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AN OPERATIONAL MODEL OF SOCIAL ENTERPRISE INFLUENCING SOCIAL AND ECONOMIC OUTCOMES

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Abstract
This research aims to test the patterns of social enterprise operations that influence social and economic outcomes. It is a quantitative study that utilizes a questionnaire as a tool to collect data from social enterprise entrepreneurs and social enterprise groups in Thailand, totaling 37 participants. The results of the analysis reveal that the patterns of social enterprise operations influencing economic and social outcomes can be considered based on factors such as being an entrepreneur, operating social enterprises, and marketing abilities. Among these factors, marketing abilities have a stronger direct influence on economic and social outcomes compared to other factors. Following this, being an entrepreneur and operating social enterprises show a positive relationship. Additionally, when considering specific indirect effects, it is found that marketing abilities and operating social enterprises have significant indirect influences on economic and social outcomes. Therefore, the analysis concludes that being an entrepreneur has both direct and indirect influences on economic and social outcomes in the context of social enterprises.

Keywords: Social Enterprise, Social Impact, Economic Impacts, economic outcomes

Introduction
The role and importance of social enterprises in Thailand are increasingly gaining significance. The government has undertaken the development of a master plan to promote social enterprises for the years 2010-2014. This master plan covers strategies for creating awareness and learning about social enterprises in the country, developing models and capabilities of social enterprises, and strategies for accessing funding and resources. Thailand has also enacted the Social Enterprise Promotion Act of 2019 to promote business activities with the main objectives of promoting employment for qualified individuals, solving community or social issues, and contributing to environmental sustainability. The nature of social enterprise operations focuses on creating benefits for society, such as providing employment opportunities and distributing income within the community. It emphasizes responsible business practices in production processes, business operations, and the development of products or services, avoiding long-term negative impacts on society, well-being, and the environment. To ensure the sustainability of business operations, there is a need for effective management and financial oversight, with profits often reinvested to expand the business for achieving the stated goals or returned to benefit society or service users. The principles of a sufficiency economy may be adopted in managing the business. According to the Thai Social Enterprise Office (2022), there are 148 registered social enterprises, with 124 not intending to share profits with shareholders and 24 allowed to share up to 30% of net profit, as per the law, such as DoiKham, AutisticThai, Green Net Cooperative, Akha Ama Coffee, and Thai Farmer Social Enterprise Company Limited.

Utaradit Rajabhat University has actively collaborated with social enterprises in Utaradit province, integrating academic disciplines, particularly in business management and marketing. This collaboration aims to generate academic knowledge or innovations related to causal factors affecting social and economic outcomes for the development of social enterprises in Thailand. This research project, conducted by university faculty members with experience in the area, is expected to yield academic knowledge and innovations concerning the causal factors influencing social and economic outcomes. The benefits include contributing to the development of social enterprises in Thailand, creating sustainable social, economic, and environmental impacts, and providing policy benefits at the provincial and national levels. Furthermore, it may encourage governmental and private sector support for social enterprises by presenting development guidelines that align with the operations of social enterprises and promote sustainable development for the benefit of socially disadvantaged groups in communities, provinces, and the country as a whole.

Research Question:

What are the operational models of social enterprises that influence social and economic outcomes?

Research Objectives:

To examine the operational models of social enterprises and their impact on both social and economic outcomes.

Literature Review

1. Entrepreneurs and Economic-Social Outcomes

Social Enterprises, characterized as Hybrid Organizations, differ from conventional business entities where profit maximization is the primary goal. Social enterprises pursue dual objectives simultaneously, encompassing both economic and social goals (Newman et al., 2015). These entities engage in various activities to generate self-sustaining revenue, utilizing these earnings to achieve sustainable social objectives in the long run (Peredo & McLean, 2006; Liu & Takeda, 2015). In the context of Thai social enterprises, the General Systems Theory serves as the foundational theory for studying these entities. This is because organizations must operate several interdependent systems, relying on each other, including input factors, processes, and relationships among variables, to achieve goals efficiently (Keiser et al., 2000). The social and economic outcomes are significantly influenced directly and indirectly by the characteristics of entrepreneurs in social enterprises. These characteristics include ethical considerations, organizational responsibility management, and knowledge management (Sakulsuraekphong, 2019). The study found that entrepreneur-specific factors directly impact economic, social, and environmental outcomes of businesses, leading to sustainable operations. These entrepreneur factors include entrepreneurship, leadership qualities, and networking abilities (Pangprasert et al., 2020). In this research, the hypothesis H1 is proposed: Entrepreneurs influence the economic and social outcomes of social enterprises.

2. Entrepreneurs and Marketing Capabilities

Marketing plays a crucial role in the management and sustainability of social enterprises. Instead of focusing solely on sales transactions, contemporary marketing approaches emphasize relationship marketing. However, many social entrepreneurs lack awareness or have misconceptions about the practical aspects of marketing. Marketing is often misunderstood as

primarily a sales-driven activity rather than a relationship management strategy. The application of marketing for social enterprises is becoming increasingly significant in the future (Powell & Osborne, 2015). Research indicates that marketing activities of social enterprises are often not well-planned. The findings suggest that entrepreneurs' characteristics significantly affect marketing capabilities. Social entrepreneurs who perceive marketing solely as a sales activity and feel uncomfortable with excessive commercialization may not recognize the benefits of emphasizing marketing capabilities. This includes setting specific goals for groups with shared interests and building relationships within those groups. This perspective contrasts with experienced social entrepreneurs who view the world more favorably in terms of the positive impact of participatory marketing on the social and economic outcomes of social enterprises. It is suggested that marketing is a pathway to the sustainability of social enterprises (Powell & Osborne, 2015). Therefore, the hypothesis H2 is proposed: Entrepreneurs influence the marketing capabilities of social enterprises.

3. Entrepreneurs and Operations

Social entrepreneurship, or social enterprise, is a concept rooted in the cooperative model, emphasizing the creation of justice within communities through collaboration and collective action. It aims to make individuals aware of self-help and mutual assistance, focusing on principles such as freedom, equality, justice, and mutual support. The goal is sustainable community development and improvement of living standards (Pearce, 2003). The study found that entrepreneurial factors directly influence the sustainable operation of businesses (Pangprasert et al., 2020). Entrepreneurial characteristics, including innovation, risk-taking, and proactive work, significantly impact the sustainable operation of social enterprises (Shin, 2018). To ensure the success of social enterprises, entrepreneurs must exhibit leadership qualities, which involve the ability to inspire, connect, and build trust among diverse stakeholders. Additionally, they should be motivated by the social benefits derived from the business (Keech, 2017). Networking, the ability to connect with various social and organizational networks to gain beneficial support for business development, is another essential skill (Channuwong et al., 2022; Stratan, 2017). The research distinctly indicates that entrepreneurs have a positive impact on the sustainable operation of organizations, particularly in terms of knowledge, skills, decision-making, vision setting, mission and strategy development, and leadership. This leads to effective business operations, especially in the creation of networks that facilitate easier work processes (Shin, 2018). Therefore, the hypothesis H3 is proposed: Entrepreneurs influence the operations of social enterprises.

4. Operations and Economic-Social Outcomes

Social enterprises represent a new business model that blends social and economic values (Srivetbodee, Igel, & Kraisornsuthasinee, 2017). The outcomes measuring the performance of social enterprises include both economic and social aspects (Liu & Takeda, 2015). The success factors of social enterprise operations are derived from the theoretical framework of Nathalie Stevens and Crucke (2008), which evolved from the principles and environmental factors of social enterprises, starting from the grassroots of organizations. It has become a model for the operations of social enterprises, consisting of a social mission, social innovation, and social impact (Channuwong et al., 2024; Chamnanlertki, 2014). Empirical testing reveals a causal relationship with the primary factor being the social mission, followed by social innovation and social impact, influencing the ultimate factor—the outcomes of social enterprises. It demonstrates that the success of social enterprises can be explained by creating social value, which is an outcome unique to social enterprises, different from the value created by general businesses. This is because social

value entails a blended value of both social and economic aspects. Therefore, the hypothesis H4 is proposed: The operations of social enterprises influence the economic and social outcomes.

5. Marketing Capability and Economic-Social Outcomes

There is relatively limited research on the marketing capability of social enterprises, including issues of inclusive marketing and the ability to create social businesses (Bull, 2007; McLaughlin et al., 2009). An essential concern for social enterprises is the involvement of marketing in their operations, affecting both the social and economic outcomes of social enterprises. It highlights that marketing is a path to the sustainability of social enterprises (Powell & Osborne, 2015). Additionally, marketing management related to product development, customer needs responsiveness, and holistic marketing communication influences the outcomes of social enterprises (Tiyatrakarnchai et al., 2021). The marketing capability of social enterprises has indirect effects on economic and social outcomes. It includes product development, pricing, distribution channel management, marketing communication, marketing data management, sales, marketing planning, and marketing operations (Liu & Takeda, 2015). Marketing for social enterprises involves products, production, pricing, distribution, communication, and services that contribute to creating social value. Preliminary research indicates that social value can be harmonized with marketing activities in a balanced manner (Srivetbodee et al., 2017). Therefore, the hypothesis H5 is proposed: Marketing capability influences the economic and social outcomes of social enterprises.

Conceptual Framework

This research has reviewed the literature that led to the establishment of a conceptual framework, presenting the variables used in this study as illustrated in Figure 1.

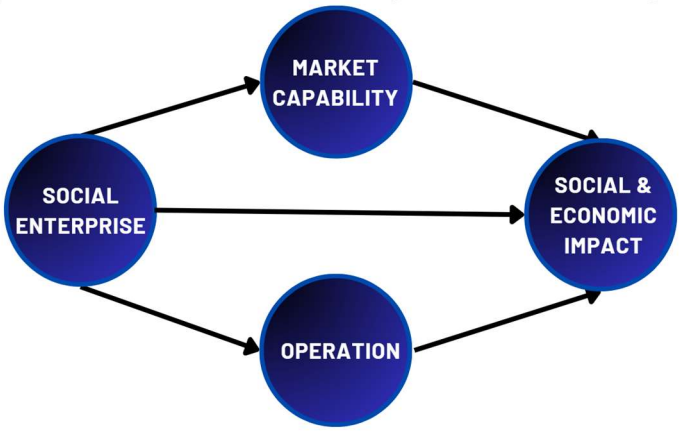

Figure 1: Research Conceptual Framework

Research Hypotheses

1. Entrepreneurs influence the economic and social outcomes of social enterprises.
2. Entrepreneurs influence the marketing capability of social enterprises.
3. Entrepreneurs influence the operations of social enterprises.
4. The operations of social enterprises influence the economic and social outcomes.
5. Marketing capability influences the economic and social outcomes of social enterprises.

Research Methodology

For this study, a quantitative research approach is employed, collecting data through questionnaires.

Population and Sample Groups

The population consists of entrepreneurs from social enterprises and social business groups in Thailand. In Thailand, there are 177 social enterprises and social business groups (Office of the National Social Enterprise Promotion, 2022). The sample group comprises the same population used for this research.

Research Tools

The research tool for this study is a questionnaire. In developing the questionnaire, the research team reviewed literature related to the operations of social enterprises, marketing capabilities, and social and economic outcomes. The questions were adapted to align with the objectives of this research. The questionnaire consists of four parts: Entrepreneurship, Social Enterprise Operations, Marketing Capability, and Economic and Social Outcomes. A Likert scale is used with a 7-point rating (1 = strongly disagree, 4 = neutral or unsure, 7 = strongly agree). The summarized questionnaire items are presented in Table 1.

Table 1 Summary of Questions by Variables and Results of Reflective Measurement Model Testing

Variables and Components	No. of Questions	Sources	Loading	α	ρ_A	ρ_C	AVE
Entrepreneurship		Apirungruengsakul,		0.894	0.896	0.926	0.759
Financial Stability Management	3	Jadesadalug, &	0.902				
Technology and Innovation Management	3	Sansook, (2022)	0.877				
Efficient Operations Management	3		0.877				
Business Distribution System Management	3		0.827				
Operations Management		Dwivedia, &		0.829	0.876	0.867	0.669
Innovation	4	Weerawardenab,	0.753				
Proactive Entrepreneurial Operations	4	(2018)	0.817				
Risk Management	4		0.862				
Effective Planning	5		0.788				
Social Mission	4		0.733				
Sustainable Practices	3		0.605				
Service Innovation	2		0.562				
Product Innovation	2		0.660				

Environmental Complexity	4		0.618				
Supportive Structure	4		0.567				
Marketing Capability		Srivetbodee,		0.866	0.913	0.902	0.754
Product Strategy	2	Kraisornsuthasinee	0.807				
Production Strategy	4	& Lgel, (2017)	0.870				
Pricing Strategy	2		0.525				
Distribution Channel Strategy	2		0.904				
Marketing Promotion Strategy	2		0.811				
Economic and Social Outcomes		Tarapituxwong,		0.800	0.806	0.909	0.833
Social Outcomes	8	Pol-art, & Sattayopat, (2020)	0.903				
Economic Outcomes	9	Chamnanlertki, (2014)	0.922				

Data Collection

The research team sent letters and questionnaires to social entrepreneurs and social enterprise groups in Thailand. Respondents had the option to reply either by postal mail or online. After two weeks, the research team followed up with non-respondents to track the results. Another round of follow-ups occurred two weeks later. The data showed that out of 37 responses, postal responses were the highest at 89.19%, while online responses, through links and/or QR codes, constituted 10.81% of the total responses. The final step involved assessing non-response bias by comparing early and late responders using a t-test, with a p-value less than 0.05 indicating no significant difference between the two groups (Armstrong & Overton, 1977). The 37 completed questionnaires were deemed accurate, complete, and suitable for analysis.

Data Analysis

Structural Equation Modeling (SEM) was used to test the research hypotheses. SEM is a standard method in research for developing or refining theories, analyzing relationships between multiple latent variables simultaneously, and is commonly used in business management and market research. Smart PLS 4 software, known for its prominence in Partial Least Squares Structural Equation Modeling (PLS-SEM), was employed for the analysis. Smart PLS 4 is particularly well-suited for small sample sizes and situations where there are no distribution assumptions or normality concerns, making it suitable for analyzing complex models (Hair et al., 2010).

Results

The analysis examined the patterns of social enterprise operations influencing both social and economic outcomes, considering four latent variables: Entrepreneurship (SE), Social Enterprise Operations (OPER), Marketing Capability (MK), and Economic and Social Outcomes (ECSM). The research team conducted data analysis and reported the results following the recommended steps by Hair et al. (2019) and Jhantasana (2020), divided into four parts: 1)

Reflective Measurement Models: This section evaluated the quality of the Reflective Measurement Model using four indices: Internal Consistency Reliability, Convergent Validity, Reflective Indicator Loadings, and Discriminant Validity as shown in Table 1-3.

1.1) Internal Consistency Reliability: Assessed through Dijkstra-Henseler's rho (ρA) and Jöreskog's rho (ρC), with values equal to or greater than 0.708. The results ranged between 0.800-0.913, passing the criteria (Dijkstra, 2014) (Table 1).

1.2) Convergent Validity: Evaluated using Average Variance Extracted (AVE), with values equal to or greater than 0.50. The results ranged between 0.541-0.833, meeting the criteria (Table 1).

1.3) Reflective Indicator Loadings: Examined for the reliability of the measurement indicators using Loading Cronbach's alpha (α) and composite reliability. All three criteria required values equal to or greater than 0.708. For the Entrepreneurship variable with four latent variables, all criteria passed. However, for the Social Enterprise Operations variable with ten latent variables, five did not meet the loading criteria, namely Sustainability Orientation, Service Innovation, Product Innovation, Environmental Complexity, and Supportive Structure. Therefore, these five latent variables were deemed necessary to be removed from the model (Table 1).

Table 2 Fornell-Larcker Criterion Result Analysis

Variables	SE	OPER	MK	ECSM
Social Entrepreneurship (SE)	**0.871**			
Social Enterprise Operations (OPER)	0.722	**0.744**		
Marketing Capability (MK)	0.630	0.670	**0.810**	
Economic and Social Outcomes (ECSM)	0.816	0.722	0.703	**0.831**

1.4) Discriminant validity analysis, considering the Hypotheses Testing in the Multitrait-Multimethod Matrix (HTMT) ratio, where for conceptually similar constructs, HTMT should be less than 0.90. Additionally, the Fornell-Larcker (1981) Criterion is considered. According to Henseler, Ringle, and Sarstedt, HTMT is a statistic that effectively distinguishes or discriminates between variables. The results of the test show that all variables meet the criteria (Tables 2-3).

Table 3 Heterotrait-monotrait ratio of correlations (HTMT) Result Analysis

Variables	SE	OPER	MK	ECSM
Social Entrepreneurship (SE)				
Social Enterprise Operations (OPER)	0.792			
Marketing Capability (MK)	0.659	0.776		
Economic and Social Outcomes (ECSM)	0.761	0.671	0.741	

2) Formative Measurement Models will be examined based on 5 criteria, including: 1.) Convergent validity, assessed by Correlation values, 2.) Collinearity, evaluated by the Variance Inflation Factor (VIF), 3.) Statistical significance of weights, considering the p-value (less than 0.05) of T-Statistics of Outer weights, 4.) Relevance of indicators with a significant weight, determined by the Larger significant weights being more relevant (contributing more), and 5.) Relevance of indicators with a non-significant weight, assessed by Loadings greater than or equal

to 0.50 of T-Statistics of Outer loading. As this research does not involve Formative Measurement, no examination of the quality of the Formative model has been conducted.

3) The Structural Model, or the structural equation model, is analyzed through Smart PLS 4 according to the research framework, encompassing both First Order and Second Order constructs. The analysis of Second Order constructs employs the Repeated-indicator Approach, involving the use of the First Order construct indicators as indicators for the Second Order constructs before conducting the analysis. This approach is known as the Hierarchical Component Model (Monsak, 2016). Smart PLS 4 presents the estimated path model, as depicted in Figure 2, considering six criteria detailed as follows:

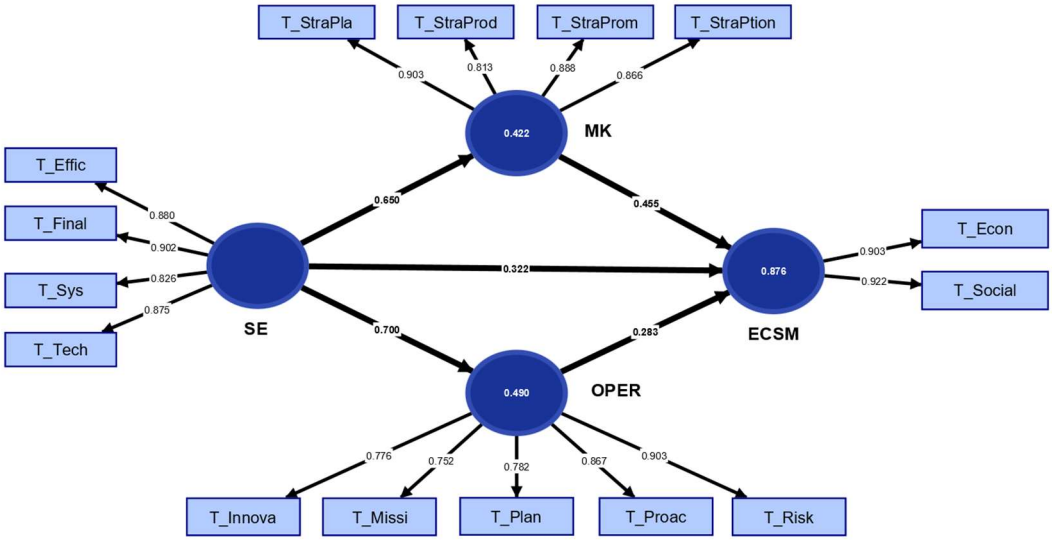

Figure 2 Results of PSL-SEM Analysis According to the Research Framework

3.1) Collinearity Analysis, also known as checking for multicollinearity or collinearity detection. Variance Inflation Factor (VIF) should be less than 3. The test results show values ranging from 1.000 to 2.253, which are all below 3 for every variable. This indicates that the collinearity test criteria are met (Table 4).

Table 4 Variance Inflation Factor: VIF (Matrix) Result Analysis

Variables	SE	OPER	MK	ECSM
Social Entrepreneurship (SE)				
Social Enterprise Operations (OPER)	1.000			
Marketing Capability (MK)	1.000			
Economic and Social Outcomes (ECSM)	2.248	2.253	1.989	

3.2) Analysis of R^2 values, which is an assessment of model quality using the accuracy statistic in predictions. It was found that the Economic and Social Contribution Model (ECSM) has a value of 0.871 (considered), Social Enterprise Operations (OPER) has a value of 0.522 (substantial), and Marketing Capability (MK) has a value of 0.396 (substantial) (Table 5 and Figure 2). This can explain the variance of variables; the Economic and Social Contribution Model

(ECSM) has a variance of 87.69%, derived from all three variables: Social Entrepreneurship, Social Enterprise Operations, and Marketing Capability. In other words, these three variables collectively explain the variance of the Economic and Social Contribution Model (ECSM) with high accuracy. For Social Enterprise Operations (OPER), it has a variance of 49.00%, derived from the Social Entrepreneurship variable. Hence, it can be stated that the Social Entrepreneurship variable explains the variance of the Social Enterprise Operations variable with moderate accuracy. Finally, Marketing Capability (MK) has a variance of 42.20%, derived from the Social Entrepreneurship variable. Thus, it can be said that the Social Entrepreneurship variable explains the variance of the Marketing Capability variable with moderate accuracy.

Table 5 Structural Model Result Analysis

Variables	R^2 value	Q^2 value	RMSE	MAE
Social Entrepreneurship (SE)				
Social Enterprise Operations (OPER)	0.522	0.367	1.017	0.719
Marketing Capability (MK)	0.396	0.339	0.339	0.672
Economic and Social Outcomes (ECSM)	0.871	0.644	0.632	0.473

3.3) Analysis of Q^2 values, which represent the size of predictive relationships, revealed that the Economic and Social Outcomes (ECSM) has a value of 0.644 (large). Social Enterprise Operations (OPER) has a value of 0.367 (medium), and Marketing Capability (MK) has a value of 0.339 (medium) (Table 5). This can explain the size of the predictive relationships as follows: the Economic and Social Outcomes (ECSM) has a predictive relationship size of 64.40%, indicating a large level. For Social Enterprise Operations (OPER), the predictive relationship size is 36.70%, signifying a medium level. Lastly, Marketing Capability (MK) has a predictive relationship size of 33.90%, also indicating a medium level.

Table 6 f^2 – Matrix Result Analysis

Variables	SE	OPER	MK
Social Entrepreneurship (SE)			
Social Enterprise Operations (OPER)	1.091		
Marketing Capability (MK)	0.657		
Economic and Social Outcomes (ECSM)	0.385	0.256	0.740

3.4) Analysis of f^2, which indicates the size of the predictive impact between latent variables using Cohen's (1988) framework, revealed the following values: The path from being an entrepreneur (SE) to Social Enterprise Operations (OPER) has a value of 1.091 (large). The path from being an entrepreneur (SE) to Marketing Capability (MK) has a value of 0.657 (large). The path from being an entrepreneur (SE) to Economic and Social Contribution Model (ECSM) has a value of 0.385 (large). The path from Social Enterprise Operations (OPER) to Economic and Social Contribution Model (ECSM) has a value of 0.256 (medium). The path from Marketing Capability (MK) to Economic and Social Contribution Model (ECSM) has a value of 0.740 (large) (Table 6).

3.5) The PLS predict analysis, assuming k = 10 and repeating the process ten times for each subgroup with properties meeting the minimum sample size requirements, indicates that the model is effective. This is evident when comparing RMSE and LM values for each variable. The results show that all variables meet the criteria, indicating the efficiency of the model. Furthermore, comparing PLS-SEM_RMSE with LM_RMSE and PLS-SEM-MAE with LM_MAE, all variables meet the criteria (Table 7). Additionally, having Q^2 values greater than 0 indicates the effectiveness of the model.

Table 7 Model Performance Analysis by Comparing RMSE and LM Values

Variables	PLS-SEM_RMSE	LM_RMSE	PLS-SEM_MAE	LM_MAE
Social Enterprise Operations (OPER)				
Innovation (T_Innova)	0.870	0.943	0.717	0.778
Proactive Operations (T_Proac)	1.028	1.154	0.808	0.928
Risk Management (T_Risk)	0.780	0.792	0.621	0.668
Efficient Planning (T_Plan)	0.866	0.921	0.700	0.755
Social Mission (T_Missi)	0.849	0.907	0.710	0.741
Marketing Capability (MK)				
Product Strategy (T_StraProd)	0.788	0.827	0.601	0.622
Production Strategy (T_StraPtion)	0.876	1.000	0.663	0.775
Distribution Channel Strategy (T_StraPla)	0.974	1.053	0.807	0.855
Marketing Promotion Strategy (T_Prom)	0.844	0.900	0.665	0.701
Economic and Social Outcomes (ECSM)				
Economic Outcome (T_Econ)	0.729	0.806	0.599	0.677
Social Outcome (T_Social)	0.753	0.818	0.547	0.622

3.6) Model Comparisons is a method that helps in theory building by comparing PLS-SEM models to assess and compare different models. It evaluates criteria for model selection

and statistical tests, providing data for deciding the most suitable model. The analysis is conducted on four indices: PLS Based, Asymptotically Efficient, Asymptotically Consistent, and PLS predict. The results indicate that all four indices favor Model 1 over Model 2. Therefore, the decision is made to choose Model 1, aligning with the research framework of this study (as shown in Table 8).

Table 8 Model Comparisons of 2 Models for Decision Making

Variables	Model 1	Model 2
PLS Based		
GoF by Tenenhaus	0.531	0.552
R^2	0.776	0.788
Adj R^2	0.765	0.769
Q^2	0.607	0.621
Asymptotically Efficient		
AIC	-278.908	-281.432
AICu	-274.063	-286.638
AICc	-52.293	-56.136
Mallow's Cp	17.499	11.356
FPE	0.297	0.289
Asymptotically Consistent		
BIC	-267.273	-285.461
GM	260.135	260.834
HQ	-281.452	-289.167
HQc	-283.822	-289.056
PLS predict		
RMSE	0.386	0.453
MAE	0.306	0.369
Q^2 Predict	0.128	0.162

4) Robustness Checks refer to evaluating the robustness of the model by assessing its accuracy when testing the correctness of parameters. It is essential to conduct tests on the model's accuracy, relying on the examination of Measurement Models and the Structural Model. Smart PLS 4 presents the estimated paths of the model, as shown in Figure 3. The assessment considers the path coefficients, which should have statistically significant p-values less than 0.05 and T-statistics greater than 1.96, indicating that the path coefficients support the research hypotheses or accept the research hypotheses themselves (Hair et al., 2014). The analysis results reveal that all paths in the model are statistically significant as shown in Table 9.

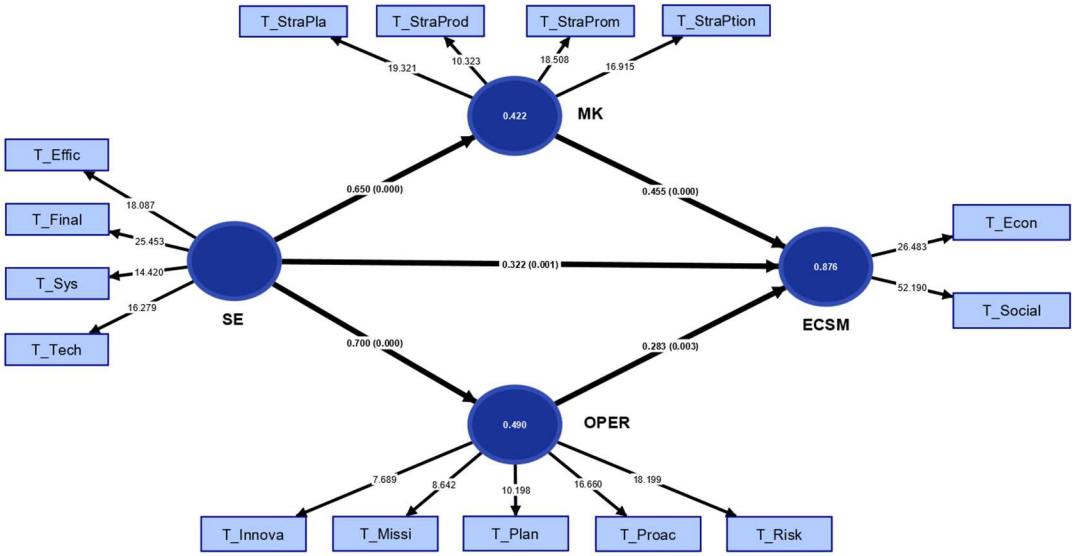

Figure 3 Results of Statistical Significance Testing Using the Bootstrapping Procedure

4.1 Entrepreneurship with Economic and Social Outcomes: The analysis reveals a statistically significant influence of entrepreneurship on economic and social outcomes with a path coefficient of 0.322 (t = 3.209, p-value = 0.001).

4.2 Entrepreneurship with Social Enterprise Operations: Entrepreneurship significantly influences social enterprise operations with a path coefficient of 0.700 (t = 8.192, p-value = 0.000).

4.3 Entrepreneurship with Marketing Capability: The results show a statistically significant impact of entrepreneurship on marketing capability with a path coefficient of 0.650 (t = 6.716, p-value = 0.000).

4.4 Social Enterprise Operations with Economic and Social Outcomes: Social enterprise operations significantly influence economic and social outcomes with a path coefficient of 0.283 (t = 2.972, p-value = 0.003).

4.5 Marketing Capability with Economic and Social Outcomes: Marketing capability has a statistically significant influence on economic and social outcomes with a path coefficient of 0.455 (t = 4.033, p-value = 0.000).

Table 9 Analysis of the Social Enterprise Operations Model's Impact on Economic and Social Outcomes

Hypothesis path	Path coefficient (Direct effect)	t-values	p-values
Social Entrepreneurship (SE) → Economic and Social Outcomes (ECSM)	0.322	3.209	0.001
Social Entrepreneurship (SE) → Social Enterprise Operations (OPER)	0.700	8.192	0.000
Social Entrepreneurship (SE) → Marketing Capability (MK)	0.650	6.716	0.000

Social Enterprise Operations (OPER) → Economic and Social Outcomes (ECSM)	0.283	2.972	0.003
Marketing Capability (MK) → Economic and Social Outcomes (ECSM)	0.455	4.033	0.000

From Table 9, it is evident that the factors directly influencing economic and social outcomes more significantly than others are marketing capability, followed by being an entrepreneur and operating social enterprises. These relationships are positively and statistically significant. Examining the Specific Indirect Effects in Table 10 reveals that marketing capability and operating social enterprises have an indirect influence on economic and social outcomes. Therefore, based on the test results of the model relationships, it can be concluded that being an entrepreneur has both direct and indirect impacts on economic and social outcomes.

Table 10 Specific Indirect Effects of Result Analysis

Variables	Path coefficient (Direct effect)	t-values	p-values
Social Entrepreneurship (SE) → Social Enterprise Operations (OPER) → Economic and Social Outcomes (ECSM)	0.198	2.750	0.001
Social Entrepreneurship (SE) → Marketing Capability (MK) → Economic and Social Outcomes (ECSM)	0.295	3.337	0.006

The final step in the PLS-SEM analysis is the CTA-PLS (Confirmatory Tetrad Analysis - PLS) test, as it helps confirm the specific requirements of the measurement model. This test explains the differences in the covariance of one pair of latent variables and another (Bollen & Ting, 2000). CTA-PLS is an insightful test of the measurement model and the main methods for specifying the model and providing theoretical reasoning. In Reflective Measurement, indicators are assumed to originate from the same domain. If one of the indicators significantly differs, it results in rejecting the hypothesis, indicated by a p-value less than 0.05 (Hair et al., 2017). The analysis reveals that p-values for all paths in the model are greater than 0.05 (Table 11).

Table 11 Confirmatory tetrad analysis (CTA-PLS) Result Analysis

Variables	t-values	p-values
T_Effic,T_Final, T_Sys,T_Tech	1.329	0.184
T_Effic,T_Final, T_Tech, T_Sys	0.883	0.377
T_Innova, T_Missi, T_Plan, T_Proac	0.796	0.426
T_Innova, T_Missi, T_Proac, T_Plan	1.152	0.081
T_Innova, T_Missi, T_Plan, T_Risk	0.787	0.431
T_Innova, T_Plan, T_Risk, T_Miss	1.496	0.063
T_Innova, T_Plan, T_Proac, T_Risk	1.666	0.096
T_StraPla, T_StraProd, T_StraProm, T_StraPtion	0.916	0.360
T_StraPla, T_StraProd, T_StraPtion, T_StraProm	0.737	0.461

Discussion

The research team discussed the findings as follows

Entrepreneurs significantly influence the economic and social outcomes of social enterprises, with a large predictive impact. This aligns with Sakulsuraekphong (2019), confirming direct and indirect influences of entrepreneurs' characteristics on the social and economic outcomes. Entrepreneurial characteristics include ethics, organizational responsibility management, stakeholder management, and knowledge management. Entrepreneurs in social enterprises aim to achieve both economic and social goals, leading them to engage in various activities to generate income independently. This sustainable income is then used to operate and achieve long-term social objectives (Peredo & McLean, 2006; Sirathanakul et al., 2023).

Entrepreneurs significantly influence the marketing capability of social enterprises, with a large predictive impact. This is consistent with Powell & Osborne (2015), confirming the impact of entrepreneurs on marketing capabilities. Social enterprise entrepreneurs with marketing experience tend to have a positive perspective on market participation, resulting in social and economic outcomes for the social enterprise. Marketing is considered a pathway to the sustainability and management of social enterprises, emphasizing a relationship-oriented marketing approach instead of a transactional focus.

Entrepreneurs significantly influence the operations of social enterprises with a large predictive impact, aligning with Shin (2018). Shin emphasizes the positive impact of entrepreneurs on sustainable business outcomes. Entrepreneurial characteristics such as innovation, risk-taking, and proactive work are pivotal for the success of social enterprises. To ensure the sustained operation of a social enterprise, entrepreneurs must possess leadership qualities, including the ability to inspire, connect, and build trust among diverse stakeholders. Motivation from social benefits is crucial for entrepreneurs to lead an organization towards achieving positive social and economic outcomes, emphasizing the importance of establishing networks to facilitate operations.

The operations of social enterprises significantly impact economic and social outcomes, with a medium predictive impact. This aligns with Chamnanlertki (2014), Pansuwong, et al. (2023) who found that operating for social causes is identified as the primary factor influencing social enterprise outcomes. Success in social enterprises is explained by creating value in both social and economic aspects simultaneously. Thus, social enterprises must demonstrate operations that highlight three key success factors: social missions, social innovation, and social impact.

Marketing capability influences the economic and social outcomes of social enterprises with a large predictive impact, consistent with Liu & Takeda (2015). The ability to market influences economic and social outcomes indirectly, considering factors like product management, pricing, distribution channel management, marketing communication, market data management, sales, and marketing planning. The involvement of marketing in operations contributes to social and economic results for social enterprises, emphasizing the role of marketing as a pathway to sustainable success.

Research Suggestions

The researchers summarize the recommendations as follows:

aspects, including financial stability management, technology and innovation management, efficient operations management, and business distribution system management. Regarding marketing capabilities, entrepreneurs should direct their attention to marketing rather than sales, emphasizing relationship marketing as a crucial factor for the survival and sustainability

of social enterprises. This involves creating new products that meet consumer needs and are friendly to stakeholders. Communication strategies should leverage storytelling techniques to generate value for society. Government agencies related to social enterprises should promote entrepreneurship by enhancing capabilities in financial management, technology and innovation management, efficient operations management, and business distribution system management. In this regard, efforts should focus on building the capacities of social enterprise entrepreneurs, utilizing the acquired knowledge to develop and improve operations, leading to economic and social outcomes. Another crucial aspect for social enterprise entrepreneurs is marketing capabilities, emphasizing relationship marketing with stakeholders as a pathway to the sustainability of social enterprises.

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