Briefing Note

Parliamentary Research Training

Promoting Digital Capacity to Contribute to Connectivity and Inclusive Development in ASEAN: The Case of Thailand

Author: Ms. Usa Alice Thalakorn

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Summary

This briefing note examines Thailand's digital, highlighting its progress, challenges, and potential role in promoting regional digital capacity within ASEAN. While Thailand has made significant strides in developing its digital infrastructure and economy, challenges remain, including limited and concentrated investment, unequal access to infrastructure, and a lack of digital skills. Despite these challenges, Thailand's ambitious digital transformation plan positions it for economic growth and inclusion. Additionally, its strong performance in the technology pillar of the Network Readiness Index and successful regional collaborations like the cross-border mobile payments initiative with Singapore demonstrate Thailand's potential to contribute to a more collaborative and unified digital ASEAN.

To further promote digital capacity both domestically and regionally, the Thai parliament can play a crucial role.

Domestically, this can be achieved through:

- Legislative and regulatory reforms: Enacting laws promoting investment in infrastructure and digital services, while maintaining fair competition and affordability.
- Promoting innovation and entrepreneurship: Implementing incentives for businesses investing in digital solutions, particularly in underserved areas.
- Building a digitally ready workforce: Allocating resources for extensive digital skills training at all educational levels and offering targeted programs for specific demographics.

Regionally, Thailand can contribute by:

- Leading collaborative initiatives: Sharing best practices, co-organizing workshops, and contributing expertise to knowledge-sharing platforms.
- Promoting knowledge exchange: Leveraging its strengths in specific digital areas like e-commerce or ICT infrastructure to offer training programs for other ASEAN member states.
- Supporting regional policy harmonization: Engaging in discussions and contributing to the development of consistent and complementary digital agendas within ASEAN.

By implementing these strategies, Thailand can play a significant role in fostering a more digitally inclusive and prosperous ASEAN.

1. Introduction

Digital innovation in one of five strategic areas to achieve the vision for the ASEAN Connectivity 2025 [1]. ASEAN's digital technologies could hold significant potential across key sectors in ASEAN and strategic approaches shall be implemented in order to seize this opportunity [1]. According to ASEAN digital masterplan 2025, in order for ASEAN Member States (AMS) to achieve its digital vision, three conditions are required to be met. First, closing digital infrastructure gap with high-quality, ubiquitous connections across the board is crucial for enabling digital services and fostering regional progress. Second, the services which run over digital connectivity in ASEAN must be safe and useful for the people. Third, bridging the digital divide for both businesses and consumers in AMS are necessary. Businesses need upskilling to boost productivity, while consumers require improved literacy and affordability to access and utilize digital services widely [2]. However, uneven digital capacities of countries, which are existing gaps in infrastructure, technology, and people's skills, have gotten wider, rather than narrower [3]. Thailand, in the process of transitioning to digital economy, is facing a critical challenge in terms of skilled workers in the digital sector. For example, only 1% of the population is considered experts in digital skills [4]. Moreover, the abundance of graduates lacking essential digital skills, coupled with their tendency to pursue non-digital careers, exacerbates the gap between digital workforce supply and demand [4].

Parliaments in ASEAN can play a crucial role in promoting digital capacity which is essential for bridging the digital divide. In the case of Thailand, it is important to recognize the domestic challenges and mobilize the representative role of the parliament to provide effective strategies to existing challenges as well as to proactively seek opportunities to pursue areas of contribution in demand of digital development among ASEAN member countries which could be considered in the upcoming AIPA 45th Assembly.

This briefing note seeks to address three research questions:
1. What is the current state of Thailand's digital literacy and skill level comparing to other ASEAN members?
2. What are the significant challenges for Thailand to promote digital capacity?
3. How Thailand can contribute to promote digital development in ASEAN?

2. The situation of digital capacity in Thailand

The digital landscape in Thailand is advancing steadily, fueled by ambitions of becoming a Southeast Asian digital leader [5]. Thailand launched a 20-year Thailand Digital Economy and Society Development Plan (Digital Thailand Plan) in 2016 which breaks down its vision into four phases. Phase 1 laid the digital foundations including digital infrastructure, followed by Phase 2's focus on digital inclusion (Figure 1). In 2024, Thailand has entered Phase 3 that aims for full digital transformation by 2027. The ambitious journey culminates in Phase 4, envisioning Thailand as one of the global leaders in the digital economy.
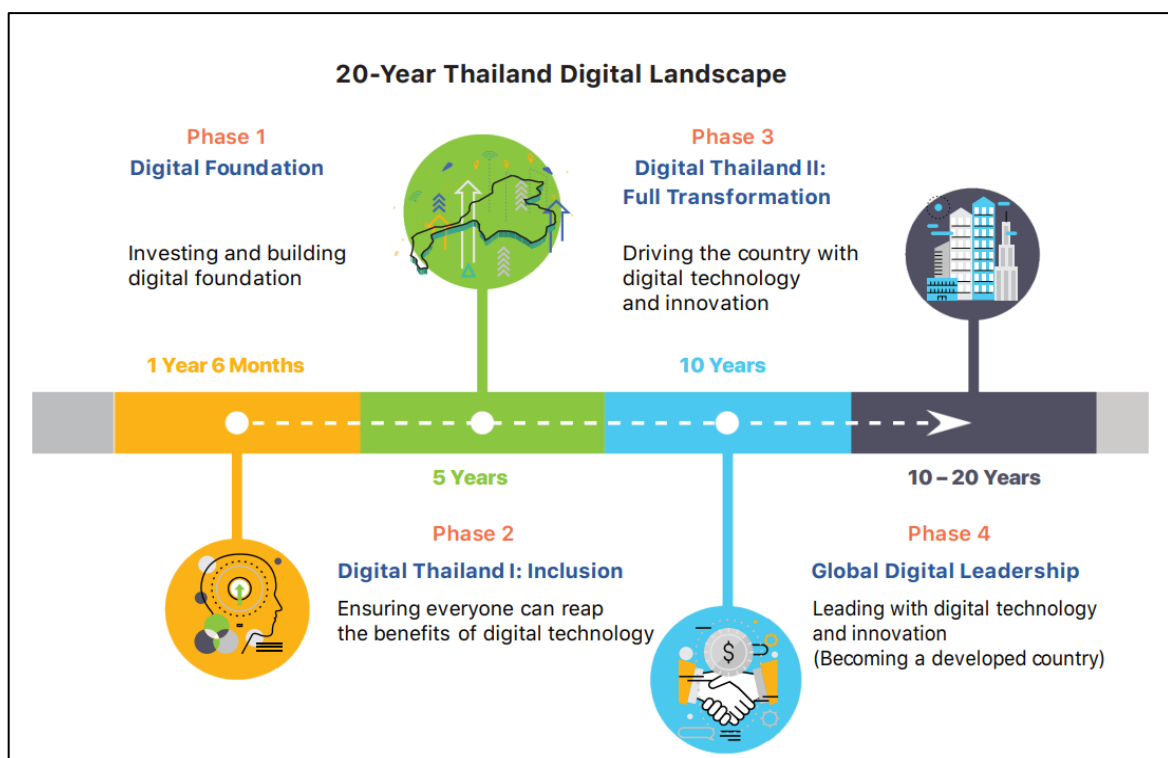

Figure 1. 20-Year Thailand Digital Landscape [5]

While Thailand's digital development exhibits commendable progress, several key areas remain challenging. These include insufficient and concentrated private investment, inadequate human capital equipped with advanced ICT skills, sluggish development of digital infrastructure, and significant budgetary constraints [6]. In the past recent years, many Thai companies have been facing a complex landscape of challenges as they navigate the digital transformation journey. According to the Thailand Digital Transformation Survey in 2023, 60% of the companies are facing insufficient human resource capacity, especially lacking both internal and external expertise (Figure 2)[7]. Addressing these issues head-on is crucial for Thailand to maintain its digital momentum and achieve its national digital development goals.
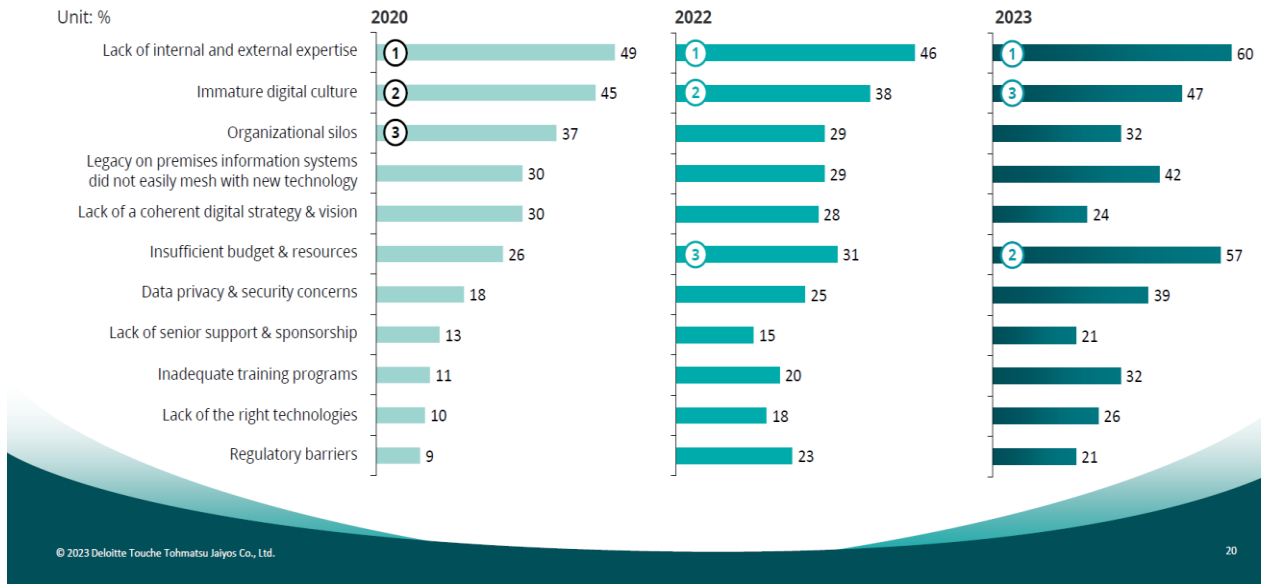
Figure 2. Challenge of Digital Transformation of Companies in Thailand [7]

Three digital capacity challenges can be discussed as following:

Limited and concentrated investment: While investment in the digital economy is encouraging, it remains relatively low and concentrated among a select few players. This raises concerns about equitable distribution of resources and hinders broader economic participation. Despite Ministry of Digital Economy and Society's key role in driving digitalization, its budget allocation seems relatively small compared to other ministries, raising questions about alignment between priorities and resources [8].

Unequal access and infrastructure gaps: Despite improvements, unequal access to digital infrastructure and resources persists within the population. This digital divide excludes individuals and communities from reaping the benefits of the digital economy. The timely provision of nationwide information infrastructure, accessible to all, faces several constraints. These include logistical challenges, resource limitations, and potential equity concerns [9].

A lack of digital skills: A critical challenge hindering Thailand's future economic success is the acute shortage of skilled talent. This gap stems from mismatches between current skills and industry needs, further exacerbated by an outdated technical and vocational education system [10].

These challenges, in part, stem from policy considerations. Examining existing policies and exploring alternative approaches are crucial to address these limitations and unlock the full potential of Thailand's digital transformation journey.

Thailand's opportunity in Digital Landscape

Thailand's digital transformation offers businesses opportunities to innovate, grow, and contribute, requiring agility, tech adoption, and regulatory compliance. Its unique tradition-innovation blend makes it a compelling Southeast Asian destination for the digital revolution [11]. A comprehensive digital transformation strategy in Thailand, if fully implemented, could unlock THB2.5 trillion (USD79.5 billion) in economic value annually by 2030. This projected value is attributed to gains in productivity across various sectors, increased revenue generation for businesses, cost savings from improved efficiency, and a positive impact on the overall GDP [12].

Thailand's Digital Landscape in the Context of ASEAN

Thailand ranks 42th out of the 134 economies included in the 2023 Network Readiness Index (NRI) and it holds 4th place in Technology pillar among eight Association of Southeast Asian Nations (ASEAN) economies with a score of 44.73 (Figure 3.)[13]. The Technology pillar assesses a country's technological infrastructure and its ability to participate effectively in the global digital landscape. It utilizes three sub-pillars to provide a comprehensive picture (Fugure 4.):

1. Access: This sub-pillar delves into the basic level of information and communication technology (ICT) accessibility for individuals within a country. It examines factors like the availability and affordability of communication infrastructure, ensuring everyone has a basic entry point to the digital world.

2. Content: This section shifts its focus to the internal production and utilization of digital technologies. It analyzes the nature of digital content created within the country, including scientific research output, software development expenditure, and the popularity of local mobile applications. This provides insights into a country's ability to innovate and contribute to the global digital pool.

3. Future Technologies: Looking ahead, this sub-pillar gauges a country's preparedness for emerging trends and technological paradigms that will shape the future networked economy. It examines the adoption of cutting-edge technologies like Artificial Intelligence (AI) and the Internet of Things (IoT), as well as investments in promising future technologies like

blockchain or quantum computing. By analyzing these factors, the NRI assesses a country's potential to adapt and thrive in the ever-evolving digital landscape.

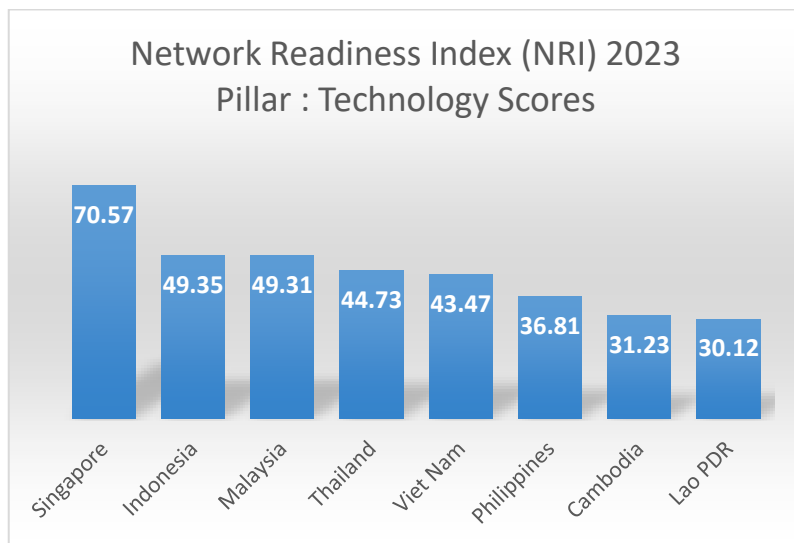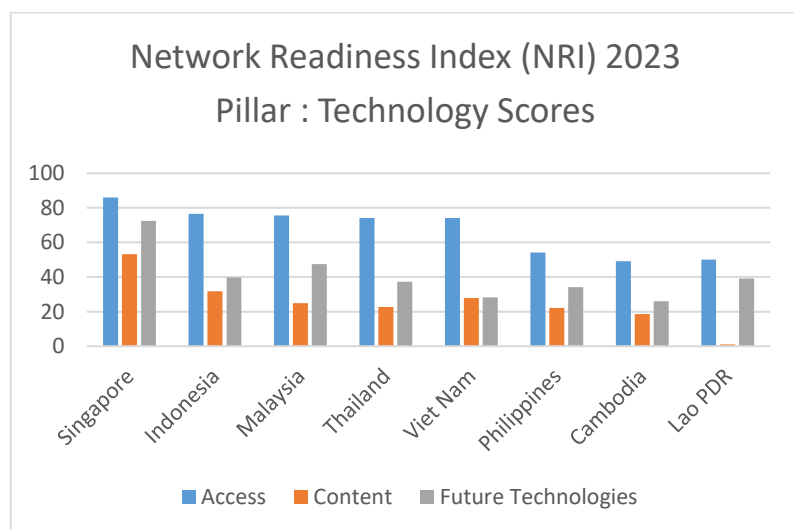*Figure 3. 8 ASEAN nations' technology pillar scores in NRI [13]*

Figure 4. 8 ASEAN nations' technology pillar scores divided in three sub-pillars:

Access, Content and Future Technology [13]

Thailand's Digital Competitiveness ranking in 2023 is in the 35th position out of 65 economies and in the 3rd position among ASEAN nations following Singapore and Malaysia (Figure 5) [14]
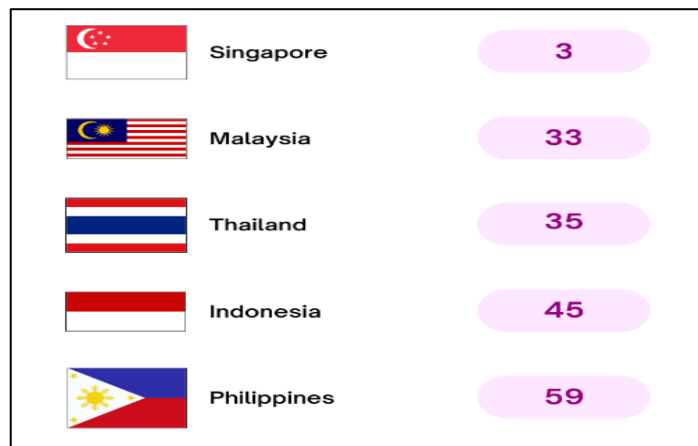
Figure 5. 5 ASEAN nations in Digital Competitiveness ranking 2023 [14]

Thailand and Singapore have already led successful initiatives regarding ASEAN Digital Economy. The collaboration between Thailand and Singapore on cross-border mobile payments demonstrates the potential for regional cooperation in the digital sphere [15].

Digitalization for Promoting Inclusion

Digital financial inclusion remains a challenge for many in ASEAN's young population; however, digitalization offers solutions [16]. A significant portion of the digital generation (nearly half seeking credit) faces difficulties accessing formal financial services. This results in a reliance on informal sources like family and friends. Women's uptake of advanced financial products like loans and investments is lower than men. Strong digitalization of basic saving and payment services enables wider access to advanced financial products like investments, credit, and insurance, especially for underrepresented groups [16].

In the 4th ASEAN Digital Ministers' Meeting (ADGMIN), the ASEAN Framework on Logistics for the Digital Economy Supply Chain in Rural Areas was welcomed [17]. This framework aims to bridge the digital divide by promoting regional collaboration, supporting infrastructure development, and leveraging ICT solutions to improve rural connectivity. These efforts will ultimately contribute to the growth of the digital economy in rural communities [17].

3. Strategies for Thailand

Role of Parliament in promoting digital capacity domestically

A robust legislative and regulatory system is crucial to fostering a thriving digital ecosystem. The parliament can enable legislation that promotes investment through new laws encouraging infrastructure development (high-speed internet, ICT services) while maintaining fair competition

and affordability for all. Additionally, existing regulations hindering digital adoption (e-commerce, data privacy) shall be modernized. The parliament can also promote innovation and entrepreneurship by implementing tax breaks and incentives for businesses that invest in research and development of digital solutions, particularly in underserved areas, as well as facilitating access to funding for startups and small businesses embracing digital technologies further strengthens the ecosystem's foundation for growth.

The parliament can also build a digitally ready workforce by allocating resources for extensive digital skills training. This involves supporting educational institutions in integrating digital literacy and essential ICT skills seamlessly into their curriculum at all levels, ensuring all students graduate with a strong foundation in this crucial area. Furthermore, targeted training programs funded specifically for unemployed individuals, those residing in rural communities, and older adults will be crucial to bridge the existing digital skills gap and ensure everyone has the opportunity to participate actively in the digital world.

Role of Parliament in enhancing the contribution in ASEAN

While operating within the national framework, the Thai parliament can still play a significant role in promoting regional digital capacity. This can be achieved through three key strategies: regional collaboration: first, by championing and leading regional initiatives within ASEAN. This could involve advocating for and actively participating in collaborative projects, such as sharing best practices, co-organizing workshops, and contributing expertise to knowledge-sharing platforms. Second, by promoting knowledge exchange through leveraging Thailand's existing strengths in specific digital areas, such as e-commerce or ICT infrastructure development. This can be done by offering workshops and capacity-building programs to share best practices and expertise in digital development with other ASEAN member states. Finally, by supporting regional policy harmonization. This involves engaging in discussions and contributing to the development of consistent and complementary digital agendas within ASEAN. This collaboration will ensure alignment and minimize policy fragmentation across the region, fostering a stronger and more unified digital landscape.

4. Conclusion

While Thailand has made strides in developing its digital infrastructure and economy, challenges remain in areas like investment concentration, unequal access, and skill shortages. However, Thailand's ambitious digital transformation plan holds promise for economic growth and inclusion.

Thailand currently ranks 4th in the technology pillar of the Network Readiness Index among ASEAN nations, demonstrating its strong foundation for digital advancement. Additionally, its initiatives like the collaboration with Singapore on mobile payments showcase the potential for regional cooperation. The strategies for Thailand's parliament to promote digital capacity can be achieved both domestically and within ASEAN. Domestically, this involves enacting supportive legislation, promoting innovation and entrepreneurship, and building a skilled workforce through targeted training programs. Regionally, Thailand can champion initiatives, share its expertise, and support policy harmonization to foster a more collaborative and unified digital landscape within ASEAN.

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