

Enabling the Development of Inter-Operable Open Data Systems in the Asia-Pacific Region (Project Open Data)



ASEAN Bankers Association



Virtual Roundtable Report

14 February 2022 / 12:30 – 15:30 Singapore Time

Summary: Open data is ultimately about the freer flow of information to improve knowledge sharing and access to information for the greater benefit of consumers, enterprises, government and the economy. It is about enabling individuals to take control of their data. It encapsulates in concepts such as open finance and open data. The digital age and recent events, including the pandemic, have accelerated changes in the financial system. This paper is the output of a roundtable that concludes that open data is an important capability that can unlock value domestically and globally. We recommend that governments in the region progress on the stepping stones to a vibrant, commercially robust, open data ecosystem and where possible take steps to standardise on open data frameworks for several reasons, not just for interoperability. Organisations can create and consume technology locally and also adopt learnings from across markets. People can be empowered to benefit from increased use cases in finance and commerce, improved access to information and markets leading to better economic outcomes. Cross border trade could be enhanced and made more efficient, without any loss of necessary government controls and regulatory oversight.

We encountered a few themes:

1. That there should be a whole-of-government approach
2. That cross-border interoperability is important
3. That the biggest beneficiaries of open data are developing economies
4. That there needs to be a commercial voice on the design of an effective solution

Backdrop

The APEC Business Advisory Council (ABAC), ASEAN Bankers' Association (ABA), Asia Pacific Financial Forum (APFF) and the Emerging Payments Association Asia (EPAA) have been examining open data in the region together with regulators, financial institutions, fintechs and other interested stakeholders.

A recent workshop hosted by EPAA, in partnership with APFF and ABA, was held with a significant number of attendees bringing together experts from many jurisdictions and from government, regulatory agencies and the private sector. Harnessing years of knowledge and experience across the region, workshop participants came together to collaborate on this critical topic.

The agenda included the current state of open data with real-life examples, a case study from one regional regulator, EPAA's research, a fireside chat with regulators, and examples of innovation and challenges faced by fintechs. The workshop consisted of presentations, moderated discussion, and interactions with the audience.

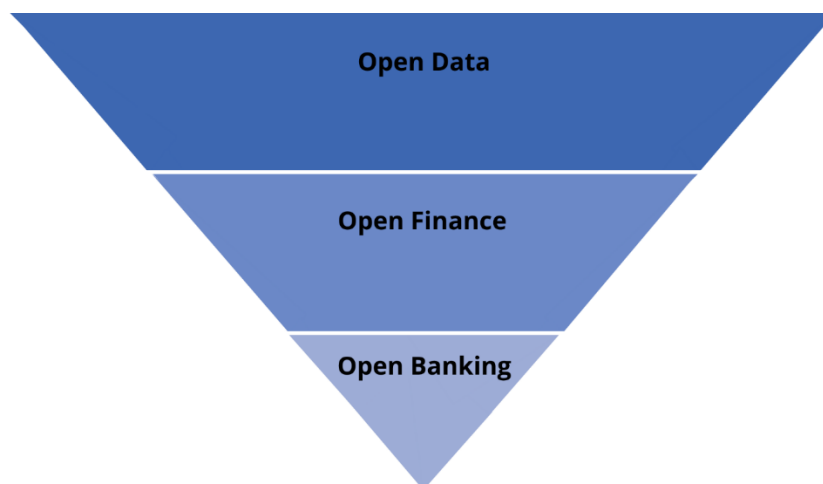
Findings of the Open Data Workshop

Here we take a view of open data in its broadest sense. Open data consists of more open and privacy preserving access to consumer data, previously restricted to banks, governments, and private corporations.

We take the in-principle view that individuals are entitled to some extent at least, to see, share and restrict access to their data, and that sharing this data can lead to better outcomes.

Some economies in the region have already started an open data journey. Where almost all initial-use cases are financial services (e.g. account information, transaction history), implementation approaches vary. A few economies have a government-led initiative, others were industry led. Some take a prescriptive approach – others a more ‘free-form’ approach. No economy is yet taking a truly international approach, and it was observed that standards failed to exist across any two markets represented in the workshop.

Picturing open data as a structure, many view financial use cases as an enabler, with open finance allowing open data and open markets



While open banking is a significant component of open data, the concept is much larger. The desire to have access to open data is not necessarily one that will be heard from the general public, just as the need for the Internet in the early days was expressed by a few technology companies. Traditional organisations, banks, technology companies and especially fintechns can develop better technology using open data that can provide significant benefit to the public.

Findings from the Workshop

The workshop highlighted many reasons why open data is important. It enables competition and empowers innovation. It enables better consumer outcomes and provides an ecosystem for fintechns to enter the market. Most importantly, when supported by digital enablement and access, open data supports wider access to financial services. Twelve key points were identified:

OPEN DATA SUPPORTS WIDER ACCESS TO FINANCIAL SERVICES

12 Key Points were identified:

- 1 Benefits to developing economies**

In the digital age, information from these economies was more restricted than from developed economies. When overlayed with a per-capita view, the disadvantage was stark.
- 2 Developing economies have less access to open data**

Open data in principle should collectively benefit people in developing economies more, yet ironically, developing economies have less access to open data
- 3 Literacy and access to the internet are foundations**

Literacy and access to the Internet are foundations, though as that progresses, infrastructure elements need to be considered too, such as open data.
- 4 Better access to financial services benefits people at a grass roots level**

They get more choice and better access to money and credit.
- 5 Privacy-functionality trade-offs may be different across markets and across regions**

For example: Differences between Asia-Pacific and Europe.
- 6 Enabling fintechs means better services and access for people**

Fintechs are the innovators.
- 7 Fintechs are generally frustrated by the pace of change**

Even the most advanced economies are far from achieving their original goals.
- 8 Understanding the use cases is essential in open data - and they are universal.**

For example: universal account information aggregation, payments (credit, push, e.g., QR as well as the more elusive pull payment use case like in the card schemes), and a very important capability – digital identity to identify and authorize payers and payees for sending and receiving payments safely.
- 9 Regional (or global) standardisation/ coordination is a must**

The digital economy knows no boundaries, and we can learn from each other. However, APEC member economies are still largely digitally isolated from each other unlike those in the Euro-zone. A regionally integrated economy could thrive and benefit all.
- 10 A strong regulatory approach has proven the most successful in establishing networks.**

The UK, Brazil and Australia are examples of the strong regulatory approach. India's semi-central approach also shows promise. Laissez faire approaches mean some economies are not enabling change fast enough where incumbents take too long to respond.
- 11 Key use cases and global standards must be driven by regulators.**

They will not happen by themselves.
- 12 In a fast moving world, It is important to move quickly and not be delayed by a need for perfection**

The launch of a minimum viable product is a good place to start accepting that incremental changes will be necessary to meet the stated goals.

These 12 key points point to four overarching themes.

Theme 1: Whole-of-Government Approach

Licensing of new-to-market firms serves the purpose of ensuring appropriate oversight and consumer protection as institutions dealing with the data must have secure, legal and ethical processes in place, adhere with laws of jurisdictions (e.g., GDPR), and can be held to account. The risk is in the failure in loss of customer data, fraud, identity theft and loss of brand reputation for institutions, the industry, and confidence of consumers in the concept of open data.

There could also be a role in licensing for industry-led entities with appropriate governance and oversight, in addition to regulators.

Harmonising licensing requirements can make it easier and more attractive for fintechs and other such organisations to participate in a licensing regime, lead to mutual recognition across borders, and ensure that fintechs are subject to oversight and accountability across the same borders.

Harmonised standards could also address the challenges of “data sovereignty”. Regulators are concerned about their ability to demand data if the data is held offshore. As a result, most jurisdictions require local data be held locally or, have in place a process to ensure that consistent standards apply where data is to be stored offshore. In a growing global digital economy, this may not be practical, and even if legislated, may deviate in practice. Harmonised cross-border licensing could deal with the situation, by ensuring that proper requests for data can be obtained even if the data is held offshore.

Many economies are dealing with the problem of multiple authorities with variable regulatory objectives. Many of these authorities generally come under the finance portfolio but include:

1. Prudential regulators
2. Central banks
3. Corporate and conduct regulators
4. Consumer protection agencies (including competition)
5. Digital identity authorities
6. Anti-money laundering/Counter-terrorist financing regulators, etc.
7. Privacy regulators
8. Private banks (have their own rules and policies)
9. Industry self-regulatory organizations

As we start to look at non-financial data, the list gets longer – e.g., telecommunication authority etc.

Dealing with the myriad of regulators in any market can prove to be difficult for a small or large fintech or tech company. While aggregation may not be necessary or recommended, a whole-of-government streamlined approach to open data may be suggested, with clearly defined roles and responsibilities assigned to regulators and co-ordinated regulatory approach.

In turn these whole-of-government entities can align with cross-border initiatives to effect cross-border harmonisation.

Theme 2: Standardisation, Harmonisation and Cross Border Integration.

Why Standards? Take an example: two banks, if left alone, will most likely implement open data differently. A tech company then needs to implement two different solutions for those two banks. Small institutions may be ignored, and the development of use cases and technology may be stifled as the overhead is significant: e.g., account aggregation services. All economies in APEC have more than two banks, and many small banks, so in this way expecting a solution to evolve organically by itself is not effective, and may not be viable.

Emerging standards exist in some areas. Examples are in payments: ISO20022 (replacing SWIFT MT, and ISO8584), Digital Identity has W3C Verifiable Credentials and OpenID Connect, and ISO20022 and Peppol in invoicing. Transaction history from bank accounts also has ISO20022. There are also standards on how to authenticate and provide permissions. Governance and security practices such as ISO27001 and SOC exist as well. A challenge with open data implementations globally to date, has been a failure to adopt cross-geography standards, even regionally. While localisation is necessary, we heard from fintechs that the technical differences between implementations across markets are negligible: for we have more in common than we differ. The differences cause inconvenience, add costs to local institutions who often customise global software to meet their ends, at the risk of decreased utility for consumers to benefit from global innovation. This does not speak to the lost opportunity to standardise.

Consistent standards at the technology protocol level such as the Internet Protocol, Universal Serial Bus (USB), 2G/3G/4G etc in cellular phones have led to tremendous advancements, collaborative innovation, and cheaper technology for resident individuals. The world-wide web's hypertext protocol means that someone in one economy can access a web page in another economy with a rich and full multimedia experience.

Open data is the next generation of the Internet and can open up more value. Standardised open data is critical to achieve these goals.

It is important to focus on a standard and level of harmonisation, as well as cross-border integration. Cross-border integration allows domestically led integration where deemed useful, necessary and appropriate. The workshop recommended the recognition of a standard, and a level of harmonisation, so at least for basic elements of open data, for which there is no contention, there is some consistency. Standardisation supports an open, free-to-use standard, with the networks and regulation under the control of each government. The benefit is that companies can exchange technology, learnings, and practices globally. They can also more easily integrate if the need arises.

Will this prevent innovation? Forcing a single standard on every institution does not allow for diversity and alternative methods of service. Institutions are free to innovate. If they have a better way of accomplishing the same thing, they should be allowed to do so. This standardises on common identified used cases, and may be viewed as optional.

Will this create an unnecessary overhead of governance? It is important that governance is quick to respond to the most minor request and is not a bottleneck to domestic or organisational innovation. This is a solvable challenge that could be successfully addressed with a strong and commonly agreed guidance from APEC.

Theme 3: Developing Economies

While the Internet has done wonders driving the information age, for many people in developing economies, they have seen few advantages. By giving the access to the Internet, through remote network initiatives, and through cheaper or subsidised devices, more people can access the Internet. Greater literacy and digital education can also help.

However, even with these technical tools, a rice farmer (for example) is in no better situation to access markets today. Additional infrastructure, including through open data, may be necessary. Open data could provide access to payments, and access to online markets to allow people to buy and sell more effectively. Imagine a farmer being able to simply advertise the quantity and grade of rice they anticipate producing. Access to finance to support the crop and access to a marketplace for services and supplies could help reduce costs for the farmer, and help get him a better price without excessive value extraction by intermediaries.

Today a producer in a developed economy has better access to online markets than those in developing economies, which is why we say open data could benefit developed economies more.

Theme 4: The Need for a Commercial Voice

Most implementation cases of open data, especially open banking, have been designed technically. A technical view sees data as a database. Big data, artificial intelligence and machine learning could help establish conclusions. For commercial interests, much of the data has been mined already for such purposes. Access to the data is constrained by privacy concerns. And rather than viewing data as a database, data needs to be viewed as the flow of information, especially in real-time. It is transactions, payments, market orders, invoices, notifications and so on. This commercial view has been missing from many purely government-led efforts. As such we urge that implementation approaches pay attention to this commercial aspect of open data in order to generate a stronger solution that can enable commerce and the commercial markets to provide more significant benefits to consumers accessing open data.

What does guidance look like?

In its simplest form, effective open data guidance is coordinated encouragement from governments to agencies and private institutions to share customer data securely for the benefit of individuals.

It is created through agreement on common standards, building the infrastructure, and solving critical problems that could inhibit this outcome in the absence of guidance. These could be legal, technical or logistic.

In order to facilitate a world where we can share freely, confidently and securely share information across borders one day, key principles need to be established to ensure alignment and consistency. These consistent principles may include privacy, data sovereignty, individual rights, corporate and government assets.

Why APEC?

The EU is now moving forward with its Payment Services Directive 3 (PSD3). The challenges it faces are different, and its mainly single currency means the implementation scope is quite specific to a “one-Eurozone” philosophy.

Outside Europe, Africa and the Middle East, APEC represents the third major region, includes economies large and small, and is a suitable forum to start such an initiative: the development of a common standard and the harmonisation of basic implementation of open data. There is no compelling reason not to coordinate with other regions.

Unlike technology standards, the community will not be able to establish open data without government support. Operating consistently can help reduce regulatory burdens in any single economy.

A common approach acknowledges we can achieve more together than apart.

Steps to achieve open data in APEC

The key steps to achieve open data in the region could be the following:

1. Acknowledgement that open data is important and should be encouraged where appropriate;
2. Agree that consistent standards, with domestic regulatory control (so that each economy has ultimate control of the policy, security, networks and technology of their open data implementations) is beneficial;
3. Identify use cases that are important to standardise (e.g., digital identity interoperability, bank account & transaction information, payments);
4. Recommend implementation of standards, providing baseline guidance and sandboxes to test consistency;
5. Establish common principles of open data across the region; and
6. Implement agreed recommendations in each economy: as laws, regulations and through technical infrastructure (with the potential for shared infrastructure models).

Who should be involved?

Development of the standards should involve key stakeholders representing APEC economies, including:

- Financial services regulators
- Domestic open data regulators;
- Banks and financial institutions;
- Regional associations representing people, and organisations of interest;
- Policymakers from finance ministries/treasuries; and
- Fintechs.

The forum recommends that APEC form a working group to establish key use cases in a phase one of open data, focusing on open banking, critically:

1. Obtain balance and account details;
2. Obtain transaction history;
3. Standardised digital identity; and
4. Initiate credit transfer.

Once identified and agreed, over time, to recommended standards and practices. To then gradually extend use cases across financial services and beyond in accordance with the steps mentioned above.

Conclusion

Regional agreement on a standard open data framework represents a generational innovation that could provide a positive impact to member economies, and speed the adoption of technology for the benefit of all people in the Asia-Pacific region. Through the development of regionally agreed open data guidance, we have an opportunity to help shape that future to accelerate growth and advance people's lives.

APEC can leverage existing platforms for public-private sector collaboration, such as the APFF, a policy initiative under the APEC Finance Ministers' Process, to provide technical support to member economies in undertaking these efforts.

ANNEX: ROUNDTABLE AGENDA

(Times displayed are Singapore Time)

1230-1245	OPENING PROCEEDINGS Welcome Remarks on behalf of EPA Asia Ms. Camilla Bullock, CEO, EPA Asia Welcome on behalf of the ABAC Finance and Economics Working Group Mr. Hiroshi Nakaso, Chair, ABAC Finance and Economics Working Group; and Chairman, Daiwa Institute of Research Welcome on behalf of the ASEAN Bankers' Association and APFF Mr. Kobsak Duangdee, Secretary General, Thai Bankers' Association and Chair, Asia-Pacific Financial Forum
1245-1325	SESSION 1 Current State of Play Moderator: Dr. Brad Pragnell, Ambassador, Emerging Payments Association Asia; and Principal, 34 South 45 North
1245-1255	Real-life Examples Mr. Pieter Franken, Director, ASEAN Financial Innovation Network (AFIN) / APIX
1255-1305	EPA Research Mr. Nikesh Lalchandani, Head of Policy, Emerging Payments Association Asia
1305-1325	Discussion
1325-1400	SESSION 2 Fireside Chat with Regulators – (1) Future Plans (2) How Regulators are Working with Incumbents and Fintechs Moderator: Ms. Simone Joyce, Chair, FinTech Australia
1325-1330	Mr. Alan Lim, Head, Fintech Infrastructure Office, Monetary Authority of Singapore
1330-1335	Mr. Paul Franklin, Executive General Manager, Consumer Data Right, Australian Competition and Consumer Commission
1335-1345	Questions by Moderator
1345-1400	Discussion
1400-1410	BREAK
1410-1445	SESSION 3 Innovation – Perspectives from the Fintech Sector, What is Working and Not Working Moderator: Mrs. Katie Mitchell, Global Head of Public Policy, Nium
1410-1420	Examples of Innovations Dr. David Haroon, Chief Data and AI Officer, Union Bank of the Philippines and Chief Data and Innovation Officer, Aboitiz Group
1420-1430	Challenges Faced by Fintechs Mr. Jakob Rost, Founder & CEO, Ayoconnect – Building Indonesia's Financial API Platform
1430-1445	Discussion

1445-1515

SESSION 4

Solutions – Open Discussion on Inter-Operable Guidelines

Moderator: Mr. Richard Lomas, Senior Vice President, Government Affairs Asia-Pacific, Citi

1445-1455 Mr. Tom Alaerts, Principal, Standards Engagement, APAC, SWIFT

1455-1505 Mr. Laurence White, Senior Advisor, Asia-Pacific, Digital Finance, Institute of International Finance (IIF)

1505-1515 **Discussion**

1515-1530

CLOSING

Closing Remarks on behalf of EPA Asia

Dr. Brad Pragnell, Ambassador, Emerging Payments Association Asia; and Principal, 34 South 45 North

Mr. Nikesh Lalchandani, Head of Policy, Emerging Payments Association Asia

Closing Remarks on behalf of APFF

Mr. Kobsak Duangdee, Secretary General, Thai Bankers' Association and Chair, Asia-Pacific Financial Forum