



# Public Management

Session 9: Digital Transformation, E-Government & Smart Cities

# IT Self-test



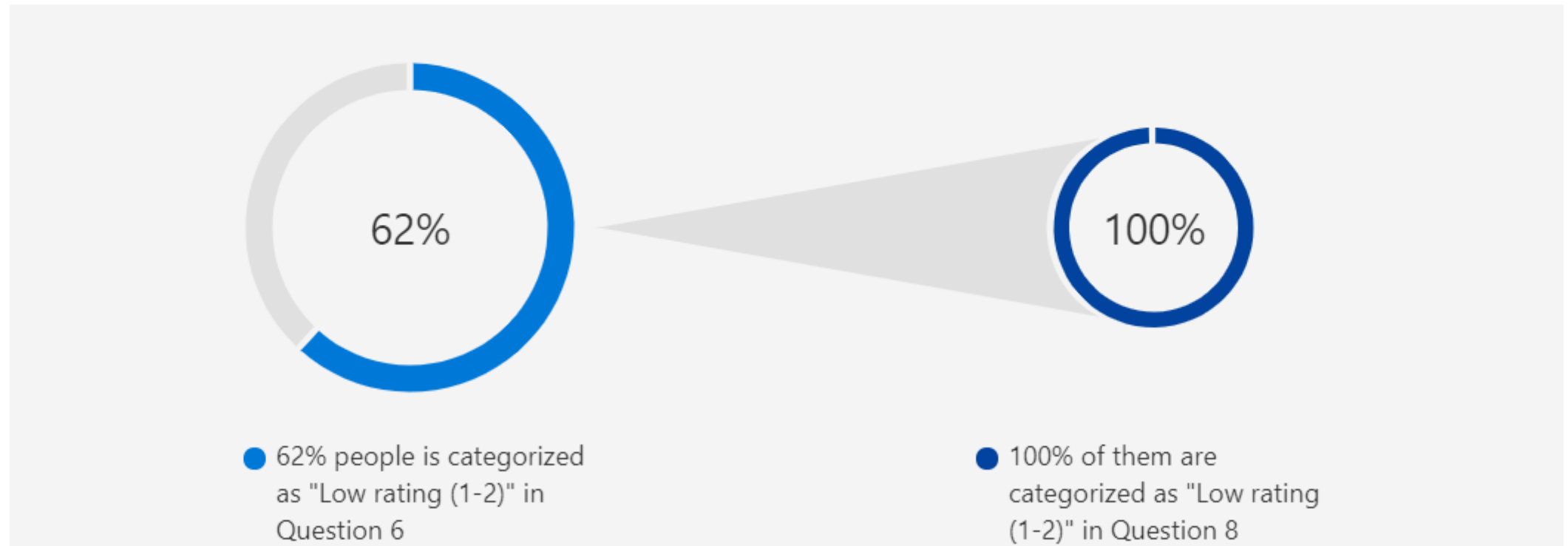
- Some concepts:
- IoT – the extension of internet connectivity into physical devices and everyday objects.
- Smart city – using different types of IoTs (sensors to collect data → monitor and manage → optimize)
- Dark data – data acquired through various sources, but not used in analysis.
- Chatbot – conversational bot
- Filter Bubble – website's algorithm guesses what information a user would like to see (Google Maps, Facebook ad, for example).

# Session Overview

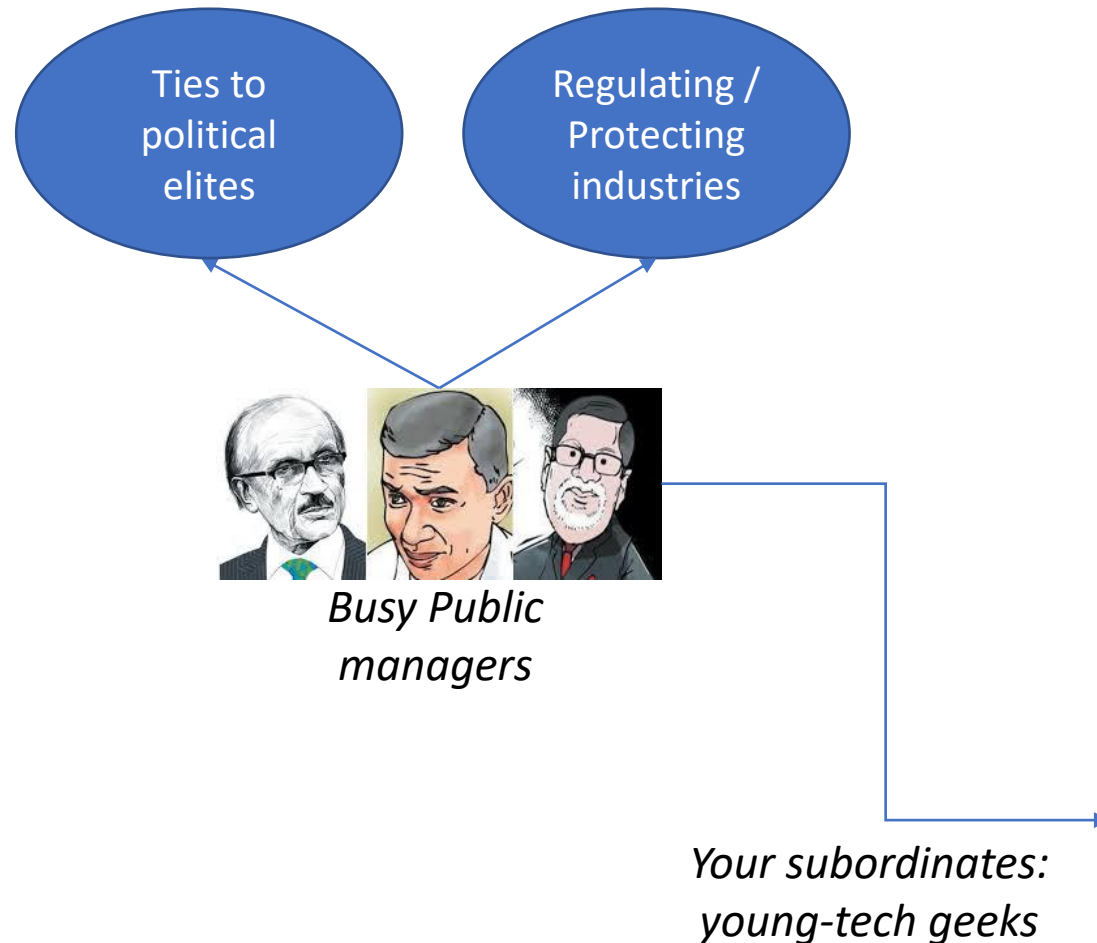
- Development of ICT and Public Management
- Vietnam's Development
- Governance amid Technological Disruption
- New Concepts, Unknown Future

# Result

Large percentage of people is categorized as "**Low rating (1-2)**" in Question 6, and all of them are categorized as "**Low rating (1-2)**" in Question 8.



# Worldwide Phenomenon



- Rise of new technology, Artificial intelligence, etc.
- Rise of new economic mode (e.g. Sharing Economy)
- Cyber security, Social media, big data, etc.



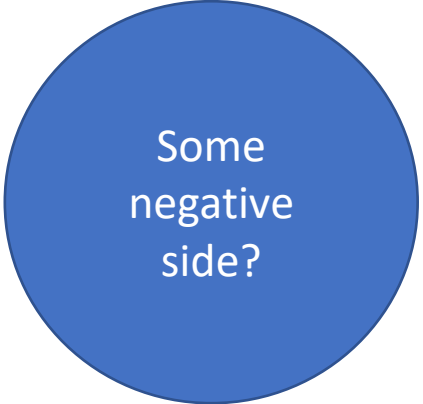
# Stages of E-Government

- Use of electronic media – internet, intranet, hand-held devices by government and interact with its citizens.
- Stages of E-Government
  - Stage 1 – Cataloguing, online presentation of information
  - Stage 2 – Transaction, limited forms and services available online
  - Stage 3 – Vertical integration (central-local), top-down links of different system
  - Stage 4 – Horizontal integration (public-private)

*Question: Have you used the government's website (central, local, agency-level, etc.)? How would you evaluate your experience? (in terms of stage 1, 2, 3, and 4)*

# Expected Advantages

- Overall administrative cost to government: higher vs lower?
- Prove *more efficient* government operations
- Create a *stronger and close relationship* between citizens and governments
- Provide *easier access* to government for all → empower citizens
- *Improve* the level of *service* to citizens
- Provide more transparency in government with more responsibility



Some  
negative  
side?

# Key areas

- Use of E-Government – vary country by country (normal use to aggressive use)

Health  
Social security  
Taxation  
Criminal justice  
Public safety  
Passport office  
Immigration  
Disaster  
Disaster Management

*Generally popular in service sector*





# Singapore – Stay-Home Notice Reporting Sys.



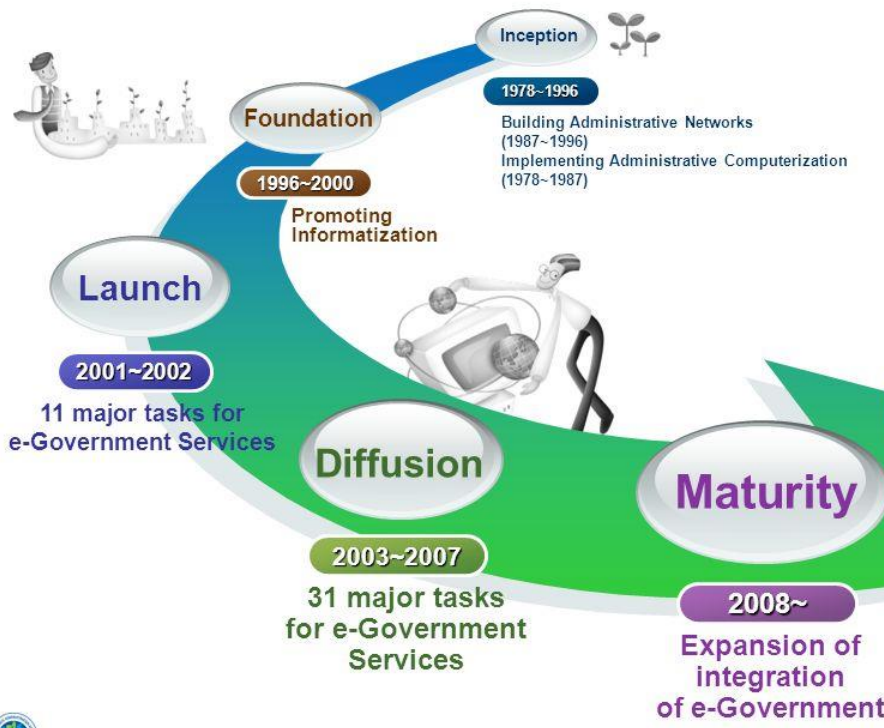
- Singapore Ministry of Manpower is conducting checks on foreign workers issued a mandatory 14-day stay home notice (SHN). How would you check them? Bao Ve?
- Using application – The government sends messages 2-3 times and ask the workers click the link and report their location (random call).
- From time to time – demand video-call.
- Violators – Permanent residents (expelled) / citizens (1 year in prison or 10,000 SGD fines).



# Concerns

- (Fahnbulleh, 2005) and others
- Trust: User anonymity + trust of government <https://youtu.be/QISAIL3xMh4>
- Privacy and Security: Concerns about inadequate cyber security and privacy of data
- Digital divide: Unequal access to computer technology by citizens
- High initial costs of setting up an e-government solution
- Resistance to change

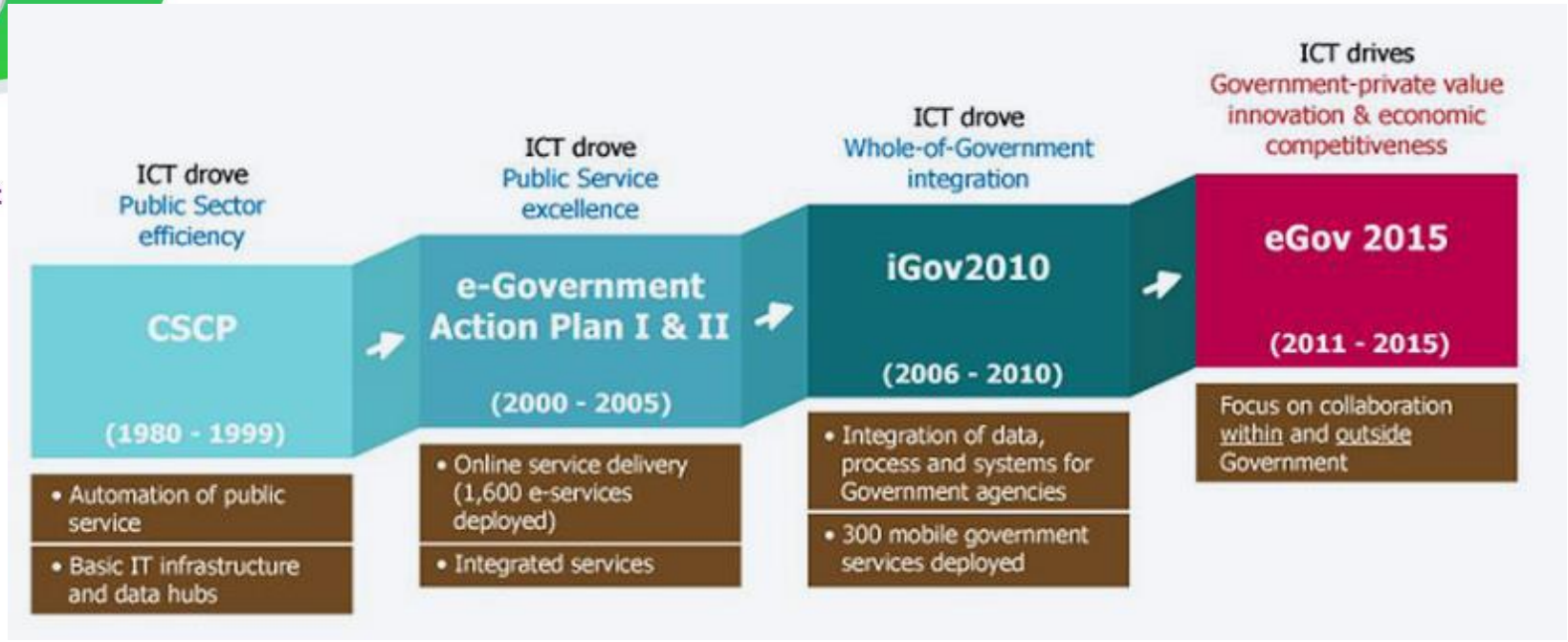




South Korea

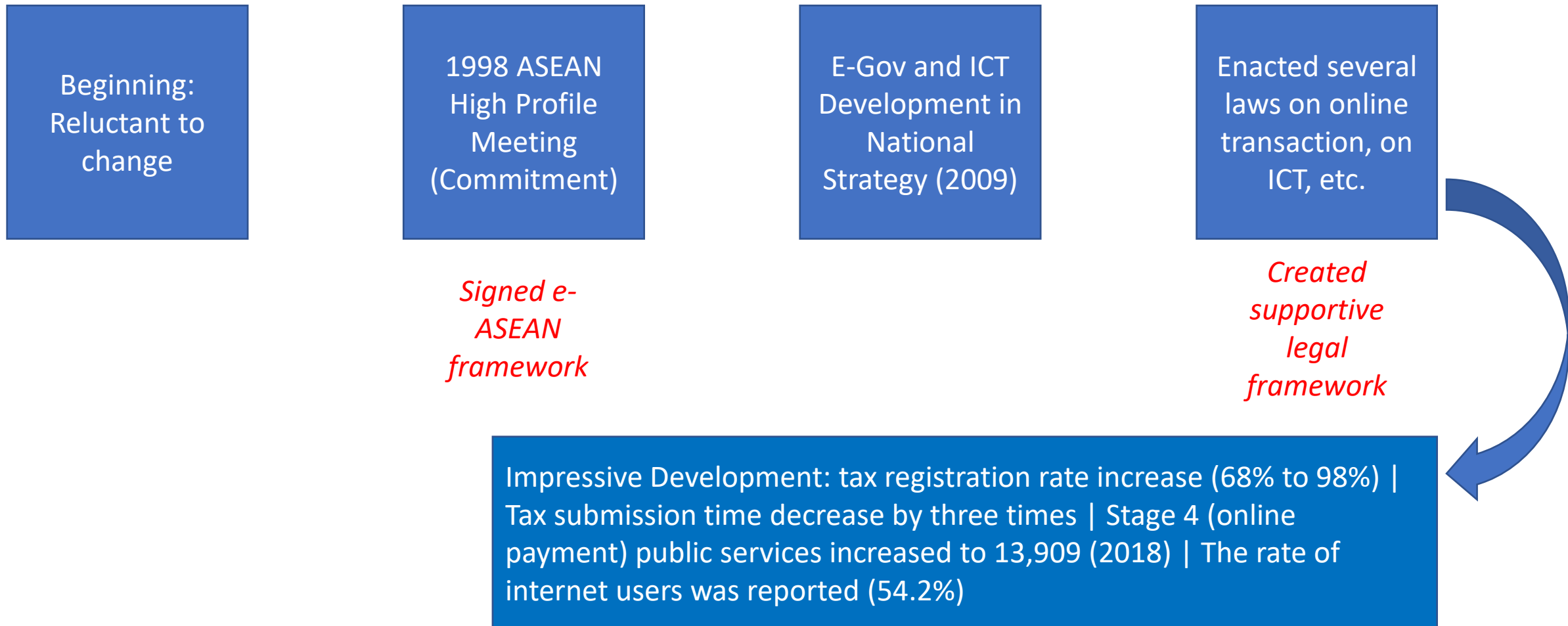


Ministry of Public Administration and Security



Singapore

# Vietnam's Development



# E-Government Ranking

- Vietnam's E-Government Development Index Ranking (2018 – 88 out of 193)
- Vietnams EGDI = Service component (0.5725) + Infrastructure (0.3715) + Capital (0.5989)

Ranking	Country	EGDI
1	United Kingdom	0.9193
3	South Korea	0.8915
4	Singapore	0.8828
77	Thailand	0.5522
83	Brunei	0.5298
89	Vietnam	0.5143

# Vietnam's Limitation



## Vietnam's Digital National Commitment

Linh Tong in the Diplomat (2018) argued that **the digitalization process for Vietnamese public service most similar to the Chinese experience**, even though the country started the whole process much earlier, in the mid-1980s (Vietnam actually started in 2009). In both cases, the focus is on applying ICT to internal government activities to improve administrative and management capacity and delivering public services through e-government applications...[...]...Moreover, because the actual implementation of Vietnam's e-government started as late as in 2009, it is still in an embryonic stage. ***Without political determination and genuine commitment to increase transparency in the public sector, such a costly project like digital government in Vietnam might eventually end up in vain, as in many African countries*** (July 14, 2018).



*What does this report worry exactly?*



# Singapore 'Hive'



- Singapore created Government Digital Services (2015) – a team of 90% scientists, coder, and engineers
- Emulated start-up environments in Silicon Valley-style office – open spaces, high ceilings, couches, a ping pong table, etc.



- Enable creativity and innovation.
- Design experience / Design thinking (think user first)

# More Genuine Concerns: Governance

- Robots, AI, Fintech, Blockchain – new words dominate public policy areas. How do we regulate or govern new technologies and new industries we do not understand or have sufficient control over? How can the public sector keep pace?

Clockspeed: the rate at which it introduces new products, processes, and organizational structure

Technology Clockspeed:

The rate at which technological innovation reaches mass adoption in a specific domain

Policy Clockspeed:

The duration of a policy cycle response time



# TC and PC Relationships

- In the age of Industrial 4.0 and VUCA world usual relationship between TC and PC is:



*Technology Clockspeed has been much faster than Policy Clockspeed*



Setting social, ethical, and best practices for new technology application is led by industrial players

Typical Government Response?

# Regulation 'Sandbox'

- Regulation Sandbox – typically involves temporary relaxations or adjustments of regulatory requirements to provide a 'safe space' for startups or new technology companies in a live environment for limited time, without having to undergo a full authorization and licensing processes.



Only temporary  
Adequate customer protection is  
necessary

Lead by industries,  
followed by  
government is  
eventually risky

# How to Solve TC >>> PC Situation?

- Accelerating Collaboration between domain experts and non-domain experts (policy commandos)
- Learning by doing – more experiment, more real-world feedback
- Agile thinking – Seeks to get a first-cut approximately right, and to iterate with users and stakeholders (real-world testing, dynamic feedback)

# In-Class Discussion



Case of **Singapore parking app** (Parking.SG) <https://www.parking.sg/>

- 1) Could you recognize any similar example to the case of Parking App in Vietnam? Discuss.
- 2) Iterated based on timely data (walked with police officers, interviewed URA, HDB, motorists)
- 3) Launched app version → continued experimentation, feedback, rapid iteration → Basics firmly established.
- 4) Launched a trial app within 4 months → full national app in 8 months

