Influencing Export Barriers for Internationalization and Relationship Between Export Barriers and Information Systems Strategic Orientation on SMEs’ in Bangladesh: A Study on Ready-Made Garment (RMG)

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Abstract
Almost in all countries, the important source of economic growth is small and medium enterprise constitutes. In the international business environment, SMEs’ face a number of barriers in the process of internationalization. This research study attempts to identify the most influencing internationalization export barriers and the relationship between information systems strategic orientation on perception of export barriers in SMEs. The mail survey and face to face conversation with structured questionnaire was conducted among the SME exporters of Dhaka city in Bangladesh on Ready Made garments industry. The collected data from the valid 107 respondents were then analyzed using factor analysis and Pearson Product-moment Correlation. The result obtained revealed a significant negative relationship between information systems strategic orientation on perception of export barriers in SMEs’. The empirical evidence from this study shows five are the identifying factors which are significantly influence the Internationalization of Export Barriers in Bangladesh on RMG.

Keywords: SME, Internationalization of SME, Internationalization export barriers, information systems strategic orientation.

1. Introduction
As the reduction in the barriers for global commerce continues and the world economy becomes more integrated, there is increased attention being placed on the internationalization of small and medium-sized enterprises (SMEs) (Lu and Beamish, 2001; Knight, 2001). As more and more firms enter the international business environment (Etemad et al., 2001), small and medium enterprises (SMEs) start working as a key element in development strategy. In a very competitive environment, there is a need to identify and understand factors that impact international performance (Kuivalainen et al., 2004). Internationalization of SMEs (Coviello and McAuley, 1999) drive economic development at national, regional and international levels (Bell, McNaughton, young, and Crick, 2003; OECD, 2009). According to European Commission (2011), export is one of the most common modes of Internationalization. Moreover, some of the studies have evidently reported that there are a number of export barriers and perceive substantial barriers in the process of Internationalization (Bennett, 1997; Gabrielsson, and Kirpalani, 2012; Leonidu, 2004).

The Internet has become a vital part of most successful businesses where as few businesses today do not have websites. Small- and medium-sized enterprises (SMEs) have been increasingly enjoying the benefits of E-Commerce (Bennett, 1997; Fink, 1998). Thus, the application and optimal use of information technology (IT) is improving the competitiveness of industries and reducing unnecessary bureaucratic requirements (Hossain, Deb & Amin, 2009). The small businesses use the Internet and establish Web presence as a complement to traditional way of competing. Weill (1990) found that investment in strategic information systems, rather operational information systems, was risky but with a potential for high payoff in the long term. However Benjamin and Levinson (1993) concluded that performance depends on how information systems resource is integrated with organizational, technical and business resources. R. Rajendran (2008) said in his article that the Web presence strengthens the relationship between information systems strategic orientation and small business performance. The mail survey was conducted among some small businesses manufacturing and exporting knitwear apparels and draw a conclusion on the paper that the small businesses are investing in information and communication technologies to develop information systems applications to support their business strategy (Rajendran, 2008).

In Bangladesh, SMEs are very important players in the economy. According to Hossain, Deb and Amin (2009), about 90 per cent of all industrial units in Bangladesh are SMEs, which generate some 25 per cent of the gross domestic product (GDP) and with regard to the contribution rendered by SMEs in Bangladeshi export earnings, statistics that indicate the SME contribution to national exports varies between 12 per cent and 40 per cent in different industries (Planning Commission, 2008). On the other hand, total export growth largely depends on the ready-made garment sector (44.64%), which continued to register positive growth¹. Moreover, some of studies evidently reported that there is an existence of export barriers in Ready-Made garment (RMG) especially

¹ Source: Centre for Policy Dialogue Trade Database
in the area of SME (Ahmed, 2002). Hossain, et al. (2009) suggested in their study that more productive use of information technology must be made in order to increase the efficiency and effectiveness to expending in SME internationalization. Based on the condition, the major objective of the paper is to investigate the impact of Information Systems Strategic Orientation on SMEs’ perception of Export Barriers in Ready-Made garment (RMG) Bangladesh. To achieve this objective, we developed a research framework drawing on the related literature to conceptualize the complex relationship between Information Systems Strategic Orientation (ISSO) and Internationalization export barriers (IEB).

2. Literature review

2.1 Small and medium-sized firms (SMEs)

Small to medium-sized firms (SMEs) is estimated to account for 80 per cent of global economic growth making tremendous contributions to national economies (Poon and Swatman, 1999; Jutla et al., 2002). European Union stated in 2007 that a medium size company which has less than 250 employees and the annual turnover is equal or less than (€50)m fifty million euro. On the other hand, a small size organization is one having less than 50 employees and the annual turnover is equal or less than (€10) ten million euro. In addition, United States international trade commission (2012) gave a simple definition regarding SMEs that, for both manufacturing and service industries, an Organization having less than 500 employees are treated as SMEs.

According to the central bank of Bangladesh (2010), a medium size manufacturing enterprises is an organization which employees between 100 to 250 workers and has the total asset between Bangladeshi Taka 100 million to 300 million not including land and factory. On the other hand, a medium size trading and business enterprise is an organization where the total number of workers is between 50 to 100 workers and the total asset is between 10 million to 150 million Bangladeshi taka excluding land and property (Rahman 2011). However, in the non-manufacturing sector a company will be considered as small in the number of employee is between 25 to 99 and the value of total asset is 5 million to 100 million Bangladeshi taka excluding land and factory.

2.2 SME internationalization

The term international has been defined as an attitude of the firm towards foreign activities. It is also referred to as the actual carrying out of activities abroad. In other words, all activities related to export, import, Foreign Direct Investment (FDI), international subcontracting and technical cooperation that put SMEs’ into a significant business rapport with a foreigners are being considered as internationalization where export is one of the most common modes (European Commission, 2011). The prime focusing area of the internationalization of SMEs is the role of human capital related elements of the firm (Ruzzier et al., 2007; Borchert and Ibeh, 2008). The incremental expansion of international activities of a firm is a well recognized theory which describes how gradually the internationalization of SMEs progress from their non-export stage to different stages to different stages of export and finally global manufacturing (Shamsuddoha et al., 2009). SME’s strategic internationalization and their export behavior have played an important role to attract broader interest in different perspectives namely market, firms and entrepreneurship perspective (Ruzzier, Hisrich and Antoncic, 2006; Rajendran, R. 2015).

2.3 SME internationalization export barriers

Leonidas (2004) defined export barriers as the constraints that hinder the organization’s ability to commerce, to progress or to hold up business activities in the foreign markets. Export barriers relating to SMEs can be categorized into – namely internal and external obstacles (Hamill, 1998; Hamill and Gregory, 1997; Julien, Joyal, Deshaies, Ramangalahy, 1997; European Commission 2010). Internal barriers can be defined as organizational determinants that may include those structural and behavioral aspects within the firm which have a potential effect on exporting (Leonidou, 1998). External barriers consists of those determinants outside the firm or which an individual exporter can be a very limited command, such as macro-economic, social, physical, cultural, and political characteristics, as well as industry features that have a great impact on export behavior and performance (Leonidou, 2004). Organization for Economic Co-operation and Development (OECD) 2009 identified the top ten barriers of the SMEs internationalization considering the most influential which are as follows, “(1) Shortage of working capital to finance export (2) identifying foreign business opportunities (3) limited information to locate market (4) inability to contact potential overseas customers and (5) obtaining reliable foreign representation (6) lack of managerial time to deal with internationalization (7) unskilled personnel for export operation (8) difficulty in matching competitors prices (9) lack of home government assistance/incentives and (10) excessive transportation costs”.

According to Leonidou (1995), the fear of tremendous completion in overseas markets is the greatest barrier to export operation. The excessive completion in foreign markets also

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1 These two aspeas of the international process are discussed in Kindleberger, C. P., American Bvrincrs Abrd, Boston: Yale University Press, 1969.)
develops attitudes towards two important aspects- risk and innovation. Suggested that fear of intense competition in foreign markets was the biggest barrier to export activity, Dicht et al. conducted a research in 1990 and confirmed that psychic distance from the foreign markets was an influential factor by which firms’ export operations were being vastly affected. In 1997, Hamill and Gregory's were identified four main categories of export barriers namely as psychological barrier, Operational barrier, Organizational barrier and Product/market Barrier.

On the other hand, a range of barriers accredited OECD/APEC which were detrimental to admittance by SMEs to international markets. Based on that, the most serious impediments SMEs’ access to international markets are (a) a shortage of working capital for financing exports; (b) identifying foreign business opportunities; (c) limited information related to locating/analyzing markets; and (d) inability to contact potential overseas customers (Lester and Terry, 2008).

In the global business environment, the internal growth may allow SMEs to globally (Khoo et. al, 1998; Kandasama, 1998; Lefebvre et. al., 1999) and Bennett (1997) found that the web usage for export marketing, there are some basic reasons for the slow, gradual, steady and evolutionary internationalization of enterprises (Gankema, Snuf and Zwart, 2000) which are no longer relevant in the SME context (Arenius, Sasi and Gabrielson, 2005). There were also findings suggesting that businesses who had their own website felt less psychic distance from foreign markets (Bennett, 1997). The adopter categories of electronic commerce are the different perception of export barriers (Vivekanandan and Rajendran, 2006) and the export barriers stay behind as challenges in the process of internalization of SMEs (Hashim, 2010).

2.4 Information systems strategic orientation

The application of information systems in general, the Internet and Web technologies in particular provide not only operational, managerial and strategic advantages to manufacturing SME but also provide them opportunities (Bell and Loane, 2010; Loane, 2005). R. Rajendran (2008) said on his study that to develop information systems, it work as an investments which provide entrepreneur to achieve competitive advantages and economic returns. While small businesses have been traditionally seen reluctant to develop information systems strategy (Hagmann & Mc Cahon, 1993); Mehrtens, Cragg, & Mills, 2001), but the evidence over the past decade shows an increase in strategic use of information systems in small businesses (Naylor & Williams, 1994; Poon, 2000). Bili and Raymond (1993) emphasize that small businesses must adopt some kind of framework for strategic planning information systems, if they want to create information systems-based strategic advantage. Levy and Powell (2000) propose an approach to information systems strategy development for small businesses which include Strategic Content (Business missions, implementation, planning), Business Context (Understanding of business environment) and Business Process (Analysis of business, activities and systems).

European Commission (2010) concluded that the internet enabled SMEs of all sizes to overcome the export barriers to internationalization. However Benjamin and Levinson (1993) conclude that performance depends on how information systems resource is integrated with organizational, technical and business resources. Chan, Huff, Barclay, and Copeland (1997) argue that the impact of information systems on performance may not be a direct one, but intermediated by other factors such as the alignment between information systems strategy and business strategy. Dutot, Bergeron and Raymond (2014) tried to find out a deeper understanding of how SMEs develop their information management capabilities based on different business strategies to insure greater international performance.

R. Rajendran (2008) defines Strategic orientation of information systems indicates the degree of information systems support for each strategic alignment dimension. Venkatraman (1989) identifies six characteristics for strategic orientation of business enterprises but the empirical findings of their study suggest a parsimonious taxonomy of three generic realized information systems strategies. But also the emergence of these dimensions is ignored in the further analyses of their study (R. Rajendran, 2008). However, they conclude that the concept of information systems strategic orientation is somewhat novel and is an area ripe for future information systems strategy research. The Strategic orientation of information systems applications represent the general pattern of realized information systems Strategic (Rajendran, 2015). Rajendran and Vivekanandan (2008) survey among the born global manufacturing SMEs revealed the three dimension of information systems Strategic orientation named as cost quality leadership (Pricing Strategy, Quality Service Strategy, Quality Product Strategy, Process Efficiency Strategy), Product development (Product Differentiation Strategy, New Product Strategy, Product Diversification Strategy) and Market Development (New Market Strategy, Intensive Marketing Strategy).

3. Research gap and specific objective

In the context of Bangladesh, a huge body of literature can be found in the field of SME and their export barriers, but specifically Information System Strategic Orientation on SMEs export barriers in RMG had not sufficiently been studied here. In literature review, found few significant studies on impact of information system and SME
export barriers conducted in Bangladesh in very recent time. By studying the impact of information technology in trade facilitation on small and medium-sized enterprises in Bangladesh, Hossain, Deb and Amin (2009) found that there is a positive attitude towards adapting to technological upgrading and the SMEs have a strong will to utilize business-supportive initiatives to ensure enhanced access to the global market. Moreover Huda (2013) conducted a case study of Bangladeshi Small and Medium Enterprise and to identify some Export Barriers for SMEs. Moreover, the most important research work conducted by Rana and Sørensen (2013), that “exploring management and entrepreneurial factors in the internationalization of SMEs: evidence from the Bangladeshi apparel industry” which investigate the internal management and entrepreneurial factors that affect the internationalization process of ready-made-garment (RMG) SMEs in Bangladesh. That study collected information from 46 apparel SMEs located in Chittagong, Bangladesh and results reveal that entrepreneurs’ management capability, foreign language skill, and e-commerce orientation play an instrumental role in the internationalization process. On the other hand, Shamsuddoha, Alia and Ndubisi (2009) have mentioned in their study that “government export assistance programs play an important role in the SMEs’ internationalization process by contributing to a number of firm and management related factors that determine international marketing performance of a firm.” But all of those articles neither addressed the influence of Information System Strategic Orientation on SMEs export barriers in RMG nor perception of Internationalization of Export Barriers in RMG. Hence to bridge up this gap the study has specified its objectives as follows:

a) To identify the factors which are significantly influence the Internationalization of Export Barriers in RMG.

b) To examine the relationship of the Information System Strategic Orientation and Internationalization of Export Barriers in RMG.

Therefore it is relevant to investigate the influence of the Strategic orientation of information systems on the perception of internationalization export barriers in RMG in Bangladesh to expose the inner mechanism of lessening. Thus the research hypothesis is:

**H1**: A higher level the Information System Strategic Orientation will reduce the Internationalization Export Barriers perceived by SMEs in RMG.

4. Research methodology
The most appropriate types of research design for this study was the conclusive research design because in accordance with Malhotra (2009) conclusive research is “a types of research where used to describe some functions or characteristics (descriptive research) and used to obtain evidence regarding cause-and-effect relationship (causal research)”. This is a descriptive study since we use the survey method and use questionnaire to collect our required information.

4.1 Sampling and data collection
Population of the study was SME’s exporter in RMG sector in Dhaka city. Though the population of this study was unknown and infinite, we covered only one hundred fifteen (115) RMG enterprises in Dhaka city, using non probability convenience sampling technique. The convenience sample of this was surveyed with a total of 115 questionnaires. After receiving the feedbacks, because of fragmentary responses and centrality bias, 08 questionnaires were declined and 107 copiously completed questionnaires were finally retained which consequently had engendered 93% response rate for this study. For this study purpose, both the primary & secondary data was collected. Primary Data was collected through the mail survey and face to face conversation and secondary data was collected from the following sources: Documents, journals, articles, books and internet. Here American Psychological Association (APA) citation style used for each secondary data.

4.2 Operationalization
This study was contained with two variables namely international export barriers (IEB) and independent Information Systems Strategic Orientation (ISSSO). Hamill and Gregory's (1997) work identified four main categories of barriers to export activities namely psychological barrier, Operational barrier, Organizational barrier and Product/Market Barrier. In this study, Psychological barriers included intense competition in the foreign markets, fall in the international market price, import restrictions in foreign market and need for foreign representation and Operational barriers were getting payment, transport problems, capital goods import restriction and documentation problems. Organizational barrier indicated lack of skilled staff, lack of management consultancy, currency appreciation and training and retaining skill labor. Product and market barriers means cost of free sample, need for sample for each order, inability to use foreign language and quality cost. For measuring the variables we have used a five-point Likert response scale ranging from 1 to 5 (1- very minor problem and 5- very major problem) used by Bennett (1997).

For our study we used nine business strategies of information systems Strategic orientation (Rajendran and Vivekanandan 2008) named as Pricing Strategy, Quality Service Strategy, Quality Product Strategy, Process
Efficiency Strategy, Product Differentiation Strategy, New Product Strategy, Product Diversification Strategy, New Market Strategy, and Intensive Marketing Strategy to examines the correlation between the Information System Strategic Orientation and Internationalization of Export Barriers in RMG. The instrument for Information System Strategies was design around nine business strategies. The five point Likert scale ranging from 1 to 5 (1-strongly disagree and 5-strongly agree) used by Chan, Huff, Barclay and Copelan (1997).

4.3 Questionnaire design /formation
A structured questionnaire developed on the previous literature to collect information which included three sections. The first section designed to collect general information regarding to enterprises, the second section designed to collect information towards international export barriers among exporting SMEs’ and questions are set at the third section regarding Information System Strategies which influence the IEB.

A list of barriers derived from the literature and to measure the perception towards barriers among exporting SMEs’, the five point Likert scale ranging from 1 to 5 (1- very minor problem and 5- very major problem) used by Bennett (1997).

The instrument for Information System Strategies was design around nine business strategies. The five point Likert scale ranging from 1 to 5 (1- strongly disagree and 5- strongly agree) used by Chan, Huff, Barclay and Copelan (1997). Pretesting of the questionnaire was conducted to assure the reliability the research instrument and the SPSS statistical software 23.0 versions used to process the obtained data.

4.4 Method of data analysis
Because data are showed normal distribution, parametric statistical analysis techniques were used to assess and measure different major issues of this study. More specifically, here to test the reliability of the collected data, the value of the Chronbach's alpha had been estimated and evaluated against the recommended standard by DeVellis (2003) who suggested that, ideally the Cronbach alpha coefficient of a scale should be above (0.7). The report values of Cronbach's Alpha for export barriers and Information system strategy were good where overall alpha value reported was .919 and .845. Additionally, the ‘Bivariate’ correlation analysis was done by using ‘Pearson Product-moment Correlation’ technique to examine the relationship of the Information System Strategic Orientation and Internationalization of Export Barriers in RMG. This study incorporated factor analysis to identify the principle export barriers which are most influencing for international export barriers (IEB) on the perception of SMEs’ exporter in RMG sector.

5. Analysis and findings
5.1 Sample participants characteristics
The participants of the mail survey and face to face conversation conducted for the study are the SME exporters of Dhaka city in Bangladesh on Ready Made garments industry. This industry is well known for its excellent export performance and its participation in the global market as a quality supplier. The profile of the respondent exporters is presented in the table – 02.

Table 02: Profile of Respondents SMEs

<table>
<thead>
<tr>
<th>Description</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership Status</td>
<td>Proprietorship</td>
<td>37</td>
<td>34.58</td>
</tr>
<tr>
<td></td>
<td>Partnership</td>
<td>54</td>
<td>50.47</td>
</tr>
<tr>
<td></td>
<td>Limited Company</td>
<td>16</td>
<td>14.95</td>
</tr>
<tr>
<td>Company Age</td>
<td>Up to 10 years</td>
<td>34</td>
<td>31.77</td>
</tr>
<tr>
<td></td>
<td>Up to 20 years</td>
<td>65</td>
<td>60.75</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>8</td>
<td>7.48</td>
</tr>
<tr>
<td>Computer System Usage</td>
<td>Less than one year</td>
<td>18</td>
<td>16.82</td>
</tr>
<tr>
<td></td>
<td>One year to 3 years</td>
<td>27</td>
<td>25.23</td>
</tr>
<tr>
<td></td>
<td>above 3 years</td>
<td>62</td>
<td>57.95</td>
</tr>
<tr>
<td>Internet Usage</td>
<td>Less than one year</td>
<td>7</td>
<td>6.54</td>
</tr>
<tr>
<td></td>
<td>One year to 3 years</td>
<td>12</td>
<td>11.22</td>
</tr>
<tr>
<td></td>
<td>above 3 years</td>
<td>88</td>
<td>82.24</td>
</tr>
</tbody>
</table>

5.2 Reliability analysis
Table 05 below shows the reliability statistics of the scales used in this study. It can seen from the table 05 below that the report values of Cronbach's Alpha for export barriers and Information system strategy were good where overall alpha value reported was .919 and .845 which are much higher than DeVellis’s (2003) recommended of 0.70. Here Cronbach's Alpha value indicating an acceptable level of internal consistency of the collected data.
Table- 03

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>export barriers</td>
<td>.919</td>
<td>16</td>
</tr>
<tr>
<td>Information System Strategy</td>
<td>.845</td>
<td>9</td>
</tr>
</tbody>
</table>

5.3 Factor analysis of export barriers

This study was conducted a confirmatory factor analysis which using principal axis factoring with varimax rotation as an extraction method (see for details, e.g. Nummenmaa et al., Hair et al., 1998, pp. 87-120). The Kaiser Meyer-Olkin (KMO) measure of sampling adequacy indicated a practical level of common variance (KMO = 0.667).

Table- 04

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</th>
<th>KMO and Bartlett's Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approx. Chi-Square</td>
<td>1254.300</td>
</tr>
<tr>
<td>Df</td>
<td>126</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.000</td>
</tr>
</tbody>
</table>

5.3.1 Communalities

Communalities show how much of the variance in the variables has been accounted for by the extracted factors. For instance in the following table (table-5), over 95.5% of the variance in Transport problems, over 94.0% of the variance in Inability to use foreign language, 93.7% of the variance in Documentation problems is accounted for while 50.9% of the variance in Need for foreign representation is accounted for.

Table- 05

<table>
<thead>
<tr>
<th>Initial</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital goods import restrictions</td>
<td>1.000</td>
</tr>
<tr>
<td>Cost of free sample</td>
<td>1.000</td>
</tr>
<tr>
<td>Documentation problems</td>
<td>1.000</td>
</tr>
<tr>
<td>Fall in the international market price</td>
<td>1.000</td>
</tr>
<tr>
<td>Getting payment</td>
<td>1.000</td>
</tr>
<tr>
<td>Import restrictions in foreign market</td>
<td>1.000</td>
</tr>
<tr>
<td>Inability to use foreign language</td>
<td>1.000</td>
</tr>
<tr>
<td>Devaluation of Bangladeshi currency</td>
<td>1.000</td>
</tr>
<tr>
<td>Intense competition in the foreign markets</td>
<td>1.000</td>
</tr>
<tr>
<td>Lack of ready availability of management consultancy service</td>
<td>1.000</td>
</tr>
<tr>
<td>Lack of skilled staff</td>
<td>1.000</td>
</tr>
<tr>
<td>Need for sample in obtaining each order</td>
<td>1.000</td>
</tr>
<tr>
<td>Need for foreign representation</td>
<td>1.000</td>
</tr>
<tr>
<td>Quality cost</td>
<td>1.000</td>
</tr>
<tr>
<td>Training and retaining skilled labor</td>
<td>1.000</td>
</tr>
<tr>
<td>Transport problems</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

5.3.2 Total variance explained

The next item shows all the factors extractable from the analysis along with their eigenvalues, the percent of variance attributable to each factor, and the cumulative variance of the factor and the previous factors. Notice that (table-06) the first factor accounts for 34.624% of the variance, the second 17.541%, the third 12.168%, the fourth 8.943% and the fifth 7.992%. All the remaining factors are not significant.
<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>5.540</td>
<td>34.624</td>
</tr>
<tr>
<td>2</td>
<td>2.807</td>
<td>17.541</td>
</tr>
<tr>
<td>3</td>
<td>1.947</td>
<td>12.168</td>
</tr>
<tr>
<td>4</td>
<td>1.431</td>
<td>8.943</td>
</tr>
<tr>
<td>5</td>
<td>1.279</td>
<td>7.992</td>
</tr>
<tr>
<td>6</td>
<td>.996</td>
<td>6.226</td>
</tr>
<tr>
<td>7</td>
<td>.829</td>
<td>5.179</td>
</tr>
<tr>
<td>8</td>
<td>.541</td>
<td>3.378</td>
</tr>
<tr>
<td>9</td>
<td>.341</td>
<td>2.131</td>
</tr>
<tr>
<td>10</td>
<td>.176</td>
<td>1.098</td>
</tr>
<tr>
<td>11</td>
<td>.065</td>
<td>.407</td>
</tr>
<tr>
<td>12</td>
<td>.045</td>
<td>.278</td>
</tr>
<tr>
<td>13</td>
<td>.005</td>
<td>.033</td>
</tr>
<tr>
<td>14</td>
<td>1.966E-16</td>
<td>1.229E-15</td>
</tr>
<tr>
<td>15</td>
<td>-1.099E-16</td>
<td>-6.869E-16</td>
</tr>
<tr>
<td>16</td>
<td>-2.325E-16</td>
<td>-1.453E-15</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

5.3.3 Screen plot

The screen plot is a graph of the eigenvalues against all the factors whereas the eigenvalue refers to the standardized variance associate with a particular factor. The graph is useful for determining how many factors to retain. The point of interest is where the curve starts to flatten. It can be seen that the curve begins to flatten between factors 3 and 4. On the following graph (graph 1) we can see that factors 1 to 5 possess the eigenvalues more than 1 and the remaining factors (factor 6 to 16) have the eigenvalues of less than 1, so only five factors have been retained.

Scree Plot
5.3.4 Rotated Component (Factor) Matrix

The idea of rotation is to reduce the number of factors on which the variables under investigation have high loadings. Rotation does not actually change anything but makes the interpretation of the analysis easier. Looking at the table (table-07) below, we can see that Fall in the international market price, Inability to use foreign language, Devaluation of Bangladeshi currency substantially loaded on Factor (Component) 1; Documentation problems, Getting payment and Capital goods import restrictions are substantially loaded on Factor 2; Import restrictions in foreign market, management consultancy service, Training and retaining skilled labor and Transport problems are substantially loaded on Factor 3; Cost of free sample and Quality cost are substantially loaded on the factor 4; Need for sample in obtaining each order is substantially loaded on Factor 5.

Table- 07
Rotated Component Matrix

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital goods import restrictions</td>
<td>.840</td>
<td></td>
<td></td>
<td>.840</td>
<td></td>
</tr>
<tr>
<td>Cost of free sample</td>
<td></td>
<td>.909</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documentation problems</td>
<td>.738</td>
<td>.936</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall in the international market price</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Getting payment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Import restrictions in foreign market</td>
<td></td>
<td></td>
<td>.602</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inability to use foreign language</td>
<td>.877</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Devaluation of Bangladeshi currency</td>
<td>.789</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intense competition in the foreign markets</td>
<td>.776</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of ready availability of management consultancy service</td>
<td>.575</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of skilled staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.683</td>
</tr>
<tr>
<td>Need for sample in obtaining each order</td>
<td></td>
<td></td>
<td></td>
<td>.929</td>
<td></td>
</tr>
<tr>
<td>Need for foreign representation</td>
<td>.642</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality cost</td>
<td></td>
<td></td>
<td></td>
<td>.726</td>
<td></td>
</tr>
<tr>
<td>Training and retaining skilled labor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.920</td>
</tr>
<tr>
<td>Transport problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.609</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 7 iterations.

Factor analysis extracted five (5) major factors which influencing international export barriers (IEB) of SMEs’ exporter in RMG sector. These identified factors represent 81.268 percent of the variance of the variables. Table -08 shows the items that are included in each factor.

Table- 08
Grouping of Items in Each Factor

<table>
<thead>
<tr>
<th>Factors</th>
<th>Factor name</th>
<th>Loaded variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>Inability to control foreign market and currency devaluation</td>
<td>Inability to use foreign language, Devaluation of Bangladeshi currency, Intense competition in the foreign markets, Fall in the international market price, Need for foreign representation, Lack of ready availability of management consultancy service.</td>
</tr>
<tr>
<td>Factor 2</td>
<td>Payment and Documentation problems</td>
<td>Getting payment, Documentation problems, Capital goods import restrictions.</td>
</tr>
<tr>
<td>Factor 3</td>
<td>Unskilled labor and transport problems</td>
<td>Training and retaining skilled labor, Lack of skilled staff, Transport problems, Import restrictions in foreign market</td>
</tr>
<tr>
<td>Factor 4</td>
<td>High cost of quality full product</td>
<td>Cost of free sample, Quality cost</td>
</tr>
<tr>
<td>Factor 5</td>
<td>High demand of sample</td>
<td>Need for sample in obtaining each order</td>
</tr>
</tbody>
</table>

From the table 08, this study identify five (5) loaded variables which are name as factor 1 inability to
control foreign market and currency devaluation, factor 2 payment and Documentation problems, factor 3 unskilled labor and transport problems, factor 4 high cost of quality full product and factor 5 high demand of sample. Those five are the identifying factors which are significantly influence the Internationalization of Export Barriers in Bangladesh on RMG.

5.4 Relationship of information system strategic orientation on internationalization export barriers in RMG.

Table 09 below depicts the relationship of Information System Strategic Orientation on Internationalization Export Barriers in RMG. From table 09, it can be observed that correlations of the two variables are -0.875 had demonstrated strong and negative relationship with those variables, here Correlation is significant at the 0.01. It can be generalized from the findings illustrated in table 09 that, higher the Information System Strategic Orientation had a significantly inverse relationship with Internationalization Export Barriers in RMG in the context of Bangladesh. Thus, this study found strong evidence in the favor of $H_1$ in the context of Bangladesh.

Table - 09
Correlations Information System Strategic Orientation on Internationalization Export Barriers in RMG

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Export_barrier</th>
<th>ISSO_mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export_barrier</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>$N$</td>
<td>107</td>
</tr>
</tbody>
</table>
| ISSO_mean            | Pearson Correlation | -875 **  | 1
|                      | Sig. (2-tailed)    | .000      |
|                      | $N$               | 107       |

**. Correlation is significant at the 0.01 level (2-tailed).

On the others hand, table-10 also shows relationship of information system strategic Orientation with factor 2 (Payment and Documentation problems), which shows the highest inverse relationship with Internationalization Export Barriers among the identifying five influencing factors. The correlations of the two variables are - .835 ** had demonstrated strong and negative relationship with those variables, Correlation is significant at the 0.01. It can be generalized from the findings illustrated in table 10 that higher the Information System Strategic Orientation had a significantly inverse relationship with Payment and Documentation Export Barriers in RMG in the context of Bangladesh.

Table- 10
Correlations of Information System Strategic Orientation on payment option (Factor 3)

<table>
<thead>
<tr>
<th>ISSO_mean</th>
<th>Pearson Correlation</th>
<th>payment_documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISSO_mean</td>
<td>Sig. (2-tailed)</td>
<td>-835 **</td>
</tr>
<tr>
<td></td>
<td>$N$</td>
<td>15</td>
</tr>
<tr>
<td>payment_documentation</td>
<td>Pearson Correlation</td>
<td>-835 **</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>$N$</td>
<td>15</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

6. Conclusive analyses of this study

In the context of Bangladesh, this study conducted on the SMEs’ in the selected Ready Made Garments (RMG) and analyzed findings that, the five (5) export barriers name as inability to control foreign market and currency devaluation, payment and Documentation problems, unskilled labor and transport problems, high cost of quality full product and high demand of sample which are significantly influence the Internationalization of Export Barriers in Bangladesh on RMG. The export barrier - Need for sample in obtaining each order receives the greatest rating indicating that the buyers needed more sample in obtaining each order. The mean score of all the information systems strategies are above 4 in the five –point scale. This shows that the information systems strategies support their business.

The data support the hypothesis $H_1$: A higher level the Information System Strategic Orientation will reduce the Internationalization Export Barriers perceived by SMEs in RMG. The negative relationship explains how the information systems strategic orientation facilitates SMEs to overcome internationalization export barriers are explained by their information systems strategic orientation. Here factor 2 payment and documentation problem shows highest level of negative correlation with information systems strategic
orientation and internationalization export barriers. Thus information systems strategic orientation is one of the factors that could influence internationalization export barriers.

7. Limitation and directions for future research
Only 107 respondents were considered for the study, which represented only Dhaka city SME exporter in RMG sector in Bangladesh where as there are some other cities overall the country. Study variables were selected on the basis of limited literature review with selected studies related to this field. As there was no up to date study regarding this issue in Bangladesh, Lack of appropriate secondary data made the study quite difficult. But this study may be replicated in different industrial setting to generalize these findings. Further studies with SMEs at different stages of internationalization will be required to validate the findings of the study.

8. Conclusion
The readymade Garments Industry occupies a unique position in the Bangladesh economy which is 80 percent of the total export earnings of our country. So we can say it is a multibillion-dollar manufacturing and export industry in Bangladesh. In our country context, RMG in SMEs’ sector perceive a number of internationalization export barriers in the present business environment. The result of this study reveals the significant relationship between the Information System Strategic Orientation and the Internationalization Export Barriers.

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European commission (2010), “internationalization of European SMEs.” Brussels: Entrepreneurship Unit, DGEL.
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