallet
19	PT. MVCommerce Indonesia	Switching	September 2014	PonselPay	SMS based payments
20	PT. Witami Tunai Mandiri	Switching	January 2015	TrueMoney	Remittance focussed payments provider
21	PT. Espay Debit Indonesia Koe	Switching	July 2016	EDIK	TBC





Related publications



The Pulse of Fintech

'The Pulse of Fintech' is a quarterly report created by KPMG Enterprise and KPMG Fintech along with CB Insights. Given the significant interest in fintech globally, and its ongoing evolution in terms of market drivers, technologies and potential use-cases, KPMG and CB Insights are partnering to bring you the pulse of fintech on VC investment globally. Each quarter, it'll highlight key fintech deals, issues and challenges around the world, in addition to key trends and insights related to fintech in key regions, including the North America, Asia and Europe.



Singapore Payments Roadmap

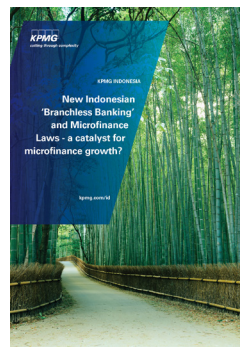
KPMG in Singapore was commissioned by the Monetary Authority of Singapore to look into the state of the payments ecosystem in Singapore.

More than 2,500 consumers, merchants and other stakeholders were surveyed for the report, with recommendations made on how Singapore can improve the payments systems in support of the Smart Nation Vision and to the greater benefit of all Singaporeans.



Investing in Indonesia

This publication is intended as a general guide to investing and doing business in Indonesia, primarily for new foreign investors looking to enter the Indonesian market, but also as a useful reference document for established, experienced foreign and local players



Financial Inclusion in Indonesia

This publication looks at the microfinance landscape and implications of new *Branchless Banking regulations* (Laku Pandai) and *Microfinance Laws*. It suggests the larger domestic institutions are set to benefit over the smaller rural microfinance institutions, with opportunities opening up for larger conglomerates with banking and insurance arms attached.



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Glossary

Alfamart	PT Sumber Alfaria Trijaya	Kaskus	PT Darta Media Indonesia
AMEX	American Express Bank Ltd.	Lazada	Lazada Group
ASPI	Asosiasi Sistem Pembayaran Indonesia / Indonesia Payment System Association	Lippo Group	An Indonesian publicly listed joint-stock real estate development company
ATM	Automated Teller Machine	M & A	Merger and Acquisition
BCA	PT Bank Central Asia Tbk	Mandiri	PT Bank Mandiri (Persero) Tbk
BI	Bank Indonesia	Mastercard	Mastercard Incorporated
BNI	PT Bank Negara Indonesia Tbk	MOU	Memorandum of Understanding
BRI	PT Bank Rakyat Indonesia Tbk	mWallet	Mobile wallet
BTN	PT Bank Tabungan Negara Tbk	n/a	Not available
eCards	Electronic cards	NPG	National Payment Gateway
eCash	Electronic cash	NSICCS	National Standard of Indonesian Chip Card Specification
eCommerce	Electronic commerce	OECD	The Organization for Economic Cooperation and Development
ePay	Electronic payment	Pulsa	Prepaid mobile credit
eRetailers	Electronic retailers	SOE	State-Owned Enterprise
eWallet	Electronic wallet	Teleco	Telecommunications
Go-Jek	PT Go-Jek Indonesia	Telkomsel	PT Telekomunikasi Indonesia Tbk
Grab	PT Grab Taxi Indonesia	Visa	Visa Incorporated
Indosat	PT Indosat Tbk	VC	Venture Capital
Indomaret	PT Indomarco Prismaatama	XL Axiata	PT XL Axiata Tbk
JCB	Japan Credit Bureau / JCB Co., Ltd.	3D Secure	Three Domain Server Security Process
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