

ASEAN Initiatives Seek to Leverage Real-Time Payments for Innovation

2018 ASEAN Payments Insight Survey

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Author: David Bannister

Introduction

Catalyst

Immediate payment infrastructures are being implemented across the globe. As this happens, a patchwork of capabilities is emerging, with countries that were early adopters of real-time payment platforms now looking to modernize their systems, and to open them up to new fintech challengers requiring access to financial networks.

ASEAN member states are at different levels of technical and economic sophistication, and are part of a wider Asia-Pacific demography that is increasingly influenced by the giants that are China and India.

The ASEAN Economic Community's 2025 Blueprint for financial integration shines a light on the challenges and opportunities that real-time payment capabilities create for all involved. Significantly, this includes ambitions for financial inclusion, financial integration, and interoperability between member states.

To understand in more detail how financial institutions plan to maximize their investments in the new ecosystem it will create, Ovum conducted a payments insight survey of ASEAN banks.

Summary

The results show that banks in the ASEAN region are looking beyond simple implementation of real-time or immediate payment infrastructures and are focusing increased investment on payment modernization, with instant payment capabilities serving as the first step to digital transformation across consumer and corporate services.

This creates a mixed picture as some institutions across the region concentrate resources on hygiene factors such as security, while others are closer to being able to leverage earlier investments in those areas and are focusing on deploying value-added or overlay services to support growth.

Overall, ASEAN spending growth outperforms other regions:

- 64% of ASEAN financial institutions forecast investment in payments to increase in the next 18–24 months, compared to 56% in the broader Asia region and 53% globally.
- Planned payments investment varies widely across ASEAN; 53% of Singapore-based respondents expect investment to increase a lot (>5%) compared to 30% in Indonesia and 13% in Malaysia and Thailand.

ASEAN payment operators are working in a pan-Asian context

Founded in 1967, the Association of Southeast Asian Nations (ASEAN) originally consisted of Indonesia, Malaysia, the Philippines, Singapore, and Thailand, which have since been joined by Brunei, Vietnam, Laos, Myanmar, and Cambodia.

It is a highly diverse region in terms of religions, cultures, and economic prosperity. Not surprisingly, this means highly divergent capabilities in financial infrastructure, with the three most prosperous economies – Thailand, Singapore, and Malaysia – having deployed or being in the process of deploying real-time payment systems, while others have yet to begin the modernization of their infrastructures.

As part of an ambitious 10-year economic program under the banner ASEAN 2025, the member states are engaged in the modernization and integration of their financial infrastructures, including payment systems, that will ultimately lead to a pan-regional real-time payment ecosystem.

The first elements of this could be live as early as the end of 2019 following the signing of a memorandum of understanding (MoU) in November 2017 between several major regional payment systems operators who are members of the Asian Payment Network (APN). These are Payments Network Malaysia (PayNet), ITMX Thailand, National Payment Corporation of Vietnam (NAPAS), Network for Electronic Transfers (NETS) in Singapore, and Rintis of Indonesia.

But the ASEAN countries are part of the wider Asia-Pacific region, where the rapid payments transformation taking place in the giants of India and China is being felt by neighbors in the region. Trade and financial activity between those countries, other financial centers of Hong Kong, Japan, Taiwan, and Australia/New Zealand, and ASEAN members means interoperability between their payment systems is highly desirable.

Recognizing this, the parties to the MoU have reached a broad consensus to use ISO 20022 messaging standards as a first step toward regional real-time payments connectivity.

ASEAN members plan cross-border real-time payments service

Malaysia will be the latest country to implement immediate payments, when the Real-time Retail Payments Platform (RPP) being developed by Payments Network Malaysia (PayNet), the national financial market infrastructure provider, goes live later this year.

PayNet is also in active discussion with its counterparts in Thailand and Singapore to link their payments networks, creating what will be the world's first cross-border, multicurrency real-time payments network.

RPP is PayNet's strategic initiative to modernize Malaysia's real-time payments infrastructure, drive innovation in electronics payments, and bring the benefits of immediate payments to all participants in the payments ecosystem, including banks, payment institutions, telcos, billers, merchants, businesses, consumers, and the government. 2018 will see the launch of Instant Credits, Request-to-Pay for e-commerce and person-to-person (P2P) Payments with Proxy Address Resolution.

This will allow payments to be addressed seamlessly by mobile numbers, National Registration Identity Card (NRIC) numbers, or business registration numbers.

For now, there is much work to be done across the region in modernizing existing architectures and models to deal with "hygiene factors" such as security and regulatory compliance.

Nevertheless, future expectations run high, with an overwhelming percentage of respondents saying that real-time payments will increase revenue (82%) and reduce costs (77%). They are looking toward further innovation through open APIs, which are perceived as a clear benefit by 97% of banks in ASEAN countries, versus 90% globally and 88% across Asia.

DBS Bank: building on the basics of immediate payments

As countries around the world move to implement immediate payment (IP) infrastructures, they should remember that this is one part of a more complex system and other elements are essential for successful adoption. According to Ng Peng Khim, Head of Institutional Banking Group Technology, DBS Bank, it is important that any service is accessible and easy to use in order to achieve mass adoption and reach the unbanked.

Mr Ng was the industry lead for the Singapore G3 FAST (Fast and Secure Transfers) immediate payments systems and GIRO Payment Initiative between 2012 and 2015. His experience has led him to realise that more elements are required for successful adoption. These include mechanisms such as QR codes that can be used to initiate payments, and a central address database that allows users to make payments using mobile phone numbers or emails as proxies for their account details. A QR code mechanism is not available yet, and while a consumer central address database is already in place, there are plans for a corporate address database to be launched in 2018. "In Singapore, the usage of the FAST payments service increased after the introduction of a central addressing database," he said.

From a bank's perspective, the focus must be on making services more cost-effective to operate – which also has the effect of allowing these services to reach more people. One group that can be significantly impacted are the unbanked. Outside of Singapore, the unbanked in some parts of the ASEAN region represent a considerable part of the population. Likewise, banks can leverage the same concept for creating B2B services. "The idea is to flip it round from real-time payments to real-time collection for business," Mr Ng said.

In many parts of the region, including India and Singapore, cash is a primary payment method, with a lower card payment usage compared to other markets. QR codes will allow the creation of mechanisms to facilitate immediate payments at the point of sale.

DBS's core markets, for both consumer and corporate activities, are Singapore, Hong Kong, China, Taiwan, Indonesia, and India, with additional regional operations in Japan, Korea, Australia, Malaysia, Dubai, the US, and the UK. Across these markets, India and Hong Kong, as well as Singapore, already have IP infrastructures in place, while Taiwan has an e-ACH real-time payment system that the bank implemented three years ago. Other markets with real-time payment capabilities are Thailand, with Malaysia planning to go live with its new infrastructure from August 2018. Larger parts of the ASEAN region, such as the Philippines, have yet to define their strategy for IP implementation.

The focus is now on facilitating cross-border payments. Talks between banks and regulators from Singapore, Thailand and Malaysia are in place. While the discussion is mainly around interoperability between systems, Mr Ng said the larger goal is to have interoperability on a wide scale beyond the ASEAN countries. For DBS, that would mean creating a payments corridor between Singapore, India and Hong Kong, and eventually building up to a pan-Asian IP infrastructure.

ASEAN investments in a global context

Banks around the world are in close agreement about where they see the benefits of immediate payments, but have differing views of the priority, reflecting their different stages of implementation.

Internationally, retail customer product and service enhancements are ranked as a top-three benefit for 42–44% of respondents. By contrast, SME/business banking is second on the list for 36% of global respondents, but in fourth place for Asian respondents (32%) and fifth place among ASEAN respondents (31%).

It is interesting to note that KYC/AML benefits are at the bottom of the ranking for global respondents but second for ASEAN respondents and third across Asia. This reflects similar concerns at the early stage of adoption of real-time payments in other regions, particularly in the eurozone, where the cross-border element of the Single Euro Payment Area imposed compliance requirements.

At this stage of the adoption of real-time payments, it is harder to see the use cases that will be developed, and how they will lead to improved revenue, but there are still gains to be made in service enhancements.

Figure 1: The expected benefits of immediate payments vary by region



Source: 2018 Ovum Global Payments Insight Survey

Payments modernization is driving investment

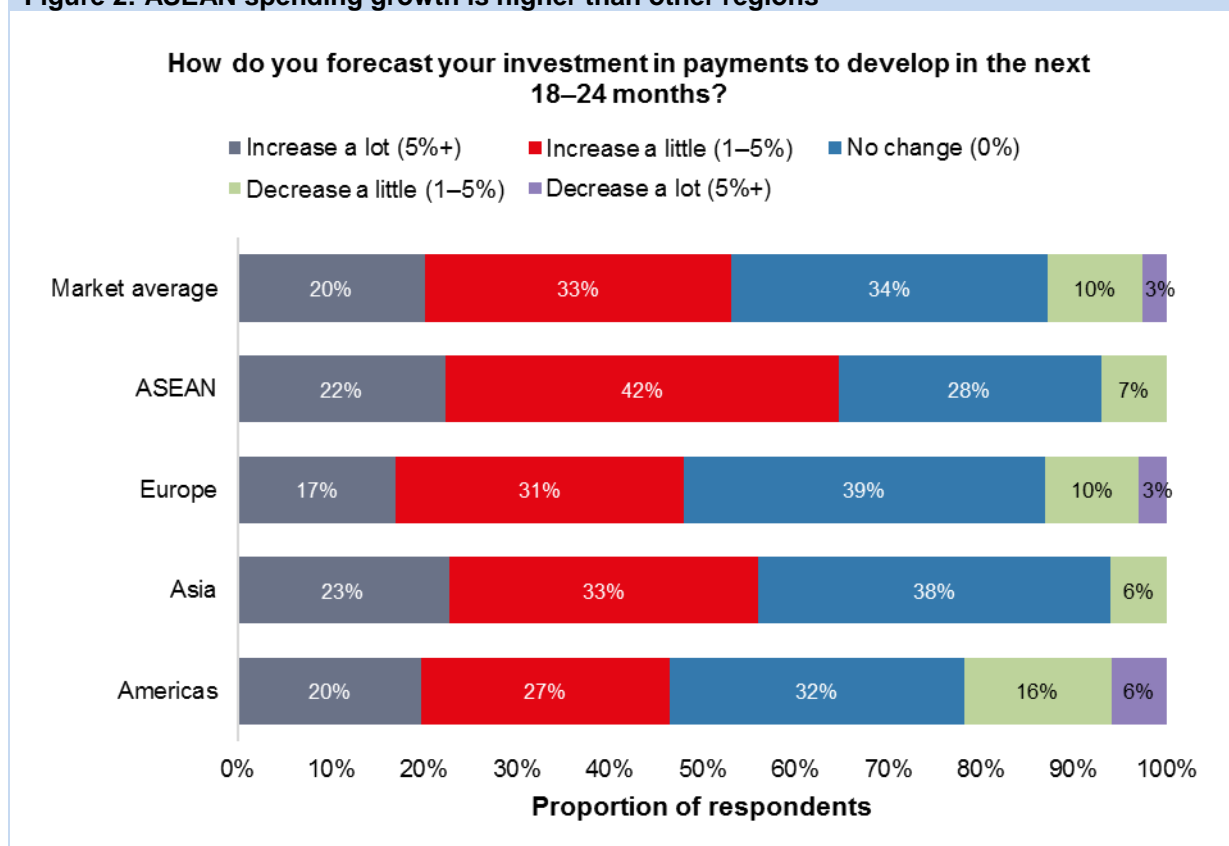
Larger players see budgets growing in the medium term

Investment in payment systems is growing faster in ASEAN countries than in any other region, with 64% of respondents expecting to increase investment in the next 18–24 months, compared to a market average of 53%, and all other regions, with Asia at 56%, Europe at 48%, and the Americas at 47%.

The greatest increases in investment are among larger organizations, with 75% of institutions with \$200bn+ turnover reporting that they will increase spending, while a large proportion of the smallest banks are reducing IT spend.

Within this, there is considerable variation as to where the investment is being directed in terms of immediate priorities – the emphasis placed on the implementation of real-time payments as an enabler of infrastructure modernization and the future benefits of API-based open banking suggest that the region is looking forward to a significant digital transformation. The high penetration of mobile phones and use of social network connectivity, combined with the growth of cross-border commerce, will help develop further the ASEAN 2025 vision of greater financial and trade integration.

Figure 2: ASEAN spending growth is higher than other regions



Source: 2018 Ovum Global Payments Insight Survey

There is considerable variation in the pace of investment growth among ASEAN countries

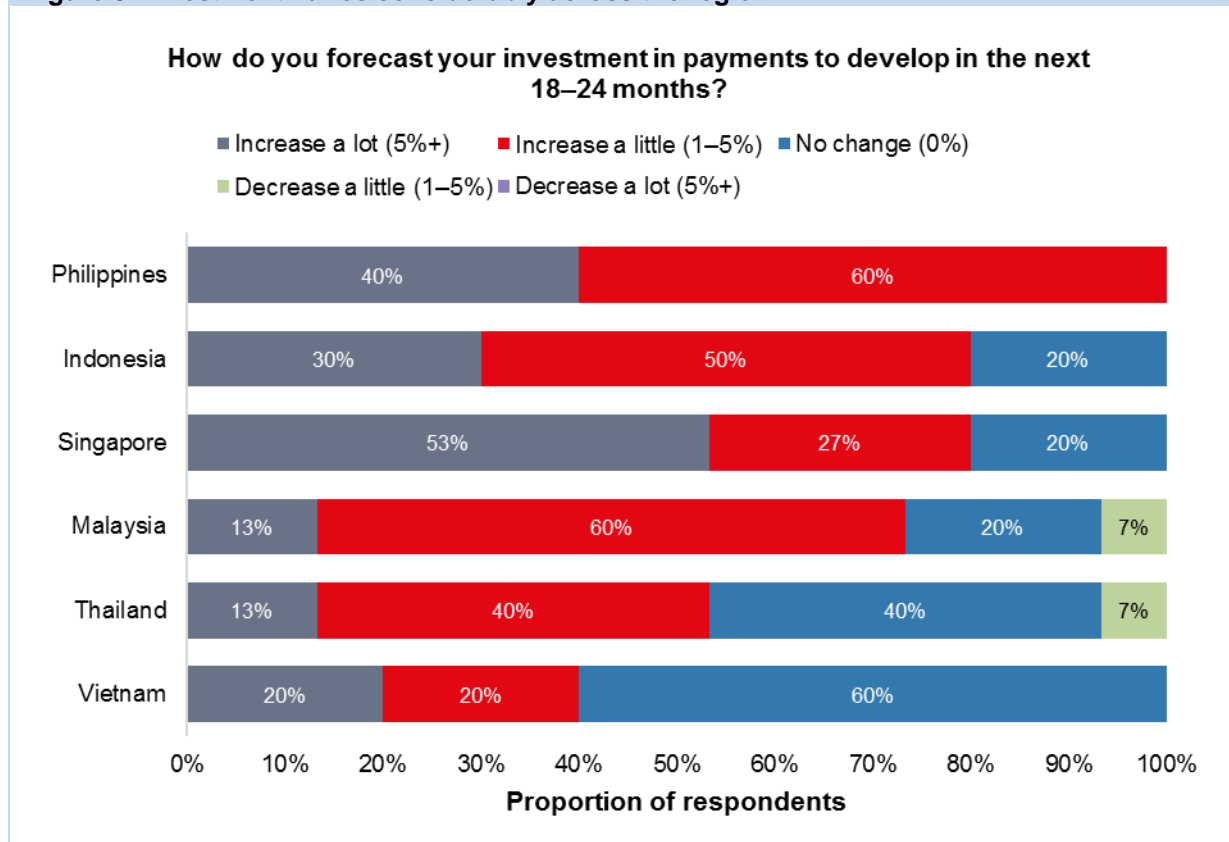
As previously noted, different ASEAN member countries are at different stages of development, and this is reflected in their investment plans and the maturity of their national infrastructures.

For instance, 100% of institutions in the Philippines and 80% in Indonesia say that they are increasing investment – 40% by 5% or more in the Philippines – compared to an average of 61% in APAC overall.

That said, Singapore stands out as a region of particularly high growth in spending, with 53% of banks anticipating investment levels to grow by more than 5%. In part, this can be explained by the prominence of Singapore as a regional financial hub, but it also points to a continuation of investment in competitive service improvements following several years of investment in the underlying infrastructure.

This includes the implementation of an addressing database allowing the use of mobile phone numbers as a proxy for account details, extending the integrating with PayNow, Singapore’s first peer-to-peer funds transfer service and the development of overlay services.

Figure 3: Investment varies considerably across the region



Source: 2018 Ovum Global Payments Insight Survey

Investment in payment systems is split between hygiene factors and innovation

Closer examination of the issues cited by respondents shows that they can be split into two groups: hygiene factors such as security, cost, and regulatory requirements; and those that focus on competitive areas such as developing new services on top of immediate payments and open banking – with the latter area making a strong showing despite not being regulatory mandated in many countries.

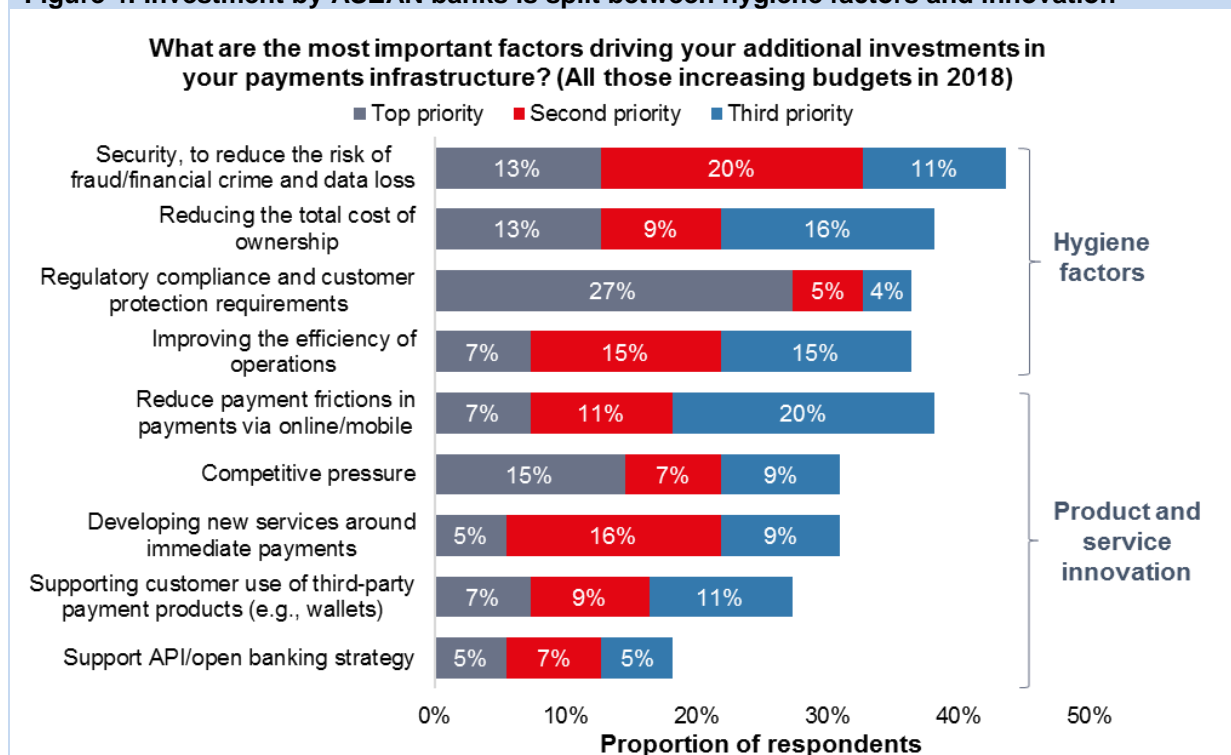
Among those increasing their investments, there is a growing focus on security and protecting customer data, with regulatory compliance and customer protection requirements the top priority for 27% of respondents (compared to 12% globally).

Security is cited as a top-three issue by 44% of banks – the largest single issue. The rise of e- and m-commerce in the region has led to an increase in card-not-present fraud, and new methods of payment create new types of fraud, such as with QR codes in China. Real-time payments require new fraud models to be set in place, along with robust authentication and authorization.

Beyond these hygiene factors, other major drivers cited are reducing the total cost of ownership (38%), reducing friction in online and mobile payments (38%), and developing new services around immediate payments (30%) such as API-based open banking initiatives (17%).

This latter figure for APIs is particularly interesting given both the lack of developed underlying infrastructures and regulatory mandates, indicating that many institutions have a strategic view of future payment system developments as they make their shorter-term tactical investment plans.

Figure 4: Investment by ASEAN banks is split between hygiene factors and innovation



Source: 2018 Ovum Global Payments Insight Survey

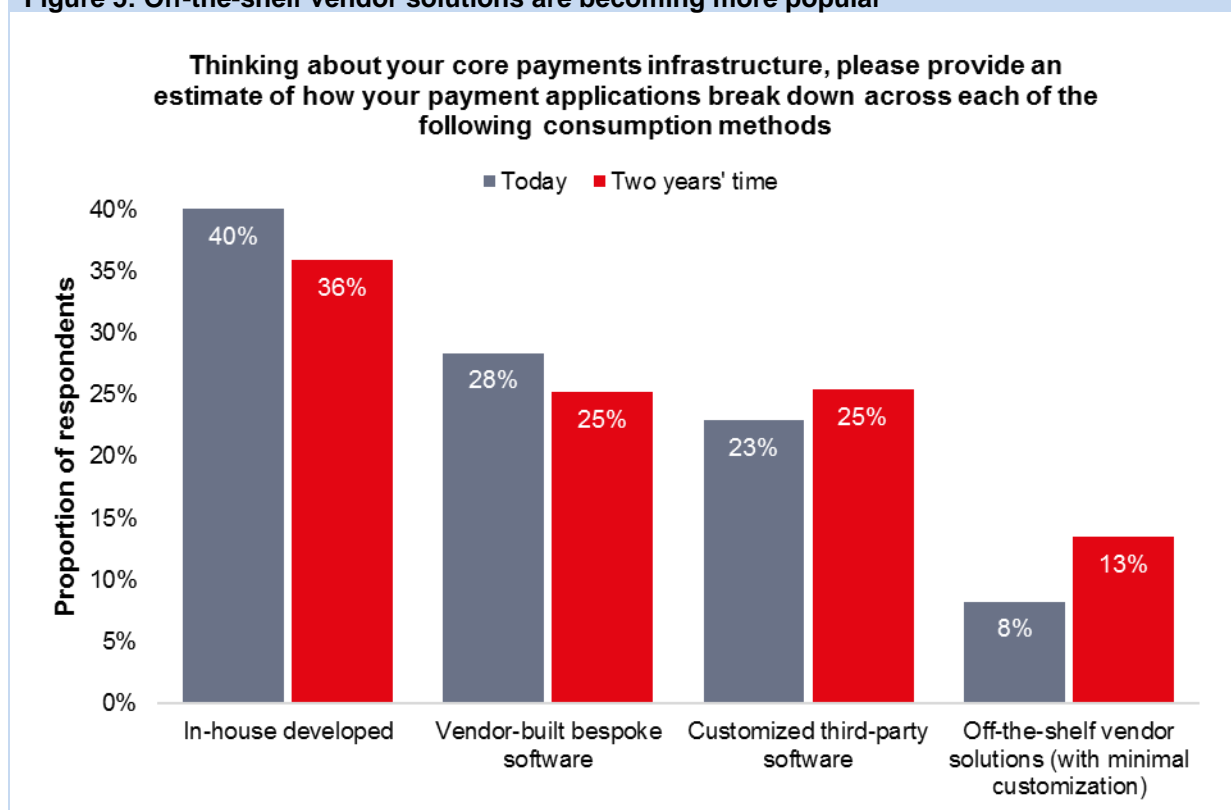
Reducing reliance on in-house developments is central to cost reduction and simplification

In the drive to reduce costs, institutions are increasingly turning away from in-house developments and bespoke vendor solutions, currently the most widespread approach.

In-house developments are expected to fall from 40% to 36% of payment applications, and bespoke systems from 28% to 25% over the next two years. This contrasts with global figures showing a small increase in in-house developments (from 37% to 39%) and a fall in bespoke vendor-built systems, from 24% to 21%.

Increasingly, these will be replaced by customized third-party software and off-the-shelf vendor solutions with minimum customization and maintenance requirements. ASEAN banks expect the use of off-the-shelf systems with configuration builder toolkits such that future enhancements can be done through configuration rather than customization, to increase from 8% to 13%, bringing them into line with global usage, where such solutions currently represent 12% of usage and are also expected to increase to 13% over the same period.

Figure 5: Off-the-shelf vendor solutions are becoming more popular



Source: 2018 Ovum Global Payments Insight Survey

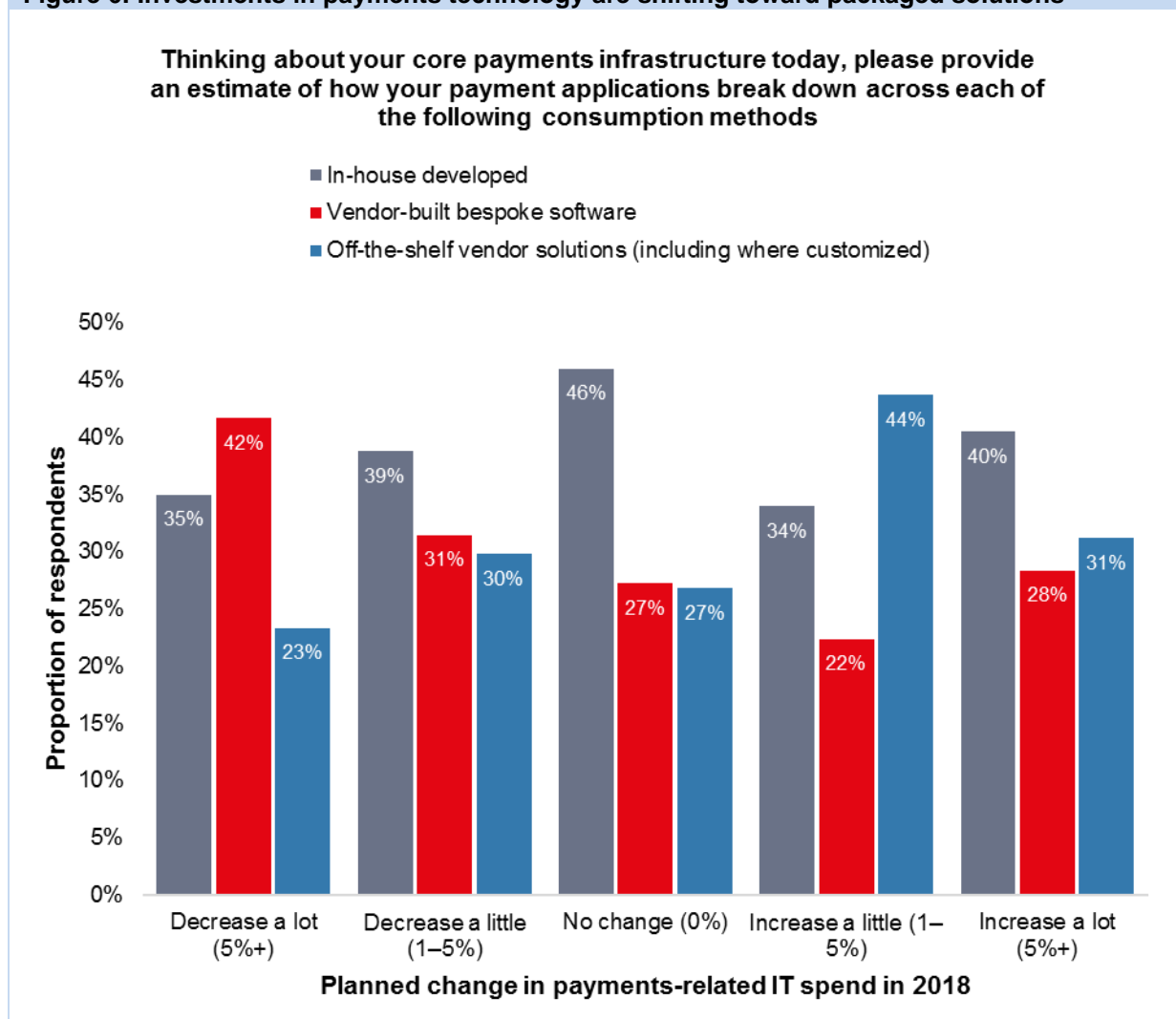
Investment is shifting toward off-the-shelf packages

The shift to off-the-shelf solutions is even more marked when broken down by the investment plans of respondents' institutions.

Among those planning to increase investments, the use of packaged and customized third-party solutions shows the greatest growth (Figure 6).

While this is largely driven by cost considerations, it also reflects the approach of ASEAN regulatory bodies to ensure that interoperability and harmonization efforts are based on international standards such as ISO 20022 and common business processes. In such an environment, vendors can leverage the experience they glean working with multiple financial institutions.

Figure 6: Investments in payments technology are shifting toward packaged solutions



Source: 2018 Ovum Global Payments Insight Survey

The future is open

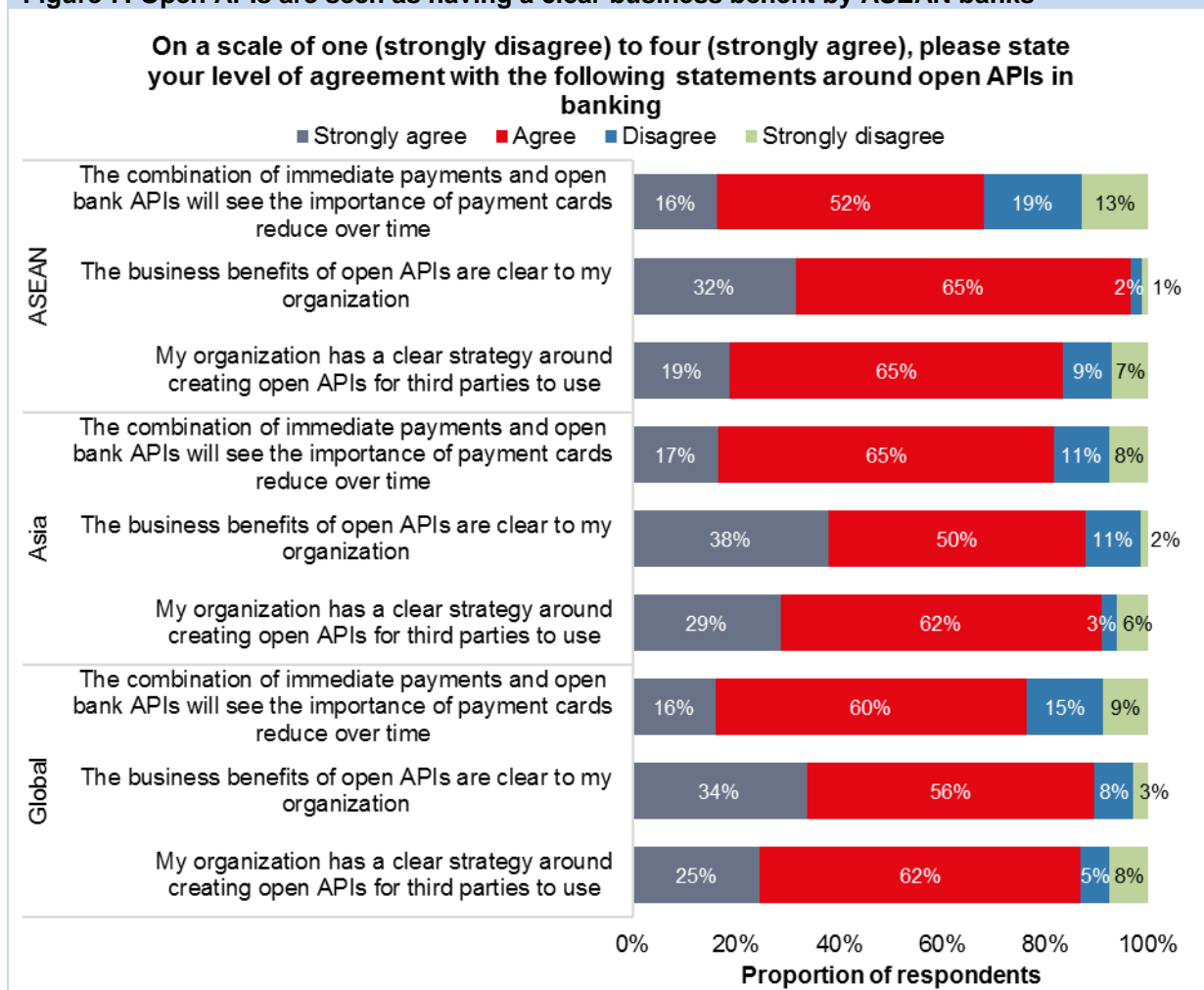
The enthusiasm shown by respondents about open banking also reflects the technical maturity of different markets, with the UK, European Union countries, and Australia – largely driven by government initiatives – leading the charge.

Overall, banks internationally have positive views of the benefits of future payments technologies, with ASEAN banks particularly focused on API-based open banking: 97% say they have a clear understanding of the benefits of open APIs, compared to 88% in Asia and 90% globally.

The ASEAN banks are less clear on their strategies for the creation of open APIs for third parties to use – 84% compared to 87% globally and 91% in Asia. This likely reflects the fact that there is no regional equivalent to the regulatory frameworks for open banking mandated in Europe and Australia, so while there is a good understanding of the potential benefit, how to address the challenge is less clear.

It also reinforces the view that the banks' investment split between hygiene factors and innovation is based on a strong picture of where they are heading once the basic infrastructure has been robustly and securely deployed.

Figure 7: Open APIs are seen as having a clear business benefit by ASEAN banks



Source: 2018 Ovum Global Payments Insight Survey

Immediate payments will enable new service offerings and drive revenue growth

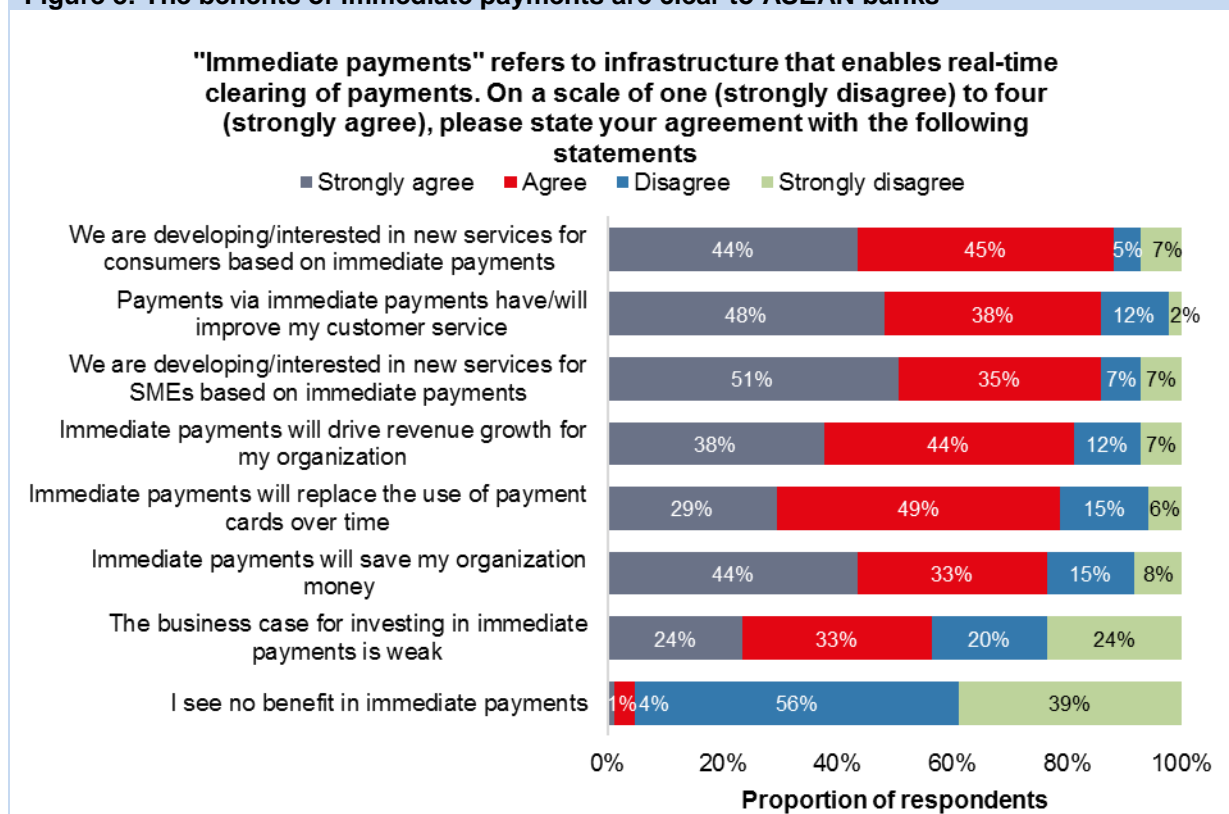
Looking beyond the cost savings and efficiencies gained from investment in payment system modernization, respondents say that the move to immediate payment architectures will have a range of benefits.

As shown in Figure 8, 82% of respondents say that immediate payments will drive revenue growth for their organizations, and 77% say they will save money, largely through improved operating efficiencies, but 57% say the business case for investment is weak as they have yet to develop use cases.

A slightly higher number, 86%, say that immediate payments have or will improve their customer services, suggesting that although improved customer experience is not currently front of mind for many, they do see it as a benefit of real-time payments in the future. Furthermore, 89% have developed or are developing new services for consumers based on immediate payments, and 86% have done or are doing the same for SME customers.

A large number (78%) of ASEAN institutions think that immediate payments will replace the use of payment cards over time. This compares to 83% in Europe, 76% in Asia, and 73% in the US. This would appear to reflect the fact that credit card adoption is lower in the region than in the US, while the European figure is likely boosted by the expected migration of e-commerce payments following PSD2. Mobile-based overlay services that use QR codes and wallets over immediate payment networks will reduce dependence on cash and provide an alternative to cards.

Figure 8: The benefits of immediate payments are clear to ASEAN banks



Source: 2018 Ovum Global Payments Insight Survey

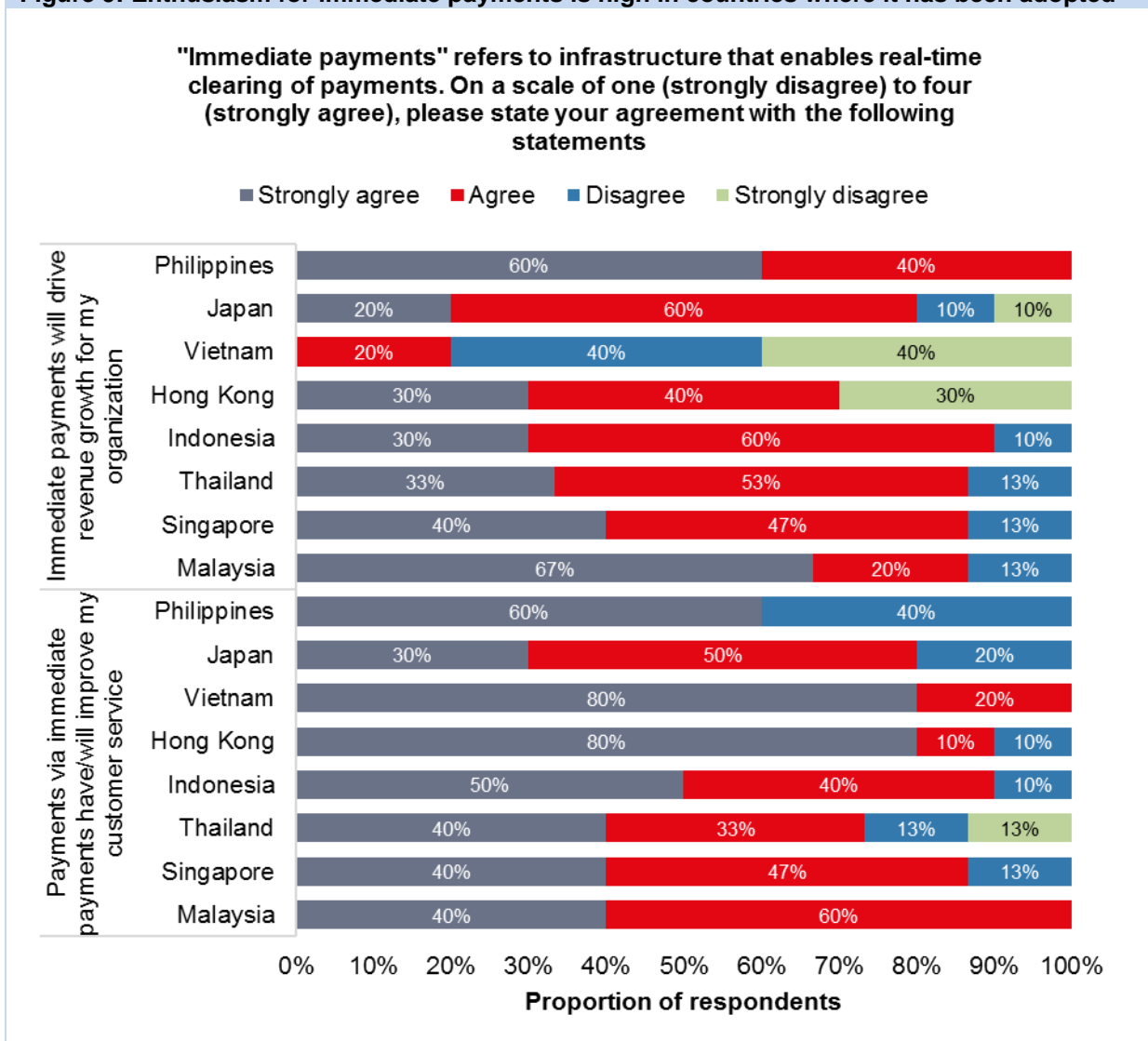
Enthusiasm for immediate payments is high across the region

It is not only in countries that have implemented, or are about to implement, domestic immediate payment infrastructures that respondents express enthusiasm for the benefits.

Improvements to customer services are, perhaps not surprisingly, seen as the greatest benefit by most respondents. In Vietnam and Malaysia, 100% of respondents agree that this will be a benefit.

There is more disagreement on the effect on revenues, with 40% of Vietnamese respondents being unconvinced that immediate payments will drive revenue growth for their organizations compared to 7% across the region. Similar sentiment was expressed in other countries that have gone down the real-time payment route, including the UK and Australia: only once the underlying investments had been made did the majority come to think of use cases.

Figure 9: Enthusiasm for immediate payments is high in countries where it has been adopted



Source: 2018 Ovum Global Payments Insight Survey

Key takeaways

Historically, the implementation of immediate payments has been driven by national regulators – in the UK, Singapore, and Australia, for instance – but it is increasingly becoming market-driven, as in the US.

But the implementation of real-time payments is also influenced by shifts in consumer and business behaviors, including the ubiquity of always-on mobile internet connectivity.

The ASEAN member states are taking a very proactive stance that is driving toward a pan-regional real-time payment network across Asia, and innovators such as PayNet and DBS have powered ahead. On top of the immediate payment initiatives, institutions such as DBS have introduced a consolidated wholesale, retail and merchant payment framework to further their digital transformation program, leveraging the real-time payments platform as their main enterprise payment hub. This kind of approach will allow financial institutions to cover customer segments from retail to SME and merchants to wholesale.

There are opportunities and challenges in adopting real-time payments. To address both of those, all players must recognize that security, real-time payment capabilities, and open APIs are the building blocks for digital transformation in banking and financial services across consumer and corporate services.

Appendix

Methodology

For the 2018 Ovum Global Payment Information Survey, Ovum and ACI Worldwide partnered to run a 22-question survey across a sample of retail banks.

The 2018 Ovum Global Payment Information Survey included a total 1,032 executive respondents across 13 industry sub verticals in 19 countries, resulting in over 225,000 separate data points on current perceptions and investment plans around payments technology on a global basis. This includes 277 retail banks, of which 75 operate in the ASEAN countries.

The aim of the survey was to understand the current attitudes, business objectives, and operational pain points facing each respondent company, in turn creating a unique viewpoint on the role that investments in payments technology will play in underpinning both the immediate and future objectives of each institution.

The survey focused on the following main topics:

- IT investment plans around payment services
- Core business objectives and priorities
- Payment systems architectures, including SaaS
- Plans and experiences around both open banking and real-time payments

Fieldwork ran between January 2018 and February 2018, providing a clear insight into current thinking in the industry across financial institutions in the region.

This paper focuses on the survey findings for banks in the ASEAN region. Those interested in the more detailed findings are advised to visit www.aciworldwide.com for further information.

Author

David Bannister, Principal Analyst, Financial Services Technology

david.bannister@ovum.com

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askananalyst@ovum.com

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