

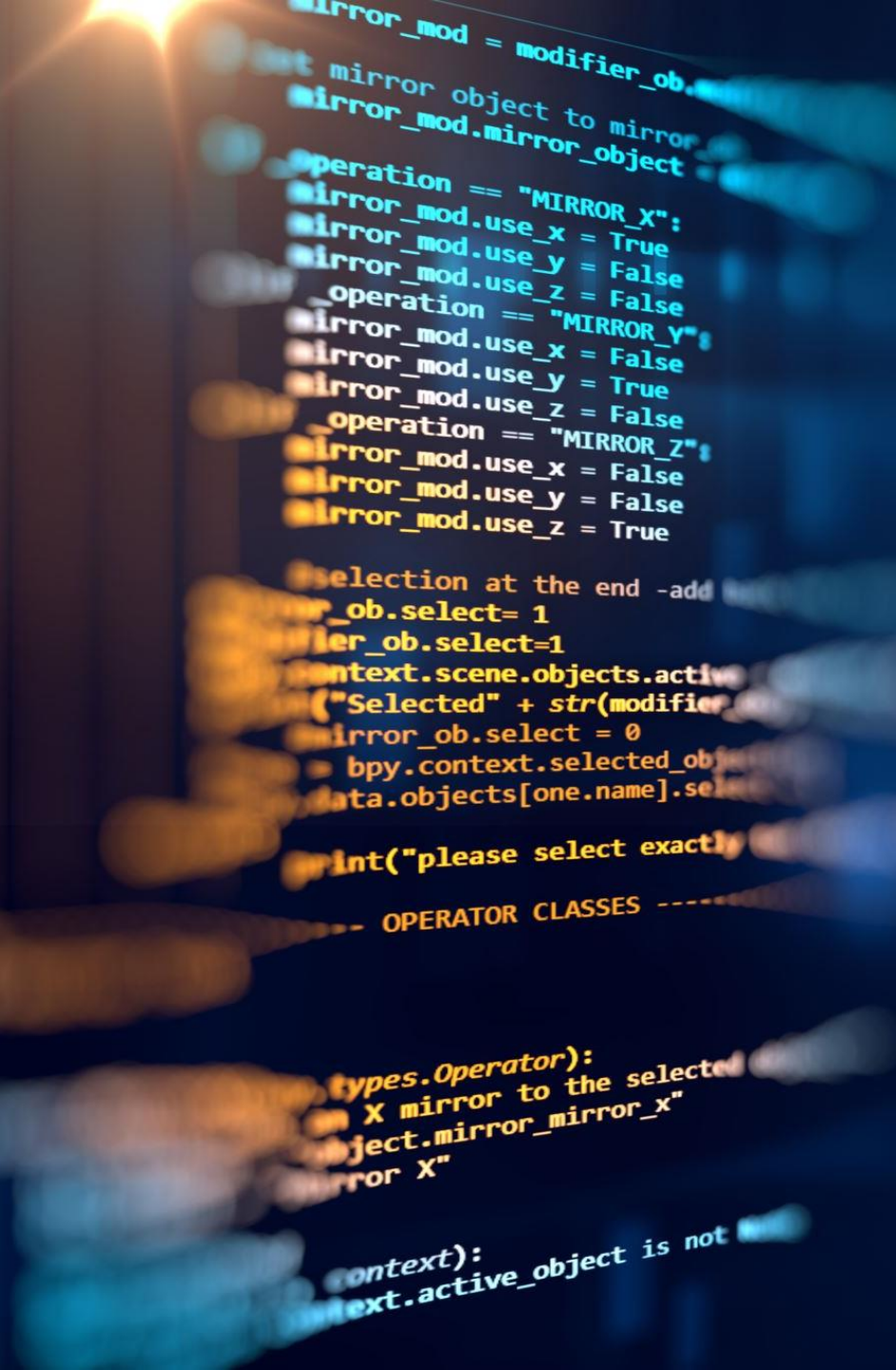
Regulatory and policy development and coordination on cyberspace: Experience from Thailand & challenges to traditional regulations

Bhumindr BUTR –INDR
Thammasat University



มหาวิทยาลัยธรรมศาสตร์
THAMMASAT UNIVERSITY





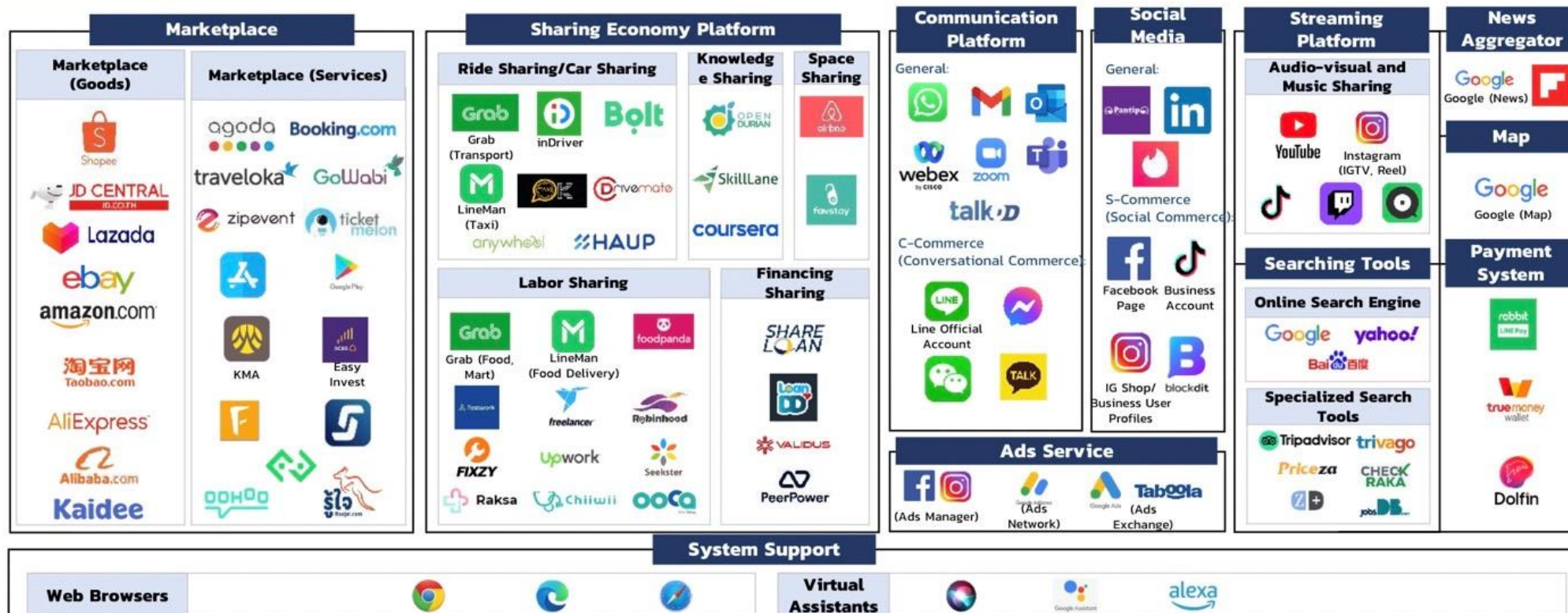
Plan

- Greetings
- Global governance of cyberspace and Sustainable Development
- COVID-19 Pandemic ,Cyber attack and Inequalities
- Cybersecurity and the Credit system for network governance enforcement mechanism
- Challenges to traditional regulations
- Principles for the future of regulation

ตัวอย่างบริการแพลตฟอร์มดิจิทัลประเภทต่าง ๆ



กระทรวงดิจิทัล
เพื่อเศรษฐกิจและสังคม

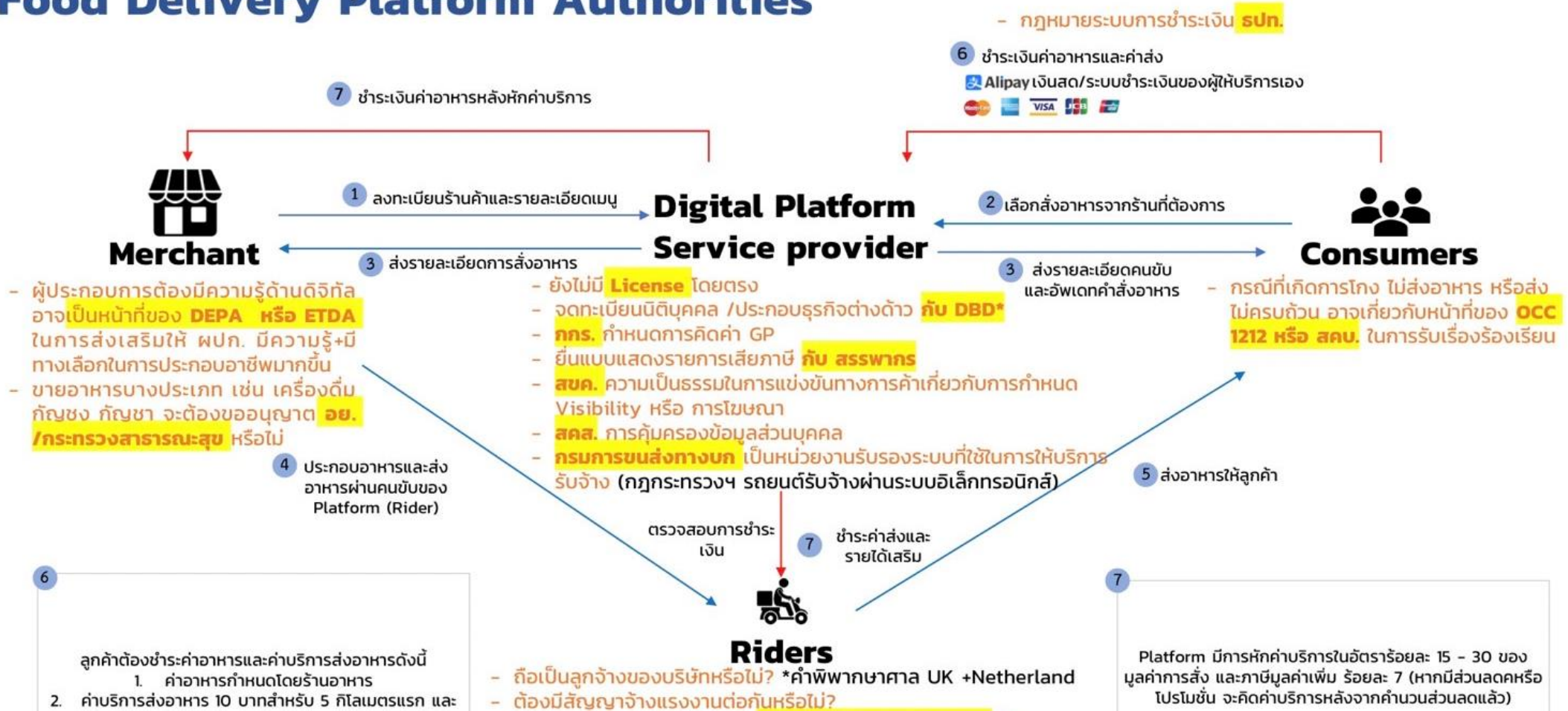


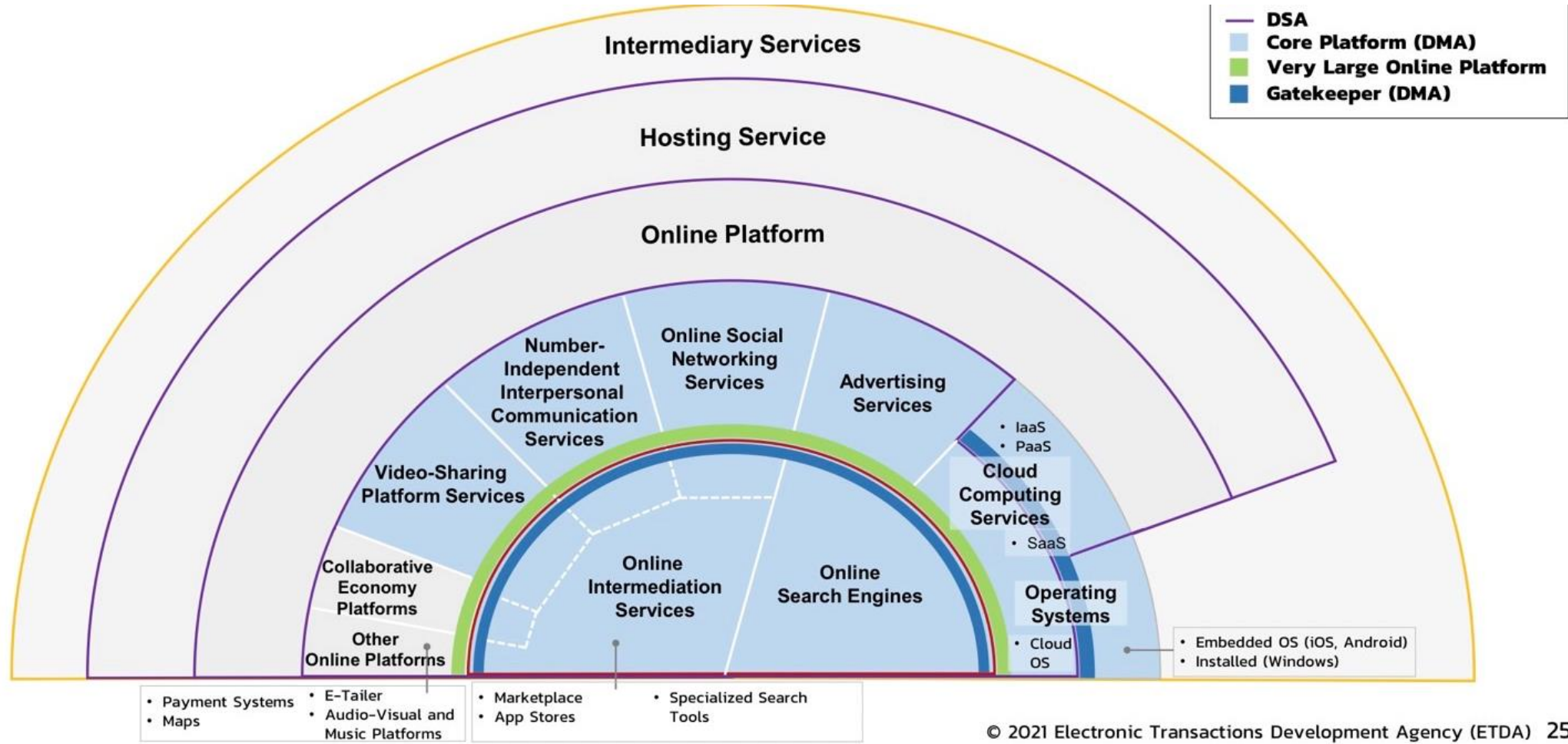
ผู้ซื้อ นิยมซื้อสินค้าผ่าน e-Marketplace มากที่สุด

ส่วนผู้ขาย นิยมขายสินค้าผ่าน Social Commerce มากที่สุด



Food Delivery Platform Authorities





Digital Services Act (DSA)

- Transparency reporting
 - Requirement on terms of service due account of fundamental rights
 - Cooperation with national authorities following orders
 - Point of contact & legal representative.
-
- Notice and action and obligation to provide information to user
 - Reporting criminal offences.
-
- Complaint and redress mechanism and out of court dispute settlement
 - Trusted flaggers
 - Measures against abusive notices and counter notices
 - Special obligations for marketplaces, e.g. vetting credentials of third-party suppliers ("KYBC")
 - Bans on targeted adverts to children and those based on special characteristics of users
 - Transparency of recommender systems
 - User facing transparency of online advertising
-
- Risk management obligations & Crisis response
 - External & independent auditing, internal compliance function and public accountability
 - User choice not to have recommendations based on profiling
 - Data sharing with authorities and researchers
 - Code of conduct and Crisis response cooperation.



	Intermediary	Hosting	Online Platform	VLOP
• Transparency reporting	✓	✓	✓	✓
• Requirement on terms of service due account of fundamental rights		✓	✓	✓
• Cooperation with national authorities following orders			✓	✓
• Point of contact & legal representative.				
• Notice and action and obligation to provide information to user				
• Reporting criminal offences.				
• Complaint and redress mechanism and out of court dispute settlement				
• Trusted flaggers				
• Measures against abusive notices and counter notices				
• Special obligations for marketplaces, e.g. vetting credentials of third-party suppliers ("KYBC")			✓	✓
• Bans on targeted adverts to children and those based on special characteristics of users				
• Transparency of recommender systems				
• User facing transparency of online advertising				
• Risk management obligations & Crisis response				
• External & independent auditing, internal compliance function and public accountability				✓
• User choice not to have recommendations based on profiling				
• Data sharing with authorities and researchers				
• Code of conduct and Crisis response cooperation.				



DSA

Online platform = a provider of a **hosting service** which, **at the request** of a recipient, **stores and disseminates** to the public information, unless that activity is a minor and purely ancillary feature of another service...

Very large Online platform = **monthly active recipients** of the service **equal to or higher than 45 million**

DMA

Core platform service

- online intermediation services;
- search engines
- social networks
- video-sharing platforms
- number-independent interpersonal communication services;
- operating systems;
- cloud
- advertising services,

Gatekeeper = more than **45 million end user and 10,000 business user**



Proposal on Digital Market Act (DMA)



คณะกรรมการ
เพื่อคุ้มครองและส่งเสริม
ผู้บริโภค



Core Platform Services

P2B

Hosting /
Online Platform

- Online intermediation services
- Online search engines
- Online social networking services
- Video-sharing platform services
- Number-independent interpersonal communication services
- Operating systems
- Cloud computing services
- Advertising services



Gatekeeper

- Has significant impact on the internal market;
- Operates a core platform service which serves as an important gateway for business users to reach end users; and
- Enjoys an entrenched and durable position in its operations or it is foreseeable that it will enjoy such a position in the near future



Do's

Obligations for Gatekeeper



Don'ts

- Allow third parties to inter-operate with the gatekeeper's own services in certain specific situations
- Allow their business users to access the data that they generate in their use of the gatekeeper's platform
- Provide companies advertising on their platform with the tools and information necessary for advertisers and publishers to carry out their own independent verification of their advertisements hosted by the gatekeeper
- Allow their business users to promote their offer and conclude contracts with their customers outside the gatekeeper's platform

- Treat services and products offered by the gatekeeper itself more favorably in ranking than similar services or products offered by third parties on the gatekeeper's platform
- Prevent consumers from linking up to businesses outside their platforms
- Prevent users from un-installing any pre-installed software or app if they wish so

Status of Digital Services Act and Digital Market Act (as of 28 December 2022)



กระทรวงดิจิทัล
เพื่อเศรษฐกิจและสังคม

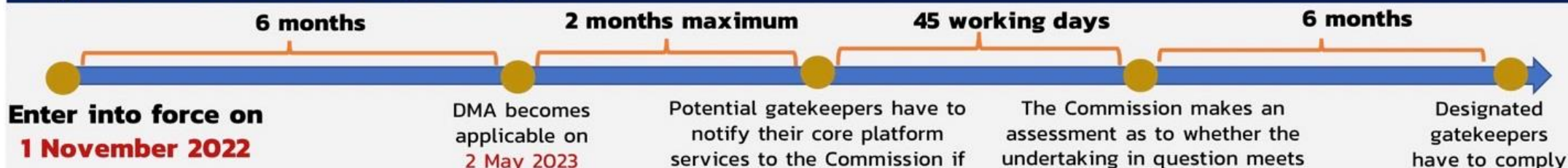


Digital Services Act (DSA)

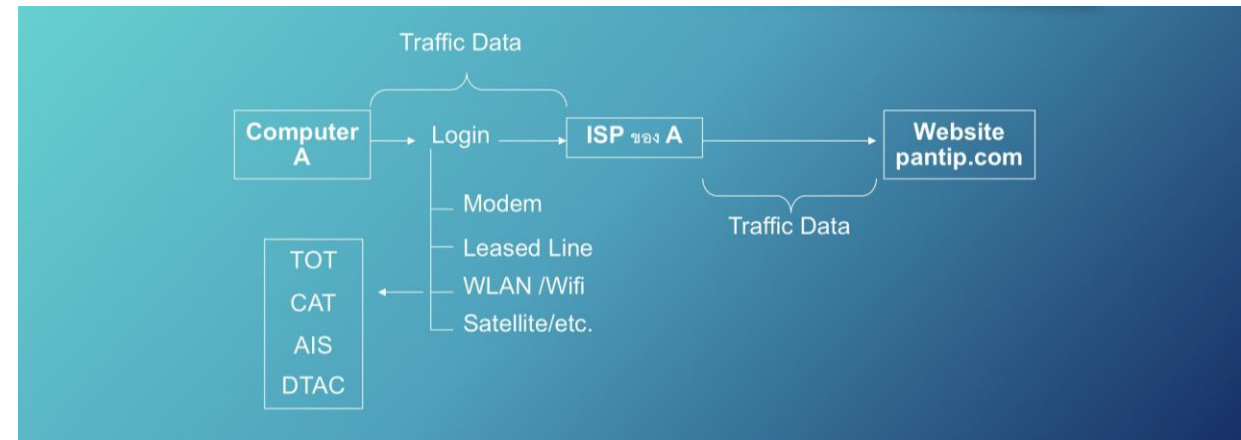
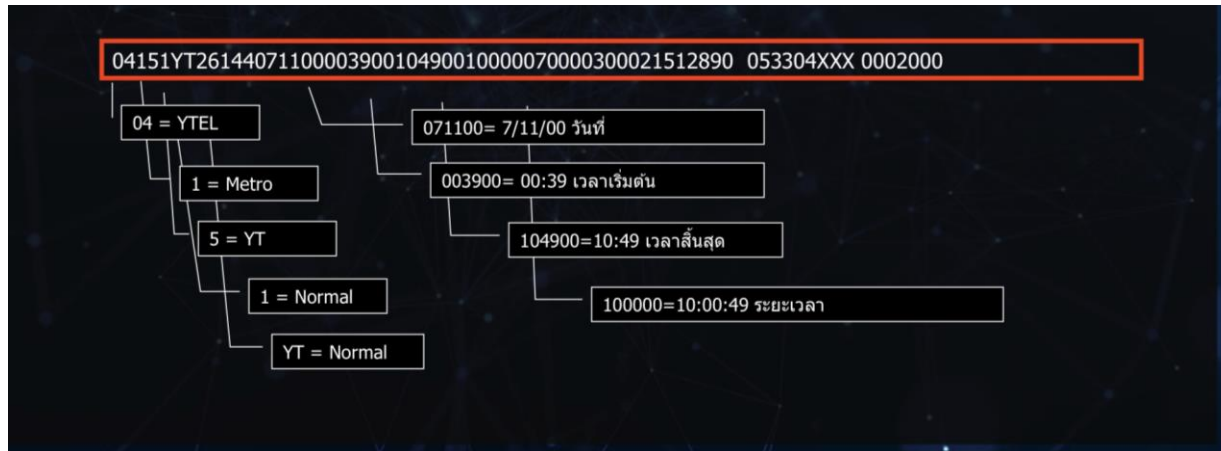


*The DSA will be directly applicable across the EU and will apply fifteen months or from 1 January 2024, whichever comes later, after entry into force. So, DSA entered into force 16 November 2022 that will apply to all regulated entities on **17 February 2024**.

Digital Market Act (DMA)

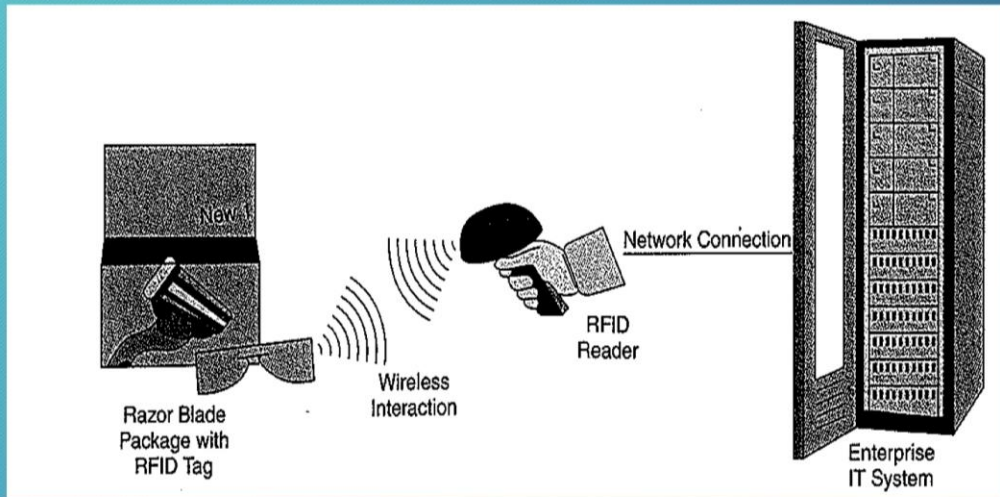
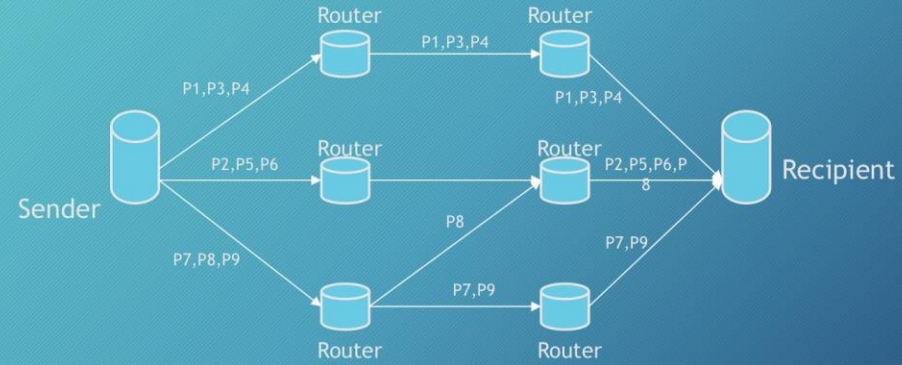


III. COVID-19 Pandemic , Cyber attacks and Inequalities

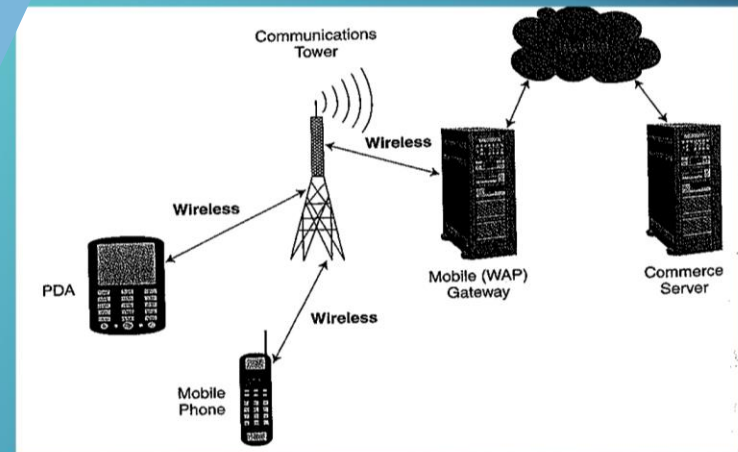


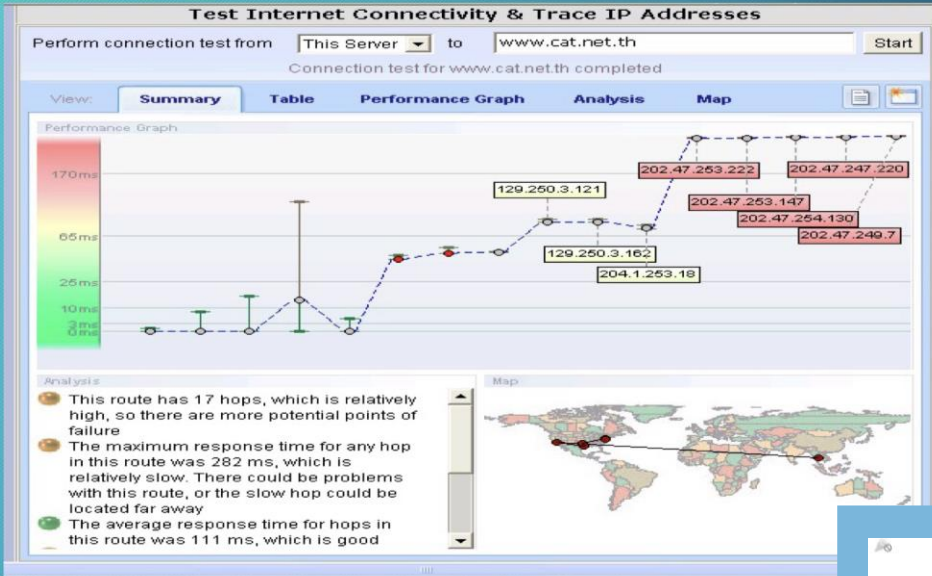
TCP/IP protocol stack

Telnet	FTP	SMTP	NFS	BOOTP	etc.,	Application layer protocols
TCP/IP		UDP				Transport layer protocols
Internet Protocol						Network layer protocols
						} Hardware layers



WAP





Time Zone Converter

THE TIME ZONE CONVERTER

Monday May 30, 2005 in GMT

DST **is not** in effect on this date/time in GMT
*Daylight Saving Time

Date: May 30 2005 (month day year)

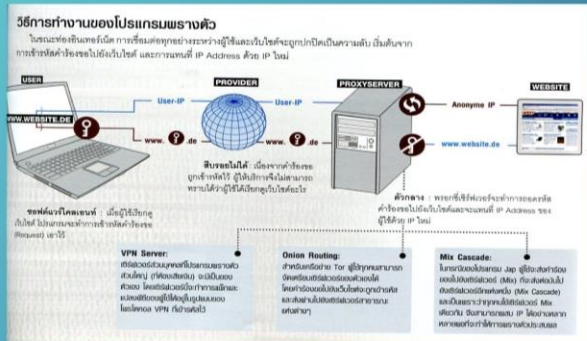
Time: 22:39:14 (HH:MM:SS) C A.M. P.M. 24-Hour
 Use Current Date/Time
▲ Uncheck this box to specify a datetime above

From Time Zone:	To Time Zone:
RQ/CHAT	Asia/Baghdad
Navajo	Asia/Bahrain
PDC	Asia/Baku
Solovkiy	Asia/Chongqing
Pacific/Apia	Asia/Beirut
Pacific/Auckland	Asia/Bishkek
Pacific/Chatham	Asia/Briset
Pacific/Easter	Asia/Calcutta
Pacific/Efate	Asia/Chobalsan
Pacific/Endebury	Asia/Chongqing

help with time zones
feedback - report problems

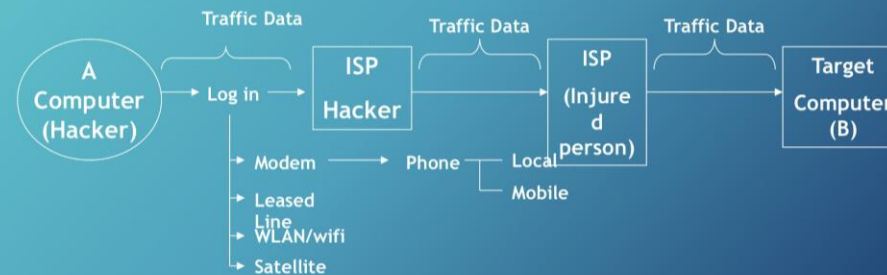
Convert
discamer

โปรแกรมพรางตัว (Anonymizers)



Preparing Case for taking legal action against hacker

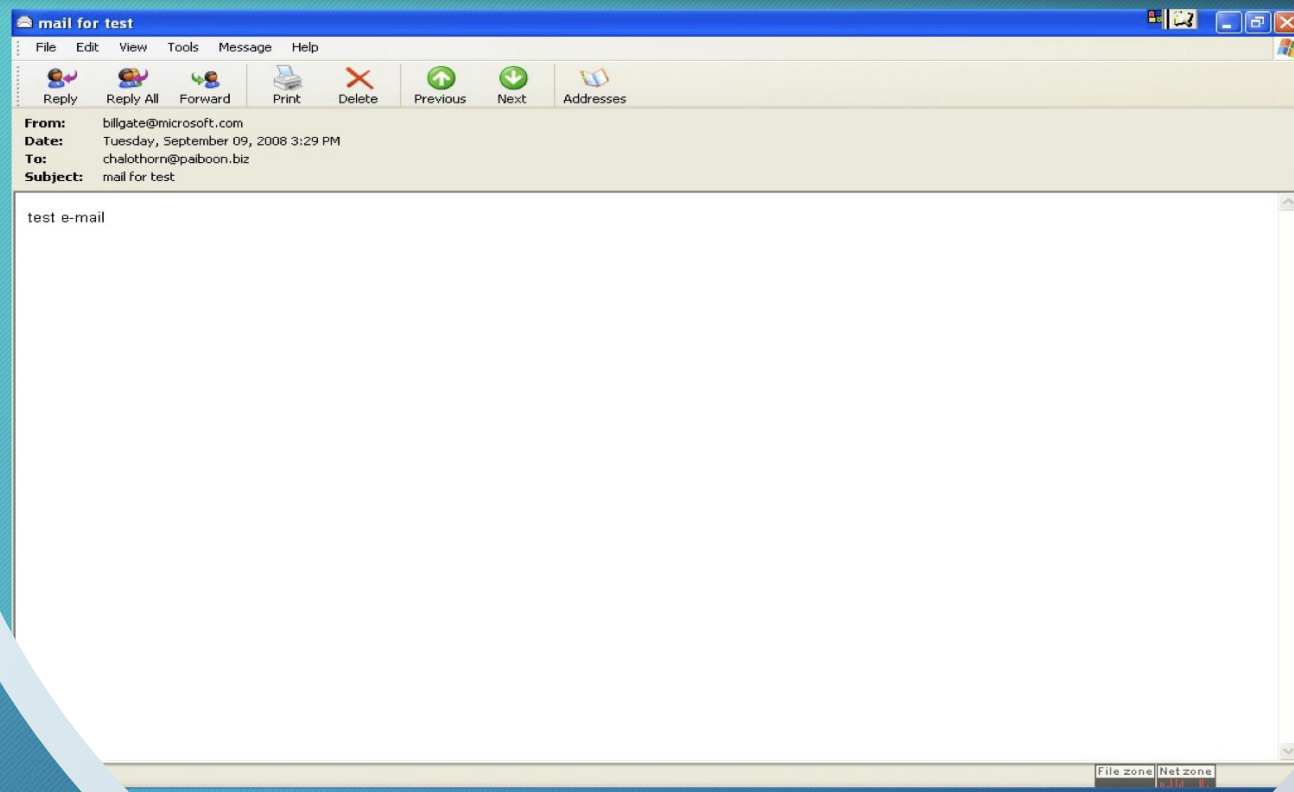
(2) กรณีการ Hack เครื่องคอมพิวเตอร์



IP Address ปลอม

IP Address ปลอม

Return-Path: billgate@microsoft.com<spare@thai-elaws.com>
 Received: from host122.elifelife.co.th [203.151.233.122] by host21.nir
 Tue, 9 Sep 2008 15:29:18 +0700
 Received: from ppp-58-8-75-16.revip2.asianet.co.th ([58.8.75.16])
 by rack.itkshost.com with smtp (Exim 4.69)
 (envelope-from <spare@thai-elaws.com>)
 id 1Kcyb3-000115-Gr
 for chalthorn@paiboon.biz; Tue, 09 Sep 2008 15:29:14 +0700
Message-ID: <17A0BE173DFB4D8784F49184D44B24DF@original>
 From: "billgate@microsoft.com" <spare@thai-elaws.com>
 To: <chalthorn@paiboon.biz>
 Subject: mail for test
 Date: Tue, 9 Sep 2008 15:29:15 +0700
 MIME-Version: 1.0
 Content-Type: multipart/alternative;
 boundary="-----_NextPart_000_0029_01C91290.D17758A0"



High Value Dataset

20 Groups of High Value Dataset/ the numbers in each group



Agriculture

8



National Statistics

7



Location

7



Economy

3



Health

3



Crime

3



Transport
Timetable

3



Election Results

3



Social and welfare

1



Accountability

1



Company
Register

1



Government
Budgets

1



Environment

1



Tourism
Information

1



Innovation and
Technology

0



Land Ownership

0



Education

0



Legislation

0



National Map

0



Weather forecast

0

Selecting High Value Dataset

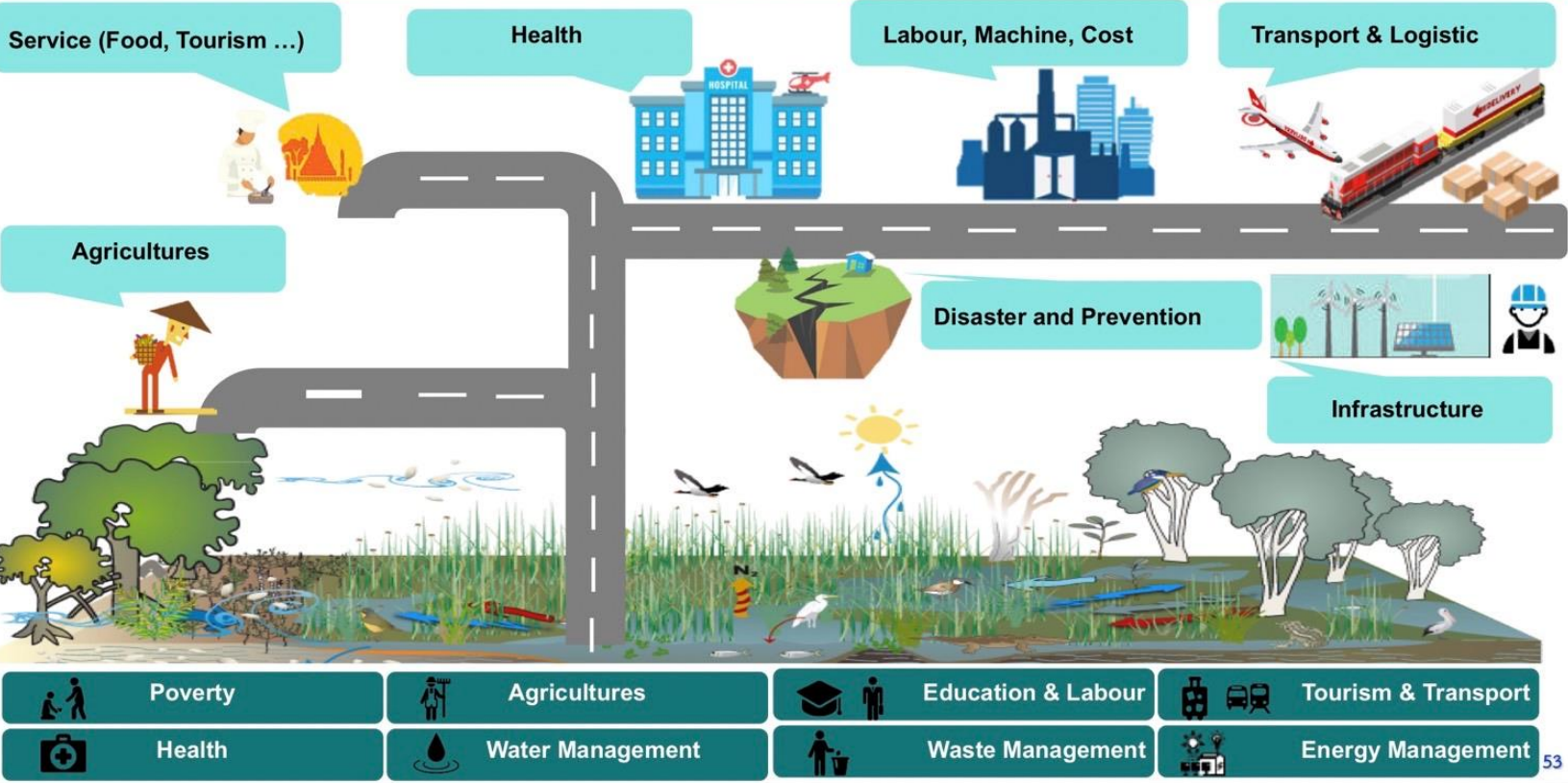
Selecting high value dataset is one of the highest impact **methods to gain more transparency**. In which, the selected dataset **need to match with the open data criteria**.

The number of High Value Dataset

High Value Dataset aspects



Data Driven for Thailand 4.0 – Big Data Agenda



One Stop Service

ทิศทางการพัฒนาศูนย์บริการเบ็ดเสร็จ

	Single electronic form	Single Electronic form	Automatic Digital Data	GDX	Digital Signature	Digital ID KYC Authentication	e-Certification /e-License	e-Payment	Digital Inbox	Single Government Platform
OSS 4.0										
	ช่องทาง	แบบฟอร์ม	เอกสารสำเนา	เชื่อมโยง	อนุมัติ	ยืนยันตัวตน	ใบอนุญาต	ชำระเงิน	รับเอกสาร	ระบบดิจิทัล
OSS 3.0										
	Online	E-form	Image File	มีบางข้อมูล	e-Signature	e-Authentication	e-Certification /e-License	e-Payment	E-mail	Website (บริการได้บางส่วน)
OSS 2.0				-						
	ตั้งโต๊ะ	กระดาษ	กระดาษ	-	ลงนาม ปากกา	มาด้วยตัวเอง	กระดาษ	จ่ายเงินสด	มารับ/ไปรษณีย์	Website (บริการได้บางส่วน)
OSS 1.0				-						

e-Tax Invoice & e-Receipt และ e-Tax Invoice by Email

การนำส่งข้อมูลให้กรมสรรพากร

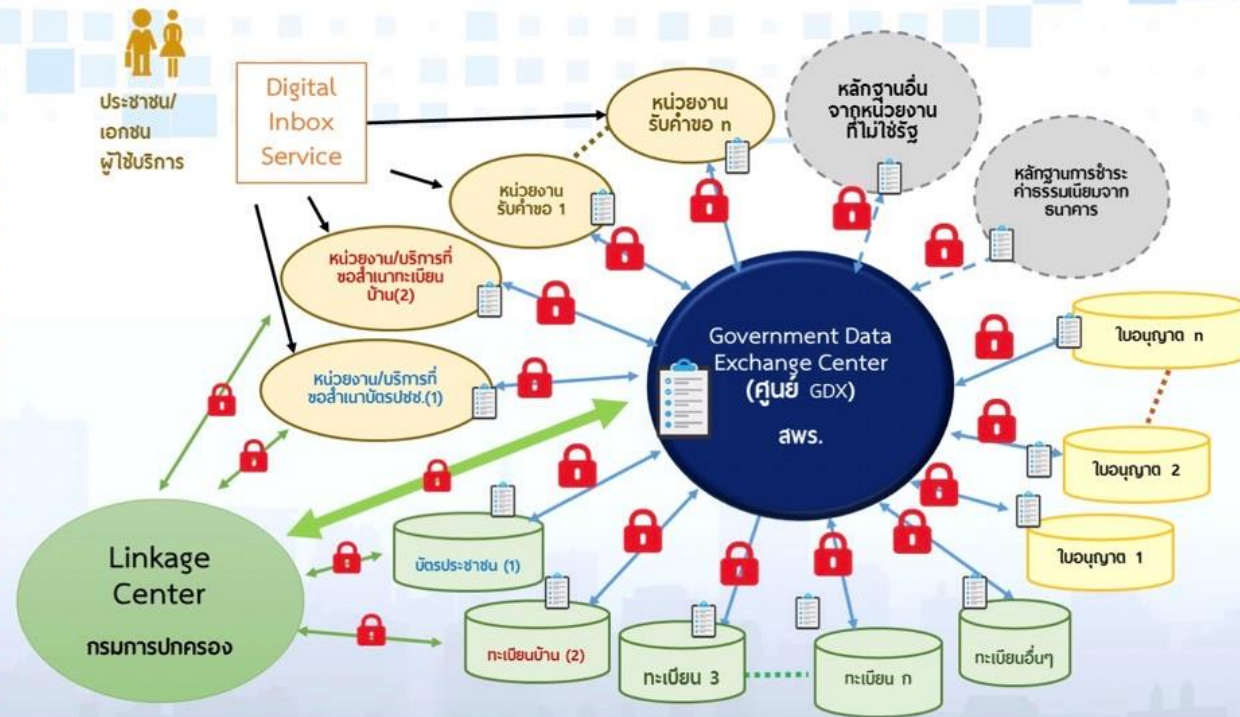


แหล่งที่มา: https://etax.rd.go.th/etax_staticpage/app/#/index/aboutinfo/overview#top

ศูนย์กลางการแลกเปลี่ยนทะเบียนข้อมูลดิจิทัลภาครัฐ (Government Data Exchange)

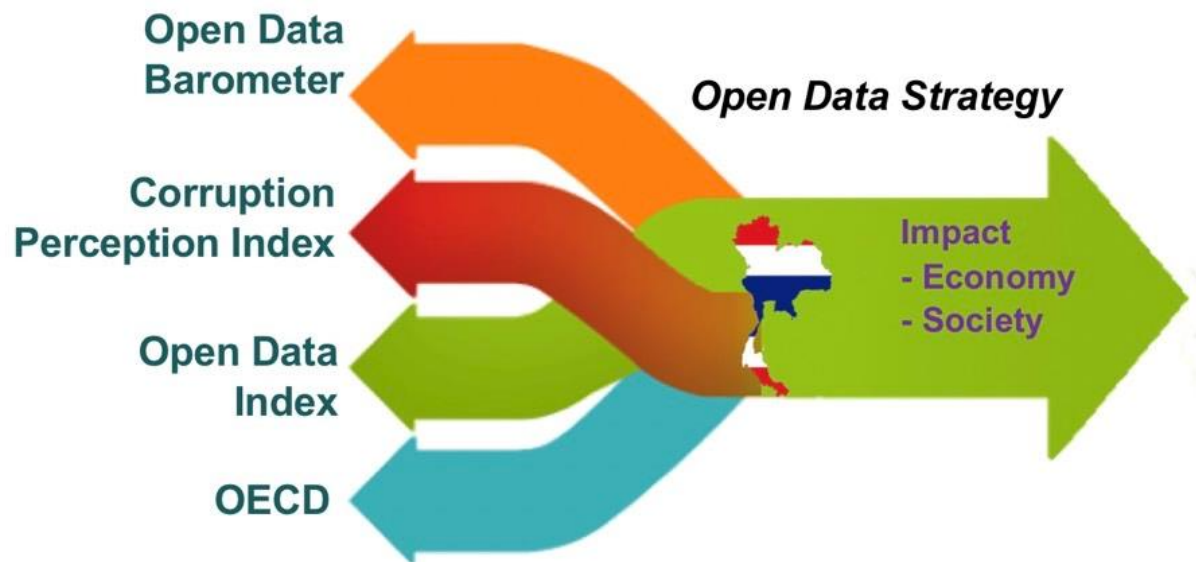
Government Data Exchange Center หรือ ศูนย์ GDx เป็นศูนย์กลางในการเชื่อมโยงแลกเปลี่ยนข้อมูลระหว่างหน่วยงานภาครัฐ โดยเป็นเสมือน “Clearing House” ที่ทำหน้าที่

- รับและส่งคำขอเอกสารประกอบจากหน่วยงานที่บริการประชาชน ภาครัฐ และภาคธุรกิจ เพื่อส่งข้อร้องขอไปยังหน่วยงานทะเบียนหรือหน่วยที่ออกใบอนุญาตผ่านทาง Digital Inbox และส่งคำข้อร้องขอต่อไปยังหน่วยงานที่กำลังบริการประชาชน พร้อมทั้ง การลงสารบรรณ รับ-ส่งที่ต้นทาง กลางทาง และปลายทาง เพื่อใช้ตรวจสอบภายหลังได้
- เอกสารที่รับ/ส่ง **ต้องเข้ารหัสลับ** โดยที่คนกลางเปิดอ่านไม่ได้



<https://gdx.dga.or.th/Account/Login?Index=Show>

Thailand's Positions in Data Global Indexes



Government data shall be considered open if it is made public in a way that complies with the principles below:

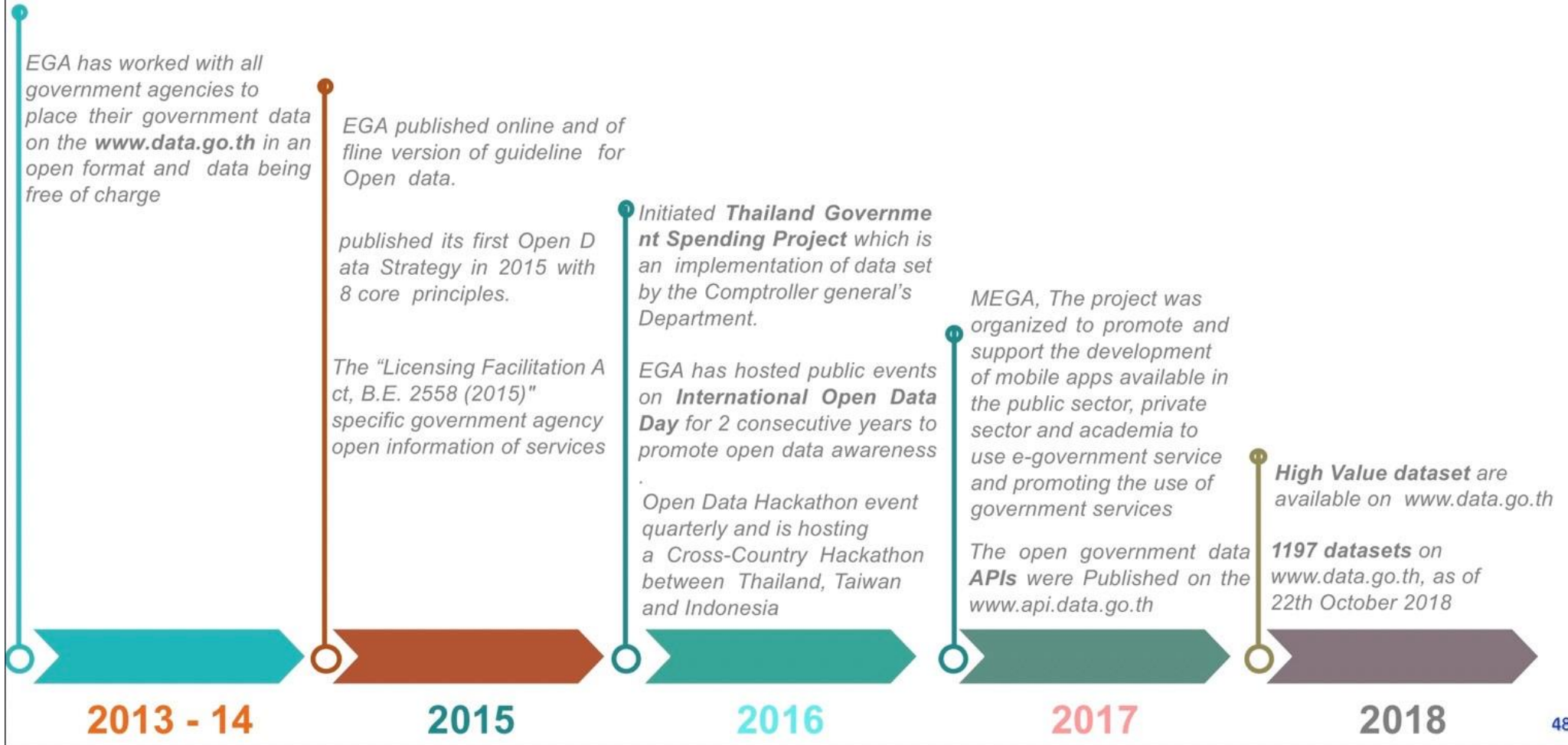
- Complete
- Primary
- Timely

- Accessible
- Machine processable
- Non-discriminatory

- Non-proprietary
- CC



Data.go.th: The story so far



2013 - 14

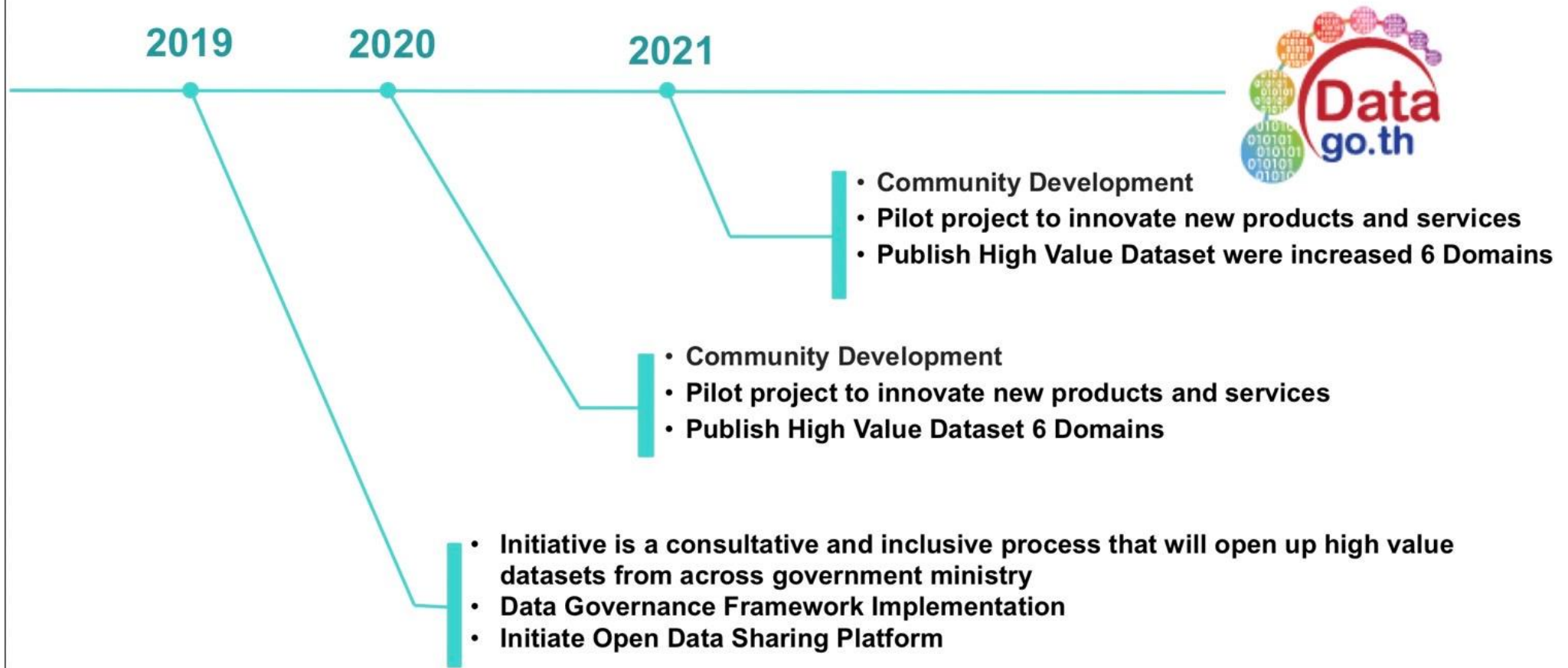
2015

2016

2017

2018

Timeline Open Data



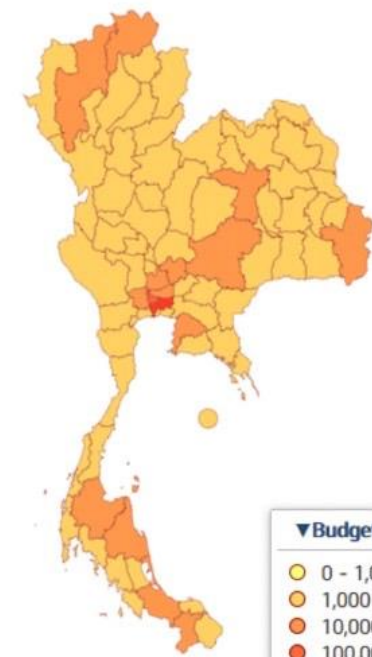
Case Study 1 - Thailand Government Spending

Tops 5 Aspects | **Functional Classification** | Expenditures Types

Budget | Expenditures



Budget Expenditures ⓘ



หมายเหตุ: ปีงบประมาณ พ.ศ. 2561 (รวม พ.ร.บ. เพิ่มเติม)

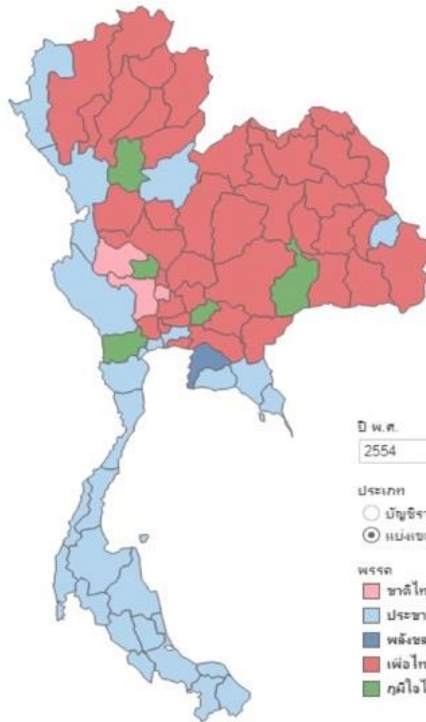
<https://govspending.data.go.th/>

Case Study 2 – Election Result



ศูนย์กลางข้อมูลเปิด
เกี่ยวกับการเลือกตั้ง
opendata.ect.go.th

หน้าหลัก ▾ สมาชิกสภาผู้แทนราษฎร ▾ สมาชิกวุฒิสภา ▾ การออกเสียงประชามติ ข้อมูลพรรคการเมือง ☰



คะแนนเสียงแบ่งตามจังหวัด: All

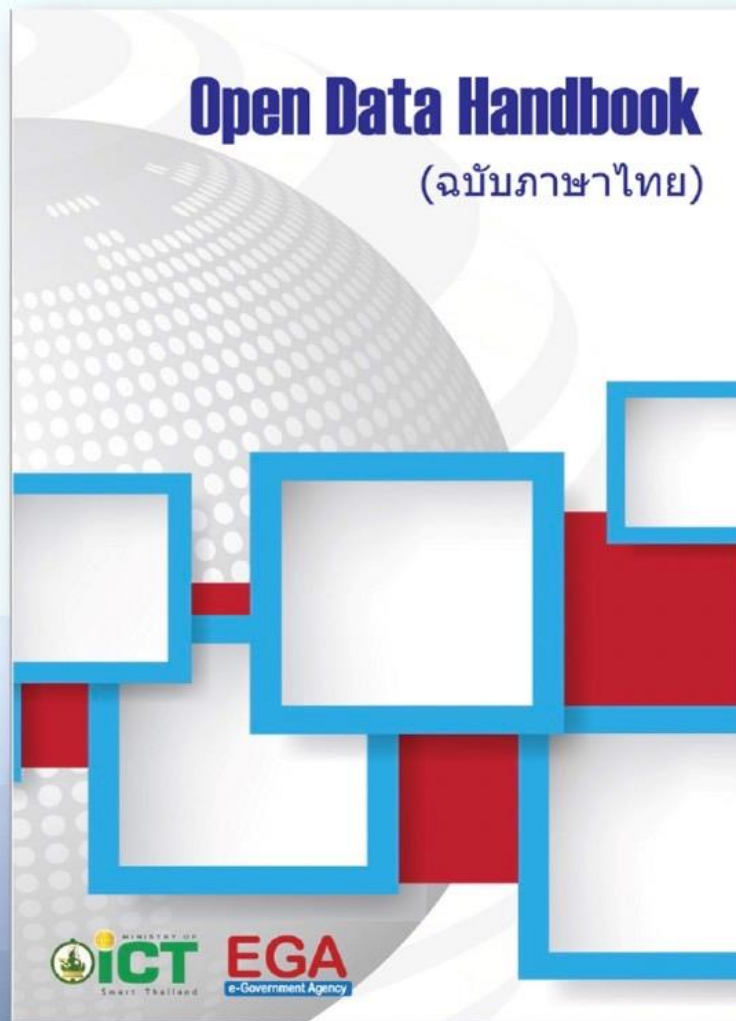
กรุงเทพมหานคร	ประชาธิปัตย์	1,356,672
	เพื่อไทย	1,284,263
	รักษ์สันติ	68,095
	ประชากรไทย	92
	ภูมิใจไทย	14,474
กระบี่	ประชาธิปัตย์	148,568
	เพื่อไทย	37,306
	มากภูมิใจ	8,765
	ภูมิใจไทย	9,683
	เครือข่ายชาวนา	662
กาญจนบุรี	ประชาธิปัตย์	183,684
	เพื่อไทย	162,552
	ภูมิใจไทย	34,112
	เครือข่ายชาวนา	1,585
	ชาติพัฒนาเพื่อ	7,927
กาฬสินธุ์	เพื่อไทย	296,535

แบ่งเขตเลือกตั้ง



รายชื่อ ส.ส. แบ่งเขตเลือกตั้ง

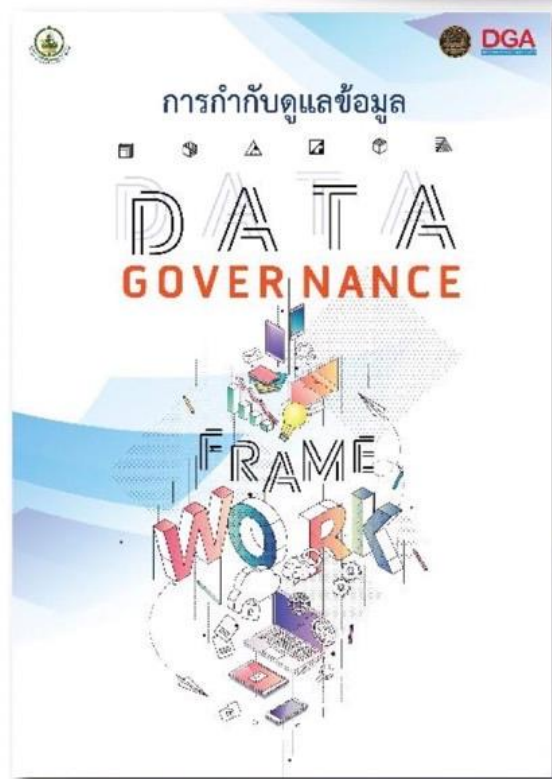
จังหวัด	เขต	ชื่อพรรค	ชื่อ ส.ส.	คะแนน
กรุงเทพมหานคร	1	ประชาธิปัตย์	นางฉิมมาท จงเลิศศิริ	40,328
	2	ประชาธิปัตย์	นางสาวจอนงค์ กาญจ...	52,178
	3	ประชาธิปัตย์	พ่่อมเหลวมอภิมงคล...	47,982
	4	ประชาธิปัตย์	นายอเนก มุรพชัยตรี	44,621
	5	เพื่อไทย	นางสาวสิลาวัณ วิษ...	38,206
	6	ประชาธิปัตย์	นายธนา ชีวีดิษฐ์	51,501
	7	ประชาธิปัตย์	นายศุทธิพงษ์ ปุณณ...	38,470
	8	ประชาธิปัตย์	นายสรรเสริญ สมะลา...	43,293
	9	ประชาธิปัตย์	นายอรุณวิชัย สุจร...	42,352
	10	ประชาธิปัตย์	นายชัยเชษฐา คงจก...	32,306
	11	เพื่อไทย	นายสุรชาติ เกษนทอง	28,376
	12	เพื่อไทย	นายดำรง ไชยกุล	38,351
	13	เพื่อไทย	นาวาอากาศเอกสุ...	51,765
	14	เพื่อไทย	นายอัครพันธ์ ปิ่นทอง	49,829
	15	ประชาธิปัตย์	นายณัฐกร บรรจกั...	37,260



สามารถดาวน์โหลดคู่มือได้ที่

<https://data.go.th/Documents.aspx>

ดาวน์โหลดฟรี หนังสือ การกำกับดูแลข้อมูล Data Governance



ดาวน์โหลดได้ที่ <https://www.dga.or.th/th/profile/2108/>

VI- challenges to traditional regulations

- 1. ELECTRONIC TRANSACTIONS DEVELOPMENT AGENCY ACT, B.E. 2562 (2019)
- 2. ELECTRONIC TRANSACTIONS ACT, (NO. 4) B.E. 2562 (2019)
- 3. EMERGENCY DECREE ON ELECTRONIC MEETINGS, B.E. 2563 (2020)
- 4. ROYAL DECREE PRESCRIBING CIVIL AND COMMERCIAL ELECTRONIC TRANSACTIONS EXCLUDED FROM THE APPLICATION OF THE LAW ON ELECTRONIC TRANSACTIONS, B.E. 2549 (2006)
- 5. Royal Decree Prescribing the Rules and Procedures of the Public Sector's Electronic Transactions B.E. 2549 Royal Decree Regarding Security Techniques in Performing Electronic Transactions B.E. 2553
- 6. NOTIFICATION OF MINISTRY OF DIGITAL ECONOMY AND SOCIETY RE: STANDARDS FOR MAINTAINING SECURITY OF MEETINGS VIA ELECTRONIC MEANS B.E. 2563 (2020)
- 7. Personal Data Protection Act, B.E. 2562 (2019)
- 8. Computer Crime Act B.E. 2550 (2007) amended in B.E. 2560 (2017)
- 9. Copyright Act (No.5) B.E. 2565 (2022)
- 10. Emergency Decree on Digital Asset Businesses B.E. 2561-
- Source-<https://www.etda.or.th/th/Useful-Resource/laws-sharing.aspx>

V. Principles for the future of regulation

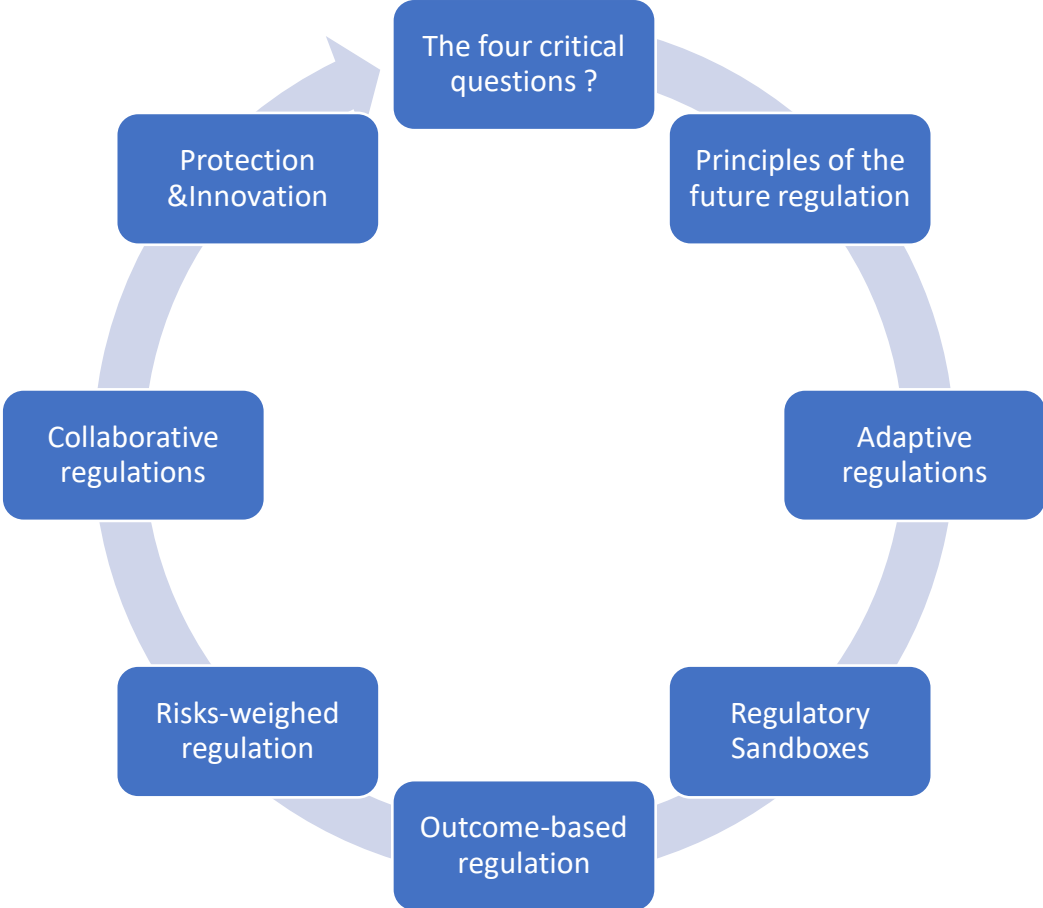


Figure 2. The four critical questions

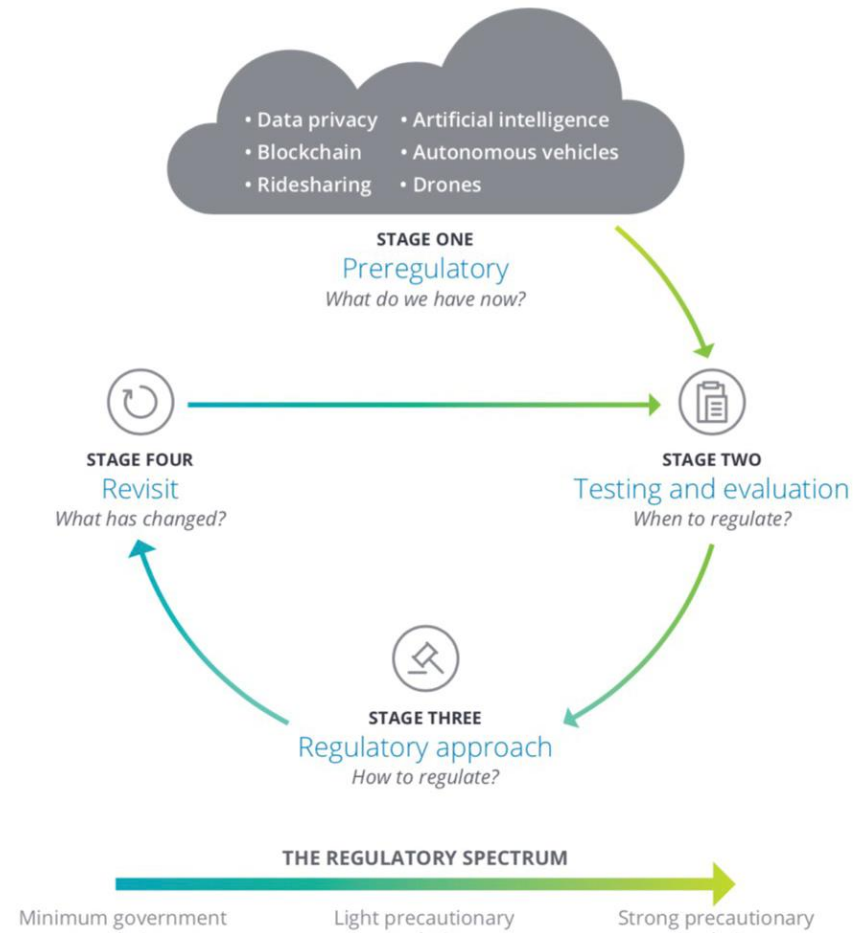


Figure 4. Principles for the future of regulation



Source: Deloitte Center for Government Insights analysis.

Deloitte Insights | deloitte.com/insights

Adaptive Regulation

Fake noise will be added to new electric cars starting today in the EU

A safety feature for pedestrians

By [Jon Porter](#) | [@JonPorty](#) | Jul 1, 2019, 6:58am EDT

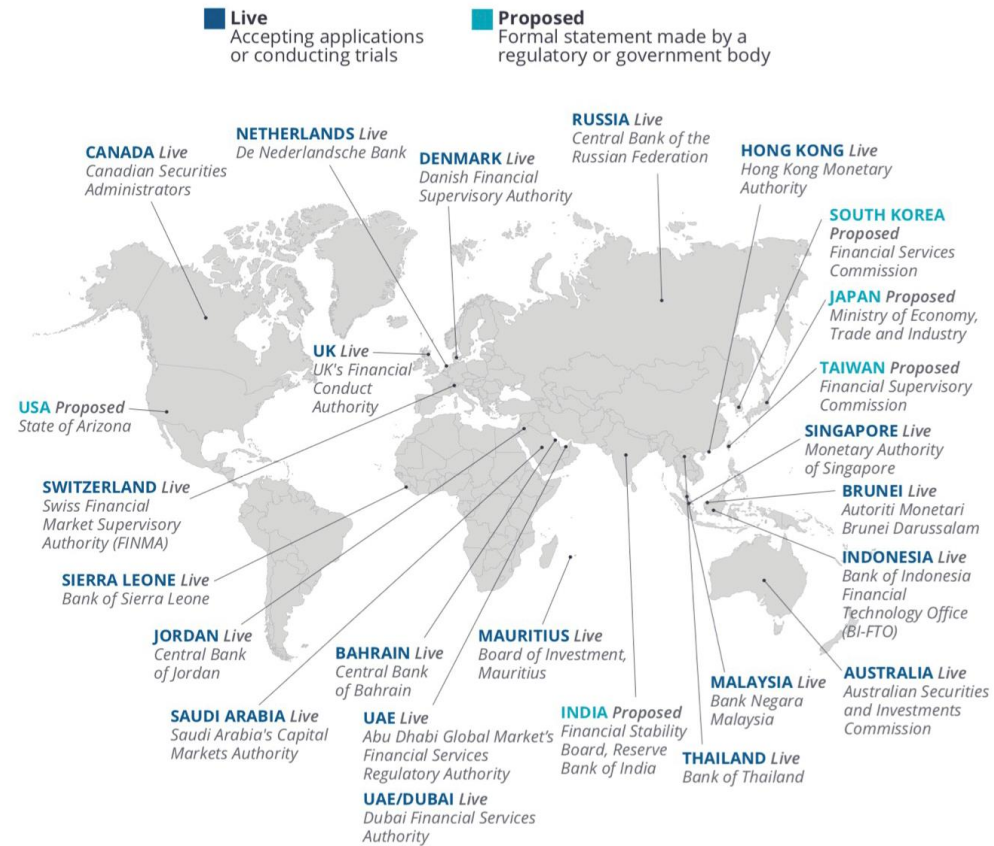
[f](#) [t](#) [SHARE](#)



Photo: Greg Gifford/The Verge

Regulatory Sandbox

Figure 5. Map of regulatory sandboxes



Outcome-based Regulation

Table 2.1. Drone Legislation Approaches, by Country

Approach	Definition	Countries
Outright ban	Countries do not allow drones at all for commercial use.	<ul style="list-style-type: none"> • Argentina • Barbados • Cuba • India • Morocco • Saudi Arabia • Slovenia • Uzbekistan
Effective ban	Countries have a formal process for commercial drone licensing, but requirements are either impossible to meet or licenses do not appear to have been approved.	<ul style="list-style-type: none"> • Algeria • Belarus • Chile • Colombia • Egypt • Kenya • Nicaragua • Nigeria
VLOS required	Drones must be operated within VLOS of the pilot, thus limiting their potential range.	<ul style="list-style-type: none"> • Belgium • Bermuda • Bhutan • Botswana • Croatia • Ecuador • Jamaica • Latvia • Lithuania • Luxembourg • Mexico • Nepal • Netherlands • Slovakia • South Africa • South Korea • Switzerland • Thailand
Experimental BVLOS	Exceptions to the constant VLOS requirement are possible with certain restrictions and pilot ratings.	<ul style="list-style-type: none"> • Australia • Austria • Brazil • Canada • China • Czech Republic • Denmark • Finland • France • Germany • Greece • Guyana • Ireland • Japan • New Zealand • Panama • Poland • Rwanda • Singapore • South Africa • Sri Lanka • Russia • Trinidad and Tobago • Uganda • United Kingdom • United States
Permissive	Countries have enacted relatively unrestricted legislation on commercial drone use. These countries have a body of regulation that may give operational guidelines or require licensing, registration, and insurance, but upon following proper procedures it is straightforward to operate a commercial delivery drone.	<ul style="list-style-type: none"> • Costa Rica • Iceland • Italy • Norway • Sweden • United Arab Emirates



Consider three different ways of structuring UAS regulations:

- You must have a license to fly a drone with more than xx kilowatts of power (input—not very helpful).
- You cannot fly a drone higher than 400 feet, or anywhere in a controlled airspace (output—better).
- You cannot fly a vehicle in a way that endangers human life (outcome—best; addresses the impact or effect it has).

Risk-weighted Regulation

The pilot intends to look “first at the software Developer or digital health technology developer, not the product.”

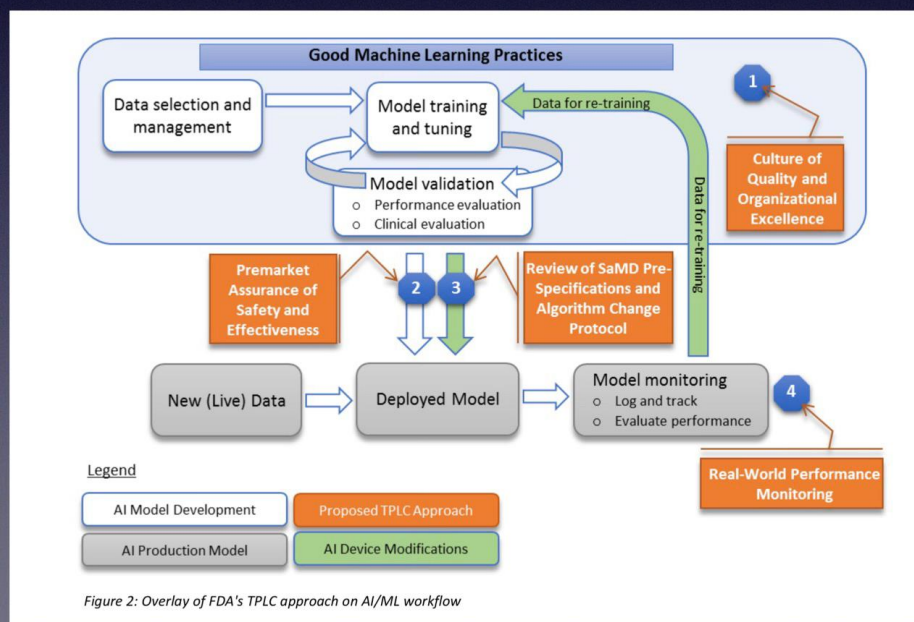
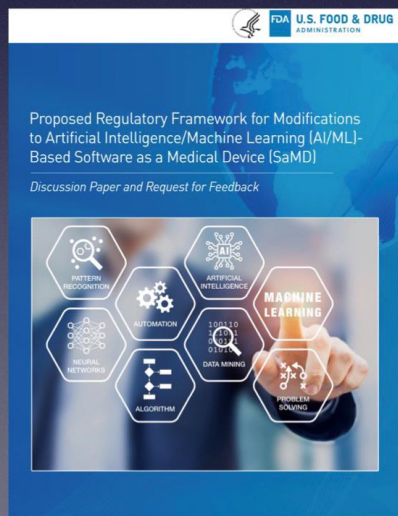


Figure 2: Overlay of FDA's TPLC approach on AI/ML workflow

Collaborative Regulation



Bank of Thailand Regulatory Sandbox



ธนาคารแห่งประเทศไทย
BANK OF THAILAND

ความคืบหน้าการทดสอบใน Regulatory Sandbox

ตั้งแต่ ม.ค. 60 ถึงปัจจุบัน มีโครงการเข้าร่วมทดสอบใน Regulatory Sandbox ดังนี้

Standardized QR Code



- ชำระเงินด้วยมาตรฐาน Thai QR Code 19 โครงการ
 - **PromptPay**
Exit 11 แห่ง
 - **Credit/Debit Card**
Exit 4 แห่ง
Testing 4 แห่ง

Biometrics



- ใช้ Facial Recognition ในกระบวนการ KYC
Testing 10 แห่ง
- ยืนยันตัวตนด้วย Iris Recognition
Testing 1 แห่ง

Blockchain



- จัดการหนังสือค้ำประกัน (LG)
ผู้ร่วมทดสอบ:
 - ธนาคาร 8 แห่ง
 - ธุรกิจและรัฐวิสาหกิจ 7 แห่ง
- โอนเงินระหว่างประเทศ
Testing 3 โครงการ

Machine Learning



- Alternative Credit Scoring/Info. based lending
Testing 1 แห่ง

Standardized API



- API แลกเปลี่ยนข้อมูลระหว่าง ธพ. และ FinTech firm
Testing 1 แห่ง

Protection VS Innovation

Cross-sector challenges | Regulation



Existing regulatory regimes often struggle to keep pace with emerging technologies, creating roadblocks in the deployment of AI capabilities



Prescriptive regulations are currently limiting the advancement of AI in financial services. Inflexible requirements and regulators' limited resources constrain their ability to keep up with the rapid pace of change, creating significant regulatory uncertainty for institutions seeking to use new technologies

— Notable regulation challenges include



Complexity of regulatory frameworks

"Institutions must consider how to develop AI while staying compliant, which is not the easiest path when implementing new offerings"

Interpreting regulatory requirements for AI-based solutions is complex, as these frameworks were not designed with AI applications in mind; this exposes institutions to making mistakes in the adoption of AI



Lack of standards for identity

"Increased flows of data are crucial to the enablement of AI, but are not without their costs"

Realizing the benefits of AI requires the continuous flow of personal data across institutions. Robust authentication and verification methods that are standardized across institutions are necessary to ensure security and privacy, and minimize the risk of fraud or other undue harms



An undefined liability model

"If AI-powered decisions result in amplified losses, who becomes liable?"

AI introduces ambiguity into responsibility in the event of loss or negative outcomes. Institutions are hesitant to use third-party services for AI systems as regulators will likely hold the primary institutions responsible if there are damages to recover



Fragmented data-sharing regulations

"The success or failure of firms' global ambitions will be determined by the regulatory environment of their local geographies"

The fragmented nature of regulation across nations segments the pace of AI innovation and the structure of financial services by region. Strategic national competition also makes regulatory coordination difficult, creating barriers for adoption and stalling investment



Auditability of new systems

"Algorithm-driven AI solutions are often complex black boxes even to the creator"

While regulators require audits of new processes (e.g. to verify independence), many AI processes are not easy to audit (e.g. traditional interim working steps are often skipped entirely), raising questions around when an audit is or isn't necessary



Tendency to avoid risk

"Uncategorized risks introduced by AI into the ecosystem are intimidating to tackle"

Regulators are continuously challenged to create the optimal balance between enabling innovation and mitigating risks. However, the complexity surrounding AI, combined with regulators' natural tendency to be cautious, suggests that regulatory frameworks are likely to lean in favour of risk mitigation

Project for preparation of draft legislation on application of artificial intelligence and related impact assessment



Key mechanism 1: AI technological sandbox

Objectives

Division 2 of the (Draft) Act

which will allow further development and consideration on risk and regulations

Key measures

- ETDA provides direct support to AI firms with technical and legal advice
- ETDA provides indirect support to AI firms by facilitating requests from developers/businesses to receive support from public agencies with jurisdiction related to the testing
- Enable field tests to be conducted, with appropriate safety measures for people and environment in testing area
- Provide means to receive exception from related regulations during testing, where ETDA supports by coordinating with public agencies with jurisdiction related to the regulations

Draft Notification of the Agency (ETDA) to realise this instrument

- Detailed outline of qualifications and process of application to participate in AI technological sandbox
- Requirements of ETDA and the firm to mitigate potential risks of field testing, such as notifying people in the area and preparing compensation plan for harm/damages, and authority of ETDA to order changes or discontinuation of testing
- Requirement of the firm to report test results and evaluation to ETDA, for example, risk, frequency of human intervention and unexpected outcomes
- Conditions of exception from regulations, for example, the firm is not to be exempt from civil and criminal liabilities in any case

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Key mechanism 2: Risk assessment framework

Division 5 of the (Draft) Act

Objectives

- To provide guidance for trustworthy AI development by design, with comprehensive measures for risk management
- To ensure AI products and services that involve separate parts being provided by different entities are managed interconnectedly as a system

Key measures

- Defining AI risk assessment framework (criteria and methods of AI system risk assessment) for AI actors to perform risk assessment and design and implement risk management measures
- Authorising actors related to risk assessment to related actors to create a list of AI systems that must be operated with high caution
- ETDA reviews the framework when deemed appropriate, with duty to publicise on its website
- For any AI usage with potential risk to health, safety, or basic rights of the people, ETDA performs impact assessment and notifies related

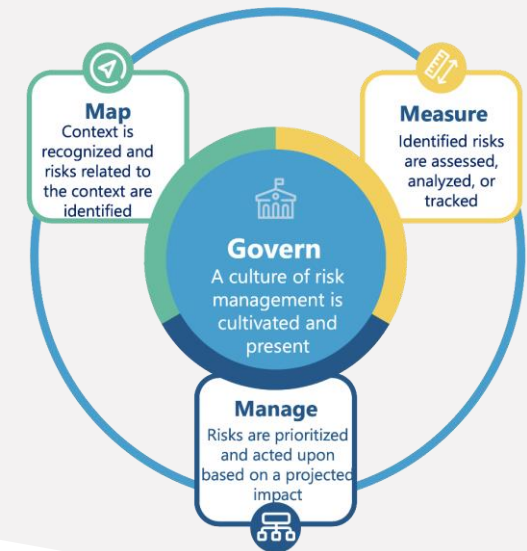
Draft Notification of the Agency (ETDA)

to realise this instrument

- Outline of AI risk assessment framework covering all AI actors (entities involved in AI lifecycle) for voluntary use by periodically conducting risk assessment and producing reports

Characteristics of trustworthy AI systems

- Valid and reliable
- Safe
- Secure and resilient
- Accountable and transparent
- Explainable and interpretable
- Privacy-enhanced
- Fair – with harmful bias managed



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Key mechanism 3: Data sharing

Objectives

Division 2 of the (Draft) Act

generating economic value of data

- To ensure legal compliance, including privacy protection, of data sharing

Key measures

- Producing a guideline, with good practice and advice on data sharing to diffuse knowledge and skills on data sharing
- Providing promoting mechanism, support, or assistance for innovations that increases capacity and efficiency of data sharing
- Providing recommendations and advice for public agencies and private entities, and coordinating with public agencies and private entities for data sharing
- ETDA may require firms that operate as platforms for data sharing with data buyers and sellers to register with the Agency, on which the Agency shall produce a Notification defining rules, conditions, and qualifications of such platform.

Draft Guideline on Data Sharing

as an instrument to promote data sharing with value, and establish good practice

- Data categorisation for data sharing, considering the degree of privacy and confidentiality of the dataset
- Advice on creating high-value dataset for sharing, with rubrics such as usefulness, completeness, and consistency
- Outline of approaches for valuation of data as basis for data pricing, including market-based, cost-based, and future-value-based approaches
- Essential points of data sharing contract (or MOU), with examples of good practice

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Key mechanism 4: AI standardisation

Division 3 of the (Draft) Act

- To create rigorous mechanism for defining national standards of AI and accredited certification body, in line with good practice of National Quality Infrastructure (NQI)

Key measures

- ETDA defines AI standards that are fitting with category, size, and characteristics of AI-related firms
 - Firms certified for meeting the defined standards are awarded certification marks, which shall be displayed in a prominent place (easily visible) at the headquarters or website
 - ETDA may disclose lists of firms certified for certain standards on the Agency's website in case the standard(s) pertain high impact on consumers
 - ETDA may accredit private sector organisations as certification body or inspection body
- * No instrument for this mechanism has been prepared in this project

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Objectives

Key mechanism 5: Standard contractual clauses

Division 4 of the (Draft) Act

Key measures

- Defining standard contractual clauses between AI products/services providers and users of products/services with AI system as a part of the products/services that the contracts **must include**:
 - ✓ Duties and responsibilities of AI products/services providers to the user
 - ✓ Guarantee of service quality standard by the provider
 - ✓ Complete details on range of fees (price) and types of fees chargeable for the user to receive service provision
 - ✓ If the AI products/services provider has advertised service quality standard of their products/services, it is the duty of the provide to fulfill the advertised level of products/services, and the advertisements shall be considered a part of the contract
- And **must not include**:
 - ✓ Limiting utilisation of the products/services by the users without justifiable reason
 - * No instrument for this mechanism has been prepared in this project
 - ✓ Conditions that imply discrimination, segregation, or exclusion towards the user, or that is unjust for one of the contracting parties

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