

## **INFLUENTIAL FACTORS ON SMES INTENTION TO EXPORT FROM THE PERSPECTIVE OF INNOVATION DIFFUSION**

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**Abstract:** A country's export level contributes greatly to its economy. Despite accounting for 99% of all companies, the contribution of small and medium-sized enterprises (SMEs) to national export in Indonesia is quite low, at 15.6%. The relatively low contribution of SMEs to export encourages scholars to look at the factors that impact or discourage SMEs from exporting their products. This study aims to build a model of internationalization adoption, i.e. export to foreign markets, based on the concept of innovation diffusion, with five dimensions: relative benefits, compatibility, complexity, trialability, and observability, in order to gain a better understanding of how internationalization as an innovation spreads in SMEs. The survey approach is employed, with questionnaires sent to SMEs in Bandung, and the data obtained is used to evaluate the model. According to the findings of the data analysis, relative benefits complexity, trialability, and observability all have a substantial impact on SMEs' intentions to export.

**Keywords:** *Diffusion of innovation, intention to export, internationalization, SMEs*

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### **1. Introduction**

Export contributes significantly to a country's economy. Income from international trade transactions covers the cost of imports, boosts the home economy, and raises the gross domestic product (GDP). All governments want to boost exports, so they help businesses sell products and services overseas and commit resources to export promotion. The Indonesian government implements a variety of programs to increase export levels, including export subsidies, simplified export procedures, and dumping. The value of national exports rises year after year, with the exception of 2020, when a pandemic struck the globe, affecting the economy. According to KemenKopUKM (2021), big firms dominate Indonesian export, accounting for around 84% of total national export. Meanwhile, the contribution of small and medium-sized firms (SMEs) to national export is relatively low, at 15.6%, despite the fact that SMEs account for 99% of total enterprises. Although the contribution of SMEs to export is smaller than that of large firms, which is a global phenomenon (Francioni et al., 2016), the contribution of Indonesian SMEs to export is relatively lower than that of other countries such as Singapore (41%), Thailand (29%), and China (60%) (Grehenson, 2021).

The relatively minor contribution of SMEs to export stimulates researchers to investigate the variables that influence or discourage SMEs from exporting their goods. The effectiveness of attempts to encourage SMEs to export their goods is determined by the compatibility of such efforts with the circumstances of the SMEs. According to Simmonds and Smith (1968), new

exporter development would be more successful if it took into account what circumstances drove the business to extend its market to international markets and what factors motivated the firm to export its goods. Some theories, including as the resource-based perspective, networking theory, and institutional theory, underlie researchers' work in establishing and outlining critical activities to increase SMEs' export involvement. Hessels and Terjesen (2010) developed a model for forecasting the choice of Dutch SMEs to export based on resource dependence theory and institutional theory. Both theories are concerned with the interaction between an organization and a group of environmental agents. As a result, their research concentrated on the influence of environmental elements, namely home market circumstances and globalization of the organization sector. Morais and Franco (2018) investigated the influence of cooperative alliances on SMEs' internationalization decisions and success in internationalization in Portugal using networking theory. Falk and Lemos (2019) used a resource-based approach in their study to explore the influence of R&D capabilities on SMEs' export behavior in Austria. Safari and Saleh (2020) created a model for forecasting the export performance of SMEs in numerous European and American nations using a resource-based approach. They evaluated the influence of management and organizational qualities on export success using organizational strategies as moderators.

Most earlier research were conducted in developed nations where SMEs participated heavily in export and where export was not a novel concept for them. On the contrary, in developing countries, particularly in Indonesia, the contribution of SMEs to national export is lower than predicted due to a small proportion of SMEs (KemenKopUKM, 2021). Indonesian SMEs continue to concentrate on the domestic market and consider export as an unfamiliar method for boosting company development. According to Räsänen and Tuovinen (2020) innovation is defined as a new concept, a new method of doing things, or a new item for a person that is not necessarily new to the market. As a result, internationalization or export might be seen as an innovation by Indonesian SMEs. This research aims to construct a model of internationalization dissemination and adoption based on the idea of innovation diffusion in order to get a better understanding of how internationalization as an innovation spreads in SMEs. The use of theory is relatively recent in the literature on SMEs internationalization, which is dominated by a resource-based perspective (Acosta et al., 2018; Bagheri et al., 2019; Co et al., 2018; Falk & Lemos, 2019) and institutional theory (Deng & Zhang, 2018; Kuivalainen et al., 2018; Manolopoulos et al., 2018) as a cited framework.

## **2. Literature Review**

Innovation is defined as an idea or a behavior that is viewed as novel by those who embrace it (Rogers, 1983). People do not immediately adopt an innovation, but rather go through a process known as diffusion of innovation. Rogers (1983) theorized that during this process, they consider aspects of innovation that fall into five dimensions, namely:

1. Relative benefit refers to how an innovation will benefit or outperform the previous generation.
2. Compatibility refers to how an innovation fits into a person's beliefs, experiences, and needs.
3. Complexity refers to the ease with which an innovation may be understood, learned, and implemented.
4. Trialability refers to how easy it is to experiment with an innovation.
5. Visibility refers to how the outcomes of others' adoption of innovation are observable and communicable.

Many scholars have applied the diffusion of innovation (DOI) theory in various cases to understand how an innovation, whether in a physical form such as a product or an intangible form such as a behavior, was accepted by an individual. In the case of physical form innovation, the study of Liang and Lu (2013) explored the uptake of e-government services, namely an online tax reporting system, in Taiwan. Their research divided diffusion of innovation aspects into two categories: individual, which included complexity, relative benefit, and compatibility, and environmental, which included trialability and visibility. Individuals, they argued, would consider the relative benefit, compatibility, and complexity of a new system before deciding whether or not to adopt it. Environmental elements, such as social influence and new system trial, were also hypothesized to have an impact on system adoption. Chiang (2013) incorporated three characteristics of DOI, including relative advantage, complexity, and compatibility with dimensions of use and pleasure, as drivers of an individual's desire to continue their usage of social network sites in the case of the adoption of continuous social network sites. His research separated respondents into three categories: early adopter, early majority, and laggard. Islam et al. (2013) evaluated the effects of compatibility and complexity on the intention to utilize sophisticated mobile phone services. Choshaly (2019) investigated product innovation adoption using DOI theory. He investigated the impact of relative advantages, compatibility, complexity, trialability, and observability on the intention to purchase a changed product.

In the context of intangible form innovation, Mamun (2018) proposed that the capacity of small and medium-sized firms (SMEs) to identify relative advantages, compatibility, complexity, trialability, and visibility of innovation might impact SMEs' desire to embrace an innovation. His research included both tangible and intangible innovation, such as product, process, and service innovation. Lai et al. (2018) investigated the factors of big data analytics adoption in the logistic and supply chain management fields using the DOI theory. Their study looked at the impact of relative benefits and complexity on the intention to use big data analytics. Wang et al. (2018) investigated self-collection service adoption via the lens of DOI theory and attitude.

Based on the literature reviewed above, we hypothesize that the DOI dimensions influence SMEs' intentions to export. The hypotheses are described in the next paragraph.

▪ **Relative benefit**

Foreign market requirements are typically higher than domestic market requirements; consequently, firms focused on the local market must prepare for and make significant efforts to fulfill international market standards if they intend to export their products. The endeavor to reach worldwide market demands a large cost, which would be difficult for SMEs with limited capital. As a result, before going global, they will carefully weigh the benefits and costs. According to DOI theory, relative benefit influences people's decision to embrace a new idea significantly (Rogers, 1983). Previous researches have shown that relative benefit has a major influence on the intention to embrace an innovation in a variety of contexts, including product, service, and process innovation (Chiang, 2013; Choshaly, 2019; Lai et al., 2018; Liang & Lu, 2013; Mamun, 2018; Wang et al., 2018). According to this theory, SMEs who believe that marketing their product worldwide would benefit them are more likely to export. Therefore, we suggest the following hypothesis:

**H1: Relative benefit has a positive effect on SMEs' intention to export.**

▪ **Compatibility**

Adopters have beliefs, experiences, and needs that influence how they perceive an innovation. Inconsistency between how adopters perceive an innovation and their beliefs, experiences, and needs might stymie their desire to embrace it (Rogers, 1983). Previous

studies have shown how the compatibility of values, experiences, and needs influences people's willingness to accept an innovation (Chiang, 2013; Choshaly, 2019; Islam et al., 2013; Liang & Lu, 2013; Mamun, 2018; Wang et al., 2018). Firms that internationalize by entering the global market will confront stiff competition and high standards, necessitating strong values such as customer value orientation. SMEs with consistent values and internationalization features are more likely to intend to export. Entering the worldwide market is a complicated procedure that necessitates expertise and experience dealing with overseas consumers. SMEs that have staff with expertise dealing with international customers are more likely to aim to export. Firms that confront significant domestic rivalry or are dissatisfied with domestic market volume are more likely to want to extend their market. Based on this rationale, we hypothesize that SMEs with perceived compatibility with internationalization tend to have intention to export.

**H2: Compatibility has a positive effect on SMEs' intention to export.**

- **Complexity**  
According to DOI theory, the complexity of an invention might lower an individual's motivation to embrace it (Rogers, 1983). Previous studies have demonstrated that complexity influences people's willingness to accept an invention (Chiang, 2013; Choshaly, 2019; Islam et al., 2013; Lai et al., 2018; Liang & Lu, 2013; Mamun, 2018; Wang et al., 2018). We believe that the complexity of export-related operations will influence SMEs' intentions to export their goods. Export activity, being an uncommon practice for the majority of SMEs, necessitates that they study and grasp it. SMEs who find it difficult to understand how export activity is carried out, such as how to engage with foreign clients or the procedure for filing export authorisation, tend to diminish their desire to export.

**H3: Complexity has a negative effect on SMEs' intention to export.**

- **Trialability**  
An innovation that adopters may try out can give a wealth of information about the likelihood of success or failure if they use it. Adopters can identify risks of an innovation and, as a result, lower the possibility of failure when they embrace the innovation by experimenting with it. Rogers (1983) suggests that a trialable innovation decreases the adopter's uncertainty. Innovations that can be implemented in stages will typically be adopted more quickly than those that cannot be implemented in stages. The theory of DOI leads us to believe that, in the context of the adoption of internationalization by SMEs, SMEs that have the opportunity to experiment with internationalization processes, such as participating in an international trade fair, are more likely to have exporting intentions. Previous studies have shown that trialability influences the intention to adopt an innovation in a range of situations, including product, service, and process innovation (Choshaly, 2019; Liang & Lu, 2013; Mamun, 2018; Wang et al., 2018).

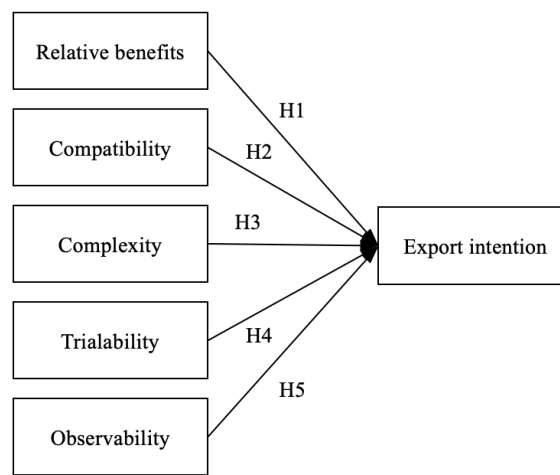
**H4: Trialability has a positive effect on SMEs' intention to export**

- **Observability**  
Before determining whether or not to accept an innovation, people will acquire information about it. The experience of others in adopting the innovation is a source of knowledge that will offer information on the potency of the innovation results. Some ideas' outcomes are easily witnessed and conveyed to others, but others' innovations are harder to express. The degree to which the outcomes of an innovation are visible to others is defined as observability (Rogers, 1983). According to Rogers (1983) the perceived observability of an innovation is positively connected to its rate of adoption. Previous studies have found that observability has a significant impact on the intention to adopt an innovation in a range

of situations, including product, service, and process innovation (Choshaly, 2019; Liang & Lu, 2013; Mamun, 2018; Wang et al., 2018). We suggest, based on the DOI theory and previous empirical data, that SMEs who may observe the consequences of others' internationalization experiences are more inclined to export.

**H5: Observability has a positive effect on SMEs' intention to export.**

The relationship between the innovation attributes of DOI, namely relative benefits, compatibility, complexity, trialability, and observability, and the export intent of SMEs is depicted in Figure 1.



**Figure 1.** Relationship between innovation attributes and export intention

**3. Research Method**

Our study has the following research characteristics: what and how much formed questions, i.e., what factors affect and how much their influence on the SMEs' intention to export; no control over the event in which we did not intervene; and the availability of actors, namely the owner or manager of SMEs. The survey technique, according to Yin (2018), is an appropriate strategy for these research characteristics. The research method includes the phases of questionnaire design, data acquisition via sampling, and data analysis using appropriate statistical techniques.

In a series of stages, we created questionnaires for quantifying the variables in the model. First, each variable was operationally defined. Second, we identified indicators that were consistent with the operational definition. The operational definition and indicators for each variable are displayed in Table 1.

**Table 1. Operational definition and indicators**

Variables	Definition	Indicators
Relative benefits (RB)	The extent to which the perceived benefits of exporting products exceed those of domestic marketing.	1. Exporting products to international markets generates greater profits than domestic marketing. 2. Exporting products to foreign markets will considerably increase the company's sales.

<b>Variables</b>	<b>Definition</b>	<b>Indicators</b>
		3. Exporting products to international markets will enhance the company's reputation.
Compatibility (CT)	Perceived alignment between exporting products and the enterprise's values, experiences, and requirements.	<ol style="list-style-type: none"> <li>1. Exporting products to international markets does not require the company to modify its business practices.</li> <li>2. Exporting products to foreign markets can capitalize on the firm's expertise in domestic product marketing.</li> <li>3. Our company is confident in its ability to compete on international markets.</li> </ol>
Complexity (CX)	Perception that exporting products is difficult to comprehend or carry out.	<ol style="list-style-type: none"> <li>1. Exporting products to international markets will require significant resources.</li> <li>2. The export of goods to international markets is subject to administrative procedures.</li> <li>3. We will address language and cultural obstacles when exporting products to international markets.</li> </ol>
Trialability (TA)	The extent to which the company can conduct export product trials.	<ol style="list-style-type: none"> <li>1. We have the chance to experiment with exporting products.</li> <li>2. We provide numerous options for participation in international exhibitions.</li> <li>3. We have the opportunity to send product samples to international markets.</li> </ol>
Observability (OA)	The extent to which we can observe the outcomes of other firms' exporting endeavors.	<ol style="list-style-type: none"> <li>1. The number of small and medium-sized enterprises that export their products continues to rise.</li> <li>2. We observe that small and medium-sized enterprises (SMEs) that export their products achieve favorable outcomes.</li> </ol>
Export intention (EI)	The extent to which a company intends to export its products.	<ol style="list-style-type: none"> <li>1. We wish to export our products to international markets.</li> <li>2. Our products may be exported to foreign markets.</li> <li>3. We will provide the necessary resources for exporting goods to international markets.</li> </ol>

In this research, we conducted a three-month survey of Bandung's SMEs by distributing questionnaires online and offline. The unit of analysis is an enterprise that meets the Bank of Indonesia's SMEs characteristics, i.e., a maximum of 300 employees, a maximum asset value of 10 billion Rupiah, and a maximum turnover value of 50 billion Rupiah (Sarwono, 2015). An eligible respondent is a business owner, director, or manager who has knowledge of the enterprise and its business environment. We received 116 respondents who completed the

questionnaire, and eight of their responses were invalid. Thus, we utilized 108 valid data to evaluate the proposed model. The company and respondent profiles are shown in Table 2.

**Table 2. Company and respondent profiles**

No.	Company and respondent profile		Frequency	Percentage
1	Company age	< 5 years	23	21,30
		5 - 10 years	15	13,90
		> 10 years	70	64,80
2	Number of employees	≤ 10 people	38	35,18
		11 – 30 people	30	27,78
		> 30 people	40	37,04
3	Turnover per year	≤ Rp. 300 million	37	34,26
		>300 million – Rp. 2,5 billion	44	40,74
		> Rp. 2,5 billion	27	25,00
4	Location	Inside industrial area	50	46,30
		outside industrial area	58	53,70
5	Industrial sector	Textile and garment	54	50,00
		Food and beverages	21	19,44
		Others (craft, manufacture, plastics, spare parts)	33	30,56
6	Ownership	Family	97	89,81
		Non-family	11	10,19
7	Gender of respondent	Male	72	66,67
		Female	36	33,33
8	Age of respondent	< 30 years	22	20,37
		30 – 39 years	27	25,00
		40 – 49 years	26	24,07
		≥ 50 years	33	30,56
9	Respondent education	Senior high school or below	53	49,07
		Bachelor or above	55	50,93
10	Position of respondent	Owner	80	74,07
		Non-owner	28	25,93

Data acquired via the distribution of questionnaires to SMEs is used to analyze the model, which consists of two primary stages: measuring instrument inspection and structural model or hypothesis testing. The first stage, examining the quality of measures, is carried out using factor analysis to check construct validity of measures and Cronbah's Alpha analysis to examine reliability of measurements. Factor analysis, as a multivariate statistical technique, has become a key tool in the development and validation of psychological theories and evaluations (Watkins, 2018). Multiple linear regression is used in stage 2 to assess the significance of the association between independent factors and dependent variables. Multiple linear regression is suited for analyzing a model with one metric dependent variable and multiple metric independent variables (Hair et al., 2019). The outcomes of the model examination are shown in the next section.

#### 4. Results and Discussion

##### 4.1. Results

##### Questionnaire examination results

Factor analysis was used as an extraction approach for items to test six variables: relative advantages, compatibility, complexity, trialability, observability, and intention to export. Questionnaires are examined using factor analysis in two steps: assessing data suitability for factor analysis and factor extraction. The tests of data suitability include Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, Bartlett's test of sphericity, and anti-image correlations. Table 3 displays the results of the data suitability evaluation. Column 1 of iteration 1 provides the findings of the first data suitability evaluation, which show that indicator CX2 has an anti-image correlation of less than 0.5, indicating that the indicator is unsuitable for inclusion in the factor analysis. The column of iteration 2 after indicator CX2 removal shows that the results meet the data suitability criterion, i.e. Kaiser-Meyer-Olkin Measure of Sampling Adequacy greater than 0.6, result of Bartlett's Test of Sphericity is significant which the significance value less than 0.05, and all indicators have anti-image correlation greater than 0.

**Table 3. Data suitability tests**

		<b>Iteration 1</b>	<b>Iteration 2</b>
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0,934	0,944
Bartlett's Test of Sphericity	Approx. Chi-square	1668,682	1626,071
	Df	153	136
	Sig.	0,000	0,000
Anti-image correlations (the values in the diagonal of anti-image matrices)	RB1	.914 <sup>a</sup>	.914 <sup>a</sup>
	RB2	.935 <sup>a</sup>	.935 <sup>a</sup>
	RB3	.923 <sup>a</sup>	.931 <sup>a</sup>
	CT1	.927 <sup>a</sup>	.925 <sup>a</sup>
	CT2	.951 <sup>a</sup>	.951 <sup>a</sup>
	CT3	.956 <sup>a</sup>	.958 <sup>a</sup>
	CX1	.863 <sup>a</sup>	.888 <sup>a</sup>
	CX2	.368 <sup>a</sup>	Removed
	CX3	.935 <sup>a</sup>	.918 <sup>a</sup>
	TA1	.935 <sup>a</sup>	.938 <sup>a</sup>
	TA2	.938 <sup>a</sup>	.934 <sup>a</sup>
	TA3	.921 <sup>a</sup>	.958 <sup>a</sup>
	OA1	.965 <sup>a</sup>	.965 <sup>a</sup>
	OA2	.964 <sup>a</sup>	.980 <sup>a</sup>
	EI1	.965 <sup>a</sup>	.964 <sup>a</sup>
EI2	.944 <sup>a</sup>	.945 <sup>a</sup>	
EI3	.935 <sup>a</sup>	.934 <sup>a</sup>	

Table 4 shows the factor extraction findings, which show that all indicators for each variable have high loadings over 0.50 on the same variable and lesser loadings on other variables. Indicators RA1-RA3 that quantify relative benefits, for example, have high loadings on the same variable created through factor extraction and low loadings on other variables. These findings show that the questionnaires satisfied the convergent and discriminant validity criteria (Hair et al., 2019).



**Table 4. Factor loadings**

	TA	RA	CX	CT	OA	EI
<b>RA1</b>	0,360	0,821	0,109	-0,048	0,162	-0,150
<b>RA2</b>	0,281	0,819	0,121	0,165	0,082	-0,042
<b>RA3</b>	0,145	0,816	-0,077	0,227	0,103	0,259
<b>CT1</b>	0,398	0,085	0,503	0,590	0,097	0,240
<b>CT2</b>	0,386	0,318	0,177	0,773	0,123	0,062
<b>CT3</b>	0,274	0,241	0,242	0,716	0,138	0,247
<b>CX1</b>	-0,202	-0,089	-0,915	-0,161	-0,082	-0,058
<b>CX3</b>	-0,237	-0,173	-0,931	-0,101	-0,105	-0,010
<b>TA1</b>	0,606	0,490	0,305	0,152	-0,024	0,420
<b>TA2</b>	0,771	0,180	0,026	0,243	0,253	0,282
<b>TA3</b>	0,734	0,374	-0,012	0,236	0,271	0,066
<b>OA1</b>	0,480	-0,001	0,272	0,158	0,614	0,389
<b>OA2</b>	0,128	0,323	0,361	0,187	0,688	0,086
<b>OA3</b>	0,317	0,019	0,248	0,241	0,525	0,431
<b>EI1</b>	0,051	0,365	0,394	0,178	0,164	0,712
<b>EI2</b>	0,016	0,403	0,372	0,247	0,059	0,707
<b>EI3</b>	-0,097	0,313	0,335	0,435	0,094	0,650

Table 5 displays the results of the examination of measure reliability. The questionnaires have strong reliability based on Cronbah's alpha values that are more than 0.7. According to Hair et al. (2019), Cronbah's alpha is more than 0.7, indicating that the measures have strong internal consistency reliability.

**Table 5. Reliability of measures**

Variable	Cronbah's alpha
Relative benefits	0.950
Compatibility	0.917
Complexity	0.803
Trialability	0.923
Observability	0.936
Intention to export	0.955

### Model examination results

Multiple linear regression is used to examine the model whether the proposed hypotheses are supported by data or not. To analyse data with multiple linear regression must meet the assumption of linearity, homoscedasticity, and normality, and multicollinearity which is examined after model estimation (Hair et al., 2019).

The assumption of linearity is tested through analysis of variance. Table 6 displays the value significance deviation from linearity as a result of analysis of variance. The value significance deviation from linearity over 0.05 for all independent variables and dependent variable relationships, therefore there is a linear relationship between each independent variable and dependent variable.

**Table 6. The value significance deviation from linearity**

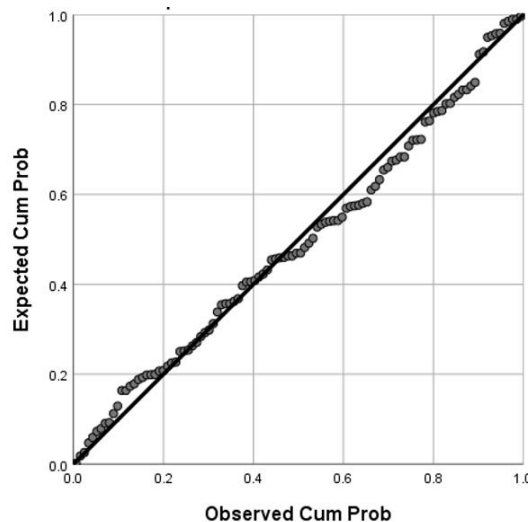
Relationship	F	Sig.
EI x RA	1.578	0.091
EI x CT	1.122	0.346
EI x CX	1.621	0.079
EI x TA	1.416	0.152
EI x OA	1.765	0.071

Homoscedasticity is examined with Glejser test that conducted by regressing absolute residual value of the independent variable. Table 7 shows the values of significance as a result of Glejser test. All significance values above 0.05 which indicate that there is no problem of heteroscedasticity.

**Table 7. The value significance of Glejser test**

Relationship	t	Sig.
RA	0.663	0.509
CT	1.302	0.196
CX	-1.225	0.223
TA	1.149	0.253
OA	0.568	0.572

Normality assumption is evaluated through Normal P-P plot of regression standardized residual which is displayed in Figure 2. Based on the Figure 2, all points spread around the line and follow the diagonal line. Therefore, we have normally distributed data that meet the normality assumption.



**Figure 2. Normal P-P plot of regression standardized residual**

Multicollinearity test is conducted to ensure that there is no dependence among independent variables. Table 8 displays the results of multicollinearity test. It can be seen that VIF values are less than 10 and the tolerances are greater than 0.1. Therefore, there is no multicollinearity among independent variables.

**Table 8. Multicollinearity test results**

Variable	Collinearity statistics	
	Tolerance	VIF
RA	0.949	1.054
CT	0.837	1.195
CX	0.951	1.052
TA	0.809	1.236
OA	0.893	1.120

All multiple linear regression assumptions have been fulfilled, and we may now continue to the analysis of multiple linear regression, as shown in Tables 9 and 10. Table 9 shows the significance of the association, whereas Table 10 shows the determination coefficient. Based on Tables 9 and 10, we conclude that, with the exception of Hypothesis 2, all hypotheses are supported by data with a reasonable degree of predictive accuracy.

**Table 9. Significance of relationship**

	Standardized coefficients Beta	t	Sig.	Hypothesis testing
(Constant)		3.006	0.003	
RA	0.331	3.752	0.000	H1: accept
CT	0.146	1.489	0.140	H2: reject
CX	-0.090	1.715	0.043	H3: accept
TA	0.228	2.293	0.024	H4: accept
OA	0.301	3,119	0.001	H5: accept

**Table 10. Coefficient of determination**

Coefficient of determination	Values
R square	0.515
Ajusted R square	0.485

## 4.2. Discussion

According to our findings, practically all aspects of export operations have a substantial impact on SMEs' desire to export. The first hypothesis, that there is a link between relative advantages and SMEs' desire to export, is validated by empirical data based on the study findings. The findings are consistent with earlier research such as Liang and Lu (2013), Chiang (2013), Mamun (2018), Lai et al. (2018), Wang et al. (2018), Choshaly (2019). This study implies that SMEs who feel marketing their goods to international markets would deliver more advantages than marketing them to local markets will be driven to export their products in order to enjoy the benefits of export.

The study's findings also show that the degree of export complexity has a detrimental impact on SMEs' intentions to export. As a result, empirical evidence supports the third theory. Our findings agree with those of Liang and Lu (2013), Mamun (2018), Wang et al. (2018), and Choshaly (2019). We conclude that when export-related operations are seen to be difficult to carry out, SMEs prefer to concentrate on the local market. Because of the complexity of export-related operations, SMEs must devote substantial time or resources to cope with export-related activities given their limited resources.

Another significant association is that trialability has a favorable effect on SMEs' inclination to export. Our findings are comparable with those of previous research, including Liang and Lu (2013), Mamun (2018), Wang et al. (2018), Choshaly (2019), which suggest a positive association between trialability and intention to engage in a new behavior. This finding suggests that SMEs that have the opportunity to test the worldwide market, such as through participating in international fairs, may boost their chances of exporting their goods to overseas markets. The international market test informs SMEs on the amount of international acceptability of their goods.

The last major conclusion is a positive association between observability and the intention of SMEs to export. Our findings are consistent with those of prior research such as Liang and Lu (2013), Mamun (2018), Choshaly (2019). Because selling items to the worldwide market is viewed as a novel practice for SMEs, they will obtain as much export-related knowledge as they can via different means, such as studying other SMEs' export experience. This observation may provide SMEs with significant information about the possible rewards and obstacles of joining an overseas market. Positive internationalization outcomes of other SMEs increase motivation to do the same with them.

Our research also uncovers an unexpected finding: compatibility has no influence on SMEs' propensity to export. This discovery contradicts the findings of prior studies such as Liang and Lu (2013), Chiang (2013), Islam et al. (2013), Mamun (2018), Wang et al. (2018), but it is compatible with the findings of Choshaly (2019). The insignificant influence of compatibility on export intention suggests that SMEs with strong export intentions may not necessarily have high compatibility of their values or experiences with export-related activities. Compatibility is determined by internal factors that are under SMEs' control; consequently, SMEs should prepare themselves if they want to export.

## **5. Conclusion**

Our research sheds fresh light on SMEs' internationalization, especially their purpose to export, from the DOI viewpoint, which is presently dominated by the resource-based view, the theory of planned behavior, and the institutional theory. The DOI viewpoint focuses on the determinant of innovation diffusion, which is appropriate in the situation of SMEs internationalization in Indonesia, as the majority of Indonesian SMEs lack internationalization experience.

The DOI theory is used in this research to predict SMEs' intentions to export their goods to overseas markets. According to the study's findings, four of the five DOI factors, namely relative advantages, complexity, trialability, and observability, have a substantial impact on SMEs' intentions to export. Relative benefits had the greatest influence, with an effect level of 0.331, followed by observability (0.301), trialability (0.228), and complexity (-0.090). SMEs have a strong intention to export if they believe that exporting their goods would benefit them more; they have export-related information from the experiences of other SMEs in export or through their trial in export. When SMEs believe that selling their goods to overseas markets is difficult, their purpose to export decreases. The compatibility dimension of DOI has no significant influence on export intention since it does not need SMEs to have compatible values or experiences with export-related activities.

Individual innovation dissemination does not always occur at the same time, and the time required to adopt an invention is determined by the individual's receipt of relevant information. Individuals with a stronger desire to absorb knowledge embrace innovations more quickly and are more inventive (Liang & Lu, 2013). Our research did not explore how a person adopts an

innovation. Further research should look at the impact of innovation adopter groups such as innovator, early adopter, early majority, and laggard on the degree of innovation adoption in the context of internationalization.

The research looks on the direct impact of DOI aspects on SMEs' intentions to export. The direct association does not reveal how these factors influence export intent. As a result, next research might investigate a mediating element, such as attitude, to explain the impact of DOI aspects on export intention. Individual belief, according to the notion of reasoned action, may influence intention through attitude.

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