# Malaysia's experience in advancing e-payment adoption

Presentation to COMCEC FCWG meeting

Payment Services Policy Department, Bank Negara Malaysia 16 September 2024

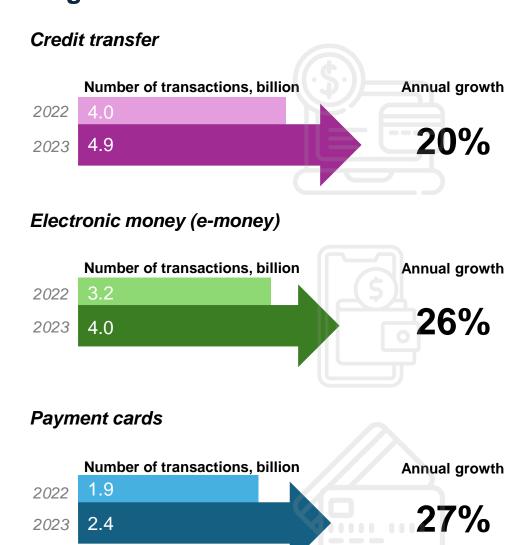


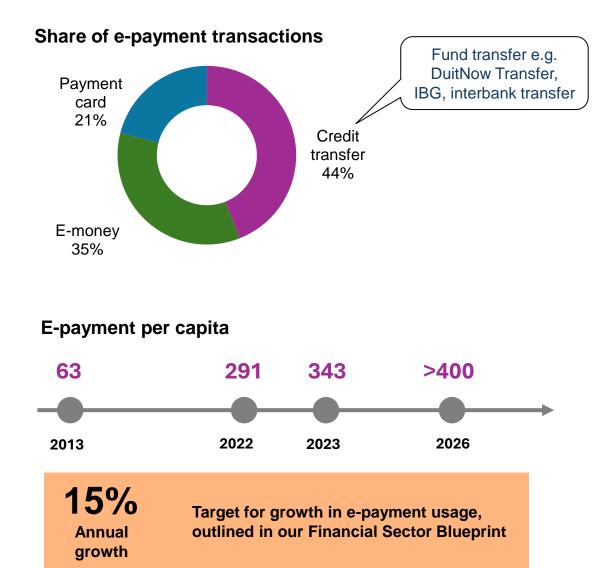
## **Outline**

- Overview of e-payment adoption in Malaysia
- Key building blocks to foster a thriving payment ecosystem
  - Robust regulatory framework
  - Clear developmental strategy
  - On-going advocacy/awareness



# E-payment adoption in Malaysia continues to rise and is projected to meet Blueprint target ahead of time





## Key building blocks to foster a thriving payment ecosystem



# Robust regulatory and supervisory framework provides strong foundation for a safe and reliable payment ecosystem

#### Regulatory framework

Legislation

- · Central Bank Act of Malaysia 2009
- Financial Services Act 2013

- Money Services Business Act 2011
- Islamic Financial Services Act 2013

BNM plays a role as operator, overseer and facilitator in advancing digital payment agenda and supporting central bank's broader payment mandate



**Approval and registration** 

- Approved **Payment System Operators** (PSO)
- Approved Issuers of Designated Payment Instruments (DPIs) payment card, e-money
- Registered Business (Merchant Acquiring Services)



Regulation

- Prudential policies imposed on regulatees by BNM to:
  - · Ensure effectiveness of risk management
  - · Combatting financial fraud & scams

### **Policy Documents (risk management):**

- Payment System Operator
- E-money
- Merchant Acquiring Services
- Payment Card

#### **Managing fraud**

Strengthened fraud prevention measures

**payNet** 

VISA

- Fairer treatment of fraud victims
- National Fraud Portal



## Key building blocks to foster a thriving payment ecosystem



## BNM undertook a series of policy reforms to further accelerate e-payment adoption

2013 onwards

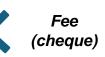


Credit transfers to displace cheques & cash, supported by wider internet coverage, faster crediting time

**Pricing Reform Framework** 

- Reduced fees of interbank payments
  - Imposed ceiling fee on credit transfer
  - Introduction of cheque fees and e-Payment Incentive Framework

Fee (Interbank transfer)



2015 onwards



**Debit card to displace cash,** driven by higher adoption of ATM cards

#### **Payment Card Framework**

- Imposed ceiling on debit/credit card interchange fees
- Established industry fund to enhance payment card infrastructure including deployment of 0.98 million POS terminal
- Strengthened security through
  Chip and PIN and enabled
  contactless payment

2018 onwards



Mobile payments to displace cash, supported by higher smartphone penetration, proliferation of mobile apps

## Interoperable Credit Transfer Framework

- Enabled seamless payments between bank and non-bank accounts
- Removed fees for Instant
  Transfers up to RM5k (for individuals and SMEs)
- Increased competition by opening up RPP to both banks and non-banks

Launch of the **Real-time Retail Payments Platform**, the shared
payment infrastructure



2021 onwards



Improving efficiency of cross-border payments, to complement the borderless economy

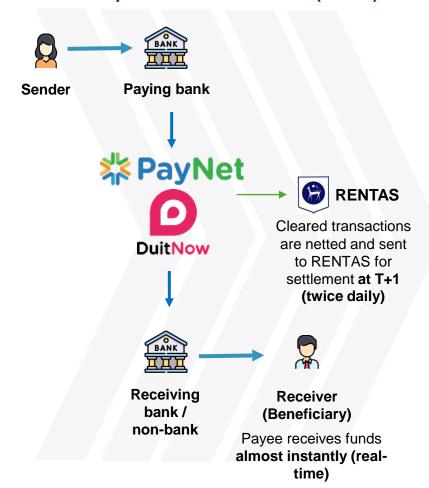
# Establish cross border linkages with strategic partners

- Aims for faster, cheaper and more convenient service
- Live **bilateral** linkages with selected corridors
- Participation in multilateral payment scheme connectivity (Project Nexus)

**Project Nexus** 

# Development of RPP has enabled players to share infrastructure cost while competing at product level

RPP works as a clearing system, while the settlement is performed in RENTAS (RTGS)





### Interoperability

All banks and major non-bank e-wallets interconnected via a shared network Eligible non-bank e-money issuers



**Banks** 



### National Addressing Database

Use of proxies (e.g. mobile phone numbers, identity card numbers, business registration numbers) to make payments









Key in payment details (e.g. select mobile number from contact list)





#### **Unified QR code solution**

Driven by the exponential growth in mobile payment and high mobile penetration rate in Malaysia



The QR code image is for illustration purposes

- DuitNow QR is Malaysia's National QR Standard
- Through DuitNow QR interoperability, any compliant QR code can take payments from any participating Banks/e-Wallets
- Almost all banks and large ewallets participate in the DuitNow QR service

# On the cross-border front, efforts are being intensified to expand efficiencies achieved in domestic payments

## 1

#### **Bilateral payment linkages** (Ongoing)

- Leverage on real time payment system to enable faster, cheaper and more convenient cross-border QR payments and P2P
- Payment linkages pursued via G2G and commercial arrangement

# Several bilateral instant payment linkages already live, with more underway

	Thailand	Indonesia	Singapore
QR payment	Live	Live	Live
P2P fund transfers	In discussion	In discussion	Live

In the pipeline: The Philippines and Cambodia



PayNet's QR payment connectivity arrangements (e.g. Alipay+, China UnionPay)



- Expanding coverage of cross-border retail payments for Malaysians to countries like China and South Korea
- ✓ Current focus is on promoting greater adoption among users and addressing operational implementation issues



#### Project Nexus (2022 – ongoing)





# Aims for faster, cost-effective, transparent and accessible cross-border payments

- Collaboration between BNM, BIS Innovation Hub and 4 other ASEAN central banks<sup>1</sup> to enable instant and secure fund transfer services using proxies
- Builds on ongoing initiative on bilateral payment linkages within ASEAN for more scalable model



### **Efforts underway to transition towards live implementation**

• <u>Implementation phase</u><sup>2</sup>: Aims to bring Nexus to live operations with its first transaction by mid-2026

<sup>&</sup>lt;sup>1</sup> Malaysia. Indonesia, Singapore, Thailand and the Philippines.

<sup>&</sup>lt;sup>2</sup> Malaysia, Singapore, Thailand, the Philippines and India.

## The Fintech Regulatory Sandbox allows the Bank to support the development of the fintech ecosystem, with insights from Sandbox benefiting other areas of the Bank's work

# **Key statistics\*** 125 APPLICATIONS RECEIVED APPROVED FOR SANDBOX TESTING 19 **GRADUATED or EXITED TESTING** 13 COMMERCIALLY VIABLE & ROLLED OUT **CURRENTLY TESTING** 6 Jirnexu DearTime 🕃

## **Insights from the Sandbox**



Sandbox testing informed calibration of developmental policies

e-KYC

Digital Insurance & **Takaful Operator** 

Insurance & takaful product aggregators



Sandbox allows the Bank to advocate and support market activity

Collaboration with government agencies (e.g. MDEC Fintech Booster, National Technology and Innovation Sandbox)



Sandbox is vital for the development of fintech players

Strengthen trust of consumers and investors of a new entrant

Guide start-ups in regulatory compliance and risk management

Allows first-hand contact on latest developments for regulators

\*As at July 2024

# National Fraud Portal (NFP) facilitates end-to-end incident reporting and fund tracing to strengthen National Scam Response Centre's (NSRC) fraud response capabilities

NFP leverages on PayNet's shared infrastructure and credible payment data lake to facilitate efficient fund tracing ...

Since its pilot phase beginning April 2024, NFP has..

# A joint effort between BNM and financial industry with PayNet administering the platform



Features

Streamlined incident reporting

- Faster validation of reported transaction
- On-going case monitoring & timely notification for further action by the financial institutions

Efficient fund tracing

- Automated fund tracing with immediate alerts to affected financial institutions to earmark fund
- Escalation of insights to law enforcement agencies for further investigations and opening of investigation paper

Industry-wide information sharing

- Timely identification of mule accounts
- Strengthened consumer profiling by leveraging on mule account data



NFP to be embedded with enhanced functionalities (e.g predictive analysis) and provide greater empowerment to consumer via self-reporting

Supplemented by ...

Industry standards on mule reporting and handling

- Facilitate better detection and classification of mule accounts
- Foster consistent and fair treatment on mule victims

75% (from 120 mins)

Shortened time needed to trace flow of fraudulent funds across payment systems and financial players



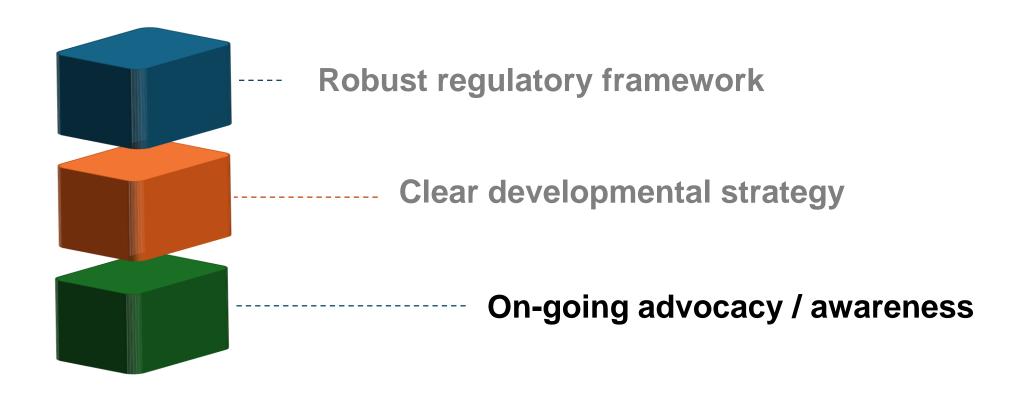
Increased average monthly earmarked amount



Increased identification of number of mule accounts

... attributed by 16 participating financial institutions, with more to participate by end 2024.

## Key building blocks to foster a thriving payment ecosystem



## As the regulator of payment players, BNM advocates coordinated efforts to promote e-payment adoption



BNM sets broad direction and empower the industry to drive e-payment initiative



- Under the Financial Sector Blueprint (FSBP), BNM outlines growth of e-payment adoption as one of key success indicator
- BNM and the industry aim to ensure sustained growth of e-payment usage (at least 15% growth) over the next 2 years
- Established an umbrella campaign which encourages industry to conduct e-payment initiatives for greater visibility and cohesiveness



<sup>\*</sup> The 'e' stands for 'electronic', while the term 'duit' means 'money' in Bahasa Malaysia, which is the medium of exchange used in our daily lives.

Followed by industry-led programs at targeted communities

More than 110 e-Duit related programmes organised nationwide

### Program objectives

- Familiarize and educate communities and businesses on epayment options, benefits and safe practices
- Onboard businesses to accept e-payment

### Target segments



Tourism hotspots – Langkawi, Redang and Tioman Islands



Marketplaces / rural communities — Pasar Payang, Daro, Jeniang, Bagan Nakhoda Omar



High footfall areas - highway layby areas

BNM plays a supporting role to facilitate discussion and collaboration between financial industry and relevant stakeholders (e.g. local authorities)

<sup>\*\* 3 &#</sup>x27;S' tagline – i.e., 'Selamat (Secure), Senang (Simple), Segera (Swift)'

# Thank you