

# Investigating the Influence of Firm Characteristics on Export Marketing Strategies and Export Performance

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## Abstract

The export performance has been studied to a great extent while fewer researches have focused the export activities of developing countries. Firm characteristics have always been found to impact export performance considerably. Furthermore, the marketing strategy applied by the firm has been an important issue related to performance. In this paper, the relationships among firm characteristics, export marketing strategies as well as export performance were investigated on the export of medical disposable products in Malaysia. Data was gathered from 22 firms by the means of a questionnaire for which the reliability of 0.85 was achieved. The statistical Chi-Square test for independence was applied for testing the hypotheses via SPSS. The results indicated that several internal firm factors namely, market knowledge, commitment, international experience and innovation affected the application of adaptation strategies. Moreover, the use of adaptation strategies and the export performance were significantly related. Finally it was concluded that firm characteristics could influence export performance indirectly and through marketing strategies.

**Keywords:** Firm Characteristics, Export Marketing Strategy, Export Performance, Medical Disposable Products, Malaysia.

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## 1. INTRODUCTION

According to broad studies on export performance, there has always been found a relationship between internal firm factors and the performance [1]. But what is less explored is the indirect impact of internal firm factors on export performance and through export marketing strategies; besides, fewer researches have focused the export of developing countries. Since improving export performance is the goal of many firms as well as governments, it is of high importance to get more acquainted with key factors which can improve not only the knowledge of export managers but also the theoretical literature; therefore, more work is needed in this field. This paper which is on particular products and a specific region, examines the relationship between firm characteristics and marketing strategies and the influence of these strategies on export performance.

The rest of paper is organized as follows, conceptual framework, literature review and hypotheses are presented in the next section. After that, methods and materials are explained.

Then, the following section presents and discusses the obtained results. Finally, conclusion, limitations and future work are signified.

## 2. LITERATURE REVIEW AND HYPOTHESES

### 2.1 Conceptual Framework

Figure 1 demonstrates the conceptual framework of the current study. This framework indicates that firm's internal characteristics influence marketing strategies [2] and that export marketing strategies affect export performance [3]. Firm characteristics represented in the figure involve firm age, firm size, international experience, market knowledge and research, education, innovation and commitment. And the marketing strategy contains the firm decision to either standardize or adapt the marketing mix. The hypotheses are also shown and their construct will be explained subsequently.

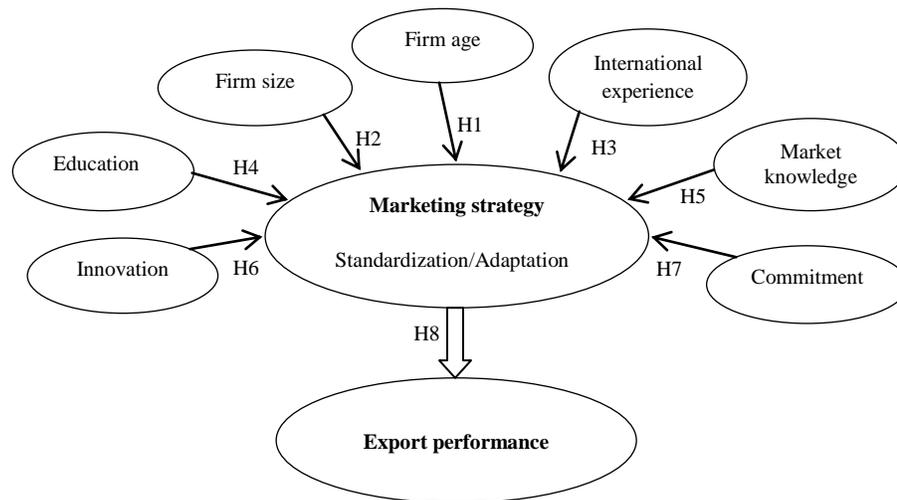


FIGURE 1: Conceptual Framework.

### 2.2 Export Marketing Strategies

Export marketing strategy responds to market forces by the use of marketing mix, to be precise product, price, promotion and place. Marketing strategies include: product strategy like product design and warranties; price strategy that should be based on customer demands; promotion strategy that promotes performance by encouraging consumers; place strategy that focuses on distribution [4]. The key factor of marketing strategy in the international market is the decision of standardization or adaptation to foreign markets conditions [3]. Standardization is when the firm uses the same marketing strategies in home market as well as target market, or when world customers are analyzed and a standard marketing mix is considered for all markets; while in applying adaptation, the marketing mix is formed with specific needs of each market segment [5]. Standardization leads to an easier business; however, it has many opponents who believe that adaptation is the key to success [6]. The critics consider the change and believe that standardization cannot create competitive advantage; therefore, they believe that firms should use adaptation strategies in order to identify the opportunities and create competitive advantage [7].

### 2.3 Firm Characteristics

The number of employees, firm age, information, communication, and innovation capacity are some of firm characteristics [8]. It is approved that firms must have an accurate and sufficient combination of key resources in order to design and implement marketing strategies [9]. Although an exporting firm may access many resources, those related to human, marketing, finance and

information aspects are the most significant for designing a precise marketing strategy [10]. As mentioned in [11], in order to utilize resources, firms need capabilities and complex skills so that they can coordinate activities in a way to achieve the highest advantage.

### **2.3.1 Firm Age**

Age of firm is generally an indicator of learning throughout the time and since engaging in export activities takes a long time, firm age is a very important factor. Some researchers have considered a relationship between firm's age and the export performance. They believe that firms in early stages can have better performance if they are more adaptive [12].

**H1:** Older firms are more likely to adapt marketing strategies.

### **2.3.2 Firm Size**

Another firm characteristic is the size for which the number of employees is the best variable [13]. Firms should be large enough in order to be capable of competing in the global market. According to the increasing competition and improvements in communication networks, larger firms have better advantages in the international market. The relationship between size and performance cannot be generalized since it depends on export strategies [14]. Larger firms are more likely to adapt in contrast with smaller firms who have restricted resources [15].

**H2:** Larger firms are more likely to adapt marketing strategies.

### **2.3.3 International Experience**

International experience is a source of competitive advantage since it leads to designing appropriate strategies [16]. When a firm has more international experience, there is more likelihood of not just using standardization for gaining worthy results [17]. A firm with international experience distinguishes environmental differences, selects the most attractive market and is more probable to adapt marketing strategies [3]. Evidence shows that the management's international business experience and training is an advantage that has a significant relationship with price adaptation and impacts performance [18].

**H3:** Firms with more international experience are more likely to adapt marketing strategies.

### **2.3.4 Education**

The employees of firms with weak performance were generally less educated and had fewer skills; yet, some researchers did not observe any specific influence of education on export [19]. It is suggested that education and experience would not create a better performance without a correct dispersion of information in the firm [20].

**H4:** Firms with more educated employees are more likely to adapt marketing strategies.

### **2.3.5 Market Knowledge and Research**

Another factor is market knowledge which is very vital for decision making and is a competitive advantage for the firm. More market knowledge makes the firm more active in pursuing the external opportunities and international development [21]. After doing market research and considering market demands, the marketing manager identifies the target market and discovers the best marketing strategies based on the features of target market and by the use of marketing information [22]. A firm without knowledge of market demands and customers will face troubles in employing market opportunities [23]. Studies on export have shown that many exporters ignore marketing research and they encounter sever problems in analyzing the foreign market and taking advantage of it [24].

**H5:** Firms with more market knowledge and research are more likely to adapt marketing strategies.

### **2.3.6 Innovation**

Technology innovation affects export activities by increasing the production, reducing costs and developing new products for international markets. There exist three kinds of innovation specifically, product innovation such as new products or changes in design and packaging; process innovation like introduction of quality control and information technology; and finally management and organizational innovation, for instance introduction of strategic planning [25].

According to literature, innovation is a key factor for the firm performance and it will perform better by accepting new ideas [26]. A firm that changes its activities toward new ideas and applies innovation as a valuable resource is likely to use higher levels of product adaptation [27].

**H6:** Firms applying more innovation are more likely to adapt marketing strategies.

### **2.3.7 Commitment**

The last firm characteristic discussed in this work is export or management's commitment. Less committed managers tend to standardized strategies since they are performed more easily [18]. Committed firms allocate more resources to export activities and have long term planning which leads to appropriate marketing strategies considering market demands [28]. Uncertainty is diminished by commitment and marketing strategy is implemented effectively which results in a better performance [13].

**H7:** More committed firms are more likely to adapt marketing strategies.

## **2.4 Export Performance**

There are many definitions of export performance and the most well-known one defines it through sales volume, sales increase, profit, and export intensity [1]. However this definition does not take into account the qualitative aspects such as manager's satisfaction or success in achieving strategic goals like the increase in market share [3]. Moreover, export performance measurement methods can be divided to two categories that are quantitative and qualitative [29]. The relationship between marketing strategy and export performance is a famous case of study in international marketing researches and marketing strategy is known as a significant factor of export performance; though the results have been different in some studies [4]. Strategy impacts performance directly while firm characteristics influence it indirectly and through strategies [30]; hence, it can be implied that performance is the outcome of coordination between strategy and resources and capabilities of firm as well as environment.

**H8:** Firms adapting marketing strategies are more likely to have a better performance.

## **3. METHODS AND MATERIALS**

### **3.1 Data Collection**

This study examines exporting firms in Malaysia and in order to narrow the research, the export of medical disposable products is focused. The list of firms was provided from internet and a questionnaire was used so as to gather data. The questionnaire was mailed to the sample after pre-testing and it was asked to be completed by firm's export or marketing manager. It was mailed to 89 firms out of which 22 were returned and usable; consequently, the response rate is 24.7%.

### **3.2 Measuring Instrument**

All variables of this work have been already applied by researchers; besides, validated scales are employed in the questionnaire for obtaining valid measures. Three main sections form the measuring instrument from which the first section gathers information about firm characteristics; section two asks questions about marketing strategies and the last part evaluates the export performance.

In the first section, the respondents are asked to signify the number of years the firm is working and those who have been working for less than 20 year are considered young. Then for discovering the firm size, the number of full-time employees is requested and firms are assumed large if there are more than 100 employees. After that, for gaining information about the international experience, the firm's as well as manager's export experience are taken into account. Lastly, Likert scales are used for answering questions about employees level of education, the amount of market knowledge and research, the extent of innovation employed in the firm and commitment to the export for which the degree of allocated resources and long-term planning are two key factors. The second part uses detailed dimensions of the four marketing mix elements (product, price, promotion, and place) for evaluating export marketing strategies. The questions are presented in a way so as to distinguish whether these strategies are adapted or

standardized by the firm. For this purpose, the marketing method of the firm's product in home and target markets is examined via five-point Likert scales where 1 shows totally the same and 5 indicates totally different. The last section assesses the export performance by the use of interval as well as Likert scales through different factors such as: annual sales volume, export intensity, sales volume, profitability, goals achievement, level of satisfaction, and overall performance.

With the intention of computing the reliability of the questionnaire, Cronbach's Alpha is calculated and the result of 0.85 indicates a reasonable reliability; in addition, the reliability of all questions is above 0.06 which justifies their involvement in the analysis.

It must be noted that based on the responses for export marketing strategies, firms are classified to two groups of standardization and adaptation. Furthermore, they are categorized to high-performed and low-performed by means of replies to questions of performance section.

### **3.3 Analytical Method**

The method of analyzing data applied in this paper is Chi-Square test for independence. This test is used to determine whether two categorical variables are related. It compares the frequency of cases found in various categories of one variable across the different categories of another variable. Consequently, this test is appropriate for this study seeing the hypotheses and through classification of firms based on adaptation as well as performance level. This statistical test is carried out via SPSS and the significance value needs to be 0.05 or smaller to be significant with the probability of 95%.

## **4. RESULTS AND DISCUSSION**

The accepted analytical method is applied and the hypotheses are tested. Cross tabulation is represented in Table 1 and the obtained chi-square results are depicted in Table 2.

As indicated in Table 2, the result is not significant ( $p > 0.05$ ) for the first hypothesis and no relationship is seen between the firm age and employing adaptation strategies. It must be noted that the age of firm may affect performance directly which is not focused in this paper; still, some researchers have considered a relationship between these two variables since age is an indicator of learning [12].

The second hypothesis is not supported ( $p > 0.05$ ) according to Table 2 so the size of firm and adaptation strategy are not related based on the existing dataset; although it is reported larger firms are more likely to adapt due to their sufficient resources [15]. The relationship between firm size and performance is not examined in this work; and it is supposed to be dependent on export strategies [14].

The third hypothesis with the obtained significance level of less than 0.05 is supported (Table 2) which shows that international experience affects the choice of adaptation strategies. In other words, based on Table 1 the proportion of firms that are exporting more than 10 years and adapt marketing strategies (72.7%) is significantly different from the proportion of firms that have less international experience and employ adaptation strategies (27.3%). It can be stated that since more experience leads to a better understanding of environmental threats and opportunities, it gets easier for experienced firms to adapt the marketing strategies. It is suggested that for firms with more international experience, the likelihood of adapting marketing strategies is more [3, 17, 18].

As shown in Table 2, no support is found for hypothesis four ( $p > 0.05$ ) and no relationship is noticed between employees' level of education and the use of adaptation strategies in the firm. And about the influence of education on performance, researchers did not observe any specific impact [19, 20].

			Marketing strategy (%)	
			standardization	Adaptation
Age	Young	within strategy	70	33.3
		of total	31.8	18.2
	Old	within strategy	30.0	66.7
		of total	13.6	36.4
Size	Small	within strategy	63.6	36.4
		of total	31.8	18.2
	Large	within strategy	36.4	63.6
		of total	18.2	31.8
Experience	Less	within strategy	72.7	27.3
		of total	36.4	13.6
	More	within strategy	27.3	72.7
		of total	13.6	36.4
Education	Not at all	within strategy	50.0	50.0
		of total	22.7	22.7
	Very much	within strategy	50	50
		of total	27.3	27.3
Market research	Not at all	within strategy	75.0	20.0
		of total	40.9	9.1
	Very much	within strategy	25.0	80.0
		of total	13.6	36.4
Innovation	Not at all	within strategy	72.7	27.3
		of total	36.4	13.6
	Very much	within strategy	27.3	72.7
		of total	13.6	36.4
Commitment	Not at all	within strategy	80.0	25.0
		of total	36.4	13.6
	Very much	within strategy	20.0	75.0
		of total	9.1	40.9
Performance	Low	within strategy	72.7	18.2
		of total	36.4	9.1
	High	within strategy	27.3	81.8
		of total	13.6	40.9

TABLE 1: Cross Tabulation.

For the fifth hypothesis a significant difference is observed between firms that employ adaptation or standardization strategies regarding market knowledge and research. Explicitly and according to Table 1, 80% of firms that use adaptation strategies declared that market knowledge and research in the firm is very much and 75% of firms who standardize marketing strategies stated a shortage of market knowledge in the firm. The reason is that by doing more marketing research and having more foreign market knowledge, opportunities can be analyzed with more certainty, and the marketing mix can be adapted according to target market. This result approves previous reports which proposed market knowledge and research enables the firm to overcome the problems of analyzing the foreign market and helps employing market opportunities as well as discovering the best marketing strategies [22, 23, 24].

Hypothesis six is supported and it can be concluded that innovation practices affect the use of adaptation strategies (Table 2). To be exact, among all firms that utilize adaptation strategies 72.7% declared that the firm is engaged in innovation activities very much while just 27.3% affirmed a little application of innovation in the firm as presented in Table 1. The reason is the fact that accepting new ideas is an indicator of adaptation ability. This result is consistent with the statement that a firm which changes its activities toward new ideas and applies innovation is likely to use higher levels of product adaptation [27].

It is indicated in Table 2 that for the seventh hypothesis the result is significant ( $p=0.01$ ); thus it is implied that commitment and adaptation strategies are related. Specifically, 75 % of firms that adapt marketing strategies are more committed that is to say they allocate more amounts of supporting resources and have long-term planning for their export activities; though less committed firms mostly employ standardization strategies (Table 1). It is also stated in the literature that less committed managers tend to standardized strategies since they are performed more easily [18] and committed firms apply appropriate marketing strategies considering market demands [28].

The last hypothesis which is about the relationship between the use of adaptation strategies and export performance is supported based on Table 2 ( $p<0.05$ ); consequently there exists a relationship and firms that are more likely to have a better performance use adaptation strategies more. To be precise and as shown in Table 1, most of firms that employ adaptation strategies have a higher performance (81.8%) in comparison with those that have a lower performance (18.2%). In earlier studies, marketing strategy has been known to be a significant factor of export performance that affects it directly; yet, in some studies the results have been dissimilar [4, 30].

Hypothesis	Chi-square value	Sig. level	Analysis	Result
H1	2.933	0.086	firm age/adaptation strategy	Not supported
H2	1.636	0.201	firm size/ adaptation strategy	Not supported
H3	4.545	0.033*	international experience/adaptation strategy	Supported
H4	0.000	1.000	education/ adaptation strategy	Not supported
H5	6.600	0.010*	market knowledge/ adaptation strategy	Supported
H6	4.545	0.033*	innovation/ adaptation strategy	Supported
H7	6.600	0.010*	commitment/ adaptation strategy	Supported
H8	6.600	0.010*	adaptation strategy/ export performance	Supported

\* $p < 0.05$  (significant difference at 95% confidence)

**TABLE 2:** Hypotheses Test Results.

To sum up, the results indicate the significant impact of some firm characteristics on adaptation strategies. The first internal firm factor that plays a chief role in the application of adaptation strategies is market knowledge and research. The next factor associated with adaptation strategies is the firm's commitment. After that, international experience and innovation are equally related to the employment of adaptation strategies. A firm with possession of these features can better consider the demands of the export markets. And finally it is clear that adaptation

strategies have a considerable influence on the export performance of the firm. As the findings suggest, a better performance can be achieved through coordinating to the export markets. Hence, it is confirmed that some firm characteristics can have a positive effect on export performance indirectly and through appropriate selection of marketing strategies.

The significance of the current work is that it concentrates on a specific region and particular products. Besides, it presents diverse aspects of firm characteristics, marketing strategies and export performance. This work helps Malaysian as well as other exporting firms in their attempts to improve the export performance. It presents various internal factors associated with adaptation strategies explicitly; market knowledge and research, commitment, international experience and innovation. In addition, it indicates that firms who adapted export marketing strategies performed better than those who used standardized strategies. Therefore to be effective in the application of adaptation strategies, the management should: develop market knowledge and research for discovering different opportunities and making decisions; improve commitment to export strategies through appropriate planning and implementation; promote international experience via visiting abroad; and finally increase innovation activities in the firm. Furthermore, to advance export performance, the management should consider adapting export marketing strategies rather than standardization.

## **5. CONCLUSION**

In this paper, export of specific products from Malaysia is investigated and the reason is that export activities in developing countries have not been considered very much. Focus of this study is on the relationship among firm characteristics, marketing strategies and performance. The results indicate that among investigated factors, market knowledge and research, commitment, international experience, and innovation affect marketing strategies and the choice of standardization or adaptation; that is to say firms that are stronger in these features use adaptation strategies more. It is also concluded that there is a relationship between marketing strategies and export performance; that is to say adaptation strategies lead to a better performance. Therefore, firms may develop their export performance by improving the mentioned features and through employing adaptation strategies. The results of this study can be used as guidelines by exporters who desire a better performance.

## **6. LIMITATION AND FUTURE WORK**

In this work, the export of medical disposable products from Malaysia is investigated; therefore the results should be used cautiously and other products as well as other developing countries can be selected later. In addition, more internal factors along with external factors of the firm will be explored in following researches. Another concern is about comparing the direct and indirect impact of firm characteristics on export performance that will be examined in future. And finally, other statistical tests will be applied in order to find more accurate results.

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