

# RELATIONSHIPS BETWEEN SUFFICIENCY ECONOMY PHILOSOPHY AND BUSINESS PERFORMANCE USING BALANCED SCORECARD: A CASE STUDY OF LOGISTICS BUSINESS IN SOUTHERN THAILAND

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## Abstract

This study aims to investigate to what extent logistics service providers in southern Thailand have implemented the Sufficiency Economy Philosophy (SEP), as well as to examine the relationship between the practice of the Sufficiency Economy Philosophy and business performance, as measured by a balanced scorecard. Descriptive analysis and multiple regression are used for data analysis. The study found that logistics service providers in southern Thailand have applied the Sufficiency Economy Philosophy to their business operations at a high level. Relatively high scores were also seen for all individual components and conditions in the Sufficiency Economy Philosophy. Practicing the Sufficiency Economy Philosophy has a measured by a balanced

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scorecard. Customers, internal business processes, as well as learning and growth processes score at a high level. Only the financial perspective scores at a moderate level, implying that logistics service providers in the southern region do not focus on financial issues. These positive impacts can be interpreted using the stakeholder theory which mainly concerns the corporate stakeholders. Corporate plans are carefully made considering customers, employees, and shareholders, as well as society. Considering the relationships between each component of the Sufficiency Economy Philosophy and the balanced scorecard, the study reveals that the application of moderation, self-immunity, knowledge, and integrity in the business operations of logistics service providers (LSPs) can lead to high values in the focal business's balanced scorecard. Results of the study are useful for business operations development and corporate decision making in logistics service providers.

**Keywords:** Sufficiency Economy Philosophy, Balanced Scorecard, Logistics Business, Southern Thailand

## 1. INTRODUCTION

A wide range of businesses in Thailand have applied the Sufficiency Economy Philosophy (SEP) into their operations, while the agricultural industry remains a potential industry, still adapting the SEP into business practices (Naipinit, Promsaka Na Sakolnakorn, & Kroeksakul, 2013). The application of SEP is beneficial for businesses in terms of comprehensive knowledge, reasonableness, self-immunity, and application of ethics. Consequently, businesses can improve their corporate performance, such as improved adaptation, better innovative ability for research and development, and improved effectiveness in cost management while maintaining service and product quality (Khunthongchan, Phunthasean, & Viboonpong, 2010).

The benefits of practicing the SEP have been widely discussed in

the perspective of value, reputation, and performance (Suttipun, 2018; Suttipun & Saefu, 2017). However, the relationship between the application of the SEP in business operations and business performance as measured using a balanced scorecard (BSC) remains unclear. It appears that none of the current literature has demonstrated such a relationship. Most studies are concerned mainly with business performance in terms of financial aspects only (Suriyankietkaew & Avery, 2016; Suttipun & Saefu, 2017). However, business performance can be measured in terms of both financial and non-financial perspectives, and can be applied in both manufacturing and service sectors (Grigoroudis, Orfanoudaki, & Zopounidis, 2012; McAdam & O'Neill, 1999).

The Office of the National Economic and Social Development Board includes SEP in

macroeconomic development in order to enhance national competitiveness and to achieve the vision of Thailand's 20-Year National Strategy (2017- 2036). The government of Thailand has identified the logistics industry as part of a modern industrial development, namely the New S-curve industry which plays a significant role in macroeconomic development (NESDB, 2017). However, logistics service providers (LSP) have challenged the application of the SEP in their business operations due to the lack of global standards in the SEP. As a result, entrepreneurs in the LSP sector have rarely applied the SEP to their business operations. The SEP is far behind if compared with business administration in western practices. Furthermore, none of the previous studies have examined the relationship between practice of the SEP and business performance measured by a balanced scorecard for LSPs in southern Thailand.

According to the problems outlined above, the research question posed in this study is as follows: To what extent and level do LSPs in southern Thailand apply the SEP, and how does this influence their business performance as measured by a BSC? Therefore, the research objective is to study the extent of SEP application, and the levels of business performance measured by BSC, for LSPs in the South of Thailand. This study is expected to contribute by generating a business guidance policy for the application of the SEP in LSPs. This policy could possibly lead to business sustainability and enhance

national competitiveness via improved performance. Both financial and non-financial measurements are considered for overall business performance. The remainder of the paper is organized as follows: Section 2 discusses conceptual and theoretical perspectives. Section 3 presents a review of relevant literature and hypothesis development. Section 4 provides details of the research methodology. Section 5 reveals the findings and discussion. Section 6 presents other remarks and conclusions.

## **2. CONCEPTUAL AND THEORETICAL PERSPECTIVES**

### **2.1 Sufficiency Economy Philosophy**

The SEP is an application of Buddhism's middle path as an overriding principle for the conduct and way of life of the Thai people, at different levels including individual, family, and community levels (Gunasekaran & Kobu, 2007; Kantabutra, 2006). His Majesty King Bhumibol Adulyadej reiterated the SEP throughout his 58th year of reign, as a way to lead to sustainable development (Kantabutra, 2006). Moreover, it should be recognized that business for maximum profit may not be the optimum or most sustainable goal. In contrast, concentrating on economic profit or adding value to the organization is more critical in this philosophy. Besides this, business profits change net assets, which result from the

business's activities during each accounting period. On the other hand, business profits change net assets excluding investments, while economic profit results from investments (Vahid, Reza Dehghanpour, & Nasirizadeh, 2013).

The SEP framework is comprised of three components and two conditions. The three components of the SEP are moderation, reasonableness, and self-immunity, while the two conditions required for the achievement of the SEP are knowledge and integrity (Kantabutra, 2006; Savetpanuvong, Tanlamai, & Lursinsap, 2011). According to The Thaipat Institute, the components and conditions of the SEP are explained as indicated in the following paragraphs (Sornsri, 2016).

**Moderation:** This principle refers to sufficiency or appropriateness, and includes efforts made not to exploit oneself or others. Decisions should be made appropriately and be process-oriented, based on economic aspects. They should conform well to requirements or needs. Any decision should trade-off the costs and benefits regarding one's capability, the situation, other factors and resources, and at the same time, prepare for change. Also, decisions should not exploit internal or external stakeholders, society, or the environment as a whole.

**Reasonableness:** This tenet of the philosophy encompasses making the right choice or a reasonable decision by considering all the reasons and relevant factors. Causes and effects should also be considered in all

conduct. Under this tenet, individuals or organizations must consider their conduct or executions thoroughly and prudently without bias and discouragement, in order to ensure legitimate and valid outcomes such as benefit and satisfaction for all concerned. Decisions are made and turned into action rationally according to academic principles. In a business context, this principle means that supply chain members must consider the domino effect. As a result, this principle recognizes the importance of key performance indicators (KPIs) for the balanced benefits of an organization and its stakeholders.

**Self-immunity:** This principle guides individuals or organizations to prepare for impacts or changes, to assess the possibility of those occurrences, to organize all the resources to promptly cope with them, to manage potential risks, and to be able to adapt to unpredictable situations or changes in uncontrollable external factors. It involves considering the worst-case and best-case scenarios. It is also essential to organize internal and external operational prerequisites to be able to cope with external changes, or to safeguard internal operations. This principle suggests the importance of skills and knowledge sharing. Organizations build external immunity through, for example, supplier development, so that suppliers can provide goods or services with the right quality. Research and development should also be in place.

**Knowledge:** Decisions should be carefully made and executed by applying knowledge, consisting of academic knowledge, acquired skills, and experience, in all steps. Businesses should concern both deep and broad knowledge of the environment, supply market, and situations related to their tasks. Businesses must comprehend the facts, and understand these facts based on cause and effect. They should also be aware of facts and figures concerning business environments and situations.

**Integrity:** This condition includes the moral aspects of honesty, patience, perseverance, wisdom, harmony, responsibility, commitment, and sharing. Decisions and actions should be made morally, honestly, truthfully, and persistently. There should be no cheating, deceiving, or exploiting behaviors towards others. Decisions should be made through the consideration of all aspects and issues. Proper issues, processes, and reasons should be traceable.

## **2.2 Balanced Scorecard**

Kaplan and Norton (1996) defined BSC as a high-profile model that has attracted much attention from both practitioners and academics. The BSC is a performance measurement system that allows organizations to look at a business from four crucial divergent perspectives including finance, customers, internal business processes, and learning and growth. Many companies have started

adopting BSC as the foundation for their strategic management system (Rajesh, Pugazhendhi, Ganesh, Ducq, & Lenny Koh, 2012). A wide range of companies have applied BSC to measure their performance, including the service sector and logistics businesses. The four perspectives of performance measurement using a BSC are described as follows (Chytas, Glykas, & Valiris, 2011).

(1) The financial perspective: Financial measures remain an essential dimension, as financial performance measures indicate whether a company's strategy, implementation, and execution are contributing to bottom-line improvement.

(2) The customer perspective: Since companies create value through customers, customers' perception toward the company values become a significant aspect of performance measurement.

(3) The internal business process perspective: This perspective helps to identify the critical internal processes in which the organization must excel.

(4) Learning and growth perspective: This perspective of the BSC identifies the required infrastructure for the development of long-term growth and improvement in the business. Learning and growth come from three principal sources, namely people, systems, and organizational procedures.

## **2.3 Stakeholder Theory**

Freeman (2010) supports the view of stakeholder theory whereby

managers should be involved in sustainable practices. Managers have a moral obligation to satisfy a variety of constituents who have a legitimate (e.g. shareholders, customers and employees) or silent (e.g. the environment and community) interest in a firm (Yuen, Wang, Wong, & Zhou, 2017). Besides this, Freeman states that the theory is organized under two essential questions: What is the purpose of the firm? And to what extent must the business management be responsible for stakeholders? These questions direct executives to think about how they want to pursue business. It is important to consider the kind of stakeholder relationships that are required to achieve the business goals (Theodoulidis, Diaz, Crotto, & Rancati, 2017). The stakeholder theory is a new conceptual framework of business units mainly concerning socio-economic expectations. These expectations may be requested by shareholders, customers, employees, or society.

### **3. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

A paradigm shift is needed from reactive policies towards more preventive policies in order to achieve sustainable development. Some researchers discuss the Philosophy of "Sufficiency Economy", which takes a middle path approach (Kumar, Liu, Singh, & Khurmi, 2011). Thus, by practicing the SEP, people can live with harmony and security in a sustainable society. Moreover, they would be able to tolerate and cope

with all kinds of malignant impacts of globalization (Kumar et al., 2011) as well as business commodities. This philosophy can also be used to manage social and environmental sustainability in Thailand. The philosophy can be applied to other areas to understand the conditions of people in a particular community (Naipinit et al., 2013). Applying the SEP principles, critical premises for a sustainable innovation strategy include: concern for societal and environmental impacts, fair competition, and equality of stakeholder treatment, as well as building long-term customer relationships with integrity, appropriate use of resources, diversification to reduce risk, and timely entrance into different market cycles (Savetpanuvong et al., 2011). Application of the SEP principles varies depending on the area and environment. The micro-level focusses more on a sufficiency-lifestyle, which relates mainly to families and communities. Sufficiency Economy principles are flexible and can be applied to all levels. The extent of success for the application of a principle will depend on family or internal community factors (Ubonsri & Pannun, 2013). In the case of applications in the logistics business, firms must follow sustainable practices in their overall operations and their logistics operations in particular. Not only does it have both financial and other intangible benefits, but it is also the right thing to do (Dey, Guiffrida, LaGuardia, & Srinivasan, 2011).

The current literature implicitly reveals the relationship between the application of the SEP and business performance, as well as a link to the stakeholder theory. Hence, to answer the research question of relationships between the SEP and business performance as measured by the BSC for LSPs in southern Thailand the following hypothesis was created:

H1: There is a positive relationship between the application of the SEP and business performance measured using a BSC for LSPs in the South of Thailand.

Furthermore, the study extends to examine the relationship of each component or condition of the SEP and business performance as illustrated by the following hypotheses:

H2: There is a positive relationship between the application of the moderation component of the SEP and business performance measured using a BSC for LSPs in the South of Thailand.

H3: There is a positive relationship between the application of the reasonableness component of the SEP and business performance measured using a BSC for LSPs in the South of Thailand.

H4: There is a positive relationship between the application of the self-immunity component of the SEP and business performance measured using a BSC for LSPs in the South of Thailand.

H5: There is a positive relationship between the application of the knowledge condition of the SEP and business performance measured

using a BSC for LSPs in the South of Thailand.

H6: There is a positive relationship between the application of the moral condition of the SEP and business performance measured using a BSC for LSPs in the South of Thailand.

#### **4. METHODOLOGY**

The population of this study comprises all LSPs in southern Thailand. Using quota sampling, a total of 240 LSPs is required to make up the sample for study. Of this, 116 LSPs are from Songkhla, 61 LSPs are from Suratthani, 22 LSPs are from Phuket, 15 LSPs are from Nakorn Sri Thammarat, 13 LSPs are from Trang, 9 LSPs are from Krabi, and 4 LSPs are from Pattani. The questionnaire was posted by mail to all LSPs in the sample. Of this, 81 questionnaires were answered, yielding a 33.75% response rate.

The questions listed in the questionnaire were adapted from the literature review of work done by Suriyankietkaew & Avery (2016), and Suttipun & Saefu (2017). There were three parts to the questionnaire including (1) general information of both the respondent and the business background (2) application of SEP practices in business operations (3) business performance measured by a BSC. A Likert scale with 5 levels (1 = lowest, 5 = highest) was used to indicate the level of practice in (2) and (3) (Srisa-ard, 2010). The summary for each of the variables is listed in Table 1.

Table-1  
*Research variables*

Variable	Abbreviations	Likert scale
<b>Independent variable</b>		
1. SEP practice	X	5 levels
2. Component: moderation	X1	5 levels
3. Component: reasonableness	X2	5 levels
4. Component: self-immunity	X3	5 levels
5. Condition: knowledge	X4	5 levels
6. Condition: integrity	X5	5 levels
<b>Dependent variable</b>		
1. BSC overview	Y	5 levels
2. BSC in terms of financial	Y1	5 levels
2. BSC in terms of customers	Y2	5 levels
3. BSC in terms of internal business process	Y3	5 levels
4. BSC in terms of learning and growth	Y4	5 levels

Descriptive statistics were used both to examine the level of SEP practice and the BSC of LSPs in southern Thailand. Therefore, the average value and standard deviation were taken into consideration. The value meanings in terms of the intervals are as follows, with the intermediate value as 0.5 (Srisa-ard, 2010):

- 1.00-1.50 means the lowest level
- 1.51-2.50 means a low level
- 2.51-3.50 means a moderate level
- 3.51-4.50 means a high level
- 4.51-5.00 means the highest level

Furthermore, the correlation analysis has been taken into account for examining the independence of two variables. The multiple regression was also demonstrated in order to examine the relationship between SEP practice and BSC values for

LSPs in southern Thailand. The equations for testing the research hypothesis are:

$$Y = a + bX + \text{error} \quad (1)$$

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + \text{error} \quad (2)$$

In addition to this, a sensitive analysis must be carried out between each of the SEP components and conditions, and the four perspectives of the BSC. The equations used in this detailed analysis are as follows:

$$Y_1 = a + bX + \text{error} \quad (3)$$

$$Y_2 = a + bX + \text{error} \quad (4)$$

$$Y_3 = a + bX + \text{error} \quad (5)$$

$$Y_4 = a + bX + \text{error} \quad (6)$$



## 5. FINDINGS AND DISCUSSION

The level of SEP practice and BSC measurements for LSPs in southern Thailand are shown in Table 2, according to their descriptive statistics.

As shown in table 2, the overall levels of SEP practice are high. All individual components and conditions of the SEP also show high scores. The overall level for the BSC is also high, indicating high levels of business

performance. The perspectives of customers, internal business processes, and learning and growth also indicate similar high levels. Only financial aspects scores at a moderate level. This result implies that LSPs in southern Thailand do not focus on financial perspectives. This conforms with the stakeholder theory which focuses on the satisfaction of all corporate stakeholders, namely employees, customers, and society.

*Table-2 Results based on descriptive statistics*

Variables	Min.	Max.	Mean	SD.	Meaning
<b>Sufficiency Economy Philosophy practice</b>					
X: SEP practice	2.40	4.90	3.862	.542	High level
X1: Component: moderation	3.00	5.00	4.019	.589	High level
X2: Component: reasonableness	2.25	5.00	3.855	.601	High level
X3: Component: self-immunity	2.00	5.00	3.833	.647	High level
X4: Condition: knowledge	2.00	5.00	3.707	.718	High level
X5: Condition: integrity	1.75	5.00	3.898	.668	High level
<b>Business performance by balanced scorecard</b>					
Y: BSC overview	1.88	4.94	3.694	.602	High level
Y1: BSC in terms of financial aspects	1.25	5.00	3.441	.774	Moderate level
Y2: BSC in terms of customers	1.50	5.00	3.824	.712	High level
Y3: BSC in terms of internal business process	2.25	5.00	3.744	.658	High level
Y4: BSC in terms of learning and growth	1.75	5.00	3.762	.728	High level

To examine the relationships between SEP practice and the BSC for LSPs in southern Thailand, a correlation analysis was used to examine the independence of each pair of variables. The results of the correlation analysis are illustrated in Table 3.

As shown in table 3, all variables of the SEP (X1 – X5) have values less than 0.75. More specifically, all variables in the SEP are independent and can be tested in a multiple regression. Interestingly, all components and conditions of the SEP directly lead to variations in the

BSC. The data were tested for multi-collinearity between the variables used in the study. Results show that the variance inflation factors (VIF) of the correlation matrix between variables was less than 10, therefore indicating low coefficients in the correlation matrix. Multi-collinearity is therefore unlikely to be a problem in a multiple regression model. The correlation between variables was consequently tested, where it was found that the BSC was significantly correlated with all components and conditions of the SEP (X1 – X5) at a 0.01 confidence level.

Table 3 *Result of correlation analysis*

Variables	X	X1	X2	X3	X4	X5
Y: BSC	.771***	.694***	.601***	.642***	.665***	.638***
X: SEP practice	1	.832***	.891***	.839***	.860***	.786***
X1: Component: moderation		1	.704***	.634***	.660***	.539***
X2: Component: reasonableness			1	.741***	.728***	.593***
X3: Component: self-immunity				1	.603***	.562***
X4: Condition: knowledge					1	.593***
X5: Condition: integrity						1
VIF	-	2.300	3.372	2.434	2.496	1.773

\*\*\*significance level at 0.01    \*\*significance level at 0.05    \*significance level at 0.1

Multiple regression was consequently tested in order to (1) investigate the relationship between practice of the SEP and BSC measurements for LSPs in southern Thailand, and (2) to demonstrate the

sensitive analysis between the SEP components and conditions, and the four perspectives of the BSC. The results for the multiple regression are shown in Table 4.

Table-4  
*Result for multiple regression and sensitive analysis*

Variable	Main Model		Sensitive analysis			
	(1) Y: H1 t-value	(2) Y: H2- H6 t-value	(3) financial t-value	(4) customer t-value	(5) internal business process t-value	(6) learning and growth t-value
Constant	1.248	1.021	-.267	1.049	1.599	1.249
X: SEP practice	10.752***	-	7.547***	7.909***	7.866***	6.906***
X1: Component: moderation	-	3.277***	-	-	-	-
X2: Component: reasonableness	-	-1.262	-	-	-	-
X3: Component: self-immunity	-	2.234**	-	-	-	-
X4: Condition: knowledge	-	2.286**	-	-	-	-
X5: Condition: integrity	-	2.802***	-	-	-	-
R square	.594	.634	.419	.442	.439	.376
Adjusted R square	.589	.610	.412	.435	.432	.369
F-value	115.595***	25.987***	56.956***	62.557***	61.866***	47.699***

\*\*\*significant level at 0.01 \*\*significant level at 0.05 \*significant level at 0.1

Following hypothesis testing, equation (1) revealed that SEP practices have a positive impact on the BSC. Consequently, H1 is accepted. In other words, LSPs in southern Thailand have applied the SEP into their business operations at a high level, resulting in high level scores in their respective BSCs. Regarding equation (2) which considers the relationships between each component of the SEP and the BSC, it was revealed that moderation, self-immunity, knowledge, and integrity also have a positive impact on the BSC. Therefore, H2, H4, H5, and H6 are also accepted, while H3 is rejected. This demonstrates that the application of moderation, self-immunity, knowledge, and integrity in the business operations of LSPs can lead to high-level scores in the business's BSC.

Nevertheless, the rejection of H3 shows that high levels of reasonableness do not have any impact on the BSC for LSPs. This implies that some corporative activities of LSPs, such as understanding the business and market competition, developing a marketing plan, developing a clear vision and mission, benchmarking business operations with competitors, and developing an operations plan do not have any effect on the firm's BSC.

According to the sensitive analysis (equation (3) (4) (5) and (6)), the SEP practices have a positive impact on the BSC in terms of the financial, customer-related, internal business process, and learning and growth aspects of measurement. The

application of SEP practices for LSPs does not only have a favorable impact on the overall BSC, but also on the specific aspects of finances, customers, internal business processes, and learning and growth.

Furthermore, the research results conform with the stakeholder theory. Executives should be concerned with the effects of corporative decision making on stakeholders including the customers, employees, and shareholders, as well as society. Corporate decision making, which includes policy development and business operations should concern corporate profit and benefit, as well as central stakeholder effects (Theodoulidis et al., 2007; Yuen et al., 2017). It is essential to develop activities related to corporate social responsibility, as well as to develop business sustainability. SEP practices are part of social responsibility and business sustainability, that conform to the research results mentioned above. When LSPs apply SEP practices in their business operations, these SEP practices affect each perspective of the BSC favorably. These results are relatively similar to the study of Chytas et al. (2011) which found that corporate social responsibility positively affects the perception of stakeholders as well as the BSC in terms of financial aspects.

The exemplification of this phenomenon can be seen in Thai Beverage Public Company Limited (Thai Bev., 2017) who have applied SEP practice into their business administration in order to develop the sustainability of the business. They

aim to be a leader in the beverage industry in the ASEAN region, to be self-reliant, to enhance supply chain competitiveness, and to develop a strong relationship with stakeholders. Employing both SEP practice and stakeholder theory into business administration generates higher business performance (the annual dividend of Thai Beverage has increased by approximately 11.67% since 2016) and better operations effectiveness (gas emissions have reduced by 5% and defective products have decreased by 43% since 2014).

However, there are some arguments against the results of this study. For instance, the BSC of Ichitan Group Public Company Limited in 2016 declined in comparison to 2015 which was prior to their application of the SEP (Ichitan, 2016). Earnings before interest and taxes also decreased by 49.5%. In a relatively similar decrease, net profit also fell from 12.8% in 2015 to 6.9% in 2016. This contrasting evidence could possibly have been caused by an economic crisis, the maturity of the tea-beverage industry, aggressive pricing, or aggressive marketing promotions.

## **5. CONCLUSION AND RECOMMENDATION**

The research objective was to investigate the relationship between SEP practice and BSC measurements for LSPs in southern Thailand. The research demonstrates that LSPs in southern Thailand have operated their businesses considering SEP practices

at an overall high level, as well as for each component and condition. Furthermore, the application of the SEP plays a significant role in the overview of the BSC, as well as each individual perspective of the BSC.

This study is beneficial for both general practice and the application of theory. The study is the first investigation of the relationship between practice of the SEP and business performance as measured by a BSC for LSPs in southern Thailand. Moreover, the results of the relationship between the practice of the SEP and BSC values can be interpreted using the stakeholder theory. The results are beneficial for LSPs in southern Thailand in the perspective of business operations development. LSPs can consider the effects of corporate decision making on their stakeholders in order to achieve a better BSC result.

Regarding policies attaining to the SEP, future policy implications could be in the area of innovation, which is core to sustainable enterprises (Kantabutra, 2007). LSPs should nurture both incremental and radical innovation throughout their entire organization, especially regarding service innovation. LSPs should include innovative improvements in their service delivery processes. Alternatively, LSPs can be innovative in servicing customers since the attribution of the SEP to the BSC is significantly high in the customer perspective. To do so, entrepreneurs should promote innovative activities such as the improvement of their customer

relationship management system for improved customer satisfaction (Flint, Larsson, Gammelgaard, & Mentzer, 2005).

## **6. LIMITATIONS AND FUTURE STUDY**

There are some limitations. For example, the number of answered questionnaires accounted for 33.75% of the total proposed sample. The major problem was having an incorrect address for mailing, resulting in a low number of respondents. The mailing addresses of the research sample should be amended in order to improve and produce more reliable research results.

Qualitative research is not covered in this study. Consequently, studies on the relationship between the SEP and BSC measurements in terms of attitudes, and satisfaction, as well as feelings, should be further investigated. In addition, future study can be done in the area of sensitive analysis between the components and conditions of the SEP and each perspective of the BSC, as this may provide an advanced understanding of the relationship between the SEP and BSC assessments. Furthermore, other businesses in the supply chain and other independent variables could be taken into account, for example business size, business characteristics, and periods of business operation.

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