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Digitization, IT-Enabled Services and New Business Models

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Digitization, IT-Enabled Services and New Business Models

Framing Policies for the Digital Economy



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Agenda

1. Understanding the Digital Economy

2. Establishing a Digital Economy

- Approaches
- Case Studies
 - *Malaysia*
 - *Thailand*
 - *Vietnam*
- Comparative Assessment

3. Recommendations

Requirements for a Digital Economy



Digital Economy and Society

- Digitization of public service delivery, social interactions and commercial transactions
- Creation of inclusive and integrated society

Multi-modal Platforms

- More 'things' coming online
- Services, content and processes → platform agnostic

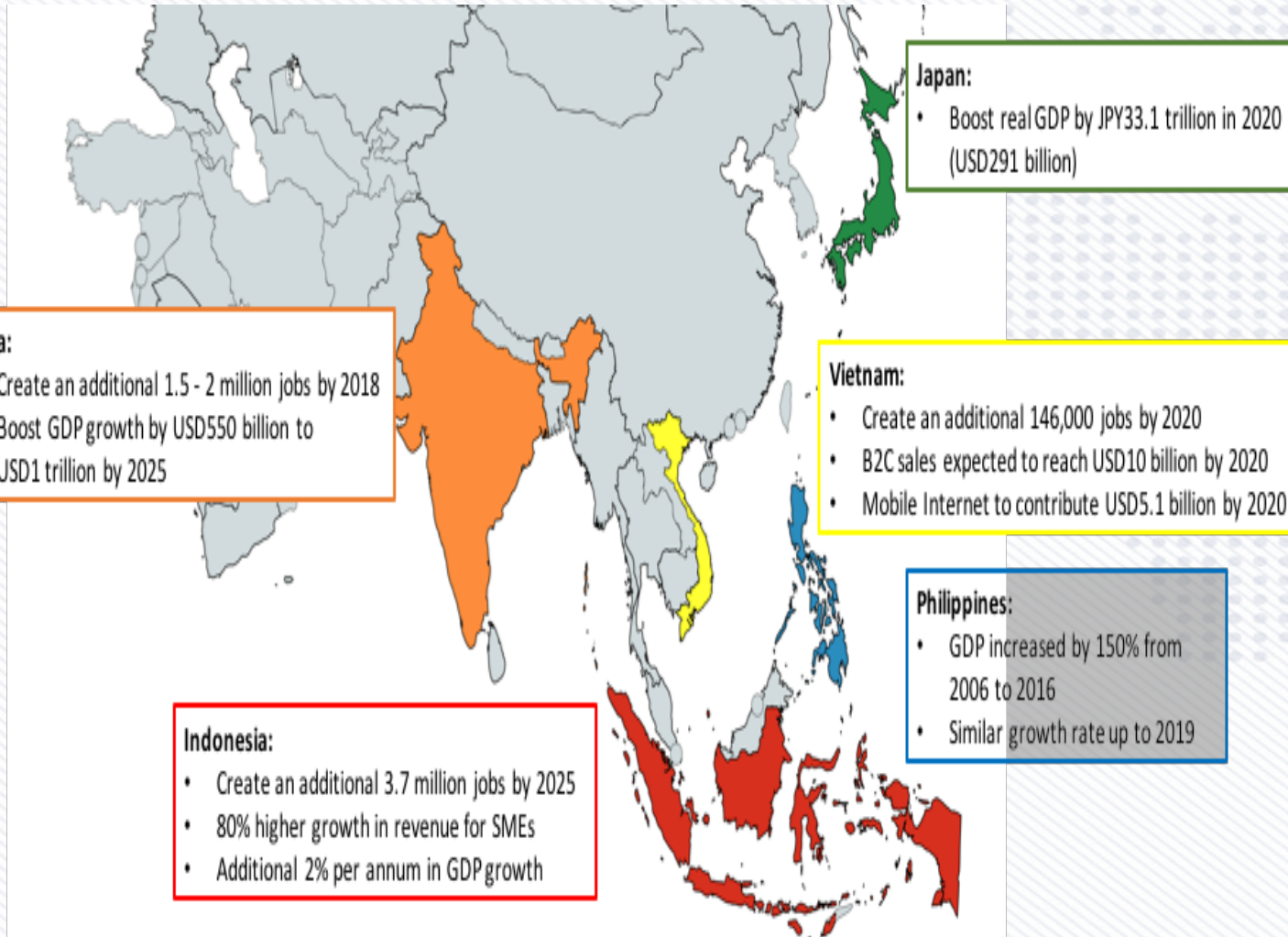
Interconnectivity and Interoperability

- Proprietary networks becoming IP-based
- Platforms talk to each other and are able to work with one another

*Interconnectivity enables economies of scale;
interoperability enables economies of scope... innovation*

Why is it Important?

Why is it different *this time*?



In **Japan**, full use of AI and IoT is expected to boost economic growth by 4.1%, and 2030 GDP by 40%

Accelerating **Indian** participation in global flows over the last decade to match leading countries, would have raised GDP by USD1.2 trillion

In **Indonesia**, increasing access to broadband and data usage, *esp by SMEs*, will increase GDP growth by 2% and create 4m jobs

What we talk about when we talk about digital trade

- Digital platforms **change the economics of doing business** across borders, bringing down the cost of international interactions and transactions
- They **create markets and user communities with global scale**, providing businesses with a huge base of potential customers and effective ways to reach them
- Small businesses become “micro-multinationals” *and* by using digital platforms such as eBay, Amazon, Facebook or Alibaba to connect with customers and suppliers in other countries ...
- ... *and* the ability of small businesses to reach new markets, this **supports economic growth everywhere**

But more than this, individuals participate in globalization directly, using digital platforms to learn, find work, showcase their talent, and build personal networks.

“ More than 1.3 billion people have international connections on social media, and more than 450 million take part in cross-border e-commerce. Data flows now account for a larger share of GDP growth than global trade in goods.”

Some of the biggest companies in the world today ...

... didn't exist 20 years ago



- Largest international **voice traffic** provider owns no network
 - Huge contributor to telco settlement fees in most countries
- Fastest growing **television** network lays no cables
 - Huge driver of 'triple-' and 'quad-play' subs services for local service providers
- Most watched **video-sharing** portal created no video content
 - Significant driver of mobile vdo consumption ... in *particular* in emerging economies
- Most popular **media** provider creates no content
 - Huge driver of mobile subs and social connectivity
- Most valuable retailer has no inventory
 - Created a platform that consumers almost never have to leave
 - E-commerce and telco investor
- World's largest **taxi company** owns no vehicles
- Most valuable **photo company** sells no cameras
- Largest **accommodation** provider owns no real estate

... and expand across other markets



- VOD streaming service joint venture between Singtel, Sony Pictures, and Warner Entertainment



- Singapore developed live video streaming app with over 150 million subscribers and over 45 million monthly active users as of July 2017



- Vietnamese company, specializing in digital content and online entertainment, social networking, and e-commerce



- E-commerce platform with sites in HK, ID, MY, PH, SG, TH, VN, TW



- Ride-hailing service originating from Malaysia which has expanded to KH, ID, MM, PH, SG, TH, VN



- Indonesia-based photo-sharing app PicMix has an international user base of 27 million



- Manila-based FlySpaces aims to help SMEs with shared accommodation for office spaces

We've seen cross-sectoral enablement in Indonesia, innovative education services in Vietnam, and cross-border enablement across the region



Go-Jek began by providing low-cost on-demand motorcycle taxi rides in Indonesia to address gaps in public transport.

The platform now provides a multitude of other services that “share” under-used access to idle resources, including Go-Food, Go-Massage, Go-Glam, and most recently payment services through Go-Pay.



GiapSchool created to fulfil demand from students and young professionals in Vietnam for high quality local language MOOCs available on multiple platforms.

Founder, Dr Giap initially translated scientific and technical books from English to Vietnamese. GiapSchool has now signed up 100+ lecturers to provide online lectures in variety of subjects.



iflix is a subscription video on demand service that distributes Western and Asian dramas. Iflix has more than 6.5 million subscribers.

Iflix has partnerships with over 150 studios and content distributors globally.

It is currently available in 25 countries across Asia, Middle East, and Africa.

Digital Disruption... occurs in various (but identifiable) ways

Product or service substitution

(E.g. displacement of music cassettes and compact disks with online music streaming; or printed motorway maps by smartphone GPS)



By-pass

(E.g. payments which by-passes traditional gatekeepers such banks or online insurance sales platforms)



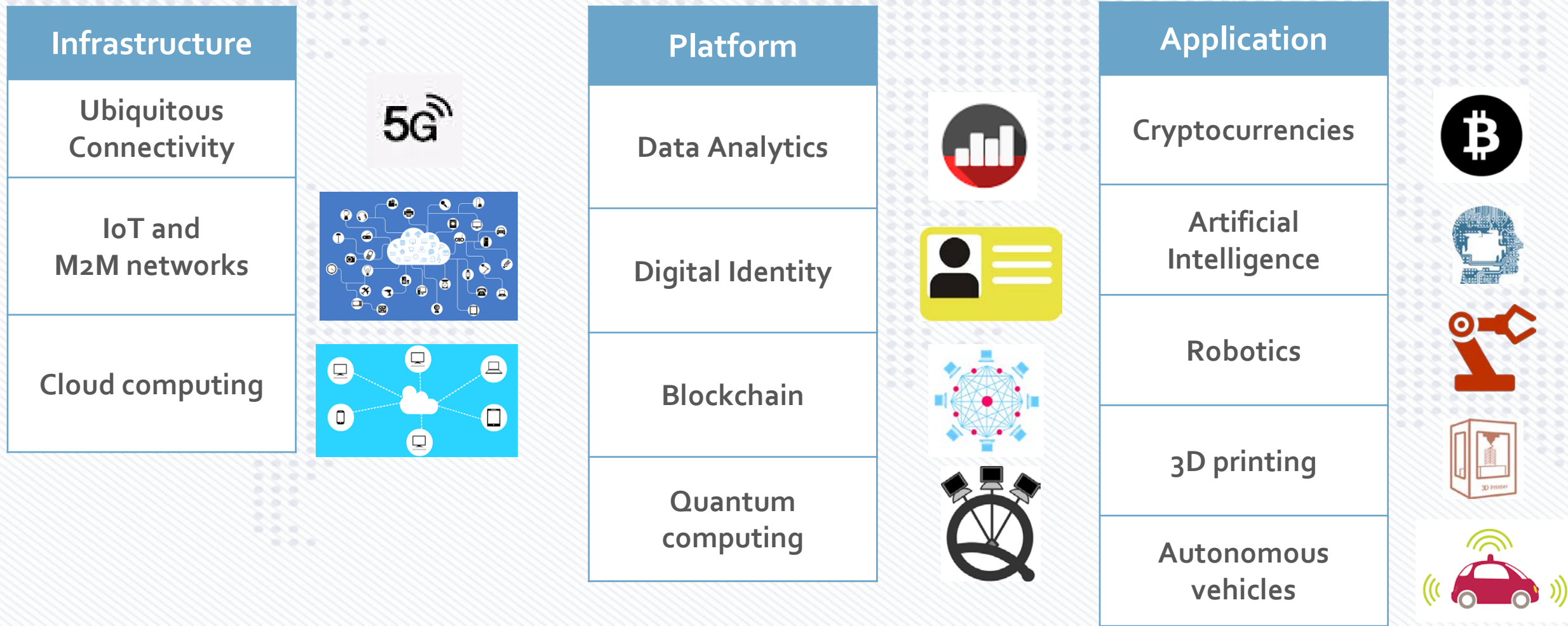
Technological paradigm shift

(E.g. cloud computing changes the way consumers procure, access and use IT infrastructure)



Transformative and Disruptive Digital Technologies

What is a GPT?



What are the Challenges for Policy Makers?

Traditional industry-specific approach to policy setting is outdated!



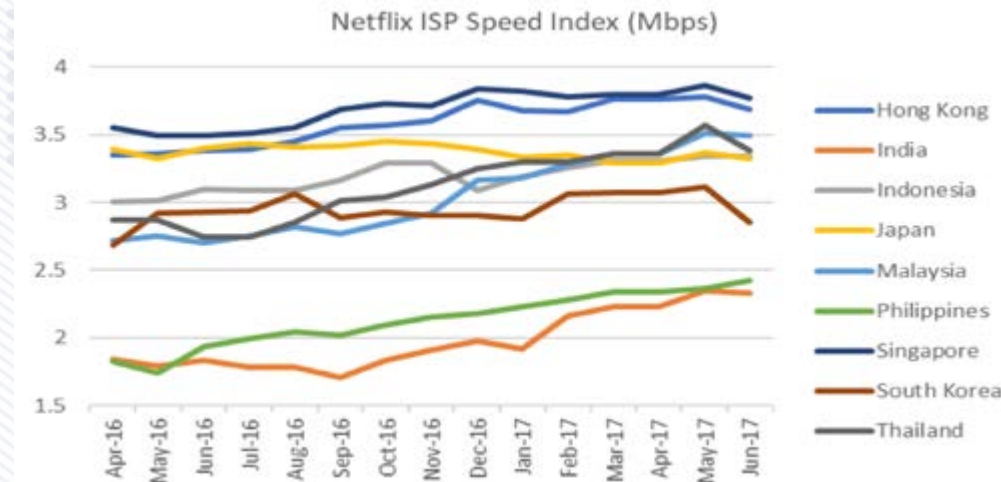
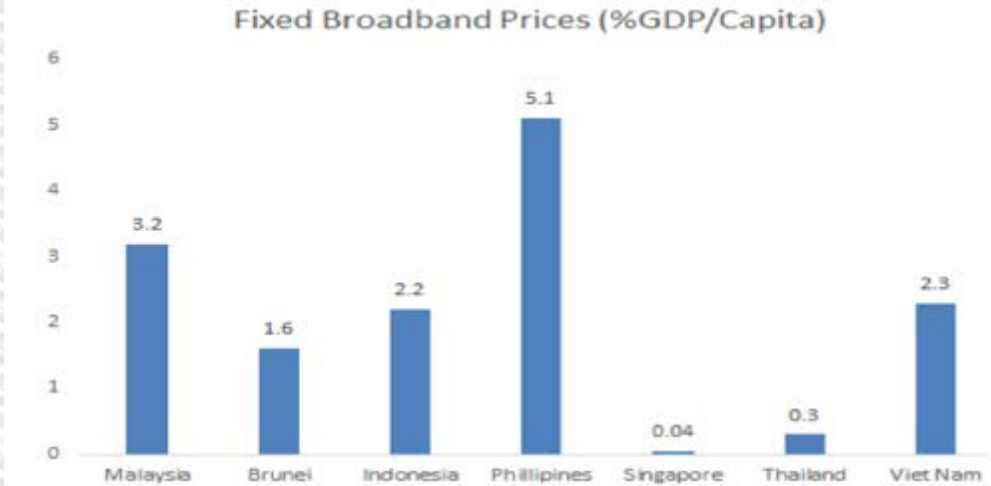
- How to advance financial inclusion without focusing on connectivity, social media, identity profiling?
- How to successfully advance *effective* universal education without consulting data analytics, behaviour profiling, content delivery, and collaborative communication?
- What is a monopoly and what is adequate market competition in such cross-sectoral growth?

**Regulators need a mindset shift from risk-manager
to development enabler**

Access Remains a Challenge for Many Emerging Economies

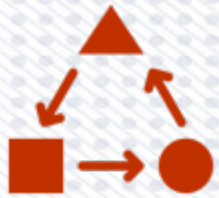
Access/Infrastructure challenges: how to create a national broadband network?

Broadband contexts		Malaysia	Thailand	Vietnam
GDP per capita		\$9.5k	\$5.9k	\$2.2k
Broadband penetration	Fixed (%)	10%	8.5%	6.5%
	Mobile (%)	58%	80%	31%
Cost	Fixed broadband prices (% GDP / capita)	3.2%	0.3%	2.3%
Speeds	Netflix ISP Speed Index (Avg. Mbps, July 2017)	3.5	3.4	NA



Sources: [Connectivity, Innovation and Growth](#); [Netflix](#)

Alongside Promoting Interoperability and Understanding the Sharing Economy



Interoperability: promoting versus mandating interoperability

- Two-stages: (1) determining when to require and (2) when to permit blocking



Sharing economy: balancing between legacy/traditional regulations and newly emerging platforms

And Creating a Safe and Enabling Ecosystem



Ensuring and protecting privacy and personal data protection



Combating cybersecurity and cultivating good cyber habits and hygiene



Extra-jurisdictional and cross-border data flows: Where to host? How to tax?



“It’s hard to compete in a global economy when you’re not allowed to cross the street.”

What Approaches are Being Adopted?

Government-led EU

Acts as the lead advocate in regulating emerging digital technologies



Top-down Singapore

Govt led unified approach to digital transformation



Innovative China

“wait and see” approach allows for innovation within informal limits



Private Sector-led US

Govt creates an enabling environment for the private sector

Bottom-up Hong Kong

Competitive environment which experiments and responses to perceived market demand



Regulated Japan

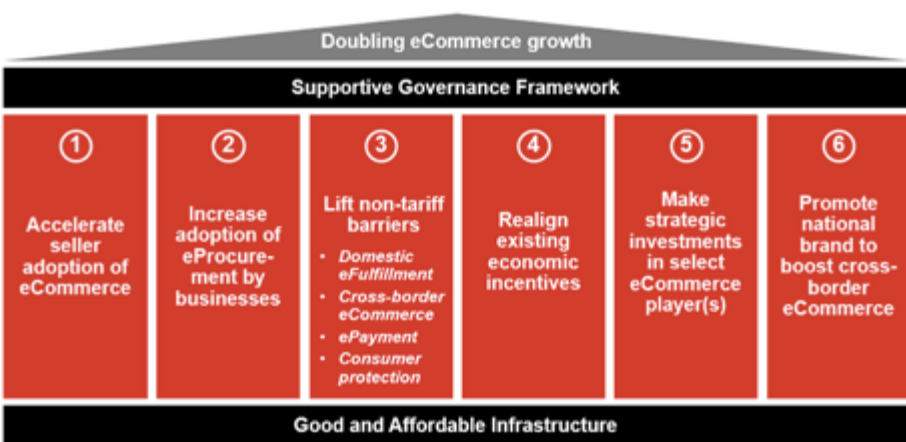
Risk adverse and regulation-centric approach to tech change



Malaysia: State plays active role in shaping development with a number of cross-cutting initiatives



Six (6) thrust areas with a supportive governance framework are the key aspects of the National eCommerce Strategic Roadmap



- 11th Five Year Plan (2016-2020) aims to **raise contribution of ICTs** from 13% to 18.2% of GDP
- **MDEC drives digital push**, by identifying key sectors and establishing Digital Free Trade Zone (DFTZ)
- MCMC initiatives to address lack of accessible and affordable fixed **broadband**
- National E-commerce Strategic Roadmap aims to **double e-commerce growth** from 10.8% to 20.8% between 2015-2020
- Public-Sector ICT Strategic Plan (2016-2020) aims to **transform public service delivery** by 2020

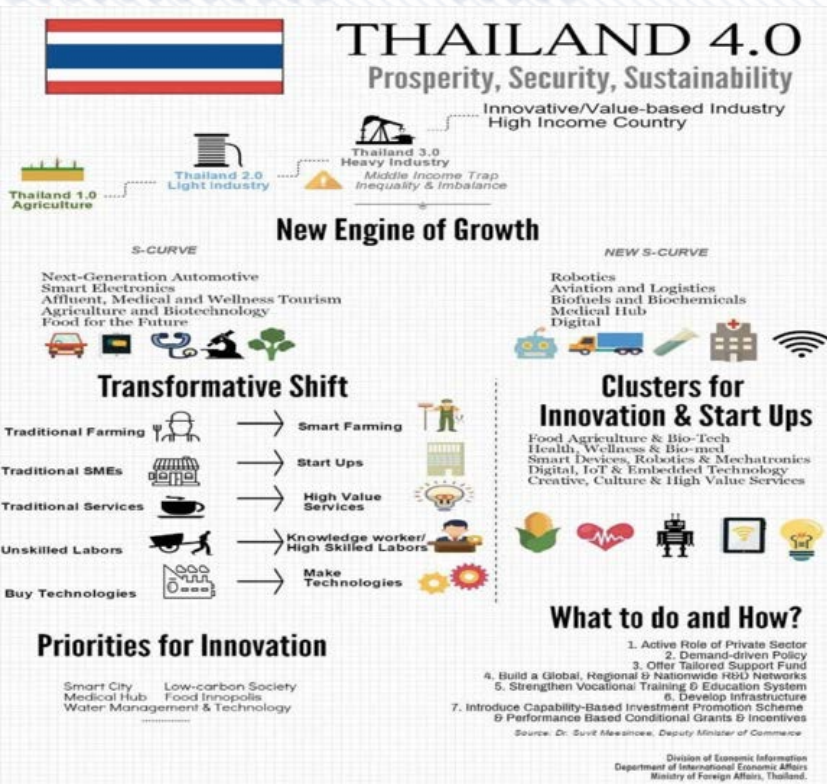
Limitations to note:

- Challenge attracting foreign and domestic investment
- Lack of coherent digital agenda and well-established coordination
- Slow implementation due to multiple stakeholders

Source: [MITI](#)



Thailand: Military govt. adopts assertive top-down approach with comprehensive master plan



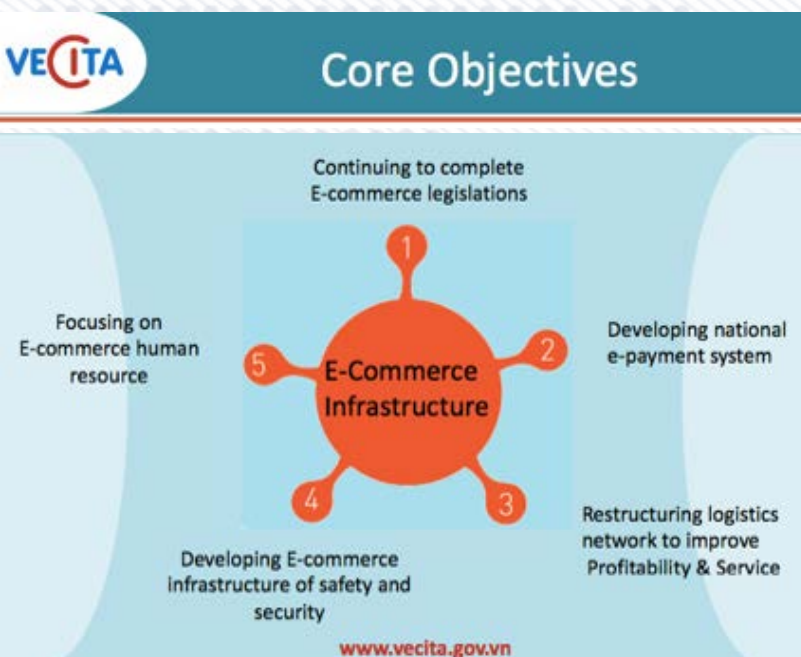
- **Digital Thailand 4.0**, includes aggressive timelines and comprehensive coverage/scope:
 - Digital infrastructure
 - Digital innovation ecosystem
 - Digital technology for an equitable society
 - E-government services
 - Human capital
 - Holistic frameworks for a Digital Thailand
- **MDES to draft 20 year Digital Economy Master Plan** to replace IT 2020 ICT master plan
- **New agencies and committees established**, including MDES

Limitations to note:

- Implementation issues:
 - Political uncertainty
 - Lack of clear path
 - Managing vested interests
- Personal data protection, taxation, and cybersecurity issues not resolved in framework

Source: [Digital Economy and Thailand 4.0](#)

Vietnam: Transition from centrally-controlled to state-directed mixed economy; no comprehensive strategy



- Digital policies driven by **multiple ministries**
- Govt aims to make Vietnam an international software hub; promote entrepreneurship; and **smart city** development
- Govt aims to have at least 40% of households/individuals covered by **fixed broadband** by 2020
- E-commerce Development Plan (2016-2020) seeks to **boost the sector and digital payments**
- **National Technology Development Programme** promotes digital technology adoption across industries
- **Opening up of Vietnam**, through foreign ownership, social media access; reduced tariffs

Limitations to note:

- Strict Internet regulatory approach may limit innovation
- Limited scope and clarity of digital economy building efforts by gov't
- Inefficiencies in implementation

Source: [Vietnam E-commerce and Digital Economy Agency](http://www.vecita.gov.vn)

Approaches differ due to level of economic maturity, legacy institutions, power distributions, state involvement etc.

	Malaysia	Thailand	Vietnam
Government vs Private Sector Leadership	Govt leadership paramount	Govt leadership paramount	State as “controller” of economy, balanced with vibrant private sector creates opportunities
Top Down vs Bottom Up	All three economies illustrate top down approach		
	Comprehensive national digital plan as blueprint	Comprehensive national digital plan as blueprint	Limited scope with tech plan
Innovation vs Regulation	All three govts place importance on both		
	Shortage of requisite skills and low levels of productivity	Supply-side dominated approach but lack of clear direction and coordination	Strong attraction to foreign investment but low levels of productivity

Recommendations

1. Leadership, Flexibility, Clarity

- Cross-sectoral policy making with specialised agencies and formalised communication and collaboration
- Agile (speed and flexibility) public service provision
- Multi-stakeholder approach including various public sector agencies, private sector, civil society and academia

2. Policy Approaches and Tools

- Whole-of-government initiatives
- Marketplace for government procurement
- Regulatory re-set (and sandboxes)

3. Strategic Choices on Platforms

- Build your own platform
 - Outsource platform
 - Regulate existing platforms
- *but ensure interoperability of platforms*

4. Goal Setting and Measurements

- Need to measure the impact the govt is setting out to achieve
- *Note: Digital economy impact difficult to delineate and quantify*

Questions?

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About TRPC:

TRPC is a boutique consulting and research firm with over 25 years experience in the telecommunications and ICT industries in the Asia-Pacific. We offer specialised advisory, research, and training services, with a focus on regulatory and strategic business issues, and possess an extensive network of industry experts and professionals throughout the region.