

Evolution of e-Service in Thailand: The Public Sector's Role in Streamlining Starting a Business*

Thanaporn Tengratanaprasert**

Abstract

The World Bank's ease of doing business index serves as a tool for international comparison, underlining that digital platforms and regulatory reforms are enablers, not absolute assurances, of entrepreneurial achievement. The discrepancies underscore areas needing development and strategies for streamlining business procedures. In Thailand, a range of laws and strategies are aimed at cultivating a conducive environment for businesses, particularly small and medium enterprises. However, enhancements in government efficiency, transparency, holistic digital services, and regulatory reforms are critical for boosting ease of doing business and competitiveness. A mixed-methods approach is applied in this study to ensure comprehensive data precision. The initial stage involves qualitative research to gain a deeper grasp of the topic, followed by quantitative research to provide policy recommendations and laying down directions for effective public service.

Despite digital progress, the Thai government still needs to work on fully transitioning to a digital process, especially in relation to the World Bank's requirements for starting a business. Suggested improvements include integrating the process of reserving a corporate name into the online company registration system, creating a unified business registration platform across all departments, and revisiting the Electronic Transactions Act. The proposed enhancements involve establishing a best practice system for quality and transparency and a dedicated committee for integrating government databases. By adopting these initiatives, government services could be made more efficient, the process of setting up

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** Graduate School of Public Administration, National Institute of Development Administration
E-mail: thanaporn.ten@nida.ac.th

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a business could be simplified, and digital services could become more cost-effective and time-saving, thus significantly elevating the ease of doing business in Thailand.

Keywords: Ease of doing business, starting a business, digital services, e-registration, e-document

Introduction

The ease of doing business is a multifaceted concept, shaped significantly by regulatory environments, government services, and leveraging technology for governance. As supported by research from Alesina et al. (2005), Klapper et al. (2006), and Barseghyan (2008), regulatory frameworks and market entry regulations play a pivotal role in stimulating or hindering investment, firm creation, and productivity. However, the influence of government regulation, though perceived as a primary obstacle to market entry by entrepreneurs (Lutz et al., 2010), can be more complex. The effects on business start-ups and entrepreneurial activities can be indirect, unpredictable, or non-constraining (Mallett et al., 2018). Intriguingly, regulatory quality was negatively associated with entrepreneurship (Sambharya & Musteen, 2014). Different types of entrepreneurial activity respond distinctly to regulatory effects. For instance, Valdez and Richardson (2013) highlight that regulatory support can encourage opportunity-motivated entrepreneurship while discouraging necessity-driven ones. This distinction, further supported by Levie and Autio's (2011) finding that lighter regulatory burdens boost non-necessity and strategic entrepreneurial entry, underscores the importance of nuanced and well-considered policy-making. Together, these insights emphasize the regulatory environment's substantial role in shaping the ease of doing business and the multifaceted impact on entrepreneurship.

Furthermore, the World Bank's ease of doing business index, which encompasses both the quality and efficiency of rules and regulations, provides a comparative measure of business climates across nations (Canare, 2018; Rao, 2018). In the current digital age, the government's role extends beyond traditional regulations and encompasses digital services that improve efficiency and contribute to the ease of doing business (Rowley, 2006). Progressive digitization of government services holds promise for entrepreneurship and can bolster the e-Government's legitimacy (Das & Das, 2021). Digital platforms and e-governance initiatives, such as Aadhar card services and online tax filings, further contribute to business facilitation by improving government efficiency and service delivery (Rowley, 2006; Yadav et al., 2020).

However, Branstetter et al. (2014) noted that regulatory reform only sometimes yields robust entrants, and Meek and Williams (2018) suggested that new ventures must navigate a series of challenges for success. Thus, regulatory reforms and digital platforms only facilitate but do not guarantee entrepreneurial success. Simplifying the pre-registration, registration, and post-registration procedures has encouraged entrepreneurship by saving would-be entrepreneurs time and money (Canare, 2018).

The gradual progression of e-Government services has the potential to offer promising results for entrepreneurship, and if these services are implemented progressively, controlled experiments can establish causality (Das & Das, 2021). Overall, the ease of starting a business remains a composite function of regulatory frameworks, entrepreneurial dynamics, and digital governance. With the changing context of technological advancement and the more complicated socio-economic situation, the government's operation requires cooperation from different sectors to meet the public's needs. The government must seek a new governance way (Estevez & Janowski, 2013).

In the context of Thailand, the government's bureaucratic reform has shifted its focus towards a participatory governance system towards Industry 4.0, emphasizing private sector participation, public engagement, and civil society. From the introduction of New Public Governance in 2007 to the Digital Economy policy in 2017, the Thai government has emphasized digital innovation for public service improvement and economic and social development (Avirutha, 2018). Despite Thailand's improved ranking in the United Nation's e-Government Development Index (EGDI) in 2020, digital inclusion still needs to be addressed, with some segments of the population needing access to digital services and necessary digital skills. World Bank Group (2016) has recommended further reforms to enhance digital adoption and attract investment. In Thailand, the Cabinet has continuously emphasized assessing business ease since 2008 (Cabinet resolution, December 2 2008), mandating an annual report on the challenges in conducting business at each Cabinet meeting. The assessment of these difficulties was further emphasized in 2016, when the Cabinet mandated that each Deputy Prime Minister supervise, monitor, and expedite the modification of critical laws, including those related to governmental services supporting business operations (Cabinet resolution, April 19 2016). In the 2017 decade, evaluating the ease of doing business became a crucial agenda for government agencies to enhance and evolve systems, structures, and mechanisms to support businesses. Some critical entities in this operation included the Ministry of Finance, Ministry of Transport, Ministry of Justice, Ministry of Labor, Bank of Thailand, the Securities and Exchange Commission's Office, and the Office of Public Sector Development Commission (Cabinet resolution, January 29 2019).

Some laws and strategies set the course and provide guidelines to foster a business-friendly environment, especially for small and medium enterprises, such as the master plan under the national strategy. Topics include public service and public sector efficiency (2018 - 2037), emphasizing evolving a modern public sector management system. The 12th National Economic and Social Development

Plan (2017-2021) in Thailand details strategies for digital adoption, public management, preventing misconduct, and promoting integrity, intending to minimize staff costs and boost efficiency in public administration, services, and national business operations. It sets a target to improve Thailand's ease of doing business, ranking to be second in ASEAN according to the World Bank's assessment by the end of the plan. However, the progress in improving the ease of doing business, along with the World Bank's assessment results for Thailand, reveals an inverse relationship between the government agencies focus on assessing business difficulties and Thailand's Ease of Doing Business ranking – as the former increases, the latter tends to fluctuate. This discrepancy between the ease of doing business and the government's efforts to develop and enhance systems, mechanisms, and structures for facilitating business operations prompts a critical inquiry: In which domains should government agencies concentrate their enhancement efforts, and how can they realistically simplify and assist business operations in terms of initiating businesses, addressing business hurdles, and minimizing bureaucratic costs? This inquiry shapes the fundamental issue this study intends to investigate and find solutions. The overarching aim of this study is to bridge the gap between the government's intentions and the on-ground reality, ensuring that Thailand becomes an attractive and efficient hub for business operations.

Literature Review

Ease of Doing Business

In 2003, the World Bank launched the Ease of Doing Business evaluation, assessing multiple countries globally. The inaugural report on the Ease of Doing Business was published the subsequent year. From then on, this assessment became a globally recognized index. International entrepreneurs frequently use these indicators to make informed decisions, particularly regarding foreign direct investment directions (Corcoran & Gillanders, 2015). The ranking of ease of doing business only partially impacted the economic growth of the rated countries. The specific criteria used for these rankings, their role on the international stage, government decision-making, and the reshaping of each country's public sector administration to meet the ranking's criteria all reflect the importance of the Ease of Doing Business rating. The World Bank's assessment primarily covers ten areas related to business activities, which can be categorized based on the business cycle into three groups:

Group I: Activities at the business inception stage, including starting a business, dealing with construction permits, and getting electricity.

Group II: Activities during business operations, such as registering property, getting credit, protecting minority investors, paying taxes, and trading across borders.

Group III: Activities related to operating in a secure business environment, enforcing contracts and resolving insolvency.

The World Bank's criteria often hinge on the complexity of the process or procedure, duration, cost, process flexibility, and investor rights protection guidelines. In a broader sense, the Ease of Doing Business assessment aims to enhance the legal framework associated with business operations to international standards, streamline input and infrastructure access processes, facilitate financial transactions, and establish systems to protect investor rights during and post-business operations.

The Ease of Doing Business evaluation continues to hold a significant role on the global stage. Its importance is reinforced by the backing of the World Bank, one of the world's most influential financial institutions, and by the increasing number of countries worldwide voluntarily participating in the assessment. As evident from the inaugural 2004 report that assessed 145 countries, by 2020, the number of evaluated countries had grown to 190 (World Bank Group, 2020). Prominent global economies such as China and India have shown keen interest in aligning their domestic systems with the assessment criteria to improve their ease of doing business ranking (Kelley et al., 2016). Corporations utilize this global assessment data for communication, sharing information, and enhancing their domestic business image to appeal to foreign investors (Geetha, 2016). These processes or business practices can attract both domestic and foreign investors to the business sector.

Therefore, the government's role in enhancing business processes is crucial in boosting such facilities' efficiency. The public sector should simplify business regulations that obstruct business operations or start-ups (Bota-Avram et al., 2018), address public needs, strengthen political impartiality, and develop a proactive business policy framework (Andrews, 2013). While numerous studies have explored a country's economic and social development level in the past, further examination is still required. Specifically, the public sector's role as a business facilitator is crucial for regional economic growth (Mongay, 2018; Ruiz et al., 2018). Therefore, the government sector needs to modify the environment to accommodate business operations and foster entrepreneurial potential (Szirmai et al., 2011).

Starting a Business

The World Bank's analytical framework for evaluating ease of doing business suggests that SMEs are a vital demographic being scrutinized. This evaluation mechanism serves as a reflection of government service reform that can streamline the operations of SMEs. Considering the exemplar mentioned above of analytical approaches, the start-up analysis focuses on domestically-owned establishments, particularly mid-sized businesses having at most five shareholders and a workforce ranging from 10-50 individuals at the onset of the business. Considering the workforce threshold set by the World Bank and the Ministerial Regulation Prescribing Characteristics of Small and Medium Enterprises, the number of employees in a small enterprise aligns with the criteria established in the ministerial regulations.

Starting a business entails managing various permits and approvals necessary to set up a small to medium-sized enterprise. Considering the stipulated minimum investment, the number of procedures involved, the time, and the costs required for a small to medium-sized limited liability company to formally commence operations in the largest business city within an economy (Kawung et al., 2019). Various studies have shown that Thailand deals with challenges such as excessive red tape and intricate procedures, particularly when launching a new business. In contrast to New Zealand, where setting up a corporate entity (Limited Liability Company) takes an average of one procedure and half a day, Thailand requires five procedures and six days to accomplish the same task (Mekhakovna, 2021).

The questions and concerns that arise revolve around the ease of starting a business in Thailand, particularly in the public sector role. There is also interest in any recent improvements or reforms in this area. This study is designed to empirically explore the ease of initiating a business in Thailand.

The Challenges of Thailand 4.0

Regulatory structures, governmental functions, and the application of digital technologies in governance play a significant role in shaping the ease of conducting business (Alesina et al., 2005). The perception that governmental regulations invariably obstruct entrepreneurial pursuits and market access is inaccurate. Their effects can be indirect, inconsistent, and not necessarily inhibitory (Mallett et al., 2018). Regulatory influences on entrepreneurial activities are nuanced, fostering opportunity-based entrepreneurship while potentially inhibiting those motivated by necessity (Valdez & Richardson, 2013). In recent years, e-governance has played a critical role in shaping business environments, acting as a

platform for government-citizen interactions and service integration (Yadav et al., 2020). Thailand is a fitting case study, showcasing the impacts of regulations, government services, and digital innovations on the ease of doing business. The country's digital capabilities are moderate, ranking third in the ASEAN group and 41st worldwide in the World Digital Competitiveness Ranking 2017 by IMD. However, Thailand's ranking in the IMD World Competitiveness Ranking improved in 2021, climbing one position higher than in 2020 despite a seven-position drop in Economic Performance.

Furthermore, Thailand scored 0.75 points in the 2020 e-Government Development Index (EGDI) conducted by the United Nations, ranking 57th among 193 countries. Despite this progress, digital inclusion remains a challenge as specific populations need access to digital services and skills. The government needs to focus on the private sector's participation, the public sector, and civil society in promoting a participatory governance system toward an industry 4.0.

The government administration in Thailand was originally focused on bureaucratic polity (Riggs, 1966), or a closed administration system, which later reformed the bureaucratic system by adopting new public management (Hood, 1991) implemented during B.E. 2541-2549 (1998-2006). The concept of private sector management was a new organizational model that was more efficient, independent, and agile. It changed in a way that disaggregates departments from ministries to reduce the government sector's size. However, the concept has been criticized for emphasizing the leaders' role and ignoring the government's accountability (Denhardt & Denhardt, 2015; Barzelay, 2001). The advancement of technology also challenged the new concept of government administration in democratic governance (Denhardt & Denhardt, 2000). During B.E. 2550 (2007), the New Public Governance influenced the bureaucratic reform concept. As society became more diverse than ever, the concept focused more on the role of the civil society sector and public engagement and the New Public Service concept. It emphasized the role of digital technology that helped improve public services more efficiently. The improvements could be seen in government processes that adopted technology such as online tax payments, I.D. cards, and mobile utility payments. In 2017, Thailand began to keenly develop into the digital economy with the government's digital policy to ambitiously promote the development and use of digital technology innovations to free the country from economic and social development traps. In addition, the *Digitality for Economy and Society Act 2017* also highlighted the importance of promoting such goals in both industrial promotion and innovation, investment, economic and social exploitation, and the development of the digital workforce of the country. However, many practical challenges can

impede the development of influential industry 4.0. Digital inclusion remains a challenge that needs to be enhanced as populations still lack access to digital services and digital skills to corporate with the government. In addition, the World Bank Group (2016) argued that digital adoption in Thailand needs to be reformed to promote a digital economy and attract investment. Government agencies at different levels, including the central, regional, and local governments, have yet to be aware of this issue. Simultaneously, some of these concepts are part of the country's management, supported by laws and regulations.

Based on the above critical indicators, the advancement in rank or score will affect future confidence and transition toward Thailand. A corresponding approach to improvement or implementation by promoting government management efficiency and transparency could be enabled as a massive room for improvement still exists. The overall competitiveness of the country may be impacted, in particular, the Worldwide Government Indicators (WGI) Government Effectiveness Index assessed by the positive attitude towards government service quality. It must be done in conjunction with enhancing the strengths of the online service index in the U.N. e-government survey index to promote Thailand's assets in the business environment. It is because it is consistent with the direction of e-government service promotion following guidelines to facilitate the business operation of the World Bank conducted through each indicator. Thailand has the most robust performance in the business environment, followed by total competitiveness. In contrast, digital competitiveness, open data, and regulatory quality show room for improvement. Therefore, there is a need for the Royal Thai Government to focus on complete digital services, open data, and regulatory reform.

Evaluating the challenges associated with doing business serves as a means to aid SMEs in operating more effectively. It is a critical agenda and prerequisite for driving local, national, regional, and global economic activities. Assessing the ease of doing business is not a short-lived phenomenon but has long-standing conceptual and theoretical roots (Leal-Rodríguez & Sanchís-Pedregosa, 2019). This article considers that the government should take on an appropriate role, reduce the formulation or create new laws and regulations, and increase its engagement with the populace. However, several improvements are needed for Thailand to enhance its ease of doing business and competitiveness. Specifically, key areas of concern are promoting government efficiency and transparency, improving the online service index, focusing on comprehensive digital services, and reforming regulations.

Best Practices of Various Countries to Ease of Doing Business

The World Bank's Doing Business 2020 report ranks countries based on the ease of starting and operating a business. The ranking is calculated considering various factors and uses data from the top ten countries regarding ease of doing business. The report particularly highlights countries that have improved their rankings significantly (High Climbers) and new entrants in the top ten (New Comers) subject to data availability. Multiple factors can facilitate business operations, but critical reforms creating a favourable business environment include:

Improving Comprehensive E-Government Services

Over the years, many countries have consistently worked on enhancing the efficiency of their government services in various sectors. The focus has been on utilizing digital technology to facilitate services like standardized online registration, swift and lawful services, and the development of a One Stop Service for juristic person registration. Such electronic systems have made government information more accessible to the public, leading to transparency and accountability (Bertot et al., 2016; Halachmi & Greiling, 2013). Singapore serves as an exemplar in enhancing government service efficiency, particularly in the domain of business start-ups. It consistently ranks in the top ten rankings and performs commendably in business start-ups. The significant developments in Singapore include the development of a One Stop Service Juristic Person Registration System; entrepreneurs can register a legal entity through an electronic system called Bizfile, launched in April 2004. The One Stop Service in Singapore allows entrepreneurs to reserve a corporate name, apply for a Value Added Tax (GST) identification number, open a bank account for the legal entity, and register the juristic person, all within a single day through the Bizfile system. It has significantly expedited the process of starting a business in Singapore.

e-Payment System

Introducing an e-Payment system in New Zealand has dramatically simplified the tax payment process. The system allows for the payment of taxes via an expanded channel range, including online banking and the Inland Revenue Agency's website, where tax payments can be made via credit or debit card. It has led to a more user-friendly and efficient payment system, which not only streamlines business operations but also reduces administrative costs, thereby supporting the growth of the digital economy (Sawyer, 2016).

Developing e-government service systems is an influential factor in facilitating business operations. It eases the process of document submission and license application while minimizing the time, cost, and number of procedures involved. These aspects significantly contribute to a country's performance on the World Bank's Ease of Doing Business indicators. As seen in New Zealand and Singapore, the digital transformation of government services can provide valuable insights for other countries seeking to improve their business-friendly environments.

Regulatory Guillotine

Regulatory transparency and clarity are indeed crucial to ensuring a conducive business environment. World Bank Group (2016) emphasizes the need for regulations to adapt to the digital age, which often requires creating or amendment existing legislation. To ensure efficiency, governments should aim for precise and consistent regulations and foster transparency and easy access to rules and regulations.

Enhanced transparency, achieved by openly disseminating information regarding rules and regulations, promotes accountability in both the private and public sectors. According to the Doing Business 2013 report, countries providing greater access to regulatory information demonstrate more efficient regulatory processes and lower compliance costs. Establishing clear and consistent regulations is another essential aspect of creating a conducive business environment. Unclear regulations can lead to confusion, unnecessary disputes, delays, and fraud. Therefore, it is necessary to ensure that regulations are well-defined and systematically enforced. For instance, Colombia's enactment of national law in 2016 introduced stricter construction standards and measures, thereby increasing supervision over building safety and quality. The World Bank's requirements for creating legal mechanisms related to movable property and shareholder rights highlight the necessity of aligning regulations with international standards and the behaviors of investors and entrepreneurs. Such mechanisms include dispute resolution between shareholders and rules prohibiting a person from holding director and chairperson positions. Therefore, improving regulatory practices involves enhancing transparency and accessibility, ensuring clarity and consistency in regulations, enforcing regulations effectively, and aligning regulations with international norms and investor behaviors. These elements create a business environment that encourages entrepreneurial activities while ensuring accountability and fairness.

Business Process Reengineering (BPR)

The concept of BPR necessitates that public service operations align with the commercial sector's habits. Given the role of technology in reducing time and increasing process safety, the government must adapt their service procedures to lighten the load for entrepreneurs interfacing with governmental services. One way to achieve this is by minimizing duplicate documentation processes, such as replicating identification cards, household registrations, marriage certificates, business licenses, etc. Enhancements in this area would concentrate on centralized (single-form) services and electronic system service delivery. However, upon examining New Zealand, the country with the highest score, it is apparent that since 2008, business registrations have been mandated to be exclusively online. It has resulted in a consolidated single process and has reduced the time spent to only half a day. Governmental agencies need to consider the issues related to digital inequality, encompassing infrastructure readiness and the skill levels of staff and service users. Failure to do so may impede the right to access governmental services and impose undue burdens on citizens.

e-Document System

Klischewski and Wetzel (2002) pointed out that while e-document management has advanced over time, most of these systems remain "isolated" and do not support cross-business or cover all types of e-documents. This limitation in issuing e-documents includes ambiguity about standards, technological hurdles, or legal obstacles. It leads to many agencies continuing to use paper documents. This approach introduces multiple challenges, including procedural, time-consuming, and inflexible document issuance. Documents could be counterfeited and must be verified with the issuing agency for validation.

Moreover, paper document storage can incur high costs, especially for documents that must be preserved for a lengthy period. In 2004, the Singapore government successfully overhauled its electronic filing system, known as Bizfile. They introduced a step-by-step guide which helped reduce the system's information updating time from 14-21 days to 30 minutes. Furthermore, it reduced the business registration time from 24 hours to 15 minutes and the establishment of a legal entity from 5 days to 15 minutes. By 2010, service users could apply for legal registration and request a taxpayer identification number simultaneously by completing a single electronic form.

In summary, operational development should focus on integrating a comprehensive e-Service system in a One Stop e-Service format. For instance, corporate name reservation, legal entity registration, taxpayer identification number requests, and corporate bank account opening should be consolidated to enable businesses to set up in one go. An acceleration in using e-Document filing systems and all e-Filing systems for document storage should be pursued. It will benefit businesses by providing convenience, speed, and cost savings while benefiting the government through data storage for future management.

The Department of Business Development has developed an electronic legal entity registration system or e-Registration for Thailand. This entirely paperless system allows for easier legal entity registration, reducing time and cost in interaction with officials and document usage. The system, implemented in 2017, charges a lower registration fee than the traditional fee. Related systems such as identity verification, e-Filing, and corporate name reservation systems have been developed to link together. However, challenges remain in system usage due to the need for knowledge and skills of operators and service personnel, legal complexities, and a lack of flexibility in electronic service systems (Tengratanaprasert & Prateeppornnarong, 2022).

Methodology

This research adopts a mixed methods approach (Creswell & Clark, 2011), combining qualitative and quantitative research, aiming for comprehensive data accuracy. The study is grounded in the principles of public administration and digital government, unfolding in two stages: Phase 1 conducts qualitative research to deepen understanding of the research subject; Phase 2 employs quantitative research to establish prototypes or best practices and suggest policies for broader adoption (Dolowitz & Marsh, 2000; Radaelli, 2000). It also offers technical guidelines for the development of a complete public service system. Two distinct research approaches are utilized in this study:

Qualitative Research: This research method strives to gain a comprehensive understanding of the procedures established by government agencies for business entrepreneurs, such as license application, notification of relevant government agencies, company registration, and tax payment. This research aims to grasp the experiences of private-sector users of government services and the viewpoints of policymakers, executives, and government officials. The focus is reducing discretionary decisions,

increasing service transparency, and providing a comprehensive government service (Bryman, 2012). This exploratory case study approach was chosen for its suitability for researching novel or early-stage subjects (Onwuegbuzie & Leech, 2005). A purposive sampling was conducted, with a semi-structured interview for 10 private sector individuals and government officials involved in business setup procedures: the Department of Business Development, Office of the Permanent Secretary, the Ministry of Commerce, the Revenue Department, and Office of the Council of State. The target groups include policy and planning analysts who have direct involvement in shaping governmental policies; lawyers who have an understanding of legal complexities and compliance issues; and information system development officers who are privy to the technical aspects of business operations (Moore & Stokes, 2012). The informant should have a minimum of 5 years of professional experience in their respective field to ensure they bring a seasoned perspective to the study. The target is to engage with a total of 15 key informants in accordance with these criteria to ensure that the study captures nuanced, expert perspectives on the dynamics of business start-up operations in Thailand. The research maintained ethical standards by securing informed consent from all participants, preserving anonymity, and keeping raw data confidential (Bryman, 2012). Approval for research ethics was sought and obtained from the Ethics Committee in Human Research at the National Institute of Development Administration. The data analysis utilizes content analysis and coding techniques to organize the data for problem examination, exploring technical and legislative hurdles in implementing the relevant starting business process. The analysis was based on data collected from surveys and interviews with target groups involved in these operations (Thomas, 2013).

Quantitative Research is used to formulate policy recommendations for service improvements to better assist and cater to the needs of service users. It involves a cost-effectiveness analysis to assess economic value, evaluate operational efficiency, and identify costs exceeding the estimated ones during system upgrades (Yates, 2015). These estimates are derived from financial analysis evaluations, considering time savings and expenses deemed economic value—such findings aid decision-making processes for leaders shaping policies for government service development using digital technology. Encouraging related agencies to develop a comprehensive digital government service system could result in substantial investment value, lower government interaction costs, and reduced national implementation budgets. It would also enhance convenience for the public.

Results and Discussion

Government Agencies Undertake Various Projects or Activities to Facilitate Starting a Business.

According to the Doing Business 2020 report, establishing a business in Thailand requires entrepreneurs to complete five steps, taking an average of six days, costing around 3 percent of per capita income, with a minimum start-up capital of 15 baht. In the 2020 Start-up Business Ranking, Thailand was placed 47th with a score of 92.4 points. The steps to starting a business in Thailand include: (1) reserving a legal entity name, managed by the Department of Business Development, taking around 3 days; (2) depositing capital into a bank, which takes 1 day and is a process for private companies; (3) registering the company's establishment, managed by the Department of Business Development, which takes 1 day; (4) registering for VAT, managed by the Revenue Department, which takes 1 day and; (5) registering employers and employees for social security, which is the responsibility of the Department of Business Development (Representative of the Department of Business Development, interview, May 28, 2021).

Thailand has been making significant efforts to enhance the efficiency of government services in the business start-up field. Significant initiatives include (1) abolishing the use of rubber stamps: In 2016, the Department of Business Development proposed changes to the Civil and Commercial Code, Section 1128, eliminating the requirement for a director to sign and stamp the company's seal on every share certificate during company registration (Representative of the Department of Business Development, interview, May 28, 2021) and; (2) abolishing the need for copies of work regulations: In 2016, the Department of Labor Protection and Welfare clarified that an employer's work regulations become effective immediately upon posting at the workplace. Consequently, submitting a copy of the work regulations was considered compliance with the law. Additional provisions were made for employers wishing to electronically submit a copy of the Articles of Association. In 2017, the Labour Protection Act (No. 6) B.E. 2560 (2017) was amended to alleviate the burden on employers by removing the requirement to submit a copy of work regulations to the Department of Labor Protection and Welfare's Director-General. This change came into effect on September 1, 2017.

Furthermore, the Department of Business Development announced the cessation of using national I.D. cards and copies of house registration from October 2, 2018, to ease the burden on

entrepreneurs, except when authorizing others to act on their behalf (Representative of the Department of Business Development, interview, May 28, 2021).

Currently, Thailand continues to work on improving the efficiency of government services in the area of starting a business. Major operations include:

Reducing the Process of Corporate Name Reservation

Based on survey findings, reserving a corporate name took three days. To hasten this process, the Department of Business Development implemented measures such as increasing staff numbers to consider requests daily. Additionally, on April 16, 2021, an A.I. technology-based name reservation system was introduced to assist in screening without requiring human staff. This system instantly lets users know whether their desired name is available for reservation. Users can proceed with the reservation if the system shows the name as available.

Conversely, if using paper forms, the name is reserved first, and the form is attached to the request. If the e-registration system is connected to the back-end system, operators can determine whether the name can be reserved. Previously, around 500 names could be registered in a day, but this number has now increased to 2,000 per day. These improvements resulted in a high percent satisfaction rate of 97 percent (Representative of the Department of Business Development, interview, May 28, 2021).

Streamlining Company, VAT, and Social Security Registration Processes

To facilitate entrepreneurs setting up limited partnerships, the Department of Business Development has consolidated VAT and employer registration processes. Now, individuals wishing to establish a company can submit forms for VAT registration to the Revenue Department along with their company registration forms at the Department of Business Development. If they do so, they are considered entrepreneurs from the limited partnership's establishment date. Regarding social security, upon setting up a legal entity at the Department of Business Development, that entity automatically becomes an employer from the day it begins operations. Even if it does not have employees yet, it can contact social security to register employees later once they are hired. This streamlined process reduces the steps involved in registering a legal entity. However, the combined registration process with VAT

registration is only available in paper form (Representative of the Department of Business Development, interview, May 28, 2021).

Development of the e-Registration System

The Department of Business Development has developed an e-Registration system. This utterly paperless system facilitates the registration of legal entities, saving applicants both time and travel expenses and reducing paperwork. Applicants can complete the entire registration process online. This system, in place since 2017, offers a reduced fee for registering legal entities compared to the standard fee. Related systems have been developed for compatibility, including identity verification, e-Filing, and corporate name reservation (Representative of the Department of Business Development, interview, May 28, 2021).

Revise the Current Fee Structure to Implement a Standard Flat Rate.

The Department has continuously improved this service process. Now, entrepreneurs can authorize the registrar to act on their behalf, payment channels have been expanded, and a flat fee rate has been established. For example, the registration fee for the initial establishment of a limited company with registered capital between 5,000 - 275,000 baht is a flat rate of 5,500 baht. In many countries, business registration is subject to a flat fee due to the intricacies of administrative procedures involved. The registration fee stays the same based on the company's capital or size because the same administrative effort is required to file and process the data. In Canada, entrepreneurs are obligated to pay a flat fee for applying to incorporate a company electronically.

Similarly, entrepreneurs in the United States must pay a flat fee for filing and publication. In South Africa, entrepreneurs are asked to pay a flat fee when applying for incorporation. However, the fee for e-filing is reduced to encourage online registration. In some U.S. states, such as Colorado, the company registration fee is as nominal as US\$1. Thailand, in line with this approach, has also reduced fees as an incentive to promote more e-registrations. The registration fee for applications submitted electronically through the e-Registration system was reduced by 30 percent from April 21, 2018, to December 31, 2020, and by 50 percent for three years from January 1, 2021, to December 31, 2023, to ease the operational costs for entrepreneurs. Additionally, since March 8, 2021, six types of representatives, including bookkeepers, heads of quality accounting firms, public company limited collateral enforcers, certified public accountants, and ordinary and extraordinary members of the Thai

Bar Association, have been permitted to prepare and submit registration applications on behalf of entrepreneurs through the e-Registration system.

Challenges and Obstacles in Improving Starting Business Conditions Based on the World Bank Criteria

Number of Company Registrations e-Registration Process Challenge

The complete digitization of the business registration process is currently a challenge. While necessary documents can be submitted to the Department of Business Development in about 60 minutes, an online system would greatly facilitate entrepreneurs by eliminating the need to visit the Department's office physically. Although the Department has developed an online platform for submitting registration documents since March 2017, its use is still not widespread. As a result, it hasn't been evaluated by the World Bank. The following comment was made during an interview:

"Not many people are using the online services offered by government agencies, including ours [Department of Business Development]. To support our goal of becoming a digital government, we are working on measures to encourage the use of these services. According to the World Bank, more than 50 percent of the transactions need to be online, a milestone we are yet to achieve. However, the COVID-19 pandemic has increased the use of electronic systems." (Representative of the Department of Business Development, interview, May 28, 2021)

To incentivize the use of online services, the Ministry of Commerce has issued new regulations reducing the fees for e-registrations by 50 percent. It has led to increased company registrations, especially as the fees associated with company formation are significantly higher than other types of applications.

Technical Challenges

Currently, users can register a digital legal entity through the Department of Business Development website, or alternatively, they can go through the BizPortal website. BizPortal is an online platform aggregating information on all business operations from start-up to closure. It also offers convenient and rapid services for entrepreneurs to apply for licenses relevant to their businesses, such as permits for food and beverage operations, retail enterprises, co-working spaces, etc. Designed to serve

as a one-stop digital service for entrepreneurs and genuine investors, the "BizPortal System" (<https://bizgovchannel.go.th/>) operates under the motto "Quick Service, One Website, All Matters Handled." It aims to enhance the service level for individuals and entrepreneurs wishing to start businesses in Thailand, keep pace with the country's various reforms, and attract foreign investments, thereby raising Thailand's business operation ease. However, there is a limitation to operations through BizPortal as it cannot facilitate an end-to-end process, and there needs to be data linkage between the Department of Business Development and the Revenue Department. An interviewee expressed this issue as follows:

"If one goes through BizPortal, it links to the e-Registration system page. The registration must be done through the e-Registration system of the Department because there is not yet a connection that allows it to be done through the BizPortal platform directly. As of now, only partnerships and limited companies can complete all processes from application submission to electronic signing online through the e-Registration system." (Representative of the Department of Business Development, interview, May 28, 2021)

It reflects that most governmental interactions occur directly between service users and the website of the relevant service providers. The transformation of service delivery should aim to provide users with an integrated solution that allows for their needs to be met, from inception to completion (end-to-end), integrating every aspect from the user interface to the internal workings of the service (external to internal), and across all potential modes of engagement, independent of the user's preference (OECD, 2020). End-to-end services are required to promote consolidation and streamlining of numerous intermediate procedures to satisfy a final need, optimizing such interactions to deliver an effective service.

Furthermore, the e-registration system caters only to partnerships and limited companies, allowing them to complete all processes online, from application submission to electronic signature, fee payment, and obtaining documents. To leverage the online system, users must first register and validate their identity to get a Username and Password, which will then be used for logging in and as an electronic signature. There are currently four methods for identity verification to obtain a Username and Password: (1) in-person verification with staff at a designated location; (2) appointing another individual

to submit the documents; (3) proceeding via e-KYC for online identity verification by capturing an image of their I.D. card and themself, and recording a 3-second video to be sent to the officer for review. This method is viral as it eliminates the need for physical travel; (4) Certificate Authority (C.A.), once they have their Username and Password, users can log into the system to enter their information. Entrepreneurs setting up their businesses can reserve a company name via the e-registration system without using the separate company name reservation system. The subsequent step involves a registrar check followed by an electronic signature. The electronic signature involves entering a code, receiving an OTP number, and paying. The registrar then processes the registration. (Representative of the Department of Business Development, interview, May 28, 2021) While it is an online process, several steps are still involved, potentially burdening users. As an interviewee explained:

"From an entrepreneur's perspective, the online process seems to involve much back-and-forth between the individuals and the authorities. Paper documents need to be prepared, signed, and submitted by a designated person, and there might be occasions when individuals need to communicate with the staff for clarification. It happens before the process concludes. Even with e-registration, there are back-and-forth interactions. Initially, the application must be submitted to the registrar for accuracy verification before signing it. Sometimes, communication through the system can be more challenging than a phone call or face-to-face conversation. If a registrar requests a revision, it could lead to misunderstanding and, thus, waste time. The Department's registration system does not merely involve information registration or submission; it requires verification by a registrar prior to registration. Entrepreneurs might find some aspects of this process inconvenient." (Representative of the Department of Business Development, interview, May 28, 2021)

Despite the push towards digitalization, there remains a strong preference among citizens and the private sector for face-to-face government services. As one interviewee observed:

"As long as online and in-person services overlap, people will still opt for in-person services at the office. Due to improved systems, going to the office is fast and not as crowded as before. In the past, submissions had to be reviewed daily, which

could be tedious. Now, it can be completed within an hour or two." (Representative of law and business consulting firm, interview, May 29 2021)

It indicates that in-person interaction with government officials remains a convenient and efficient method for many. Furthermore, government digital services may not cater to those digitally disadvantaged by age, accessibility, or literacy. Launching digital services without addressing these issues could exacerbate digital inequality (Representative of the Federation of Accounting Professions, interview, May 13 2021).

Additionally, there are aspects of public service where electronic systems cannot replace the personal discretion of civil servants. There exists a distrust of digital platforms, with a preference for traditional face-to-face interactions and physical documents (Representative of the Federation of Accounting Professions, interview, May 13 2021). However, the Department of Business Development continues to promote reforms, conducting awareness campaigns for businesses and implementing different incentive methods to encourage using the online registration platform as the primary means of registration.

The Impact of e-Registration

The implementation of digital services, particularly in the area of corporate registration, has significantly improved the efficiency of starting a business and provided convenience for Thai entrepreneurs. These changes have streamlined the process of business start-ups in Thailand, making it more accessible, straightforward, and cost-effective. Entrepreneurs or their representatives can apply for services through a comprehensive online system, accessible anytime and anywhere. There is no longer a need to engage with multiple agencies or produce unnecessary documents or documents issued by government agencies. It has led to cost savings in terms of travel and service application preparation, estimated at 10 million baht, and is complemented by a 50 percent reduction in registration fees (as shown in Table 1)

Table 1. The Results of Financial Analysis of e-Registration

Number of service users		Operating costs (million baht)			
		Before		After	
e-Registration	14,052	Interact with one agency		Do not interact with any agency	
		Travel expenses	3.51300	Travel expenses	0
		Time wasted	4.21560	Time wasted	0
		One application form		No longer require the application form	
		Cost of paper	1.12416	Cost of paper	0
		Printing ink cost	0.70260	Printing ink cost	0
Total			9.55536		0

Source: Researcher

The formula for calculation:

1. Travel expenses = 250 baht per day x number of departments interacted with x number of service users
2. Time wasted = minimum wage of 300 baht x number of departments interacted with x number of service users
3. Cost of paper = 4 baht per sheet x 20 sheets per application x number of applications x number of service users
4. Printing ink cost = 2.5 baht per sheet x 20 sheets per application x number of applications x number of service users

Therefore, promoting the ease of starting a business encourages a positive environment for trade and investment within the country, consequently benefiting the ease of conducting business in Thailand.

The Transition to One-Stop Electronic Government Services of the Revenue Department

The transition to a service model of issuing electronic documents, led by the Revenue Department, has transformed the procedures to be paperless and enhanced e-document handling,

particularly within the tax payment system. It promotes broader public engagement by making the procedures more convenient and reducing barriers to government data utilization—electronic systems for tax filing and payment offer advantages to tax authorities and businesses. For tax authorities, electronic filing lightens the workload, cuts operational costs, and saves time. For taxpayers, it diminishes computational errors in tax returns and simplifies the process of preparing, filing, and paying taxes. It not only facilitates the public, entrepreneurs, and the business sector but also decreases the load on government and private agencies in verifying the credibility of essential documents. It represents a significant digital transformation of the country, shifting societal mindsets, culture, and behaviors towards adopting and routinely using digital technology to create, verify, and use essential government documents. This transformation fosters integration across public, private, and governmental sectors, adapting the digital transformation era concrete. It can serve as a prototype for future knowledge exchanges across different departments.

In the present scenario of e-government services, potential government services that can be provided electronically are being analyzed. These include services that are permitted according to Section 4 of the Licensing and Facilitation Act B.E. 2558, based on the database of citizens' manuals. The goal is to consider an e-service system encompassing issuing e-documents to elevate one-stop e-government services provision, including electronic instruments. It incorporates the development from data storage formats to digital signatures, e-Stamp, e-Tax Invoices & e-Receipt, and e-Tax Invoice by E-mail. These services cover filing tax invoices, debit notes, credit notes, and receipts in electronic formats such as XML File or PDF, PDF/A-3 standard through etax.rd.go.th. The system also includes digital signatures and e-Stamp, promoting seamless service requests from both internal and external agencies. It represents a comprehensive electronic service system targeting all sections of the public, including labor groups and business groups.

Financial Analysis

Financial analysis is crucial in evaluating the potential and cost-effectiveness of transitioning to e-document issuing formats for services such as e-Tax Invoices & e-Receipt and e-Tax Invoice by E-mail. This transition will enhance convenience and facilitate continuous services for internal and external agencies such as the Department of Business Development and accounting firms. This analysis also considers amendments to laws/rules in alignment with the Revenue Department's announcements to reduce document preparation and copying expenses for the public. For instance, the August 31, 2018,

announcement cancelled the use of I.D. card copies and house registration copies. Similarly, the August 31, 2020 announcement cancelled the requirement for juristic person certification, memorandum, and shareholder account for Revenue Department officials. These reforms aim to make processes faster, reduce time, cut costs, and facilitate the public's access to required certifications such as juristic person certificates, memoranda, and shareholder lists from the Department of Business Development. The resultant savings are calculated as economic value, which can inform executive decision-making when crafting policies for developing digital technology-based government services. It can motivate related agencies to develop a comprehensive digital government service system, yielding investment value, reducing the cost of government contact, and minimizing the national budget for implementation.

Furthermore, these reforms are beneficial to the public as they receive services that are convenient and fast. A financial analysis tool is used to conduct cost analysis and determine the development course for a comprehensive electronic document issuance system. Factors such as the number of documents, procedures, duration, and number of service applicants are considered. The operation costs of the Revenue Department are analyzed to assess the agency's readiness and potential for digitalization. The aim is to create a prototype model that can extend the results from the document issuing process, the use of electronic documents, and document verification. It would be used to certify electronic documents and establish a system linking tax information with internal departments. The present state of government services is analyzed using cost-effectiveness analysis, the public information manual, and strategic importance considerations. These include 1) mission-based services; 2) services transformed into electronic services with significant impact on the digital economy; and assessment of electronic service provision based on (2) procedures, (3) duration, (4) fees, and (5) volume of services (transactions) per year. These parameters serve as inputs for financial analysis through a cost-benefit analysis of developing a one-stop e-government service system. These services include (1) e-Stamp, (2) e-Tax Invoices & e-Receipt and e-Tax Invoices by E-mail.

The financial analysis results demonstrate that the time reduction per year amounts to 101.61 million daily minutes, representing 96.35 percent of the reduced period. The annual expenses were reduced to 1.46 million baht annually, representing 96.35 percent. Additionally, it is possible to decrease

the number of documents by 21,900 cards daily, totalling a yearly saving of 98,550 baht and representing 96.35 percent. It corresponds to a reduced economic value of 103.09 million baht per year (Figure 1).

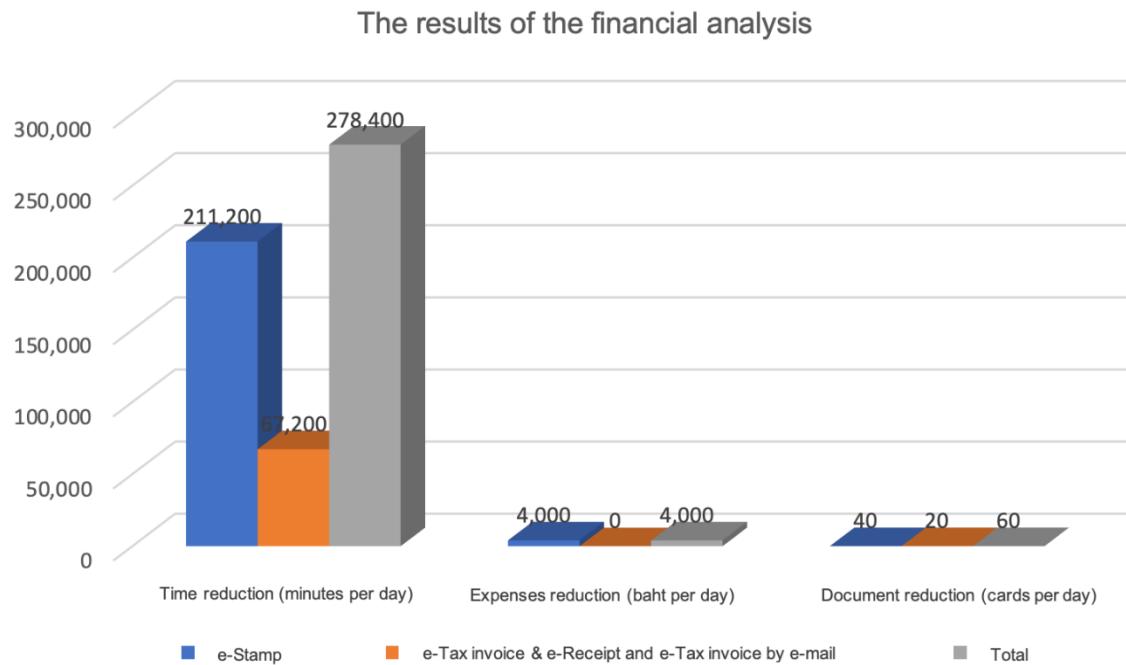


Figure 1. The Results of the Financial Analysis of e-Stamp and e-Tax Invoices & e-Receipt and e-Tax Invoices by E-mail.

Source: Researcher

Based on the financial analysis by the Revenue Department, transitioning to a one-stop e-government service system through two main services will lead to significant improvements in service delivery. Specifically, this transition will reduce time spent, decrease the number of documents required for review, and cut costs related to paper document processing and storage. These benefits are realized when shifting from 3-tier service delivery to a single electronic platform. The associated cost-benefits are outlined in Table 2.

Table 2. The Results of the Cost-Benefit Analysis of e-Stamp and e-Tax Invoice & e-Receipt and e-Tax Invoice by E-mail

Public services	Costs	Benefits	Annual al net benefits	Net Present Value
	Ct	Bt	BT-Ct	3 %
e-Stamp	16,000 Bht.	15,700 Bht.	300	291
e-Tax Invoice & e-Receipt and e-Tax Invoice by E-mail	20 Bht.	0 Bht.	20	19.4
Total	16,020 Bht.	15,700 Bht.	320	310.4

Source: Researcher

NPV is calculated by

$$\sum NPV = (Bt - Ct) / (1 + r)t \quad t=0$$

Bt = Benefits at the transition from service level (L)

Ct = cost at the transition from service level (L)

r = discount rate

t = transaction per year

The analysis reveals that the two services that allow for the electronic submission of requests and associated documents yield the highest overall benefit of 310.4. It indicates that the transformation into a digital system for these services would increase returns by up to 3 percent compared to the current system. It suggests that government officials and policymakers should prioritize this transformation. These services can serve as a blueprint for implementing digital technology strategies, thus upgrading online submission services into one-stop digital services. This transformation could significantly increase the value derived from the national budget.

Recommendations

Integrating the Process of Reserving a Corporate Name into the Online Procedure for Registering a Company

The process of establishing a company begins with the registration of a corporate name with the Department of Business Development. The Department has simplified this process, enabling operators to reserve names online (<http://www.dbd.go.th/Applications/cds/>) within less than a day, free of charge. A corporate name is approved if it is different from an existing company name and if it complies with the internal regulations of the Department of Business Development. As the Department is designing a new company establishment process, the incorporation procedure might allow for immediate verification of a company name upon submission of the incorporation application form. Consequently, instead of performing it as a separate operation, the Department of Business Development will be able to register applicants after confirming their names (Representative of the Department of Business Development, interview, May 28, 2021). This streamlined process is already used in countries like Sweden and Australia, where no extra steps are needed to reserve a company name.

According to the World Bank's 2011 Survey on the Use of I.T. in Business Registration across 34 businesses, 42 percent of respondents stated that name search is not a separate step during business registration, and 62 percent reported that reserving a separate corporate name is unnecessary. The Department of Business Development could also prepare a comprehensive taxonomy of acceptable names to facilitate entrepreneurs in company registration. In the early 2000s, many government agencies in the United States, Canada, and Australia (at both central and provincial levels) implemented clear rules to check for similarities in company names. This system, containing limited words and phrases and indicating cases where consent is required, leads to automatic acceptance or rejection of corporate names during registration. It has successfully improved transparency and efficiency in corporate name search and clearance. Individuals can check the availability of their desired name online and apply later. An automatic series of tests are then conducted to determine whether the proposed legal entity name already exists, leading to either acceptance or rejection. In exceptional cases, the Australian Securities and Investments Commission, the authority responsible for verifying corporate names, may review and reject the applied name if a word is unknown, deemed inappropriate or misleading to the public. For New Zealand, company name reservations are made online at the onset of the registration process.

Promoting the Creation of a Consolidated Platform for Business Registration

It can be achieved by amalgamating the registration procedures with the Revenue Department for TIN and VAT tax registration, the Ministry of Labor and Social Welfare, and other relevant departments. Thailand needs to develop a singular interface for all registration protocols and amalgamate it with BizPortal. Using BizPortal can help enhance the efficiency and quality of government services and boost accessibility. Nevertheless, the e-services related to business registration are yet to be fully accomplished. Office of the Public Sector Development Commission is tasked with contemplating ways to boost interoperability amongst various departments, aiming to transform business registration into a one-stop online service. After establishing a unified business registration form for all entities, the government needs to have a system and database for various departments, especially the Department of Business Development, the Revenue Department, and the Ministry of Labor and Social Welfare. This information should then be linked to a single interface for business registration, easing the process for entrepreneurs wanting to establish a business. A critical element for the success of this reform is empowering relevant departments to make decisions and promoting collaboration among various agencies involved. The lack of this will result in delayed processing, as the approval procedure would still be carried out by multiple departments, causing an inconvenience for the public due to the need to contact various relevant departments. Countries failing to implement this will find their "one-stop shop" turning into "one more stop" in their company registration process.

In Malaysia, introducing unique Corporate Identification Numbers in 2010 led to consolidating companies registered with the Companies Commission of Malaysia (CCM), simultaneously adhering to registrations with the Tax authorities, the Employment Provident Fund, the Social Security Organization, and the Inland Revenue Board. This process also includes additional services post-company registration, such as providing a company seal, statutory books, memorandum of association, and share certificates. Portugal has implemented a "FastTrack" platform that allows users to choose pre-approved legal entity names from the Registry's website and directly register the legal entity through a unified website. The registry office then seamlessly handles taxation, social security, and labor registration, distributing the legal entity registration (incorporation) notice. Estonia and Norway possess interoperable systems connected to six other systems, namely, e-procurement systems for government agencies, land, labor, tax, pledges, and civil registration. Similarly, Slovenia has systems that interoperate with six other systems: land, labor, taxes, pledges (PledgesX), citizen registries, and trade databases.

According to the Electronic Transactions Act B.E. 2044 (2001), electronic data was given legal status to function equivalently as traditional transactions. This Act was later updated by the Electronic Transactions Act (No. 2) B.E. 2551, which governs electronic signatures in Thailand, utilizing various authentication methods for its users. An assessment of the Electronic Transactions Act is needed to ensure that digital signatures become a more cost-effective and time-efficient choice than conventional contracts. The certification requirements and the fact that the legal standing of digital signatures is subject to the court's discretion have been hindrances to their usage. Further, after the law was implemented, it was observed that specific provisions act as barriers to practical implementation. These include the creation of e-documents, stipulations for the production of electronic data in writing or as written evidence, and the signing of electronic information. There are also restrictions on the exercise of authority by competent officials in supervising transaction service businesses, which currently cannot be monitored effectively. With the anticipated increase in electronic contracts between parties from different states, Thailand needs to enhance its domestic law to diminish hurdles resulting from varying legal infrastructures between member states. It can be achieved by improving or formulating laws that align with the principles of model laws or international cooperation conventions related to electronic transactions. For instance, the United Nations Convention on the Use of Electronic Communications in International Contracts can be a guide whose principles are akin to revising the Model Law on Electronic Commerce 1996 and its parent law, the Model Law on Electronic Signatures 2001. These principles were used as a foundation for drafting Thailand's Electronic Transactions Law dated January 6, 2015, aiming to modernize it to accommodate new types of transactions and cater to a broader range of international contracts.

Establishment Mechanism to Uphold Quality, Trustworthiness, and Transparency

In the mid-term, it is necessary to enhance the existing system of the Ministry of Commerce into a comprehensive business registration system. Modern best practices in this field comprise four significant points: firstly, the establishment of a centralized, complete, and reliable business registration information database; secondly, the collection of data on all registered business entities in the country into a single business register (including limited companies, joint ventures, and sole proprietorships); thirdly, integration of tools to showcase business statistics, support policy creation, and supply information to stakeholders for risk evaluation and; lastly, legal and I.T. mechanisms should be established to update business registration data and ensure interoperability with other databases for data exchange with stakeholders like tax and labor departments.

Establishment a Committee on the Integration of Government Databases

A committee on integrating government databases should be constituted since data links involve multiple agencies. A similar committee for exchanging information on the Linkage Center system existed but was disbanded in 2015. This committee should ideally have representatives from all ministries as co-hosts for smooth information requests. The committee should also be empowered to authorize permissions, accelerating the process. If the Linkage Center's information is accessible to government agencies, legislation should be enacted, making registration with the system mandatory and requiring permission for usage. Given the complexity and difficulty of individual laws, the Government Database Integration Committee might consist of a technical team and a legal team (Representative of the Department of Provincial Administration, interview, May 31 2021).

Conclusions

The Thai government has made several changes to simplify the business establishment process, including removing specific physical requirements, introducing an AI-based name reservation system, consolidating VAT and employer registration processes, and establishing an e-Registration system in 2017. These steps aim to reduce bureaucracy, save time and expenses, and accelerate the process of starting a business in Thailand. However, the process is only partially digitized, and the e-Registration system is underused. Despite reduced fees, the platform faces technical issues, such as more data linkage between the Department of Business Development and the Revenue Department. It is limited to partnerships and limited companies. There is still a preference for in-person government services due to particular challenges entrepreneurs face in using digital platforms, such as complex verification and electronic signature procedures. Despite digitization efforts, the Thai government still needs to work on making the process entirely online, especially concerning the World Bank's criteria for starting a business. There are suggestions to incorporate the corporate name reservation process within the online company registration procedure, develop a unified platform for business registration across various departments, and reassess the Electronic Transactions Act. Proposed improvements include establishing a best practice mechanism to uphold quality and transparency and a committee for integrating government databases. These measures could improve the efficiency of government services, simplify the process for entrepreneurs, and ensure digital services are cost-effective and time-efficient.

Endnote:

¹ Data has been sourced from a public manual titled 'Service Level Agreement (SLA)' available on the official website (www.info.go.th). This manual delineates the standards of service for each respective process.

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