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# Strategic Design to Increase MSME Intentions in Exporting with Standards for Global Market Needs

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Abstract. The contribution of Indonesia's exports, with the number of business entities dominating at 99.99%, is relatively low at 14.37%. Meanwhile, large business entities achieved an export contribution for Indonesia of 85.63%. Indonesia was predicted to emerge from the middle-income trap phenomenon in 2036, implying that Indonesia will become a high-income country with the fourth-largest GDP in the world. This demonstrates that Micro, Small, and Medium Enterprises (MSMEs) have enormous potential and opportunities to expand international trade. The many factors hindering MSMEs from exporting and high export standards were among the critical factors for the low intention of MSMEs in exporting and choosing to focus on domestic selling. This study used the Principal Component Analysis (PCA) and Interpretive Structural Modeling (ISM) methods to find out the main factors that cause low intentions on the awareness of MSME business actors in exporting by reducing data on the PCA method to perceived barrier and enabler factors. The ISM method helped produce policy formulation and strategic planning by analyzing the influence of the relationship between factors. 13 main barriers and six main enabler factors were obtained; from them, the action plan was designed through appropriate strategic planning, ordered by the priority of barrier factors and enablers, which are known from the partition level in the ISM model based on the results of discussion agreements with experts.

Keywords: Export; export barriers; export enablers, msmes, Indonesian mses, principal component analysis (PCA); interpretive structural modeling (ISM)

Abstrak. Kontribusi ekspor Indonesia dengan jumlah entitas bisnis yang mendominasi sebesar 99,99% ternyata kontribusi terhadap ekspor masih cukup rendah dengan persentase 14,37%. Sedangkan entitas bisnis usaha besar mampu mencapai kontribusi ekspor untuk Indonesia sebesar 85,63%. Diprediksi Indonesia akan keluar dari fenomena middle income trap ditahun 2036, maksud dari prediksi tersebut adalah Indonesia akan menjadi negara berpendapatan tinggi dengan nilai PDB terbesar ke-4 di dunia. Hal ini menunjukkan bahwa Usaha Mikro, Kecil, dan Menengah (UMKM) memiliki potensi atau peluang yang sangat besar untuk memperluas perdagangan internasional. Banyaknya faktor yang menghambat para pelaku UMKM dalam melakukan ekspor serta adanya standar ekspor yang tinggi merupakan salah satu faktor kunci rendahnya intensi UMKM dalam melakukan kegiatan ekspor dan memilih untuk melakukan penjualan secara domestik. Penelitian akan menggunakan metode Principal Component Analyisis (PCA) dan Interpretive Structural Modelling (ISM) untuk mengetahui faktor utama yang menyebabkan rendahnya intensi atas kesadaran pelaku usaha UMKM dalam melakukan ekspor dengan cara reduksi data pada metode PCA terhadap faktor barrier dan enabler yang dirasakan dan metode ISM membantu menghasilkan rumusan kebijakan dan perencanaan strategis dengan menganalisis pengaruh hubungan antar faktor. Diperoleh 13 faktor barriers utama dan 6 faktor enabler utama, dari faktor utama yang diperoleh tersebut action plan atau solusi dirancang melalui perencanaan strategis yang tepat berdasarkan urutan prioritas faktor barrier dan enabler yang diketahui dari level partisi pada model ISM berdasarkan hasil kesepakatan diskusi dengan para pakar.

Kata Kunci: Ekspor; barrier ekspor; enabler ekspor, UMKM, UMK Indonesia, principal component analysisi (PCA); interpretive structural modelling (ISM)

### Introduction

MSMEs could support the country's economic reinvigoration by reaching 64.2 million units, as the number of MSMEs was equivalent to 99.99% of the number of business units in Indonesia, with the remaining 0.01% of prominent business entities of 5,550 units.

It was found that the contribution of Indonesia's exports with the number of business entities dominating at 99.99% turned out to be relatively low at 14.37%. Meanwhile, large business entities achieved an export contribution for Indonesia of 85.63%.

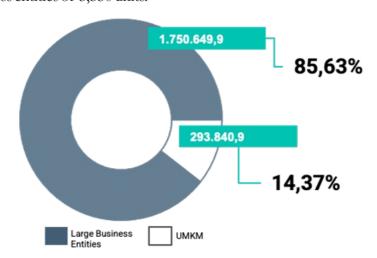


Figure 1. Export Contribution (Billion Rupiah)

Source: Processed. Ministry of KUKM, which was processed from BPS data

On the other hand, Indonesia's economic potential was predicted to reach a high economic growth scenario. Based on the prediction, it was known that if the government implemented the basic scenario, it could achieve an export openness of 34%. If the government implements the high scenario, it could accomplish an export openness of up to 54%. This showed the enormous export opportunities that can be achieved to actualize the high economic growth scenario.

The potential for export openness that Indonesia will face in 2036 was regarded as an expectation that will be achieved if the contribution of exports in Indonesia continues to increase. However, Indonesia's export contribution to Gross Domestic Product (GDP) was still left behind compared to neighboring countries. The discrepancy in Indonesia's exports can be caused by the delay in making it into trade agreements, the dependence of business

entities on raw material commodities, and the dependence on imported raw materials, which makes the selling value of Indonesian exports less competitive in terms of pricing. Another impact of these obstacles was the imposition of high export fees compared to other countries, thereby reducing the competitiveness of Indonesian export products in the global market. The many factors hindering MSMEs from exporting; the existence of high export standards was among the critical factors for the low intention of MSMEs in carrying out export activities and choosing to conduct domestic selling. On the other hand, Indonesia's wealth potential and opportunities were very high for MSME parties to compete in the global market.

The purpose of this study was to find out the barrier and enabler factors according to the conditions, situation, and background of each MSME business actor in Indonesia through a questionnaire.

The data obtained from the questionnaire was processed to determine the central barrier and enabler factors experienced by business actors. After the main factors influencing the low intention of MSMEs in exporting were discerned, decision-making was carried out using the ISM method and expert analysis. Thus, a target-specific action plan could be predictably made per the needs and conditions of Indonesian MSMEs. In addition, this study aimed to increase the intention of MSME parties to export by determining the driving and inhibiting factors affecting the involvement and intention of MSMEs to export.

The outputs in this study to support the research objectives are as follows:

- 1. Identification of barriers and enablers in carrying out export activities.
- 2. Strategic planning in the form of an action plan, formed from the analysis of the correlation between barrier factors and enablers, for implementing improvements aimed at increasing the intentions of Indonesian MSME business actors in exporting.

The stages of data collection started with making a questionnaire based on the results of searching for information from a literature study to fit the conditions, topics, and research background. The first questionnaire was intended for respondents of MSME business parties who resided in Java, Sumatra, Kalimantan, & Sulawesi. The research questionnaire was designed to determine the barrier and enabler factors perceived by MSME business parties in carrying out export activities. Respondents were taken from 2 perspectives: the export business parties and the non-export business parties. It was followed by the distribution of the second questionnaire, which encompassed the perspective of the experts in the export field.

The experts were included to assess each factor obtained from the first questionnaire. The expert's review became the basis for the later consideration of policy-making. The expert assessment was also aimed at evaluating the interrelationships among factors to fit the limitations and objectives of the study.

In this research, the data processing stage was done by dividing the factors into barrier and enabler factors which will be processed using the PCA & ISM methods. There were 22 export driving factors to be built in the formation of the questionnaire; the barrier factor was built from 50 factors, with 22 internal barrier factors and 28 external barrier factors.

These barriers and enablers were constructed from the export barriers referred to by the OECD (2012) and OECD-APEC (2006). Therefore, it was necessary for the group to employ data reduction but allow for the representation of the overall information of the original variable with the PCA method (Dunteman, 1989: 7). Subsequently, it was followed by the ISM method, intended to describe the correlation between barriers and enabler factors, figure their dependence, identify correlations between criteria, and analyze relationships by mapping criteria in different levels (Tzeng, G-W. & Huang J (2011), Ravi, Shankar, & Tiwari (2005), Beikkhakhian (2015)). After processing the data using ISM, the MICMAC analysis of the quadrants will be shown in the data processing. Quadrant in MICMAC analysis was a priority reference for barrier and enabler factors that will be used as a basis for decision-making with the results of this study. The following is an overview of how the action plan was made.

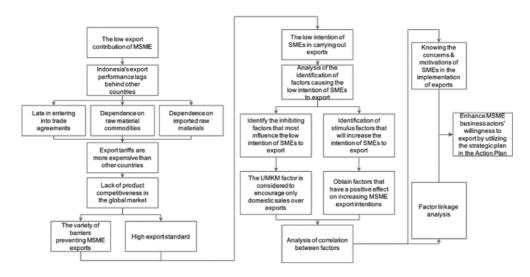


Figure 2.
Problem Linkage Diagram

MSMEs have different definitions. One of them was MSMEs regulated in Law No. 20 of 2008 of the Republic of Indonesia.

The following is a table for the classification of MSMEs according to Law No. 20 of 2008:

Table 1.

Definition of MSMEs Based on Business Unit Size

		Definition	:		
Business Type	Ministry of Cooperatives & SMEs	Indonesian Ministry of Finance	World Bank		
Micro	asset: $\leq 50$ million or Turnover: $\leq 300$ million	Small Business:	Workers $<$ 10; asset $\le$ US\$10,000; Turnover $\le$ US\$100,000		
Small	asset: 50-500 million or <i>Turnover</i> : 300 million - 2.5 billion	Turnover $\leq 4.8 \text{ B}$	$Turnover \le 4.8 \text{ B}$	$Turnover \le 4.8 \text{ B}$	Workers $<$ 50; asset $\le$ US\$3 B; Turnover $\le$ US\$3 B
Medium	asset: 500 million - 10 M or <i>Turnover</i> : 2.5 billion - 50 billion	Non-small Business: Turnover	Workers $< 300$ ; asset $\le$ US\$15 B; $Turnover \le$ US\$15 M		
Big	asset $> 10$ billion or Turnover $> 50$ billion	> 4.8 M	Workers $\geq$ 300; asset $>$ US\$15 M; Turnover $>$ US\$15 B		

Source: UU No.20 Th.2008<sup>a</sup>, Ministry of Finance RI,2013<sup>b</sup>, Ayyagri, Beck, Demirguc-Kunt,2005

Exporting is a trading system of selling or issuing goods produced or processed domestically to be sold abroad with applicable terms and conditions. Exports are intended as an economic activity to increase growth. However, this growth must be supported by the country's trade policies so that the designed objectives can be achieved according to the potential of the State of Indonesia (UNIDO, 2010). In export activities, there are many inevitable obstacles that business parties in their execution can perceive. Three types of obstacles can occur physical barriers when checking at customs and excise, fiscal constraints, and technical barriers in the form of standardization of export products.

Various efforts to increase exports have been and are being carried out by the government to increase the number of exporters in Indonesia. To achieve this, the government directed its focus on export-oriented business parties, the target market, and superior products of each business party; conducted penetration efforts to export destination countries; utilized the Preferential Trade Agreement (PTA), Free Trade Agreement (FTA), and Comprehensive Economic Partnership Agreement (CEPA); and through the simplification of regulations related to export licensing and approval processes and procedures. Increased collaboration to actualize business parties engaging in export activities also continued to be supported. This supported the development of export MSMEs, starting from designing strategies for easy access and extending the scope to financing and other access.

In this study, the PCA method was intended to eliminate enabler and barrier factors, which were obtained from questionnaires by respondents of MSME business parties in their experience when exporting and running their businesses. The purpose was to capture the central factors that described the widespread problems experienced by this research. The PCA method was able to translate a factor to a denser group of main factors (Rencher (2012), Tufféry (2011), Abdi and Williams (2010), and PSU (2017)).

The ISM method was an approach from Multi-Criteria Decision Making (MCDM), which primarily focused on decisions for policies or regulations. It can also identify interactions, correlations between the factors studied, or research problems per the expected goals (Luthra et al., 2014). This method was carried out in two stages. The first stage constructs factors or variables that need to be researched or reviewed, and the second stage discerns a relatable correlation. It identifies it so that the output is structured factors (Sahney et al., 2006).

ISM was built to describe the relationship and correlation between enabler and barrier factors. The development of this ISM model was used to assist in making policies to increase MSME export intentions for exports. The stages that will be carried out in the ISM method are as follows:

- 1. Developing a Structural Building Self-Interaction Matrix (SSIM)
- 2. Building reachability matrix from the developed Structural Building Self-Interaction Matrix (SSIM)
- 3. Conducting a cross-check with transitivity rules on the reachability matrix, where the results of the transitivity rules build the final reachability matrix
- 4. The next step was to conduct a partition on the levels in the final reachability matrix
- 5. After obtaining the final reachability matrix, building the conical matrix
- 6. Subsequently, an ISM diagram is formed
- 7. Forming the MICMAC quadrant

# Research Methodology

In this study, two methods were used, the above PCA and ISM. The data collected from MSME respondents will be processed using the PCA method to determine the key components that will be the factors in the ISM method's data processing. The research focused on collecting data from respondents who have MSME business units.

Respondents considered in this study encompassed both those who already have experience exporting and those who have not or wanted to start selling their products for export. Respondents with experience in export activities are called Exporters, while respondents who do not are called non-Exporters. The following is a classification table of export status obtained from the questionnaire.

Table 2. Export Status of MSME Respondents

Export MSME Status	Respondents Response
<u>Exporter</u>	111
Current Exporter	56
Sporadic Exporter	55
<u>Non-Exporter</u>	<u>109</u>
Aspiring Exporter	104
No Intention to Export	5
Total of Respondents	<u>220</u>

The first questionnaire data to be processed using the PCA method will be taken from the referred export drivers (OECD, 2009). Twenty-two export driving factors will be developed in forming the questionnaire. The barrier factor is built from 50 factors, with 22 internal barrier factors and 28 external barrier factors. This barrier factor was built from the export barriers promoted by the OECD (2012) and OECD-APEC (2006).

The following is a list of enabler and barrier factors selected from the PCA data processing. Each group of factors in the PCA method was labeled from various literature studies, and experts carried out considerations. Thus, the enablers and barriers factors were formed as below. There were six enabler factors and 13 barrier factors, followed by a description of each factor and its references. Below is the table of enablers and barriers factors.

Table 3. *Enablers Factors* 

Enabler	Description
(E1) Target market attractiveness	This factor relates to the drivers of exporters in the destination market, such as finding new market opportunities and getting a higher income.
Domestic market (E2) demand and competition	This factor relates to the drivers of exporters in meeting high demand from customers in destination countries and limited competition and sales in the domestic market.
(E3) Network Relations	This factor relates to the encouragement of communities in export destination countries and government support to export.

Table 3. (Continued) Enablers Factors

Enable r	Description						
(E4) Product competitiveness	This factor relates to the profits earned by exporters.						
(E5) Home government support	This factor relates to the government's ease of export, such as simplifying regulations and low transportation costs.						
International exposur (E6) of SME owners/managers	This factor relates to the experience and "exposure" that the exporters get when selling their products for export.						

Table 4. Barriers Factors

	Barrie r	Description
(B1)	Government rules/regulations	This factor relates to obstacles from the government side or obstacles related to the actions or inactions of the government of origin concerning exporter activities.
(B2)	Information Access	This factor is related to problems in identifying, selecting, and contacting international markets due to information inefficiency.
(B3)	Destination market conditions	This factor relates to the conditions/conditions in the export destination market, such as different competition, different habits of citizens of foreign destinations, and the requirements that apply in the destination country.
(B4)	Tariff & non-tariff	This factor relates to barriers concerning export restrictions and internationalization imposed by government policies and regulations in foreign markets.
(B5)	Financing Regulation	This factor relates to funding constraints from export actors associated with capital funds, export insurance funds, credit facility funds, and funds/high transportation costs.
(B6)	Distribution, Logistics & Marketing	This factor relates to barriers to production capacity, distribution of goods in export destination countries, and barriers to managing product inventory in destination countries.
(B7)	Socio-cultural foreign markets	This factor relates to language barriers and socio-cultural differences, which affect the business concept of exporters in export destination countries.

Table 4. (Continued) *Barriers Factors* 

	Barrie r	Description
(B8)	Product	This factor relates to barriers in product development, product ideas, and product standards/quality.
(B9)	Procedural	This factor relates to the barriers associated with the operational aspects of transactions with foreign customers.
(B10)	Human Resources	This factor relates to the lack of human resources expertise in dealing with problems in export destination countries.
(B11)	Price (Price barriers)	This factor relates to determining the right price for customers in export destination countries and barriers to pricing competition with foreign markets' competitors.
(B12)	Business Environment in Host Country	This factor relates to political instability in foreign markets and foreign exchange risk against the destination country.
(B13)	Foreign Government	This factor relates to the unequal treatment of foreign governments with local entrepreneurs in the destination country and internal regulations in the export country.

After obtaining the main factors from the data processing stage using the PCA method, the next step was to collect data from the interview process with experts in SMEs and exports. The interview process was conducted using an online questionnaire containing profile questions or expert backgrounds. There was an assessment of the importance of each enabler and barrier factor and the relationship between the factors. There were three experts involved in this study, consisting of Agus Santosa (Apikmen brand export practitioner, ten years of experience), Deddy Effendy (Handicraft & Homedecor industry player with the Palem Craft brand and Representative of the Yogyakarta Export-Import Financing Institution (LPEI), 18 years of experience), and Risma Fattahatin Muizullah (Policy analysis of young experts at the Ministry of Industry, 11 years of experience).

Experts were asked questions through online questionnaires; the assessment was carried out by experts using the five-point Likert scale. Afterward, the data will be processed using the geometric mean value. If the geometric mean of each enabler and barrier factor is less than 3.5, then that factor could not be accepted as the main factor in this study. This was due to the geometric mean value of less than 3.5, indicating that these factors were not following the conditions occurring in Indonesia. The results of the average geometry in the table below showed that all factors were accepted with a geomean value of >3.5. The following is a geometric table of enabler and barrier factors.

Table 5. Mean Geometric Barrier Factor

	Factor	I	Expe	t	Coomoon	Geomean
Code	Factor	1	2	3	Geomean	Result
(B1)	Government rules/regulations	3	3	5	3,556893304	Accept
(B2)	Information Access	4	5	3	3,914867641	Accept
(B3)	Destination market conditions	5	5	4	4,641588834	Accept
<b>(B4)</b>	Tariff & non-tariff	5	3	4	3,914867641	Accept
<b>(B5)</b>	Financing Regulation	5	4	4	4,30886938	Accept
<b>(B6)</b>	Distribution, Logistics & Marketing	5	5	5	5	Accept
<b>(B7)</b>	Socio-cultural foreign markets	3	4	4	3,634241186	Accept
<b>(B8)</b>	Product	3	3	5	3,556893304	Accept
(B9)	Procedural	4	3	5	3,914867641	Accept
(B10)	Human Resources	4	5	3	3,914867641	Accept
(B11)	Price (Price barriers)	5	5	4	4,641588834	Accept
(B12)	Business Environment in Host Country	3	4	4	3,634241186	Accept
(B13)	Foreign Government	4	5	3	3,914867641	Accept
	Total	53	54	53		
	Variant Total	0,22	22222	222		

Table 6. Average Geometry Factor Enabler

	<b>T</b>	Fac	ctor		Geomean	Geomean
Code	Factor	1	2	3		Result
(E1)	Target market attractiveness	4	5	4	4,30886938	Accept
(E2)	Domestic market demand and competition	3	5	4	3,914867641	Accept
(E3)	Network Relations	5	3	4	3,914867641	Accept
(E4)	Product competitiveness	3	4	4	3,634241186	Accept
(E5)	Home government support	5	5	5	5	Accept
(E6)	International exposure of SME owners/managers	5	5	5	5	Accept
	Total		27	2	Total Var (Vi)	
	Variant Total	0,6666	666667			

After evaluating the average geometry, a reliability test was assessed by knowing the Cronbach alpha value. The geometric mean assessment was carried out on the enabler factor; the barrier factor showed that the Cronbach alpha value was above 0.7. Thus, the questionnaire was reliable, and all factors were acceptable and could be continued for further research.

When these steps have been taken, a Final Reachability Matrix was formed, followed by a description of driving power and dependence power. The following is a table of the Final Reachability Matrix of barrier and enabler factors.

Table 7. Final Reachability Factor Barriers

	B1	B2	В3	B4	В5	В6	<b>B7</b>	B8	В9	B10	B11	B12	B13	Driving Power
B1	1	1	0	1	1	1	0	1	1	0	1	0	0	8
<b>B</b> 2	1	1	0	1	1	1	0	1	1	0	1	0	0	8
В3	1	1	1	1	1	1	0	1	1	0	1	0	0	9
<b>B</b> 4	1	1	0	1	1	1	0	1	1	0	1	0	0	8
<b>B</b> 5	1	1	0	1	1	1	0	1	1	0	1	0	0	8
<b>B</b> 6	1	1	0	1	1	1	0	1	1	0	1	0	0	8
<b>B</b> 7	0	1	0	1	1	1	1	1	1	0	1	0	0	8
<b>B</b> 8	1	1	0	1	1	1	0	1	1	0	1	0	0	8
В9	1	1	0	1	1	1	0	1	1	0	1	0	0	8
<b>B</b> 10	1	1	0	1	1	1	0	1	1	1	1	0	0	9
B11	1	1	0	1	1	1	0	1	1	0	1	0	0	8
B12	1	1	0	1	1	1	0	0	1	0	1	1	0	8
B13	1	1	0	1	1	1	0	1	1	0	1	0	1	9
Dependence Power	12	13	1	13	13	13	1	12	13	1	13	1	1	

Table 8. Final Reachability Factor Enablers

	<b>E</b> 1	<b>E2</b>	E3	<b>E4</b>	E5	<b>E6</b>	<b>Driving Power</b>
E1	1	1	1	1	0	1	5
$\mathbf{E2}$	1	1	0	1	0	0	3
<b>E3</b>	1	1	1	1	0	1	5
$\mathbf{E4}$	1	1	0	1	0	1	4
$\mathbf{E5}$	1	1	0	1	1	0	4
$\mathbf{E6}$	1	1	1	1	0	1	5
Dependence							
Power	6	6	3	6	1	4	

After the stages in building variables in ISM had been conducted and the Final Reachability Matrix was obtained, the next step was partitioning the enabler and barrier factor levels. Partitioning was done by building the reachability set obtained from the row of driving power factors. The antecedent set was obtained from each column of dependence power factors. If each factor has been included, the reachability factor set (entirely the same as the antecedent set) became the intersection set variable. These steps will obtain a set of factors in the level 1 partition. Then, to obtain the next level partition, the next step involved repeating the same steps but reducing the factors in the level 1 partition.

The next step was to build a conical matrix. A conical matrix is a combined level partition conducted in the previous stage, i.e., the partition stage. The merging of level partitioning factors started from the level 1 partition and continued sequentially to the level 2 partition. After the conical matrix was formed, the researcher built each conical matrix's driving and dependence power. The following is a conical matrix table of enabler factors.

Table 9.

Matrix Conical Factor Enabler

Enablers	Reachability Set	Antecedent Set	Intersection Set	0		Level
(E1)	E1, E2, E3, E4, E6	E1, E2, E3, E4, E5, E6	E1, E2, E3, E4, E6	5	6	Level 1
(E2)	E1, E2, E4	E1, E2, E3, E4, E5, E6	E1, E2, E4	3	6	Level 1
(E4)	E1, E2, E4, E6	E1, E2, E3, E4, E5, E6	E1, E2, E4, E6	4	6	Level 1
(E3)	E1, E2, E3, E4, E6	E1, E3, E6	E1, E3, E6	5	3	Level 2
(E5)	E1, E2, E4, E5	E5	E5	4	1	Level 2
(E6)	E1, E2, E3, E4, E6	E1, E3, E4, E6	E1, E3, E4, E6	5	4	Level 2

Table 10.

Matrix Conical Factor Enabler

Barriers	Reachability Set	Antecedent Set	Intersection Set	Driving Power	Dependence	Level
(B1)	B1, B2, B4, B5, B6, B8, B9, B11	B1, B2, B3, B4, B5, B6, B8, B9, B10, B11, B12, B13	B1, B2, B4, B5, B6, B8, B9, B11	8	12	Level 1
(B2)	B1, B2, B4, B5, B6, B8, B9, B11	B1, B2, B3, B4, B5, B6, B7, B8, B9, B10, B11, B12, B13	B1, B2, B4, B5, B6, B8, B9, B11	8	13	Level 1
(B4)	B1, B2, B4, B5, B6, B8, B9, B11	B1, B2, B3, B4, B5, B6, B7, B8, B9, B10, B11, B12, B13	B1, B2, B4, B5, B6, B8, B9, B11	8	13	Level 1

Table 10. (Continued)

Matrix Conical Factor Enabler

Barriers	Reachability Set	Antecedent Set	Intersection Set	Driving Power	Dependence	Level
(B5)	B1, B2, B4, B5, B6, B8, B9, B11	B1, B2, B3, B4, B5, B6, B7, B8, B9, B10, B11, B12, B13	B1, B2, B4, B5, B6, B8, B9, B11	8	13	Level 1
(B6)	B1, B2, B4, B5, B6, B8, B9, B11	B1, B2, B3, B4, B5, B6, B7, B8, B9, B10, B11, B12, B13	B1, B2, B4, B5, B6, B8, B9, B11	8	13	Level 1
(B8)	B1, B2, B4, B5, B6, B8, B9, B11	B1, B2, B3, B4, B5, B6, B7, B8, B9, B10, B11, B13	B1, B2, B4, B5, B6, B8, B9, B11	8	12	Level 1
(B9)	B1, B2, B4, B5, B6, B8, B9, B11	B1, B2, B3, B4, B5, B6, B7, B8, B9, B10, B11, B12, B13	B1, B2, B4, B5, B6, B8, B9, B11	8	13	Level 1
(B11)	B1, B2, B4, B5, B6, B8, B9, B11	B1, B2, B3, B4, B5, B6, B7, B8, B9, B10, B11, B12, B13	B1, B2, B4, B5, B6, B8, B9, B11	8	13	Level 1
(B3)	B1, B2, B3, B4, B5, B6, B8, B9, B11	В3	В3	9	1	Level 2
(B7)	B2, B4, B5, B6, B7, B8, B9, B11 B1, B2, B4, B5,	В7	В7	8	1	Level 2
(B10)	B6, B8, B9, B10, B11	B10	B10	9	1	Level 2
(B12)	B1, B2, B4, B5, B6, B8, B9, B11, B12	B12	B12	9	1	Level 2
(B13)	B1, B2, B4, B5, B6, B8, B9, B11, B13	B13	B13	9	1	Level 2

The following results are from the ISM model diagram, formed based on level partitioning. Factors with the same level partition are parallel, while the next level partition was formed under the level 1 partition. The ISM model diagram has arrows describing each factor's interplay.

Through collecting interview data from experts, three perspectives would be obtained from the three experts with respective backgrounds in assessing each enabler factor and barrier factor. The experts' assessments would be made for the basis for consideration

of decision-making or the following action solution under the main objective of this study: to increase MSME business actors' intention to export, accomplished by knowing the inhibiting factors and driving factors that deter or motivate exporting, respectively. Thus, the action solution would lead to policymaking that prioritizes facilitating export activities.

The following is a diagram of the ISM enabler and barrier factor model.

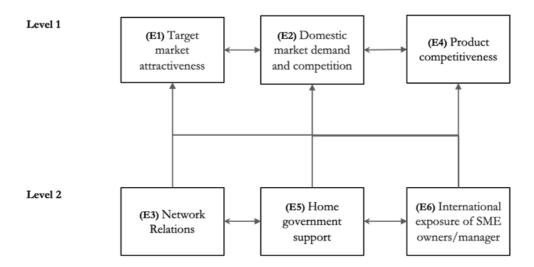


Figure 3. ISM Enabler Models

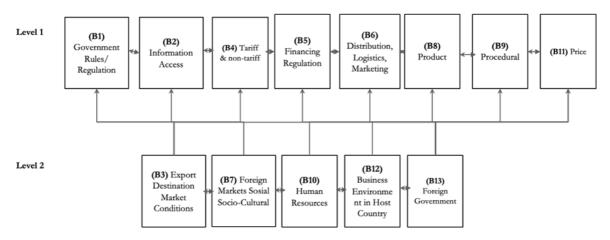


Figure 4. ISM Barrier Mode

### Results and Discussion

There were many differences between the ISM model processed using software (EX-Simpro) and the ISM model with level partitioning. The ISM factor enhancer model made with EX-Simpro showed six levels of division. Conversely, the level partitioning method showed two levels of division. The ISM model processed with software showed two levels: levels one to five were included in quadrant III or quadrant linkage. There, the linkage quadrant demonstrated that this factor was highly influential. Meanwhile, the ISM software model showed the division of four

levels, and the level partitioning of the ISM model showed the division of barriers into two levels.

The action plan at the initial stage was a recommended solution for the barrier factor at level two, and the action plan at the final stage was the recommended solution for the barrier factor at level one. The preparation of strategic planning in the action plan was reviewed by hosting a discussion forum with each expert opinion, accounting for the real needs and conditions experienced by business actors. The discussion was based on questionnaire data.

However, implementing the action plan still needed to be carried out, with more in-depth research related to the background of business actors in Indonesia. There were still other factors that affected the low intention of the community to engage in exporting. Thus, other export MSME activists and government agencies were needed to realize and implement the following action plan.

The action plan in this study was founded on the advice and discussion of three experts, grounded in the experiences and circumstances that often occurred in Indonesia in expanding worldwide product sales. The following is a table of action plans that can be the basis for determining appropriate policies under the conditions in Indonesia.

Table 11.

Recommended Action Plan

Early-Stage Action Plan				
Barrie r	Purpose	Action plan		
(B3) Export Destination Market Conditions	To facilitate Export MSME business parties in obtaining accurate knowledge and information regarding the condition of export destination countries.	1. To establish an Indonesian Survey Institute from representatives of business parties in exporting countries to determine the development of conditions in destination countries related to export activities.		
(B10) Human Resources	To facilitate Export MSME business parties in obtaining accurate knowledge and information regarding the condition of export destination countries.	<ol> <li>To exchange of Insights mentoring program driven by the Directorate General of National Export         Development (DJPEN) under the auspices of PPEI (Indonesian Export Education and Training). Insight exchange program in the form of:         <ul> <li>Sending selected MSME representatives abroad to receive export training in the</li> </ul> </li> </ol>		
(B13) Foreign Government	To maintain the existence of export MSME businesses in export destination countries.	selected export destination country.  1. Directorate General of National Export Development  To create an online international trade show program attended by customers in the export destination country, this platform was intended to communicate with customers and partners and promote products.		
(B7) Foreign Markets Sosial Socio- Cultural	To introduce products from Indonesia that customers can accept in export destination countries.	1. Socio-cultural differences can be made in one way, by holding trade fairs in the destination country by prioritizing cultural acculturation between products made in Indonesia and products to be exported in the export destination country. The action plan involves support from the Indonesian Embassy in each export destination country.		

Table 11. (Continued) Recommended Action Plan

Early-Stage Action Plan				
Barrie r	Purpose	Action plan		
(B12)	To facilitate Export	1. This obstacle can be overcome by		
Business	MSME business parties	creating a database containing updated		
Environment	in obtaining accurate	information related to the state of the		
in Host	knowledge and	economy, politics, and regulations related		
Country	information regarding	to export activities in the destination		
	the condition of export	country.		
	destination countries.			

Table 12. Recommended Action Plan

Final Action Plan				
Barrier	Purpose		Action plan	
(B1) Government Rules/Regulation	To help government support programs focus more on the export MSME business under the obstacles complained about in each business sector.	1.	The government can segment support for export activities from each sector in making export policies because the export barriers experienced by each business party are undoubtedly different and cannot be carried out with the same program approach.	
(B8) Product	To assist MSME business parties in identifying and analyzing their comparative advantage to carry out export activities.	1.		
(B2) Information Access	To assist MSME business parties in knowing important information related to export activities.	1.	The central government cooperates with local governments to conduct export counseling for MSMEs regularly to present information related to the needs and requirements in carrying out export activities, especially in areas outside Java, which also have the potential to actively carry out export activities of agricultural products in the region.	
(B4) Tariff- non- Tariff	To assist export MSME business parties in terms of imposing high tax management.	1.	The government may subsidize the imposition of tax rates on export products from customs by covering the tax costs of foreign products entering Indonesia.	

Table 12. (Continued)
Recommended Action Plan

Final Action Plan				
Barrier	Purpose		Action plan	
(B5) Financing Regulation	To facilitate export MSME business parties to obtain information on cost assistance for business development.	1.	To expand information on program support carried out by the Indonesian Export Financing Agency (LPEI) or the Indonesian Eximbank by conducting socialization from each representative of export activists in every region throughout Indonesia.	
(B6) Distribution, Logistics, Marketing	To advise business parties in export countries in maintaining product inventory capacity.	1.	To establish cooperative relationships with industrial parties in the destination country (performing a pre-order concept). Thus, export goods can be measured in a measurable inventory system.	
(B9) Procedural	To facilitate the complicated and time-consuming export procedures for MSME business parties.	1.	Export management procedures should be able to be carried out and accessed online.	
(B11) Price (Price Barriers)	To facilitate Export MSME business parties in obtaining accurate information related to sales competition with local competitors in export destination countries.	1.	The government cooperates with export actors in creating a survey agency and a website to find competitive prices with similar competitors.	

## Conclusion

This study examined the primary barrier and enabler factors obtained, predicated on questionnaire data for MSME business actors, and obtained a priority order of handling factors that hinder and encourage export activities using the ISM method and expert opinions. In this study, 13 barriers were identified, consisting of two levels of the ISM model; at level two, there were barriers to factors B1, B2, B4, B5, B6, B8, B9, and B11. In the MICMAC quadrant, all the barrier factors located at level two of the ISM model partition

level were in quadrant III or the linkage quadrant. Barrier factors B2, B4, B5, B6, B9, and B11 were located at level one, or the peak level, because the barriers factor has the highest dependence power value compared to other factors. The obstacle factors were then determined by the priority of policy formulation and divided into two stages of action plans. The stages are the initial action plan stage, containing plans for the obstacles at level two, and the final stage of the action plan, concerning the obstacle factors at level one.

The enablers' factors were identified into six, constructed into a two-level ISM hierarchy model that identified priorities.

In the ISM model that was processed using level partitioning, three enabler factors were identifiable at the peak level, level one. These include the E1 factor, the attractiveness factor of the target market; the E2 factor, the demand factor, and domestic market competition; and the E4 factor, the product competitiveness factor. In the ISM model that was processed using level partitioning, there are three enabler factors at level two. These include the E3 factor, the Network Relationship factor; the E5 factor, the Origin Government Support factor; and the E6 factor, the MSME Owner/Manager International Exposure factor.

The limitation of this study is its lack of implementation in practical scenarios. This offers opportunities for future research by involving relevant export agencies or activists to realize the action plan. By opening broader discussions with policymakers, the results obtained can be further tested to determine if they were really per the conditions in Indonesia that deterred exporting. Differences abound in the situations, conditions, and backgrounds of business actors. Therefore, it is necessary to examine additional factors that make MSME business actors reluctant to export further, such as capital support, facilities, or other platforms that can expand the business network of the Indonesian people in the global world. Simplifying and clarifying export procedures for MSME would motivate business actors to export their products, thus demonstrating the need for this scholarship.

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