Unlocking the World of Digital Corporate Banking.

October 2022
The finance sector is in the midst of radical change. Historically a relatively closed sector, and periodically suffering loss of trust – as a result of scandals, data breaches and financial crises – banking and finance have undergone significant regulatory-led disruption in Europe and the UK with the advent of open banking.

Through policies such as open banking and its EU predecessor the revised Payment Services Directive (PSD2), we have seen that a more open data infrastructure in the retail banking sector that allows for new businesses, products and services – while retaining security and privacy – can have a strong positive impact on customers, small business and new market entrants.

This phenomenon has spread across the globe, with regional leaders emerging in Australia, Mexico, Nigeria, and Singapore, but the corporate banking sector has only recently started to adopt the ideas that have been transformative in the retail banking sector. Corporate banking is a more complicated field than retail banking. A more sophisticated open infrastructure (including standards, APIs, policies and guidance) is required to securely improve market dynamism and efficiency.

This report, synthesising Starfish Digital’s research in this area, is therefore timely, and helps chart the future of the corporate banking sector across ASEAN and beyond.

Fintechs like Starfish Digital are exploring the role that intermediaries like themselves can play in creating an open and trustworthy corporate banking ecosystem.

This report echoes some of the ODI’s previous research, demonstrating the important role that data intermediaries can play in new markets, and how certain types of intermediaries, like data institutions, can help propel regulator-led innovation in building a more dynamic market.

At the ODI, our work with Starfish Digital has provided insights into this important and growing geographical region for finance data ecosystems. It is important that the corporate banking sector embraces ‘open’. This will ensure that access to financial services, and data in power services and policies, is not just held by the few. ‘Open’ can also help the sector become more trustworthy and can help safeguard against harm.

We hope that this report can serve as a keystone to the development of the digital and data ecosystem of finance and banking. We look forward to seeing how innovative leaders in the ASEAN corporate banking sector tackle the opportunities and challenges identified in this report; and how they can deliver value through more open and trustworthy data ecosystems.
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Executive Summary.

Digital corporate banking is key to the frictionless movement and creation of money between financial institutions and large corporates. Starfish Digital, with support of the Open Data Institute (ODI), undertook a six-month research study, including a survey, and series of expert interviews with representatives from global as well as regional corporate banks and the heads of treasury functions of multinational corporations operating in ASEAN, to pinpoint the impulses driving the adoption of digital corporate banking today. Our research represents the first landscape study of digital corporate banking in these economies.

Over 50 global and leading regional financial institutions and multinational corporations participated in the study. And it is clear that digital technologies are a critical enabler of growth. However, challenges remain owing to intense competition for skilled IT resources and the plethora of banking legacy technology platforms not suitable for meeting multinational corporations demands for real-time banking data and analytics.

Through our research we have identified the underlying opportunities and challenges to achieve real-time corporate banking connectivity, and the role that financial technology (‘fintech’) companies can play. The markets surveyed differ widely in terms of where they are on their digital transformation journeys. Some countries, like the Philippines, are still evolving, while others such as Singapore have all the foundations in place to make digital corporate banking a reality. Differences between the leading global banks and regional banks across the region are notable. It is clear that automating corporate banking processes has many implications for organisational structures, technology, investments and risk in addition to vendors of enterprise resource planning systems. Companies and banks need to understand the impact of adopting an API-first approach should they wish to build comprehensive digitalisation programmes and reap the efficiency, low operational costs, and competitiveness rewards.

The majority of regional banks are only at the start of their transformation journey and collaboration with fintechs is critical given today’s demand for digital experiences. According to our findings, much needs to be done from the regulatory framework aspect to support the adoption of digital solutions both from an educational as well as an investment perspective.

Lastly, fintechs, through the provision of data integration technologies, data analytics, artificial intelligence (AI) and machine learning are poised to be critical actors in the digital corporate banking ecosystem. Moreover, collaboration and digitisation between traditional firms, new fintech service providers and regulators have the potential to create a more dynamic digital corporate banking experience.
Key Takeaways.

Preference to maintain the status quo persists.
Some banking executives prefer to maintain the status quo and resist change. The need to adopt digital solutions is not being internalised by senior executives as they struggle to comprehend the tangible benefits.

Digital strategy needs to come from the top.
Unless resistance to change is addressed at the board level and decision making accelerated, regional banks might find themselves losing market share to global banks investing in ASEAN.

The system is larger than the sum of its parts.
The drive towards digitalising corporate banking products and services must be seen as a systemic change. The payoffs from investing in digital solutions, accuracy, timeliness, minimal manual intervention, for example, are “only worth the disruption and risk of change if all banks’ relationships are digital,” according to a chief financial officer at a leading Thai corporation.

Hyperconnectivity is a given.
People are looking for hyper-functionality stated the head of technology at a leading German multinational bank. “In this age everyone is connected to everyone. Hyperconnectivity is not a dream anymore. It is the hyperfunctionality layer that will be the differentiator”.

Competitive advantage and not cost is the major driver.
Companies look to banks to help them manage their capital more efficiently. To achieve this goal, companies are willing to partner with a bank that can provide digital services. Banks are realising that customers are “no longer theirs” and “must work to retain them”. Banks risk losing market share and revenue streams if they do not meet customer demands.
Fintechs are complementary to banks, but they will not own the context.
Fintechs should be viewed as business partners who provide technology that improves corporate banking products and services not as competitors. Forward-thinking banks understand the benefits fintechs bring such as faster-time-to-market and digitalisation of corporate banking services.

There are diverse expectations from fintechs.
Industry actors look to fintechs to create innovative solutions and solve industry problems such as plugging the gap in analytics software, the demand for distributed architecture solutions and AI.

Regulatory push for transparency and digital corporate banking.
Some regulators are pushing for the digitalisation of corporate banking products and services to prevent graft.

Regulators must play an active role in educating stakeholders to encourage the adoption of digital corporate banking.
Regulators need to encourage the adoption of open banking for a corporate banking digital ecosystem to develop.

Forward-thinking banks understand the benefits fintechs bring such as faster-time-to-market and digitalisation of corporate banking services.
Introduction.

The financial services industry is an early adopter of modern technologies and data driven. The industry generates, transforms, exchanges and stores tremendous amounts of data across a plethora of legacy systems. The corporate banking industry is undergoing a digital revolution. At a time when traditional banks face new competitors unburdened by legacy technology or business models, banks must adopt a digital first approach.

Digital corporate banking is defined for the purpose of this report as the provision of corporate banking services such as account onboarding, account set up, account management and maintenance, and transactions management, all through digital channels. Our research focuses on the aspect of digital corporate banking that is related to the provision of real-time data. It broadly includes automation of functions such as capturing, processing, storage, retrieval and visualisation of data.

Survey respondents acknowledged that digital connectivity is critical for corporate banking data delivery and exchange. As the provision of data in real-time from a corporate bank to their customers’ treasury systems enables Chief Financial Officers to dynamically manage their liquidity, minimise their financial risks, optimise investment leverage and lower transaction errors caused by manual intervention. Our research found that while investments were being made in digitalisation processes through the adoption of Application Programme Interfaces (APIs) in the case of the global banks, many of the leading regional banks had yet to begin digital corporate banking programmes and still defined digital connectivity as having a website presence where their corporate customers could download pdf files.

Similar research by MIT Sloan School of Management’s Center for Information Systems Research (CISR) found that digital savviness of top executives varies widely by role. For instance, only 23% of CEOs, and 12% of CFOs, could be considered digitally savvy. Even in areas that are integral to digital transformation, the level of digital understanding was lacking. Only 47% of CTOs and 45% of CIOs were considered digitally savvy, with 23% of marketing leaders and 24% of operation leaders having a basic level of digital expertise. This report found that a lack of digital knowledge was widespread amongst senior executives and cited by respondents as being one of the top reasons for lack of digital adoption at banks.
For banks, the business benefits of digital corporate banking include easier and faster customer acquisition, enhanced customer experience (and hence customer loyalty), more rapid technology development, upselling and rollout of new and innovative products and services. Automation of manual processes also lowers costs, focuses sales and operations on value-add services rather than administrative tasks, and reduces investments in fixed assets.

Companies realise that becoming a digitally adept organisation is imperative to future success but nevertheless, struggle to act. As explored in the book *The Technology Fallacy: How People Are the Real Key to Digital Transformation*, much of the block comes from legacy leadership; the inability to deploy data and analytics to support decisions and improve customer experiences; and a dearth of digital culture, replaced instead with reliance on the common misconception that technology itself drives transformation. To this end what is driving digital change at many corporates is the forward-thinking C-suite executives seeking to reap the benefits of real-time corporate banking data.

Unlike retail banking where digital delivery of data is the norm, corporate banking is at an early stage of transformation. Today API banking, AI, blockchain and embedded banking and additional technology innovations are improving data access and visualisation for real-time financial information, and advanced analytics are reshaping the corporate banking ecosystem.

In ASEAN digital disruption is acting as a critical enabler of growth. Governments across the region have put forward an array of proposals and frameworks to drive and support the better adoption of digital technology and ASEAN Connectivity 2025 is an excellent step towards the fostering of cooperation between member states.
We selected Indonesia, Malaysia, the Philippines, Singapore and Thailand, known by the International Monetary Fund (IMF) as the ASEAN-5, as our area of study because they are the top five performing countries by Gross Domestic Product (GDP) and GDP per capita in 2022 according to the IMF. Notably, Singapore is one of the world’s most advanced economies and has been ranked as one of the world’s most competitive countries according to the World Economic Forum in 2019.

Indonesia, Malaysia, Philippines, Thailand and Singapore founded ASEAN in 1967 to facilitate economic and political collaboration among its members, and to accelerate economic growth and social progress. Five more countries joined ASEAN in the 1980s and 1990s, helping to make it an economic powerhouse with a combined GDP of US$2.5 trillion. If it were a single country, ASEAN would be the seventh-largest economy in the world.

Despite the high economic performance of ASEAN, according to one respondent:

“ASEAN is a fractured market. There are many countries with too many players and the lack of an encompassing regulatory body creates challenges. For Chief Financial Officers, obstacles to real-time corporate banking connectivity remain.”

One senior UK global banking corporate banking head noted that:

“In ASEAN, structures and frameworks make it more challenging for businesses to operate. Some respondents held the view that digitisation might be the mechanism to overcome such commercial walls.”

The cross-section of market actors interviewed by Starfish Digital reveals that companies are looking for increased regulatory guidance to support the adoption of a corporate banking digital-first approach and signal to the market that digital finance is ‘safe’. In ASEAN, no-pan ASEAN regulatory or association exists to provide even informal governance like the Berlin Group (B.G.) in Europe – a European payments interoperability standards and harmonisation initiative. Established in 2004 as a standardisation body, B.G. focuses on detailed technical and organisational

1 Source: https://asean.org/
requirements, and has participants from 10 eurozone countries including banks, banking associations, payment associations, national and international payment schemes, and interbank processors. Furthermore, the B.G. operates as an association with informal governance and no specific legal status and has developed a set of standards covering PSD2 open banking and is currently working on PSD2 extension (PSD2 XS2A) to encompass selected open finance extensions, for example account information extensions covering other account types (savings, loans, securities), payment extensions, trade extensions.

It is worth noting that while no such initiative exists in ASEAN, Singapore is clearly the driving force of change in the region. The Monetary Authority of Singapore (MAS) is pushing for a lightweight regulatory framework regime, favouring a market-driven approach. The MAS has published an API Playbook with guidelines for banks, has held multiple events and is currently exploring an ASEAN-wide industry sandbox with the help of the World Bank and International Finance Corporation (IFC). Unsurprisingly, banks in Singapore are the most mature in terms of their API banking journey.

Raphael Bick, a partner at McKinsey\(^2\) commenting on Malaysia stated:

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“Relative to other markets in the region, I think more can probably be done to enable API banking in the next few years. There are various initiatives that the Malaysian government is pushing, such as real-time payments. And those will be helpful. But at the moment...open banking as you would understand it in the UK banking market, for example, does not exist yet in Malaysia.

A number of countries in the region are looking at it. Thailand has a version of it but it is also still early days. South Korea is furthest down the road and Singapore [has advanced], too. But it’s not yet as widely implemented in Asia as it is in Europe, where I think because of the GDPR (General Data Protection Regulation), open banking has picked up momentum a few years ahead of time.”
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\(^2\) Source: https://asean.org/
2. Research Questions and Surveys.

To peel back the layers of data and reveal the factors that impact the development of the ASEAN digital corporate banking ecosystem, Starfish Digital research analysts adopted a qualitative and quantitative approach, combining the findings from a series of interviews with a survey to elicit feedback from corporate banks who distributed data and the companies that consume it.

The central questions under investigation were

- Who are the impactful players in the ecosystem?
- What can they do to enhance the adoption of digital corporate banking?
- What are the major expectations of fintechs?

To obtain the best possible insights, the research teams undertook the following analytical approach:

- **Desk research** – we studied existing research undertaken by the ODI in the UK and Europe and conducted an extensive review of literature available and relevant to this report.

- **Expert interviews** – to further enhance our understanding and to obtain the sentiments of the players not possible to capture through the questionnaire, we conducted one-on-one interviews. This gave us the ringside view from the players in the ecosystem. The interviewees included influential stakeholders such as Chief Financial Officers, Chief Technology Officers and Chief Executive Officers as well as business leaders who make the decisions that impact the adoption of digital corporate banking within their organisations. The interviews were conducted with both structured and free-form questions and then analysed using qualitative analysis methods such as sentiment analysis.

- **Survey** – based on the desk research, we designed a questionnaire that inquired about the roles of various actors, enablers, and blockers in the arena of digital corporate banking. The questionnaire consisted of both ratings and qualitative answers to open questions. The questionnaire was responded to by organisations as well as individuals within the financial domain.
4. Results and Key Findings.

Survey Respondents

The primary purpose of this study was to understand the digital corporate banking ecosystem in the five major ASEAN economies. It focuses on the role of market players as enablers and inhibitors in driving the growth of digital corporate banking in ASEAN.

The research focused on the communities and impacted by the solutions to these problems – the financial institutions that majorly generate the data, and the corporates that consume the same. In total over 110 responses were received in the form of one-to-one interviews and survey replies. It is noteworthy that 62% of the respondents held roles at financial institutions operating in the ASEAN region. This weighting should be remembered when considering the overall results, as it is the financial institutions themselves that need to find a balance between innovating their core banking technology platforms while responding to market demands for real-time corporate banking services. Overall, the financial institutions strongly focused on how to deliver data, while corporates focused more heavily on the format in which it was being received.
It is worth noting that the companies that responded all had an average of 20 banking relationships and relied on their corporate banking partners to provide a wide portfolio of services and products globally. These companies stated that they were actively seeking banking relationships with those financial institutions who offered or were looking to offer digital channels so that they may operate real-time treasury platforms.

For example, 16% of respondents held the position of Chief Financial Officer. In interviews there was a single technology need that each respondent mentioned and that was the importance of adopting a dashboard-based approach to enable decision making and achieve daily intraday reporting. Specifically, treasury officers demanded dashboards that gave Key Performance Indicators (KPIs) so they could see financial positions clearly such as cash positions and overdrafts as well as past trend analysis and longer-term forecasting. Not a single one of the corporate banks mentioned this customer need and how they would work towards supporting their customers. There exists opportunities for banks to partner with treasury providers to support this real-time dashboard treasury view required by corporates today.
4.1 Identifying the barriers to achieving real-time digital finance.

Chief amongst the findings was that 81% of respondents felt that the biggest obstacle to achieving real-time digital finance was integrating legacy systems with new technology platforms and data infrastructure. Given the survey respondent weighting towards banks this is perhaps not surprising. We can see in the results that 66% of the respondents felt that complicated and long procurement processes resulted in banks not being able to nimbly address corporate customers’ demands for digital corporate banking products and services. This finding is potentially a reflection of the fact that 90% of the banking institutions sharing insights via the survey and in interviews are international banks with regional headquarters in the region who have procurement process teams operating in more than one geographical location.

One leading Philippine bank reported that:

“Banks are now where other regional leading banks were back in 2014-2015. But they have embraced a two-year planning cycle to move forward by partnering with an open technology ecosystem. Open ecosystem players have a key role to play in corporate banking transformation because they allow banks to achieve a particular level of digitisation with an effective spend, while enabling them to focus on core infrastructure to maintain the bank.”

The significant role that fintechs have to play is critical in the movement towards digital corporate banking. One global European bank, who shared that they have a five-year programme underway to replace their core corporate banking platform, is currently in the process of engaging fintechs to provide connectivity solutions to provide real-time connectivity for cash related corporate banking products. It was cited by one German global bank that:

“The rise of digital interfaces will enable us to progress legacy and ecosystem transformation initiatives and meet our customers’ demands.”
However, the best efforts of the respondents to embrace change are being met with strong obstacles in the form of a lack of a structured regulatory framework (59% of respondents) and a lack of technical skills within the organisation (59%). Notably, only 6% of the people surveyed felt that a lack of competition did not count as a reason for adopting digital corporate banking.

The technology platforms that have supported the growth of the financial institutions and multinational corporations through decades of growth have become part of the legacy that is not able to adapt to the digital age. A senior compliance specialist at a leading Swiss bank commented that:

“A huge challenge we face today is the availability of skilled resources, familiar with the latest technologies to deliver the automation and data analytics our customers demand.”

This sentiment can be compared with another challenge, which was “boardroom inertia.” Several of the regional banks reported that they were struggling to change the mindset of their executive leadership teams.

Figure 2: Reasons for Not Adopting Digital Corporate Banking

- Difficulty in integrating new technology with legacy ‘IT and data’ infrastructure: 81%
- Complicated and long procurement process: 66%
- Lack of structured regulatory framework: 59%
- Lack of technical skills within the organisation: 59%
- Lack of value proposition: 47%
- Insufficient demand from their customers: 38%
- Lack of trust in available technology solutions: 38%
- Insufficient funding: 25%
- Lack of competition: 6%
4.2 Factors driving the adoption of digital corporate banking.

With so many factors to consider, a treasurer for a Fortune 100 company summarises the main driver towards digital corporate banking as:

“Digital corporate banking is a competitive advantage, cost is not the major driver. The speed of business has changed everything.”

This speed of business is fuelled by real-time payments and the velocity of cash liquidity movement. What was once business-to-consumer is now business-to-business-to-consumer. The pace of change is increasing as corporates use digital marketplaces for distribution and place embedded banking products into their own business platforms.

The same treasurer sharply summarises “You cannot run a digital front office at velocity, without a digital middle and back office.”

The survey results echo this sentiment. 39% respondents believe that digital corporate banking as a competitive advantage is the most important driver for transformation. It is widely accepted that both corporate banks and companies have to change the mindset from being brick and mortar to becoming truly digital in the area of standard cash management and transaction banking and that banks need to embrace digital lending.

When making technology choices, a CFO of a global ASEAN corporate strongly emphasised the need for a “complete” solution:

“The payoffs from investing in digital solutions – accuracy, timeliness, minimal manual intervention – are only worth the risk of change if all bank relationship connections are digital; not even 95% is enough.”

For those companies seeking help, they are often looking towards banks to manage their business more efficiently. Banks provide expertise and technology with strong risk and regulatory frameworks. If an existing provider does not give companies what they need, they will be more than willing to crossover to another who can. Customers cannot be taken for granted and must be served well to help them take care of their own customers in turn. Financial institutions are sourcing innovative
services for gaining first mover advantage and primary banker status. This is reflected in the fact that regulatory compliance is an important driver for 26% of respondents.

As we project the speed of business out by another decade, a banking strategist at a leading global bank shares why digital corporate banking is inevitable:

“Central bank digital currencies will create convertibility at a pace the world has never known. These are not dollar bills in a treasury somewhere. This is currency written in zeros and ones traveling at the speed of light. The concept of a CFO sitting on a pile of cash in a geography wanting to manage it is no longer there. You can only get it if you’re digitally connected.”

Figure 3: Factors Driving Corporate Digital Banking Adoption
4.3 Who has the answers?

The below chart details who the survey respondents opined has the greatest influence on enabling the adoption of digital corporate banking. Regulators and regulations were considered by a number of respondents as being an obstacle to change and “reluctant to move away from their traditional approach of regulating closed financial markets to open markets.” When what is needed is proactive regulatory bodies who educate and inform market participants. One Chief Financial Officer referred that regulators were vital for installing trust in the digitalisation and adoption of new business models.

“As regulatory oversight provides a baseline of confidence. Similarly, to FDA certification for food.”

Interestingly, 32% of respondents thought that fintechs have a key role to play in digital transformation in corporate banking and were seen as being complementary to banks and corporates drive to move away from legacy systems and manual processes. Corporate banks are thinking differently about buy versus build strategies in order to adapt quickly and meet their customers’ demands for real-time digital connectivity and see fintechs as playing an important role in achieving this goal.

Figure 4: The Market Players in Digital Corporate Banking

As one market practitioner commented, “Fintechs are complementary to banks and corporate technology platforms. They will be disruptive because they re-imagine the financial markets of tomorrow. The banks that will survive are those that understand this symbiotic relationship.”
4.5 Expectations from Fintechs.

A German bank CIO expressed the following viewpoint:

“Banks will own the context of financial markets. They will always be tied to government and regulators in the creation of policies to manage risk, settlement, and the underlying foundation. Fintechs will solve problems. They will provide that enablement layer on top, and drive distribution and connectivity. It is not a war against the fintechs or big tech. There is a place for everyone to earn their side of the fees.”
What is it exactly that fintechs are expected to solve? According to survey respondents they need to offer technical solutions that give the purchaser a competitive advantage in the form of better understanding of their customer base via data analytics, AI and machine-learning solutions. Many banks today are under-utilising data assets because of manual processes and underinvestment in digital technologies. The ability of fintechs to breathe new life into legacy systems by unlocking the valuable data that is in analogue formats today and plug the gap in analytics of substantial amounts of data to enable critical business insights is key. Organisations have data stored in silos and fintechs that offer analytics, AI and machine-learning solutions today which can interface with legacy systems to offer attractive, lower cost alternatives to inhouse development efforts will be successful.

It is noteworthy that 91% of respondents mentioned the necessity of installing confidence in their technical and managerial capabilities. This market sentiment might result from the lack of clear regulatory guidelines and corporates as well as financial institutions understandably wanting to only partner with proven technology providers that can demonstrate a solid knowledge of banking compliance, security and cyber risk.

Figure 5: The Expectations of Fintechs

- They must offer cost-effective solutions that provide a competitive advantage (94%)
- They should be able to instil confidence in their technical and managerial capabilities (91%)
- They should offer innovative products and services / solution to legacy systems related challenges (88%)
4.5 Expectations of Regulators.

Digital literacy and education is a challenge particularly felt by the global banks who are faced with hiring shortages as well as protectionist policies that prevent the recruitment of overseas talent.

In May 2021, Ravi Menon, Managing Director, MAS reported that financial institutions in Singapore are offering about 6,500 newly created jobs. He also said that more technology roles are being created, but not enough Singapore graduates have the requisite skills to fill them:

“This large mismatch between demand and supply of technology workers means two things. One, we have to continue to depend on foreigners to fill the growing vacancies for technology jobs over the next few years. “Two, we need to build a strong local tech talent pipeline — as a collective effort involving individuals, financial institutions and the Government.”

The Infocomm Media Development Authority (IMDA) said that “about 19,000 tech jobs in Singapore are not filled...There are simply not enough Singaporeans applying for tech roles. The problem is not jobs, it is skills,” he said. Instead of restricting the inflow of foreign tech expertise, Mr Menon said that individuals, financial institutions and MAS need to work together to build strong skills in technology.

Respondents reported that particular challenges were felt in the area of hiring strong programming skills and in-depth business domain and system knowledge. The APAC Head of a UK global bank with a strong presence in all five surveyed countries said:

“The role of the regulator should not be merely to control but more of enablement and nurturing. We simply cannot hire technologist in region and are struggling to bring talent in from outside the countries in which we operate.”

Financial institutions, corporates and fintechs are looking to regulatory bodies to educate the corporate banking ecosystem in terms of digital literacy and frameworks as well as provide incentives to innovate and transform business practices. While less than 50% of respondents believed that mandating digital corporate banking was a positive move, almost all respondents opined that regulation should not only be about control measures but also enablement and nurturing.

The Monetary Authority of Singapore was highlighted during interviews as being an example of a regulator that took a balanced approach between regulation policies, industry practice guidelines and providing education. It was widely agreed that “while having some regulatory aspects does provide a sense of confidence, too heavy a hand can kill innovation and make operating a business expensive and cumbersome.”

Survey respondents were keen for regulators to “strike a good equilibrium,” and provide digital literacy education, investment as well as undertake investments in the form of grants or tax waivers, and to help guide the industry towards adopting standards and instil confidence in digital solutions. Especially in the case of fintech solutions, according to one Chief Financial Officer, “CFOs are not incentivised to take risks. We want clarity of responsibility and accountability. We will pay extra for certainty.”

One bank executive stated at a mid-tier bank, “When it comes to fintechs I’m keen to always understand the risk involved in terms of who owns the relationship. Am I responsible for a system crashing or the fintech? Will the regulator come down hard on my bank as they see me as responsible or the technology provider? We need greater transparency with corporate digital banking as to how we should mitigate risk in an ever-evolving regulatory environment.”

Figure 6: The Expectations of Regulators

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<tr>
<th>Requirement</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Work on enhancing digital literacy and education</td>
<td>94%</td>
</tr>
<tr>
<td>Invest in ecosystem to facilitate digital corporate finance, such as IT infrastructure, systems, and guidelines</td>
<td>84%</td>
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<tr>
<td>Provide incentive to market players for adopting digital corporate finance, such as tax breaks</td>
<td>84%</td>
</tr>
<tr>
<td>Make the adoption of digital corporate finance mandatory via directives and regulations</td>
<td>47%</td>
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</table>
5. Conclusion.

“Banks will always be tied to government and regulators in the creation of policies to manage risk, settlement, and the underlying foundation. Fintechs will solve problems. They will provide that enablement layer on top, and drive distribution and connectivity.”
– CIO, global German bank

The benefits of digital corporate banking are clear, but challenges remain most notably in the lack of a pan-ASEAN corporate banking regulatory environment and competition for talent.

Significantly, the research data findings show that changes to corporate banking processes have many implications to organisational structures and internal resistance to moving away from manual processes persists despite the widespread recognition that to maintain a competitive advantage it is necessary to embrace digital delivery of products and services. Corporate banks and companies have to change the mindset from being brick and mortar to becoming truly digital.

For banks that are only at the start of their transformation, collaboration with fintechs can accelerate time-to-revenue in the corporate banking industry. Banks are working to transform the technology at the core of their operations, which typically involve a multi-year replacement programme at significant cost and risk of service disruption. By partnering with fintechs, banks can provide new digital channels to customers in the short-term and keep abreast of the competition.
About Starfish Digital and the Open Data Institute.

Starfish Digital is a financial connectivity platform. We digitise and deliver financial data between banks and companies. The Starfish Universal Adaptor intelligently unlocks and integrates financial data from any source to any target. Starfish Connect provides an end-to-end managed service with the security and reliability demanded of critical B2B financial infrastructure. Headquartered in Singapore, we deliver globally.

www.starfish.digital

The ODI is a non-profit with a mission to work with companies and governments to build an open, trustworthy data ecosystem. We work with a range of organisations, governments, public bodies and civil society to create a world where data works for everyone.

Our work includes applied research; consultancy services; training; and providing reports, tools, events and webinars.

We focus our efforts in three broad areas:

- Improving the data practices of organisations so that they can build and manage adequate data infrastructure and data use.
- Tackling challenges so that the data ecosystem works better.
- Gathering and creating research, evidence and knowledge about data and benefits of open, trustworthy data access.
Glossary of Terms.

API banking: API or Application Programming Interface enables a third-party application to use a particular interface through which it can access a common set of tools or services. In banking, this means a bank can offer third-party access to its customer services through dedicated APIs. Multiple third parties can then use banking services or also offer the same to their customers.

Business drivers: A business driver is a resource, process, or condition that is vital for the continued success and growth of a business.

Digital corporate banking: The enablement of the finance function to provide real-time data-enabled decisions. These technologies are broadly automation of processing, data visualisation to real-time financial information and advance analytics to accelerate decisions and hidden growth opportunities.

Digital infrastructure: Digital infrastructure is defined by a focus on enabling business agility and powering user experiences that drive customer engagement and loyalty.

Embedded finance: Embedded finance or embedded banking is the seamless integration of financial services into a traditionally non-financial platform. It enables customers to access financial services within the app and in context.

Fintechs: Financial technology (abbreviated as fintech or FinTech) is used to describe new tech that seeks to improve and automate the delivery and use of financial services.

Hybrid approach: A system in which government and market factors both coexist to provide an environment for growth.

Legacy system: Legacy core banking systems are typically platforms that are decades old that banks and financial institutions use to support their back-end infrastructure for services such as setting up new accounts, processing deposits and transactions, and initialising loans.

Open banking: Open banking is a system based on an application programming interface (API) and intended for sharing financial information necessary for the development of financial products and services. Contrary to the conventional centralized management of financial data, it relies on a technological network of different financial institutions, enabling them to exchange information more efficiently.

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References:
1. Southeast Asia digital, social and mobile 2019 - ASEAN UP
2. ASEAN-KEY-FIGURES-2021-FINAL-1.pdf (aseanstats.org)
3. The Banking Industry in ASEAN on the Verge of Higher Growth - CARI ASEAN Research and Advocacy