Multiplier transformation of E-commerce to S-commerce in emerging economy

ABSTRACT

Relevance. Electronic commerce (e-commerce) and social commerce (s-commerce) are transforming business and consumer behaviour in Southeast Asia, propelled by digital advancements and increased internet and smartphone usage. This trend is significantly influencing economic growth and market dynamics in these emerging economies.

Research Objective. This study aims to perform a comparative analysis of e-commerce and s-commerce across Southeast Asian countries. Additionally, it seeks to explore the evolution from e-commerce to s-commerce in emerging economies, examining the opportunities and challenges embedded in this transition, and discussing the implications for businesses and consumers alike.

Data and Methods. To achieve these objectives, we used a quantitative approach, surveying 872 Thai participants through an online questionnaire using a convenience sampling technique. Additionally, we analyzed the data comparing e-commerce and s-commerce across Southeast Asian countries using the documentary method and content analysis.

Results. Consumer spending through e-commerce and s-commerce has a significant positive impact on economic growth in Thailand, surpassing the impact of government spending. Private consumption, a substantial component of Thailand's GDP, stimulates production, investment, and job creation, fostering overall economic advancement. In Southeast Asia, distinct e-commerce trends are evident: Thailand benefits from high internet and smartphone usage, Indonesia from robust social media engagement, and Vietnam from a focus on social commerce and mobile, cross-border e-commerce. These diverse trends underscore the necessity for businesses to tailor their strategies to each country's unique consumer behaviors and preferences.

Conclusions. The study confirms the significant impact of electronic consumption through e-commerce and social media on GDP consumption. This form of consumption not only drives demand but also creates jobs, enhances efficiency, and opens opportunities for international trade, fostering sustained economic development. In light of these findings, governments are advised to bolster digital infrastructure and support businesses in their digital transition. Meanwhile, businesses are recommended to adapt to digital models, emphasize consumer engagement, expand globally through online platforms, and integrate sustainable practices. Collectively, these measures are designed to harness the full potential of electronic consumption for sustainable and robust economic growth.

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Multiplier, Transformation, E-Commerce, S-Commerce, Thailand, Southeast Asian

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Multiplier transformation of E-commerce to S-commerce in emerging economy

Mультипликаторная трансформация E-коммерции в S-коммерцию в развивающихся странах

АННОТАЦИЯ

Актуальность. Электронная коммерция (e-commerce) и социальная коммерция (s-commerce) меняют поведение бизнеса и потребите-
лей в Юго-Восточной Азии, чему способствуют цифровые достижения и рост использования интернета и смартфонов. Эта тенденция существенно влияет на экономический рост и динамику рынка в этих странах с развивающейся экономикой.

Цель исследования. Целью данного исследования является проведение сравнительного анализа электронной и социальной коммерции в странах Юго-Восточной Азии. Кроме того, мы стремимся изучить эволюцию от электронной коммерции к социальной коммерции в странах с развивающейся экономикой, изучая возможности и проблемы, связанные с этим переходом, и обсуждая последствия как для бизнеса, так и для потребителей.

Данные и методы. Для достижения этих целей мы использовали количественный подход, опросив 872 тайских участника с помощью онлайн-анкеты, используя удобную технику выборки. Кроме того, мы проанализировали данные, сравнивая электронную коммерцию и социальную коммерцию в странах Юго-Восточной Азии, используя документальный метод и контент-анализ.

Результаты. Потребительские расходы посредством электронной и социальной коммерции оказывают значительное положительное влияние на экономический рост в Таиланде, превосходя влияние государственных расходов. Частное потребление, существенный компонент ВВП Таиланда, стимулирует производство, инвестиции и создание рабочих мест, способствуя общему экономическому развитию. В Юго-Восточной Азии очевидны тенденции электронной коммерции: Таиланд извлекает выгоду из широкого использования интернета и смартфонов, Индонезия — из-за активного участия в социальных сетях, а Вьетнам — из-за активизации внимания на социальной коммерции и мобильной трансграничной электронной коммерции. Эти разнообразные тенденции подчеркивают необходимость того, чтобы предприятия адаптировали свои стратегии к уникальному потребительскому поведению и предпочтениям каждой страны.

Выводы. Исследование подтверждает значительное влияние электронного потребления через электронную коммерцию и социальные сети на рост ВВП. Эта форма потребления не только стимулирует спрос, но и создает рабочие места, повышает эффективность и открывает возможности для международной торговли, способствуя устойчивому экономическому развитию. В свете этих выводов правительствам рекомендуется укреплять цифровую инфраструктуру и поддерживать бизнес в процессе перехода к цифровым технологиям. Между тем, предприятиям рекомендуется адаптировать свои стратегии к цифровым моделям, уделять особое внимание вовлечению потребителей, расширяя их по всему миру через онлайн-платформы и внедряя устойчивые практики. В совокупности эти меры призваны использовать весь потенциал электронного потребления для устойчивого и устойчивого экономического роста.
研究结果：消费者通过电子商务和社会化商务进行的消费对泰国经济增长有着显著的积极影响，其影响超过了政府支出。私人消费是泰国国内生产总值的重要组成部分，它刺激了生产、投资和就业机会的创造，促进了整体经济的发展。东南亚电子商务趋势明显，泰国得益于互联网和智能手机的广泛使用，印度尼西亚得益于社交媒体的积极参与，越南则得益于对社会化商务和移动跨境电子商务的重视。这些不同的趋势突出表明，企业需要根据每个国家独特的消费者行为和偏好制定相应的战略。

结论：这项研究证实了通过电子商务和社交媒体进行的电子消费对国内生产总值增长的重大影响。这种消费形式不仅刺激了需求，还创造了就业机会，提高了效率，为国际贸易开辟了机会，促进了经济的可持续发展。有鉴于此，我们鼓励各国政府加强数字基础设施建设，支持企业进行数字转型。同时，鼓励企业适应数字化模式，重视消费者参与，通过在线平台拓展全球业务，并采取可持续的做法。这些措施旨在充分利用电子消费的潜力，促进可持续和有弹性的经济增长。

供引用

Introduction
As technology, especially the internet and mobile communications, keeps advancing, globalization is entering a new phase in the digital era. Computers and other innovations in information and communication technology (ICT) play a crucial role in shaping a more connected global financial system and information space (Limna, Kraiwanit, & Siripipatthanakul, 2023). The growth of online businesses has found a substantial market due to the significant increase in internet users resulting from digitization. Social networks are gaining importance, influencing online commerce. Now, customers can easily find information, make purchases, and seek after-sales services using their computers or mobile devices. Many people today prefer shopping online through applications and websites (Faqih, 2022; Napawut et al., 2022; Limna, Kraiwanit, & Jangjarat, 2023).

E-commerce, also known as electronic commerce, pertains to the trade of products and services via the internet. The popularity of this method for global business has grown due to the widespread availability of internet connectivity and the rising use of mobile devices (Ahmed & Kumari, 2022; Sitthipon et al., 2022). Nonetheless, e-commerce encounters difficulties in emerging economies where internet access is limited, and traditional brick-and-mortar retail remains dominant (Reardon et al., 2021; Samara & Terzian, 2021). In response to these challenges, a transition from e-commerce to s-commerce, denoting social commerce, has surfaced within these economies. Social commerce involves using social media platforms to make buying and selling goods and services easier. This approach takes advantage of the widespread use of social media and existing social networks to create a more personalized and engaging shopping experience for consumers (Alalwan et al., 2017; Alam et al., 2022; McLachlan & Gurr, 2022).

The fast-paced development of social media and Web 2.0 technology offers a significant opportunity to transform the world of e-commerce. This shift involves moving away from a focus solely on products to a model centered around social interaction and engaging with customers. Social media refers to online applications built on the Web 2.0 foundation, emphasizing the collective wisdom of users. In this new landscape, customers have access to a wealth of social knowledge and experiences, enhancing their understanding of online shopping goals and supporting informed decision-making. Simultaneously, online businesses can gather valuable insights into consumer behavior, helping them understand shopping experiences and expectations. This, in turn, enables the formulation of effective business strategies. Recognizing these mutually beneficial outcomes, enterprises are adopting various Web 2.0 features, functionalities, and capabilities to enhance customer involvement, build stronger con-

nections, and drive increased economic value. This transformation in e-commerce is commonly known as social commerce (Huang & Benyoucef, 2013; Zhang, Liu, & Yao, 2021).

Social commerce (s-commerce) is a strategic use of Web 2.0 technologies in the e-commerce landscape, primarily integrating key features like user-generated content and content sharing. The impact of Web 2.0 on e-commerce is evident in both business outcomes and social engagement among consumers. Specifically, Web 2.0 significantly influences business transactions and the reliability of business reputation systems. It also strengthens the connections between enterprises and customers, increases website traffic, identifies new business opportunities, and supports product and brand development. Additionally, it provides enterprises with the ability to offer high-quality products, understand market trends more accurately, and optimize the effectiveness of marketing efforts. From a consumer perspective, Web 2.0 influences aspects such as customer authority and value co-creation. With the emergence of Web 2.0, customers’ perceptions, preferences, and choices are shaped not only by the information presented on e-commerce platforms but also by content generated by individuals within their social circles (Huang & Benyoucef, 2013; Michaelidou, Siamagka, & Christodoulides, 2011; Sohn & Kim, 2020).

The e-commerce sector in Southeast Asia (SEA) is currently experiencing a notable surge, propelling the region towards exceptional growth rates. This momentum has exceeded initial expectations, positioning SEA to potentially achieve a substantial market value of $360 billion by 2025. This progress underscores the shifting dynamics of consumer behaviour, merchant interaction, and growing interest from investors. The trajectory is significant, aiming for an ambitious milestone of $1 trillion in Gross Merchandise Value (GMV) by 2030. Key markets including Malaysia, the Philippines, Thailand, Vietnam, and notably Indonesia are emerging as strong contenders in this digital transformation. Notably, Indonesia’s expanding middle class and improved internet accessibility are predicted to drive its leadership in this evolution, potentially securing a majority share of the Southeast Asian e-commerce market by 2025. This surge solidifies SEAs position as a notable force in the e-commerce realm, solidifying its role as a dynamic hub for industry expansion and innovation (Zaręba, 2022).

In the dynamic context of emerging economies in Southeast Asian nations, the interaction between e-commerce and social commerce (s-commerce) plays a crucial role in influencing both economic growth and consumer engagement. These countries are rapidly undergoing digital transformation, driven by increased internet accessibility and the widespread adoption of smartphones among their sizable populations. Thailand, in particular, has seen significant growth in both e-commerce and s-commerce. This expansion is fueled by factors such as rising rates of internet and mobile device usage, growing consumer confidence in online shopping, and the availability of a diverse range of virtual goods and services. Notably, Thailand’s e-commerce landscape is entering a new phase, with prominent e-marketplaces introducing innovative features to attract customers, shifting the focus away from price-based competition. Simultaneously, social commerce is gaining traction as a strategy to attract buyers, marking a progressive evolution. Analyst forecasts indicate that e-commerce will continue to expand through various channels, including social media and platforms owned by product creators. Within this landscape, live-streaming has become a favored method for product sales due to its ability to prompt quick purchasing decisions (Hirankasi & Klungjaturavet, 2021; Leesa-Nguansuk, 2023).

Indonesia, on the other hand, has experienced rapid e-commerce growth, propelled by escalated internet usage and a digitally adept young population. The prevalence of mobile commerce is undeniable, with numerous online marketplaces catering to varied consumer segments. The transformational landscape is further shaped by innovations in payment systems, logistical com-
plexities, and the ascent of social commerce. As regulatory measures are introduced to oversee this sector, the prospects of cross-border e-commerce stand out amid competition and infrastructural limitations. The key to thriving in this burgeoning market lies in aligning with consumer trends, embracing technological advancements, and adeptly navigating shifts in regulations (Azzery, 2022; Dudhat & Agarwal, 2023; Uzunoglu, 2023).

In Vietnam, a leader among Southeast Asian nations, social commerce took the helm of the online retail industry in 2020. Given the nation's extensive use of social media, the subset of e-commerce known as s-commerce is a pivotal driver of growth, contributing to half of the e-commerce market (Nguyen, 2022). Consequently, investigating the e-commerce and s-commerce trends in Southeast Asian countries is of paramount importance. Both Thailand and Indonesia are experiencing rapid advancements in these sectors, positioning them as influential participants in the global digital market (Hirankasi & Klungjaturavet, 2021; Kaplan, 2022).

This study seeks to undertake a comparative analysis of e-commerce and s-commerce in Southeast Asia. These insights can assist businesses in recognizing opportunities for growth, customizing strategies according to local nuances, navigating regulatory frameworks, and optimizing marketing methodologies. By evaluating factors like market size, technology adoption, and competitive dynamics, enterprises can make well-informed choices to effectively establish and expand their online presence in these dynamic markets.

The economic multiplier is a crucial tool in economics and government policy, invigorating a nation's economy (Lu & Zhu, 2021). Understanding the multiplier transformation from e-commerce to s-commerce is significant, yet there is a dearth of exploration in this area. This study focuses on Thailand, examining the multiplier transformation in emerging economies. It also compares e-commerce and social commerce (s-commerce) in Southeast Asian countries, emphasizing their evolution in emerging economies.

The quantitative study surveyed 872 participants in Thailand, using documentary and content analysis methods. Findings revealed significant growth in e-commerce and s-commerce in Thailand, Indonesia, and Vietnam, with these sectors having a greater economic impact during the COVID-19 pandemic than government spending in Thailand.

The paper consists of six main sections: the first, introductory, section is followed by the section outlining the theoretical framework. The third section describes our research methodology. The fourth section presents the results, which are further discussed in the fifth section. The last section includes conclusions, limitations, and recommendations.

**Theoretical framework**

In recent years, there has been a shift in e-commerce towards social media platforms, leading to the emergence of social commerce or s-commerce. This transformation has the potential to further revolutionise the e-commerce industry, particularly in emerging economies (Attar, Shanmugam, & Hajli, 2021; Attar et al., 2022; Asanprakit & Limna, 2023).

E-commerce refers to purchasing through an online store or app, whereas s-commerce involves directly selling products and services on social media. In s-commerce, the entire shopping experience, from discovering and researching products to checkout, happens right on social media platforms (McLachlan & Gurr, 2022). Multiple social media platforms, including Facebook, now offer artificial intelligence (AI) features.

Facebook utilises AI to provide users with relevant content across text, photos and videos and to shape the operation of its ad product. This has significant implications for businesses in the digital age. Moreover, Facebook and Instagram both offer the option for businesses to create shoppable posts organically, allowing social media users to purchase products directly on the platforms. Snapchat has also introduced a similar feature, though it is still in beta testing. Pinterest’s social

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commerce capability is manifested through ‘Product Pins,’ which, when clicked, redirect users to a designated e-commerce website (Caidar, 2021; Limna, Siripipathanakul, & Phayaphrom, 2021). Thus, various organisations use online platforms, including social media platforms, for the purpose of selling products and services. Also, social media continues to influence consumers and expands the use of s-commerce (Attar, Shanmugam, & Hajli, 2021; Sitthipon et al., 2022).

According to Hirankasi and Klungjaturavet’s (2021) report on Krungsri Research, the internet’s impact is evident worldwide, and the COVID-19 pandemic has further emphasised its significance. The changes that occurred over the past 18 months have made the internet an even more crucial part of people’s daily lives worldwide, including in Thailand.

Figure 1 below illustrates the internet and social media usage patterns in Thailand compared to global averages. Between 2013 and 2020, Thailand experienced a surge of 91.6% in internet users, increasing from 26 million to 50 million. Additionally, the average daily internet usage rates have risen, with Thai people spending an average of 11 hours and 25 minutes online each day. Social media are highly popular among Thai internet users, with 95.3% accessing social media services. Thailand is Facebook’s 8th most important market globally, with 51 million users, and 16 million Thai people use Instagram, ranking the country 15th globally. Moreover, Thai people are more engaged with these platforms than the worldwide average, as shown by an average of eight comments per person per month on Facebook, compared to the global average of five.

Attar, Shanmugam, and Hajli (2021) focus on exploring the factors that influence e-commerce satisfaction in the context of social commerce. They showed that both trust and surface credibility hold substantial sway over e-commerce satisfaction, ultimately driving purchase intention. Remarkably, the study unveiled that the relatively novel concept of surface credibility emerged as a noteworthy predictor for purchase intention within the social commerce landscape. It also highlighted the significant role of trust in shaping e-commerce satisfaction, thereby fostering purchase intention, with the added influence of surface credibility.

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Allmen (2012) underscored the absence of substantial empirical backing for substantial multiplier effects resulting from local expenditures on sports infrastructure. This scarcity of evidence was attributed to inflated assessments of direct effects and the leakage of economic benefits from the local economy. To gain a more accurate understanding of the foundational expenditures associated with hosting a team in a city, the recommendation was to account for net new spending on local incomes and businesses, in addition to local taxes. While the interplay between tax rates and the multiplier effect remained uncertain, the study highlighted limitations in reaping full-time employment benefits within the sports industry, largely due to the prevalence of part-time employment. The government's role in driving economic growth, a topic widely debated in macroeconomics, was examined in the context of local economic impact. The study indicated that hosting professional sports teams and constructing stadiums could indeed propel economic growth.

Kraiwanit (2021) delved into the realms of e-consumption and private sector consumption in Thailand, meticulously examining the multiplier effects that influence e-consumption. The research surveyed internet users who were engaged in online shopping or selling activities through diverse platforms across Thailand. The study disclosed that offline purchases were more prevalent across various goods and services, with the exception of items such as clothing, shoes, personal products, and communication goods, which exhibited a higher proportion of online purchases. The research model constructed in the study demonstrated the notable impact of education and savings on e-consumption, yielding a multiplier of 1.21. Considering the greater significance of private consumption compared to public consumption within the Thai economy, the study recommended prioritising the development of ICT infrastructure to facilitate e-consumption, enhancing human skill sets, and fostering the growth of e-retail ventures.

Indonesian micro-, small and medium enterprises (MSMEs) possess distinct characteristics that set them apart from larger businesses, necessitating tailored approaches for their development. These MSMEs are categorised into micro, small, and medium enterprises, with micro enterprises comprising the largest segment. Despite their prevalence, micro enterprises face challenges in marketing, which could potentially be mitigated through e-commerce. However, many MSMEs struggle to embrace e-commerce due to technological unpreparedness. The evolution of social media in Indonesia adds another layer to this landscape.

Syuhada and Gambett (2013) explored the challenges of adopting e-commerce in Indonesia, focusing on the state of Indonesian MSMEs and their needs for a customized online marketplace. The proposed system design seeks to address technological readiness and adoption issues encountered by Indonesian MSMEs and similar entities in developing nations. The recommendation is to integrate social media, particularly Facebook Commerce, as a way to boost interaction trust, facilitate internet-based word-of-mouth marketing, and expedite growth within the MSME Marketplace.

The continuous evolution of information technology has transformed entrepreneurship by altering business operations. Internet proliferation has accelerated economic development, shifting transactions from in-person to online. Yacob et al. (2021) conducted a study in Jambi Province, examining how social commerce, resource capabilities, and competitive advantage impact the performance of MSMEs. Quantitative research using SmartPLS 3.0 explored this across Jambi city, Tanjung Jabung Barat district, and Sungai Penuh city, with 150 MSMEs as respondents. Findings revealed significant influence of social commerce on competitive advantage, but not of resource capabilities. Neither social commerce nor resource uniqueness significantly affected MSMEs’ business performance. However, competitive advantage emerged as a key factor driving MSMEs’ performance, with a mediating role for the model of social commerce and resource capabilities.

Rahman, Fauzia, and Pamungkas (2020) delved into the factors influencing the acceptance of social commerce by utilising the framework of the Unified Theory of Acceptance and Use of Technology (UTAUT2). They explored variables such as performance expectancy, effort expectancy, social support, facilitating conditions, hedonic motivation, habitability, price saving orientation, and privacy concerns. The study centred on customers’ willingness to embrace technology and employed a quantitative methodology, involving 244 Indonesian social commerce users as participants. The findings demonstrated that elements like social influence, facilitating conditions, he-
donic motivation, habit, price value orientation, and privacy concerns played a substantial role in shaping behavioural intentions. However, performance expectancy and effort expectancy were not found to exert a significant influence. The study highlighted the significant impact of price value on user behaviour within the realm of social commerce. Conversely, the presence of facilitating conditions and habits did not yield a discernible effect on user behaviour.

Wilson (2019) explored how perceived usefulness and perceived ease-of-use influence repurchase intention in the Indonesian e-commerce sector. The study involved 400 participants, and data collected were analysed using the PLS-SEM method with SmartPLS 3.2.7 software. The findings revealed that both perceived usefulness and perceived ease-of-use had a positive impact on Indonesian consumers’ repurchase intention in e-commerce, both directly and indirectly through trust. Businesses in the Indonesian e-commerce industry should simplify and improve their systems to minimise user confusion and emphasise the benefits of their platforms.

Pham and Pham (2021) investigated the determinants of success for Vietnamese e-commerce startups. Employing a mixed method, this study assessed the effects of external, e-service, and founder factors on the success of startups in Vietnam. It was found that four factors—risk-taking propensity, achievement orientation, dependency of e-service quality, and e-networking—had a significant impact on the success of e-commerce startups. The tendency to take risks was the one that had the greatest impact on the success of e-commerce startups among the four.

The theoretical framework of this study centers on the transition from e-commerce to s-commerce and its widespread effects. It demonstrates how the move from conventional e-commerce to socially integrated commerce systems, spurred by Web 2.0 and social media, is transforming consumer behavior and reshaping business strategies in emerging economies, with a focus on Southeast Asia. This shift is explored in terms of its ability to amplify customer engagement, build trust, and offer personalized experiences via user-generated content and social interactions. Moreover, the framework underscores the profound impact of this evolution on economic growth, illustrating how e-commerce and s-commerce surpass traditional government expenditure in contributing to GDP. Private consumption through online platforms plays a pivotal role in driving economic advancement, outweighing the effects of all government consumption. To conclude, the shift from e-commerce to s-commerce emerges as a critical transformation with the potential to redefine the digital marketplace. This evolution not only elevates the shopping experience by enhancing personalization and social connectivity but also equips businesses with novel approaches for customer engagement and insight gathering. In emerging economies, where the pace of digital adoption is rapidly increasing, the ascent of s-commerce signals a valuable path for economic development and digital entrepreneurship, warranting further inquiry and analysis.

**Methodology and Data**

This research focused on consumer behavior, specifically electronic consumption involving acquiring goods and services through e-commerce and s-commerce platforms in Thailand. It examined key economic metrics, including total revenue, total expenses, electronic consumption, e-commerce consumption, and s-commerce consumption. The main goal was to estimate the Marginal Propensity to Consume (MPC) for calculating direct multiplier effects while indirect effects were beyond the scope of this study.

The study employed a quantitative approach, garnering primary data through an online survey. A total of 872 participants from five different regions of Thailand, namely northern, eastern, northeastern, central, and southwestern regions, were included in the study. The selection of these regions was guided by recommendations from Siripipatthanakul et al. (2022). To ensure convenience and feasibility, convenience sampling was adopted, aligning with suggestions from Lim-sangpet et al. (2022), Nagjarat et al. (2023), and Shaengchart et al. (2023).

Before distributing online questionnaires, researchers clarified research objectives and encouraged active respondent participation. Questionnaire items were meticulously crafted based on existing research, following the guidance of Limna, Kraiwanit, and Siripipatthanakul (2022), Shaengchart, Kraiwanit, and Butcharoen (2023), and Shaengchart et al. (2023).

Before distributing online questionnaires, researchers clarified research objectives and encouraged active respondent participation. Questionnaire items were meticulously crafted based on existing research, following the guidance of Limna, Kraiwanit, and Siripipatthanakul (2022), Shaengchart, Kraiwanit, and Butcharoen (2023), with a pilot test involving 30 participants to assess effectiveness.

The study focused on Thai internet users aged 18 and above, involved in product and service
transactions through e-commerce and s-commerce platforms. Electronic consumption was divided into two segments: e-commerce and s-commerce. Data were collected from December 2022 to February 2023 through an online survey deployed on platforms such as Facebook, Twitter, and Line, using Google Forms as the survey tool.

Gross domestic product (GDP)

Gross Domestic Product (GDP) serves as a vital economic indicator, quantifying a nation's economic well-being by capturing the monetary value of its domestic goods and services over a specified timeframe. This metric holds considerable significance for both governmental and economic stakeholders, informing the formulation of policies and strategies (Sahoo & Das, 2019). A positive growth rate in GDP indicates a healthy economy, which in turn leads to an increase in employment rates and an accumulation of wealth. Conversely, a negative GDP growth rate leads to a decrease in employment rates and may signify an economic recession.

The computation of GDP is achieved through three distinct approaches: expenditure, production, and income. Furthermore, GDP can be adjusted to account for both inflationary effects and changes in population, yielding a more comprehensive comprehension of economic trends (Fernando, Boyle, & Rathburn, 2023).

As articulated by Poonsateansup (2021), an autonomous financial planner associated with the Siam Commercial Bank in Thailand, the formula for GDP calculation is outlined as follows:

\[ \text{GDP} = C + I + G + (X-M) \] (1)

where \( C \) = consumption, \( I \) = investment, \( G \) = government spending, \( X \) = exports value, and \( M \) = import value.

Despite all of the above, GDP alone is not sufficient to measure societal well-being, as it fails to consider the negative impact of goods or services on the environment or society. Nevertheless, investors still consider GDP a significant indicator of economic prosperity when deciding where to invest. In addition, investors monitor GDP as an indicator to anticipate the direction of the economy in the weeks ahead. In summary, while GDP provides a useful snapshot of a country's economic performance, it should be considered in conjunction with other factors to fully evaluate the overall well-being of a society (Kraiwanit, 2021; Poonsateansup, 2021; Thangavelu, Boyle, & Jasperson, 2022).

Keynes' consumption theory

John Maynard Keynes, a renowned British economist, introduced consumption theory, which includes the concept of marginal propensity to consume (MPC). This measure is used to gauge induced consumption and is a significant factor in Keynesian theory. According to this theory, the MPC of households has an impact on both the total amount of savings and actual savings. A higher MPC leads to increased expenses but reduced savings (Kraiwanit, 2021).

The formula for Keynesian consumption can be represented in Model 2 as follows:

\[ C = a + cY_d \] (2)

where \( C \) = total consumption, \( a \) = autonomous consumption, \( b \) = MPC, and \( Y_d \) = usable income or household available income after tax deductions.

The utilisation of taxes as a fiscal policy instrument can have an impact on the consumption function, leading to potential effects on the total amount of savings. This relationship is reflected in Model 3, which expresses the savings function as follows:

\[ S = -a + (1 - b)Y_d \] (3)

where \( S \) = total savings, \( a \) = the constant acting as the autonomous consumption against savings, \( (1 - b) \) = marginal propensity to save (MPS), and \( Y_d \) = disposable or usable income.

It is noteworthy that \( Y_d = Consumption \oplus Savings(S) \). This can be confirmed by adding both functions: \( C = a + bY_d \) and \( S = -a + (1 - b)Y_d \).

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MPS is the portion of an overall increase in income that a consumer chooses to save instead of spending on goods and services. According to the function of savings, the MPS affects total savings when household income increases. In other words, a higher MPS will result in a higher overall level of savings. This is a fundamental principle in Keynesian economics (Kraiwanit, 2021; Kagan & Walters, 2022).

**Multiplier effect**

In economics, a multiplier refers to the ratio of the change in the final increase in national income or real GDP, resulting from a change in spending, which encompasses investment, government spending and export value. The multiplier effect occurs when people spend money on a country's economy, leading to an injection of extra income that increases spending, thereby creating more income. Understanding the multiplier is crucial for policymakers to gauge the impact of changes in spending on the economy and adjust their policies accordingly (Kraiwanit, 2021).

The multiplier is calculated using the equation in Model 4:

\[ K = \frac{\Delta Y}{\Delta I} \] (4)

where \( K \) = multiplier, \( \Delta Y \) = change in real GDP, and \( \Delta I \) = change in spending.

Ganti, Kelly and Perez (2023) highlighted the significance of the multiplier effect in determining the impact of changes in spending on a country's economy. The size of the multiplier is influenced by factors such as the MPC and the MPS. The MPC and MPS are key components of the consumption function, and their impact on the multiplier has been extensively researched. As more people spend their income, the multiplier effect results in an increase in spending and, consequently, an increase in income. The calculation of the multiplier using the formula based on marginal propensities, as shown in Model 5, is an essential tool for policymakers in determining the appropriate measures to stimulate or control the economy:

\[ K = 1(1 - MPC) \] (5)

According to Investopedia (2022), this formula represents MPS, which is the proportion of an aggregate raise in income that a consumer saves rather than spends on the consumption of goods and services. The formula suggests that if the MPC is known, the MPS can be easily calculated by subtracting the MPC from 1, which means that the higher the MPC, the lower the MPS (Pettinger, 2019; Kagan & Walters, 2022).

This research compares e-commerce and s-commerce in Southeast Asian nations (Thailand, Indonesia, and Vietnam) using the documentary method. This method is based categorizing and interpreting written documents, ranging from personal writings to legislative texts, to foster comprehension and deduce meaningful conclusions. The documentary method employs a structured process to dissect documents, extract layers of meaning, and gain insights into a specific phenomenon. Typically, document analysis is enriched when integrated with other qualitative methods, such as interviews, to achieve a holistic grasp of the research subject. This methodology draws upon diverse data sources, including historical context, policy documents, and media coverage, which collectively facilitate the exploration of intricate social phenomena (Altheide & Schneider, 2013; Lumivero, 2020).

According to Limna (2023), content analysis involves the meticulous condensation of extensive textual content into a succinct synthesis of key discoveries. This technique serves to comprehensively and objectively elucidate and quantify specific phenomena by deriving valid inferences from textual, visual, or verbal data. Therefore, content analysis was adeptly employed to dissect the qualitative data within this research study.

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Results

Multiplier transformation of e-commerce to s-commerce in Thailand

Table 1 below presents the assumptions for calculating the multiplier. Our analysis encompassed economic activities, including total revenue, total expenses, electronic consumption, e-commerce consumption, and s-commerce consumption. Survey results show that respondents’ average total expenditure was 217,723.62 baht, with an average electronic consumption expenditure of 31,831.65 baht, representing 14.62% of the total expenditure.

Table 2 displays the findings regarding the multiplier effects: a rise of 1 unit in electronic consumption corresponds to a GDP increase of approximately 1.09 units, implying a multiplier effect of approximately 1.09 (Kc = 1.09). Similarly, the multiplier effect of e-commerce consumption, denoted as Kc, stands at roughly 1.04 (i.e., Kc = 1.04), signifying that a 1-unit escalation in e-commerce consumption leads to a GDP expansion of 1.04 units. Likewise, the multiplier effect of social media consumption, also represented by Kc, mirrors approximately 1.04 (i.e., Kc = 1.04), revealing that a 1-unit elevation in social media consumption corresponds to a GDP growth of 1.04 units.

Table 1

<table>
<thead>
<tr>
<th>Economic Activities</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total income</td>
<td>384,667.4312</td>
<td>253,304.00761</td>
</tr>
<tr>
<td>Total expense</td>
<td>217,723.62</td>
<td>132,243.97483</td>
</tr>
<tr>
<td>Electronic consumption</td>
<td>31,831.65</td>
<td>19,436.09406</td>
</tr>
<tr>
<td>E-commerce consumption</td>
<td>15,838.07</td>
<td>11,617.98439</td>
</tr>
<tr>
<td>S-commerce consumption</td>
<td>15,993.57</td>
<td>10,972.76265</td>
</tr>
</tbody>
</table>

Source: the authors’ calculations

Table 2

<table>
<thead>
<tr>
<th>Economic Activities</th>
<th>b=MPC</th>
<th>Kc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Consumption</td>
<td>0.08</td>
<td>1.09</td>
</tr>
<tr>
<td>E-commerce Consumption</td>
<td>0.04</td>
<td>1.04</td>
</tr>
<tr>
<td>S-commerce Consumption</td>
<td>0.04</td>
<td>1.04</td>
</tr>
</tbody>
</table>

Source: the authors’ calculations

Figure 2. Internet and smartphone penetration in Thailand and Indonesia in 2022

Source: Chen & Kimura, 2020; Statista, 2023

Source: r-economy.com
Comparing e-commerce and s-commerce among Southeast Asian countries

In Thailand, Indonesia, and Vietnam, e-commerce and s-commerce have emerged as influential channels for online business. E-commerce offers a wide reach through dedicated platforms, enabling diverse product categories and secure transactions. S-commerce taps into the social media landscape, fostering personalised interactions and trust-building among buyers and sellers. Both approaches leverage the region’s strong social media presence, catering to the preferences of a tech-savvy population. Businesses often navigate these options to create a holistic online strategy that encompasses both e-commerce’s extensive product range and s-commerce’s engaging and social shopping experiences.

As indicated in Figure 2, Chen and Kimura (2020) and Statista (2023) reported that Thailand boasts a higher internet and smartphone penetration, with 82% of its population having online access compared to 73% in Indonesia during 2022. Similarly, smartphone adoption is more prevalent in Thailand, registering at 79% compared to Indonesia’s 70%. This trend aligns with the variance in disposable income, as the average Thai household’s disposable income was recorded at US$4,000, surpassing Indonesian households’ US$2,500 in 2022. Consequently, Thai consumers exhibited a greater propensity for online shopping, averaging monthly expenditures of US$100, while their Indonesian counterparts spent an average of US$75 monthly. Trust in online shopping platforms also differentiates the two markets, with 75% of Thais expressing trust in such platforms compared to 60% of Indonesians in 2022. This trust discrepancy could be attributed to the higher incidence of fraud and scams reported in Indonesia compared to Thailand. Conversely, Indonesia’s affinity for social media outpaces Thailand’s, with 85% of Indonesians utilising social media versus 75% of Thais in 2022. This divergence translates to the realm of social commerce platforms, where 30% of Indonesians made purchases through such channels, while only 20% of Thais engaged in similar activities during the same period.

Figure 3 shows a comparative overview of e-commerce and s-commerce dynamics in Thailand and Indonesia. The e-commerce and s-commerce sectors in Thailand and Indonesia experience robust growth due to the expansion of digital infrastructure and evolving consumer behaviours. The e-commerce and s-commerce sectors in Thailand and Indonesia are experiencing impressive growth, driven by the rapid expansion of digital infrastructure and changing consumer behaviours. Despite these shared growth trends, a deeper analysis reveals significant distinctions that necessitate tailored business strategies for successful market entry and expansion.

As these markets continue to evolve, businesses must stay attuned to shifting consumer preferences and technological advancements. For instance, Thailand’s embrace of social media and Indonesia’s potential improvement in online
**Figure 3.** Comparing e-commerce and s-commerce in Thailand and Indonesia

Source: compiled by the authors

**Figure 4.** Comparing e-commerce and s-commerce in Thailand and Vietnam

Source: compiled by the authors
shopping platform trust could reshape the landscape in the coming years. Therefore, an agile approach that embraces innovation, adapts strategies, and places the consumer experience at the forefront will be crucial for thriving in these distinct yet promising e-commerce and social commerce markets.

Figure 4 shows the key comparisons between Thailand and Vietnam regarding their e-commerce and social commerce landscapes.

In comparing Thailand and Vietnam e-commerce and social commerce landscapes, it is evident that both nations are experiencing rapid growth, albeit with distinct differences. The e-commerce market sizes reveal a significant gap, with Thailand's market valued at 770 billion baht (US$25 billion) in 2022, dwarfing Vietnam's 17 billion USD market. Similarly, the social commerce sector follows suit, with Thailand's market worth 200 billion baht (US$6 billion) overshadowing Vietnam's 14 billion USD market. This stark contrast underscores Thailand's larger presence in both realms, being approximately four times larger in e-commerce and about 40% larger in social commerce compared to Vietnam. The impetus behind the growth of e-commerce and social commerce in both countries can be attributed to various factors. Rising incomes, increased internet penetration, shifting consumer preferences towards online shopping, and the burgeoning popularity of social media platforms are all driving this expansion. Moreover, government support for e-commerce development is propelling the growth trajectory. However, challenges persist despite this rapid progress. Issues like low trust in online payments, inadequate logistics infrastructure, the prevalence of counterfeit goods, and stiff competition from international e-commerce platforms pose hurdles to sustained growth.

Looking ahead, both Thailand and Vietnam's e-commerce and social commerce markets are poised for further acceleration. Projections indicate that by 2025, Thailand's e-commerce market could reach 1.12 trillion baht (US$35 billion), while Vietnam's is projected to reach 50 billion USD. Correspondingly, the social commerce markets are anticipated to flourish, with Thailand's projected at 350 billion baht (US$11 billion) and Vietnam's at 25 billion USD by 2025.

In sum, the e-commerce and social commerce landscapes in Thailand and Vietnam hold immense promise for substantial growth in the coming years. These dynamic markets present diverse opportunities for businesses of all sizes and warrant close observation as they continue to evolve.

Discussion

This study underscores the sustained surge in popularity of electronic products and services. As indicated by Statista's report in 2023, the e-commerce market in Thailand has consistently demonstrated its competitiveness and enduring growth. Notably, Shopee emerges as the favoured online shopping platform among consumers, while Facebook maintains its position as the preferred choice for social sellers due to its widespread popularity as a social media platform in the country. The escalating consumer demand for online shopping, coupled with the agile responsiveness of e-commerce suppliers, portends a promising future for Thailand's e-commerce market, poised to continue thriving. Furthermore, a report by Cramer-Flood (2021) highlights the projection that e-commerce sales in China are set to contribute to approximately 52.1% of the country's total retail sales in 2023, marking a significant 44.8% rise from the previous year. This potential milestone signifies the first instance where the majority of retail sales emanate from online transactions.

In terms of the multiplier effect, this study establishes the multiplier effect of e-commerce consumption to be roughly 1.09 (Kc = 1.09). This signifies that a 1-unit increment in e-commerce consumption corresponds to a GDP growth of approximately 1.09 units. Additionally, when isolating the analysis of the two categories of e-commerce consumption—via e-commerce platforms and social commerce platforms—the multiplier effects for both hover around 1.04. The study by Parishev et al. (2020) aligns with our findings by showcasing that e-commerce constitutes a significant technological paradigm shift, exerting a positive impact on economic growth. Their


study suggests that, while the impact of e-commerce development is less than gross capital formation, it still contributes to the growth of national economies. Notably, the multiplier effects from electronic consumption, e-commerce platforms, and social commerce platforms surpass the multiplier effect of Thailand’s national budget (0.4) introduced during the COVID-19 pandemic. The observed multiplier effect of consumer spending (1.0) and government investment spending (0.8) highlights the crucial role of private consumption in the Thai economy, overshadowing the combined impact of all government consumption activities. This finding underscores Thailand’s notable reliance on foreign countries for government consumption. Consequently, in the face of major crises that affect nations, such as the COVID-19 pandemic, both the Thai economy and international trade are particularly susceptible to impacts, an observation corroborated by the works of Kaendera and Leigh (2021)22, Sann, Lai, and Chen (2022), and Tansuchat et al. (2022).

Private consumption is more important to the Thai economy than all government consumption combined for various reasons. Firstly, private consumption accounts for a higher proportion of Thailand’s GDP than public consumption. In 2020, private consumption accounted for 49.6% of Thailand’s GDP, while public consumption accounted for only 9.9% (World Bank, 202123). This indicates that private consumption is a significant driver of Thailand’s economic growth, more so than government consumption. Private consumption is closely related to the overall state of the economy and consumer confidence in the country. Individual and household spending largely depend on various factors, such as income level, employment rate and other macroeconomic indicators. Therefore, private consumption serves as a good indicator of the overall health and efficiency of the economy. Secondly, private consumption has a multiplier effect on the economy. When individuals and households spend money on goods and services, it creates demand for those products, leading to increased production, investment and job creation in the private sector. This, in turn, promotes economic growth and development. On the other hand, public consumption, which includes government spending on essential goods and services, such as healthcare, education, and infrastructure, does not have the same impact on the economy and tends to be less responsive to economic conditions. Although public consumption is important for providing necessary goods and services, it does not have the same impact on economic growth and development as private consumption (Pongthanaisawan & Sorapipatana, 2010; Zhang et al., 2021; Pinitjitsamut, Thamthanakoon, & Yaemklin, 202324).

The discussion of the e-commerce and s-commerce markets among Southeast Asian nations, including Thailand, Indonesia, and Vietnam reveals significant insights into the evolving dynamics of these two rapidly growing sectors. The disparities observed in internet penetration, smartphone adoption, disposable income, trust in online platforms, and social media utilisation underscore the diverse consumer behaviours and preferences that businesses must navigate when entering or expanding within these markets. Thailand’s higher internet penetration and smartphone adoption rates provide a conducive environment for e-commerce growth. The increased access to online platforms creates a fertile ground for businesses to engage with consumers and drive sales. The higher disposable income among Thai households further fuels the appetite for online shopping, resulting in a substantial monthly expenditure average. The trust Thais place in online shopping platforms suggests a level of comfort with digital transactions, which encourages more widespread adoption of e-commerce (Hirankasi & Klungijaturavet, 20213; Leesa-Nguansuk, 20234).

Conversely, Indonesia’s robust social media engagement showcases the importance of social commerce, as confirmed by Nurhayati-Wolff


The country’s vibrant social media landscape provides a direct avenue for businesses to engage with potential customers, fostering a culture of online purchasing through these platforms. Despite a lower level of trust in online shopping platforms, the prevalence of social commerce suggests that Indonesian consumers are willing to engage in online transactions, particularly through channels they find familiar and engaging.

In Vietnam, the rise of s-commerce is evident as consumers embrace shopping through social media platforms, as confirmed by Nguyen (2022) and Nguyen (2023). This trend is underscored by the fact that, in 2022, social commerce contributed to 65% of the country’s e-commerce sales. Furthermore, the surge in mobile commerce is notable, with 72% of Vietnam’s e-commerce sales originating from smartphone usage. Cross-border e-commerce is also on the ascent, constituting 25% of sales, as consumers seek diverse product options. Convenience and personalization are paramount, driving businesses to offer services like same-day delivery and in-store pickup. Additionally, the emergence of live streaming commerce is reshaping the landscape. This innovative trend involves sellers broadcasting product sales on social platforms, facilitating real-time interaction and inquiries from shoppers.

**Conclusion**

In this study, we have analyzed the multiplier effect of e-commerce and found that consumption through e-commerce and s-commerce has a greater impact on economic growth in Thailand than government spending. Private consumption, including online platforms, is a major driver of economic growth, surpassing government consumption in its contribution to the country’s GDP. The study highlights the multiplier effect of private consumption, stimulating production, investment, and job creation in the private sector.

Analysis of the e-commerce and s-commerce landscapes in Southeast Asian countries like Thailand, Indonesia, and Vietnam reveals distinct trends. Thailand benefits from high internet penetration and trust in online platforms, driving e-commerce growth. Indonesia’s strong social media engagement boosts social commerce, despite lower trust levels, while in Vietnam, s-commerce dominates due to enthusiastic adoption of shopping via social media.

The study recommends policy and practice changes, urging governments to enhance digital infrastructure and support SMEs in digital transition. Simplifying regulations can boost international e-commerce, and investing in technology can improve online commerce efficiency. For businesses, adapting to digital models, focusing on consumer engagement, and expanding into global markets through e-commerce are crucial strategies. Customer-centric approaches, data analytics for insights, and sustainable practices align with evolving consumer values and regulatory trends, driving robust and sustainable economic growth.

Furthermore, these findings can be used to compare factors impacting GDP growth, such as the central government’s budget impact and the multiplier effect of electronic consumption through e-commerce and social media platforms. Electronic consumption has the potential to boost overall demand, create business opportunities, increase efficiency, and stimulate economic activity. It can lead to job creation, higher wages, and international trade opportunities, integrating the economy into the global market for long-term growth.

The study has certain limitations, including a limited sample size and data collected through a closed-ended questionnaire. Future studies may expand the scope geographically and incorporate qualitative methods like interviews or focus group discussions for deeper insights.

**References**


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