Deloitte Indonesia
Business and Industry
Updates

The accelerating digital payments landscape in Indonesia
The accelerating digital payments landscape in Indonesia

If there is ever a silver lining of the COVID-19 pandemic, it would perhaps be its inadvertent revolution of the digital payments landscape in Indonesia. Amidst the outbreak, Indonesia’s four major e-commerce platforms doubled their estimated transaction values from IDR 201 trillion in 2019 to about IDR 429 trillion\(^1\), and total digital transactions in Indonesia recorded an approximate 37.8 percent year-on-year increase in volume\(^2\) as consumers turned to e-commerce and contactless payment methods on the back of large-scale social restrictions and other social distancing measures.

But what is even more significant about this shift is how the pandemic has encouraged consumers to overcome some of their barriers and concerns relating to the use of digital payment methods. In a Deloitte survey conducted in the first half of 2019 before the onset of the pandemic, for example, it was found that a significant proportion of respondents continued to prefer cash-on-payment methods for their online shopping, avoiding digital payments as a result of concerns over fraud and security issues\(^3\).

One major contributing factor here has been the introduction of the comprehensive digital payments system, known as Quick Response Code Indonesia Standard (QRIS), by Bank Indonesia earlier in 2019. By enabling the interconnectivity and interoperability of QR-code-facilitated payments in a secure environment, the system had been developed with the objective of encouraging Indonesia’s 65 million micro, small, and medium enterprises (MSMEs) to adopt cashless payment systems\(^4\).

In this report, we will take a look at how the QRIS is universalising digital payments in Indonesia by enabling interoperability amongst different digital payment system service providers. Although most of the use cases currently focus on MSME retailers, we believe that the full potential of the digital payments ecosystems lies in many other use cases beyond that we will also briefly explore later in this report.

---

\(^{1}\) “Digital payment on the rise as top four e-commerce eye $29b sales amid pandemic”. Jakarta Globe. 24 July 2020.


\(^{4}\) “Bank Indonesia launched national standard QR code”. The Jakarta Post. 27 May 2019.
Universalising digital payments

Launched by Bank Indonesia in August 2019 as part of its Indonesian Payment System Vision (SPI) for 2025, the QRIS is a Quick Response (QR) code standard that facilitates real-time, secure digital payments through server-based e-money applications, electronic wallets, and mobile banking.

Broadly, the QRIS system aims to balance the need for innovation with consumer protection by ensuring the integrity, stability, and fairness of the payment systems and promoting compliance with Know Your Customer (KYC) and Anti Money Laundering/Counter Terrorist Financing (AML/CFT) rules.

Under the Regulation of Board of Member of Governors No. 21/18/PADG/2019 on Implementation of National Standard on Quick Response Code for Payment issued by Bank Indonesia, all payment system service providers are required to adopt the QRIS system, and are obliged to replace their own QR codes with the new standards as defined under QRIS by 1 January 2020.

Such a mandatory adoption program will not only ensure interconnectivity and interoperability throughout Indonesia’s digital payments ecosystem, but also promote financial inclusion by making digital payments more accessible to both consumers and merchants, especially the MSMEs.

To continue to stimulate the growth of the digital payments market in Indonesia, the government has also recently introduced two additional sets of regulations: Government Regulation (PP) No. 71/2019 concerning Operation of Electronic System and Transaction and, PP No. 80/2019 concerning Trading through Electronic System.

Enabling interoperability

Prior to the introduction of the QRIS, digital transactions would only have been possible when both the merchant and the consumer are using the same digital payments provider (see Figure 1). As a result, merchants who were trying to broaden their base of consumers had to adopt numerous digital payments systems – and in several instances, obtain certain specialised devices – to facilitate payments from consumers, and consumers frequently found themselves unable to pay for items at merchants that were not on the same digital payment networks as them.

Figure 1: An illustration of how QRIS enables greater interoperability between digital payment systems

Source: Bank Indonesia, 2019

---

1 “QRIS, one QR code for all payments”. Bank Indonesia. 17 August 2019.
Without sufficient interoperability in the market, it is perhaps little surprise that the uptake of digital payments had continued to remain low in Indonesia. In the e-commerce market, for example, digital wallets contributed to only about one-fifth of the market’s total payment value in 2019, with cards and bank transfers accounting for the majority of the value7 (see Figure 2).

Following the introduction of the QRIS, however, there is now interoperability between the different payment system service providers: merchants now need to display only one QR code, and consumers can make payments through their own preferred payment system service providers. This development – which largely coincided with the outbreak of the COVID-19 pandemic, and its accompanying large-scale social restrictions that no doubt accelerated digital behaviours – appears to have been effective in encouraging the greater uptake of digital payments in Indonesia.

As of July 2020, QRIS has facilitated around 11 million transactions with a total value of about IDR 790 billion8. Nearly 5 million merchants have also been onboarded onto QRIS by October 2020 – with MSMEs accounting for nearly 85 percent of them9 (see Figure 3) – and at least 46 digital service providers, comprising 25 banks and 21 non-banks, have registered for QRIS licences10.

---

8 “Hampir 5 juta penjual pakai kode QR BI, transaksinya Rp 790 miliar”. Katadata. 8 October 2020.
Promoting financial inclusion

There are some 65 million MSMEs in Indonesia\(^\text{11}\), and providing them with easy access to an integrated digital payments network is a significant step in enabling the overall digital transformation of the economy and promoting financial inclusion. To support MSMEs during this challenging pandemic period, the Bank Indonesia has announced that it will nullify the merchant discount rate (MDR) of 0.75 percent until the end of 2020\(^\text{12}\).

Beyond retail, however, it is also worth noting that the QRIS also has a number of other potential use cases. Specifically, Indonesia is home to world’s largest Muslim population, and has been experiencing increasing volumes of zakat, infaq, and alms (ZIA) transactions in recent years (see Figure 4). Of these transactions, digital payment methods have been gaining traction, representing about 13.6 percent of ZIA transactions last year\(^\text{13}\), and can conceivably be expected to continue to grow with the introduction of QRIS.

Nevertheless, the use of a QR code – while secure if used correctly – may be susceptible to malicious attacks. For example, as the QR codes are typically located in public areas, potential attackers may seize opportunities to make modifications to the QR codes to enable the payments to be redirected to another account\(^\text{14}\). Alternatively, counterfeit QR codes may be used to distribute malicious links, which could in turn enable the attackers to collect personal data from customers’ phones\(^\text{15}\). Raising the awareness of these threats will therefore be key to ensuring that the integrity of the system is maintained, and thereby support the further proliferation of a greater number of use cases.

Figure 4: Volume and growth rate of ZIA transactions in Indonesia

<table>
<thead>
<tr>
<th>Year</th>
<th>Volume of ZIA transactions</th>
<th>Growth rate of ZIA transactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>10.61%</td>
<td>37.46%</td>
</tr>
<tr>
<td>2016</td>
<td>24.06%</td>
<td>30.42%</td>
</tr>
<tr>
<td>2017</td>
<td>30.42%</td>
<td>24.06%</td>
</tr>
<tr>
<td>2018</td>
<td>26.00%</td>
<td>40.00%</td>
</tr>
<tr>
<td>2019</td>
<td>37.46%</td>
<td>10.61%</td>
</tr>
</tbody>
</table>

Source: Badan Amil Zakat Nasional, 2019

---

Looking ahead

By enabling the interoperability and security of digital payment transfers, QRIS is expected to become a major catalyst that will propel the trajectory of Indonesia’s digital economy towards fulfilling its full potential as Southeast Asia’s largest digital economy.

Since its introduction about a year ago, we have already witnessed significant traction in the QRIS’ ability to promote financial inclusion amongst MSMEs – and this promise could potentially extend to many other use cases, such as ZIA transactions. Other use cases could also include, for example, cross-border payment applications. To this end, the Bank Indonesia has announced plans to enable QRIS transactions with local currency settlements across several other major markets, including India, Saudi Arabia, and Thailand, that could benefit Indonesian tourists, migrant workers, and pilgrims who are abroad16.

Ultimately, as with most digital ecosystems, collaboration with different partners will be key to ensuring uptake and the exponential proliferation of multiple use cases. To enable this, however, it is essential that safeguards – including measures to curb malicious attacks and protect consumer data – are put in place now to ensure the security and integrity of the QRIS ecosystem in the long run.

Brian Indradjaja
Technology, Media & Telecommunications Leader
bindradjaja@deloitte.com

Contact Us

Claudia Lauw Lie Hoeng
Country Leader
clauw@deloitte.com

Brian Indradjaja
Technology, Media & Telecommunications Leader
bindradjaja@deloitte.com

Business Leaders

Elisabeth Imelda
Audit Leader
Imelda & Rekan
eimelda@deloitte.com

Rosita Uli Sinaga
Assurance Service Leader
PT Deloitte Konsultan Indonesia
rsinaga@deloitte.com

Melisa Himawan
Tax & Legal Leader
Deloitte Touche Solutions
mehimawan@deloitte.com

Edy Wirawan
Financial Advisory Leader
PT Deloitte Konsultan Indonesia
ewirawan@deloitte.com

Brian Indradjaja
Risk Advisory
PT Deloitte Konsultan Indonesia
bindradjaja@deloitte.com

Iwan Atmawidjaja
Consulting Leader
PT Deloitte Consulting
iatmawidjaja@deloitte.com

Irawati Hermawan
Legal Leader
Hermawan Juniarto & Partners
irahermawan@hplaw-deloitte.com
Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities (collectively, the "Deloitte organization"). DTTL (also referred to as "Deloitte Global") and each of its member firms and related entities are legally separate and independent entities, which cannot obligate or bind each other in respect of third parties. DTTL and each DTTL member firm and related entity is liable only for its own acts and omissions, and not those of each other. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more.

Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Seoul, Shanghai, Singapore, Sydney, Taipei and Tokyo.

About Deloitte Indonesia
In Indonesia, services are provided by Imelda & Rekan, Deloitte Touche Solutions, PT Deloitte Konsultan Indonesia, PT Deloitte Advis Indonesia and KJPP Lauw & Rekan.

This communication contains general information only, and none of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms or their related entities (collectively, the "Deloitte organization") is, by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser.

No representations, warranties or undertakings (express or implied) are given as to the accuracy or completeness of the information in this communication, and none of DTTL, its member firms, related entities, employees or agents shall be liable or responsible for any loss or damage whatsoever arising directly or indirectly in connection with any person relying on this communication. DTTL and each of its member firms, and their related entities, are legally separate and independent entities.

© 2020 Deloitte Touche Solutions