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### The Effects of Strategic Orientation and Firm Competencies on Export Performance

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1 Islamic Azad University, Tehran, Iran, izadi314@yahoo.com 2 Islamic Azad University, BuinZahra, Iran, dr.ahmadian1@gmail.com ABSTRACT

This study aims to investigate the effects of the dimensions of strategic orientation including market orientation, entrepreneurial orientation and technology orientation on innovation capability, and the effects of innovation capability and firm competencies dimensions including production competencies, marketing and sales competencies and informational competencies on export performance. In this study, leading production companies in Isfahan Iran, was considered as the study population. A questionnaires was used to gather information which was distributed among 50 of managers and experts of marketing, sales and foreign trade divisions of those companies. The questionnaire is a complex of standard available questionnaires for such variables employing the opinions of professors and advisors in the field. Finally, Smart PLS software was used for data analysis and to test the study hypotheses. The results show that market orientation, entrepreneurial orientation and technology orientation are positively related in innovation capabilities. In addition, Innovation capability confirmed to have straight effect on export performance. Finally, production competencies, marketing and sales competencies and informational competencies confirmed to have positive effect on export performance.

**Keywords**: Strategic orientation, firm competencies, innovation capability, export performance.



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#### 1. INTRODUCTION

The conditions of the world are changing constantly and very quickly. This rapid changing situation is revolving around definite dynamic concepts like globalization, removal of the boundaries of the markets, insistent competition, shorter life cycle of products, and dramatic trend of technological innovation. In the past, it was enough for a firm to develop products and services that had better quality standards than the market, somehow, in today's markets, mentioned quality standards is only considered among a combination of factors. These factor forces firms to think and operate with a broadminded view; being customer oriented instead of profit oriented. This changing condition of the external environment and raising expectations of customers motivates companies to develop a number of powerful qualifications in order to remain in fame. This condition is especially important for looming markets like Iran because of the fierce competition and the importance of private-owned firms in the economy (Zehir, Kole and Yildiz, 2015).

Consequently, theorists who study in the field of strategic management propose the resource-based view by focusing on the internal forces of the organizations. This view connects competitive advantage to higher average returns (Barney, 1991; Grant, 1991). Strategic orientation that was created by Kohli and Jaworski (1990) and put forward through different studies by Noble et al. (2002) is here addressed with its factors - market orientation, technological orientation and entrepreneurial orientation. In an environment with deep competition, how can superiority or competitive advantage be attained? The first answer that comes to mind is that companies should carefully analyze market factors and show their market orientation, high tendency towards entrepreneurship and innovative strategy or strategic innovation, they would keep their resources and competitive advantage (Jaworski and Kohli, 1993).

Firm competencies have long been regarded as important factors in a firm's export performance as they entitle the firm to develop, mix, and transform resources (financial, physical, and managerial) into value presents (Doole, Grimes & Demack, 2006). Consequently, competencies are not only a sign of general export ability, but also they are an indicator of a firm's capacity to start and continue usual exporting. In addition, due to the strict competition situation, quick changing customer needs and wants, and



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

shorter life cycles of product, it is vital for firms to improve capabilities to define, create and convey superior customer value in export markets than the competitors (Rauch, Wiklund, Lumpkin, & Frese, 2009). For small and medium-sized enterprises (SMEs) that are often facing scarcity of resource (financial, physical, or managerial), unsatisfactory export performance, partly, is exacerbated by their failure to determine, prioritize and develop competencies required for their steady export capability.

In different previous studies, the effects of some factors on export performance have been investigated. These factors include market orientation, strategic orientation, firm competencies, innovation capabilities and so on. However, in this research, the mediating role of innovation capability is of special importance because it plays a significant role in effecting the dimensions of strategic orientation on export performance. Furthermore, the direct effect of the dimensions of firm competencies such as production competencies, marketing and sales competencies and information competencies on export performance have been investigated in this research because of their importance in producing goods that are of special importance for export markets.

Accordingly, the aim of this paper is to investigate and analyze the effects of the dimensions of strategic orientation including market orientation, technological orientation and entrepreneurial orientation on innovation capability and the effects of innovation capability and firm competencies dimensions such as production competencies, marketing and sales competencies, information competencies on export performance. Finally, some relevant strategies for exporters and firms of this kind will be proposed so they would be employed in order to make them more successful firms or maintain success, and hence, improve their export performance.

### 2. RELATED LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

#### 2.1 Export Performance

Export performance is regarded as a firm's outcome of operations in export markets (Cavusgil & Zou, 1994). Shoham (1998) claims that export performance of a firm is a compound of its international sales, profitability and growth in exports. The framework of export performance is identically important to firms and nations. Regarding the firms level, a better comprehension of export performance is important as exporting enhances application of productive capability, financial performance and competitive edge as well



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

as providing a basis for future international growth (Lu & Beamish, 2001). Regarding the national level, a better understanding of export performance is of special importance because exporting improves growing of foreign exchange stockpiles, employment levels and productivity as well as driving economic growth (Ural, 2009).

#### 2.2 Strategic Orientation

Strategic orientation was first introduced by Kohli and Jaworski (1990) and continued through different studies by Noble et al. (2002). Strategic orientation is the philosophy of firms which demonstrates their efforts to gain higher performance and displays how a job may be done with a set of values and beliefs (Gatignon and Xuereb, 1997). In this paper, it is discussed with its dimensions including market orientation, technological orientation and entrepreneurial orientation.

Tutar, Nart and Bingol (2015) performed a research in which a model has been developed under the assumption that strategic orientation dimensions have positive effects on innovation capability.

### 2.2.1 Market Orientation and innovation capability

Market orientation means the goal and culture of the firm is focused on creating value for customers (Narver et al., 1998), the creation of value becoming an institutionalized culture and becoming institutionalized. Market orientation is to be aware of the expectations and needs of the customers, to understand and satisfy them, arouse their feeling of being worthy and all of the organizational activities towards the institutionalization of this understanding (Kohli and Jaworski, 1990). In addition, market orientation is a culture that supports the creation of values in the market and is oriented by the market for the purpose of gaining competitive advantage. Basically, the market orientation and entrepreneurial orientation of a firm shows their strategic orientation.

Tutar et al. (2015) issued a paper which showed that market orientation has a positive relationship with innovation capability. Additionally, Zehir, Kole and Yildiz (2015) in their research have supported the idea that the dimensions of market orientation has a positive effect on innovation capability.

In accordance with the above discussions, it would be appropriate to propose that:

H1: Market orientation has a positive effect of on innovation capability.



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

#### 2.2.2 Entrepreneurial Orientation and innovation capability

Entrepreneurial orientation means a firm's tendency in seeking for new market opportunities, strengthening and restoring its current market status (Hult and Ketchen, 2001). This orientation includes being highly active against market opportunities, tolerant to threads and sensitive to innovations. Entrepreneurial orientation represents an attitude that includes decisions, application and continuous searching that creates new business opportunities (Kermani et al., 2018; Lumpkin and Dess, 2001). On the other hand, in current entrepreneurship studies, entrepreneurship is defined as an organizational level. Entrepreneurial orientation is a company's bias in trying to reach new markets, search for new market opportunities and keep current markets; or, its tendency towards the capability to demonstrate marketing dynamism and its ability to respond to the changes in the market. It is not only producing better goods and services that are in the strategic goals of entrepreneurial orientated firms; but also, their target is to move beyond the expectations of customers (Slater and Narver, 1995).

In their research, Tutar et al. (2015) have investigated the effect of Entrepreneurial orientation on innovation capability. After data analysis they have supported the idea that entrepreneurial orientation has a positive relationship with innovation capability. Consequently, the following hypothesis is suggested:

H2: Entrepreneurial orientation has a positive effect of on innovation capability.

### 2.2.3 Technology Orientation and innovation capability

Technology orientation means that an enterprise is able to sets up a strong technologic foundation and use it in developing new products. Technology orientation is a firm's ability to use its skills to produce technology and its technological knowledge in replying its customers' needs and wants, and even, for predicting them (Gatignon and Xuereb, 1997).

A technology-oriented firm is one that R&D is of importance in it, gains new technologies and improves them constantly. While market orientation goal is to satisfy the customers' needs and wants in a better way, technology orientation aims to develop and take advantage of advanced and innovative technology. Technology oriented firms pursue creativity, invention, finding new techniques, technologies and methods which orientate the company's activities and strategies. Technology oriented firms often



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

inspire and tolerate their employees, encouraging them to develop new technology and methods (Hatami and Shafieardekani, 2014). In an enterprise that is applied with this approach, groundbreaking innovations are of strategic priority and in such enterprises, being technologically oriented is a qualification that is accepted as a culture by all the employees (Hurley and Hult, 1998).

In some researches performed previously, the effect of technology orientation has been investigated on innovation capability. Among them is "The Effects of Strategic Orientations on Innovation Capabilities and Market Performance" performed by Tutar et al. (2015) that studies the effects of the dimensions of strategic orientation including market orientation, entrepreneurial orientation and technology orientation on innovation capability. In that essay, the researchers demonstrate that technology orientation has a positive relationship with innovation capability.

Therefore, it would be appropriate to propose that:

H3: Technology orientation has a positive effect of on innovation capability.

### 2.3 Innovation Capability and export performance

Zehir et al. (2015) performed a research in relation with small and medium-sized enterprises (SMEs) in Turkey in which they declared that Innovation capability has a positive effect on export performance. Tutar et al. (2015) proved that firm innovation capability has a positive impact on market performance.

Innovation Capability is defined as developing and managing the existing capability, technology, and knowledge required for establishing new ones. In this surrounding environment that is dominated by the applications of high-tech with rapid variation, it is necessary for businesses to improve innovation capability, as this provides firms to meet dynamic competitive advantage (Romijn, Albaladejo, 2002).

Accordingly, it is appropriate to propose that:

H4: Innovation capability has a positive effect on export performance.

### 2.4 Firm competencies and export performance

Kabagambe (2012) issued a paper related to small and medium-sized enterprises (SMEs) in Uganda in which he stated that firm competencies have a positive effect on export performance. O'Cass (2003) proved that firm competencies have a positive impact on export marketing performance.



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

Although the term firm competencies does not have an acceptable systematic framework, several researches have related export performance to firm competencies. These capacities facilitate the process of value creation from firm resources for export markets (Hatami and Ameri Siahooei, 2013). The firm competencies theory is related to the theory of resource-based view, in which firms are observed as a particular series of resources and competencies (La Patterson, 2005). Accordingly, specific export performance determines the situation of added capabilities in discovering, creating, and delivering value to customers in export markets (Morgan, 2004).

La, et al (2005) declared that internal resources including capabilities, effect major plans in regard to organizational competition and performance more than factors of industry. A literature review of export market puts forth that production, information, marketing and sales competencies are the themes of firms' export capabilities (Morgan, 2004). These capabilities will be identified through their function in delivering value to customers in the production of goods that are value, construction, and delivery (Ritter, 2006).

#### 2.4.1 Production competencies and export performance

Production competencies includes a group of skills related to developing new products or modification of current products (Day, 1994). Developing of production capabilities is as well related to the dependence of skills on new methods and ideas in the process of production and manufacturing. Considering exports, production capabilities let the organization to advance, integrate, convert resources, and create value in export market (Morgan, 2004). This implies that production competencies assist organizations to meet the level of demand in the market, rapidly develop their products to achieve the level of export orders and export tasks, and to have available opportunities.

Identically, Rauch et al (2009) emphasized the importance of production capabilities, particularly with reference to added competition, quick changes in customers' needs and wants, and short lifecycle of products. They stated that firms with mentioned conditions require to be able to adjust their production to market requirements.

Cavusgil (1994) declared that production capability has a positive and significant effect on strategic export performance. Later on, Mohsenzadeh and Ahmadian (2015) issued a paper regarding top export companies in Iran in which they showed that production



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

competencies affect export performance with the mediating role of competitive strategies.

Accordingly, the following hypothesis is suggested:

H5: Production competencies has a positive effect on export performance.

#### 2.4.2 Marketing and sales competencies and export performance

A review of the subject literature displays a significant relationship between export performance and marketing and sales capabilities. This perception is made based on Ritter's insight of marketing as a vital combination in the value creation process for customers in firms. Regarding this perspective, it is reasonable to estimate that export improvement, profitability, market share, etc. are more depended on the capability of the exporters in conceptualization, planning, and implementation and control of marketing and sales activities than the competition itself. Mohsenzadeh and Ahmadian (2015) have also stated in their research that marketing and sales competences has effect on export performance with the mediating role of competitive strategies.

Considering the above issue, previous studies have stated some capabilities in marketing and sales competencies. Important examples of them are: marketing planning, market analysis, focused marketing, the capability to gain information, distribution management and the development of communications in foreign markets, research and observation, pricing, distribution, and performing personal marketing (Cavusgil, 1994 and Kuppusamy, 2008).

In accordance with the above discussions, it is considered appropriate to propose that:

H6: Marketing and sales competencies has a positive effect of on export performance.

### 2.4.3 Informational competencies and export performance

Informational competency is a group of capabilities that allows exporters to gather, analyze, and interpret significant market information (Piercy, 1978). Information of markets, either objective (gained through formal market research) or experimental (gathered through of the activities of foreign markets) is closely related to export performance (Andersen, 1989; Kermani et al., 2017). Firms tend to develop a positive conception of export opportunities through lots of information collected about competitors, customers, marketing activities (such as required products, pricing system, and distribution and promotion and practices), and natural environment. Oppositely,



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

inexperienced exporters often encounter a large mass of uncertainty that irrelevantly affect their imaginations related to potential risks or return to foreign markets (Elango, 2007).

However, some firms bound their international activities due to lack of control on these operations; it is mostly because of poor information capabilities. Toften (2005) has discovered experimental indications that suggest a positive and significant influence of information capabilities (generating, interpreting, and operating) on the exports profitability. In a similar finding by Peircy et al (1998), information capabilities certified a difference between strong and weak export performances. However, because of the complicated structure and nature of information skills and lack of available empirical results (LaPatterson, 2005), after a while, it appears to be vital to examine these relations. Later on, Ritter (2006) declared that when exporting is not founded on competency and competition basis, the risks taken by exporters, will lead to some demands that cannot be satisfied (Mohsenzadeh and Ahmadian, 2015).

Such evidence remark the complex impact of firm competencies on export performance that would be more effectual than the influence of singular and separate capabilities. Consequently, this hypothesis is suggested:

H7: Informational competencies has a positive effect of on export performance.

#### 3. RESEARCH METHODOLOGY

The main aim of this study is to understand the relationship among the dimensions of strategic orientations, firm competencies, innovation capabilities and export performance. This paper proceeds with a review of the literature and as the dimensions of the strategic orientation are determined: 1- market orientation, 2-entrepreneur orientation and 3-technologyorientation. Furthermore, the dimensions of firm competencies are determined 1-production competencies, 2-marketing and sales competencies and 3-informational competencies. Innovation capabilities in firms is important both because of its contribution to the competitiveness and because of the key role on the export performance. The research model developed within the context of this study is presented in Figure-1.



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

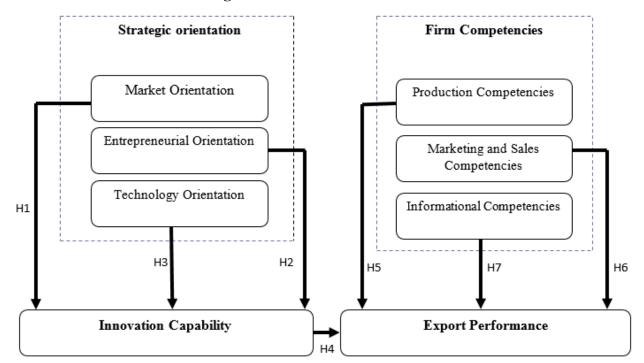


Fig. 1. Research Model

#### 3.1 Research instrument

The research in this study was conducted by using a quantitative technique. In this research, a questionnaire was employed for data collection. The questionnaire is developed by the authors based on extant literature. The questionnaire contains 62 questions in two parts, the first part includes 4 questions about demographic data of respondents and the second part includes 58 questions that are designed based on 5-point Likert scales. The questions of the second part are derived from authentic papers of Narver and Slater (1998, 1990), Covin and Slevin (1989), Vorhies et al. (2009), Calantone, Cavusgil and Zhao (2002), Levi Bategeka Kabagambe(2011), Janet Y. Murray (2010). Once the questionnaire was designed, its validity and reliability were measured.

#### 3.2 Data collection

The respondents of the above mentioned questionnaires were managers and experts of marketing, sales and foreign trade divisions of leading production companies of Esfahan, Iran. The questionnaires were distributed and then gathered in 2017, which



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

were distributed among 50 people and 47 of them that were fully and accurately completed, were used.

#### 3.3 Measurement, reliability and validity of scales

Although PLS estimates parameters for both the links between measures and constructs (i.e., loadings) and the links between different constructs (i.e., path coefficients) simultaneously, a PLS model is normally analyzed and interpreted sequentially in two stages as follows: (1) an assessment of the reliability and validity of the measurement model, followed by (2) an assessment of the structural model and (3) an assessment of the overall measure of the model. This sequence guarantees that the researcher has reliable and valid measures of constructs before attempting to derive conclusions about the nature of the construct relationships (Hulland 1999). In addition, since the questions of the questionnaire were extracted in consultation with experts from authentic articles, they have proper reliability or validity.

#### 3.3.1 Market orientation scale

Market orientation scale was adapted by Slater and Narver (1990) by factors including customer commitment, create customer value, understand customer needs, customer satisfaction objectives, measure customer satisfaction, after-sales service, salespeople share competitor information, respond rapidly to competitors' actions, top managers discuss competitors' strategies, target opportunities for competitive advantage, Interfunctional customer calls, information shared among functions, functional integration in strategy, all functions contribute to customer value, share resources with other business units. Each item was measured using a five point Likert scale ranging from 1 to 5, where 1 shows that the respondent strongly disagrees with the statement and 5 indicates strong agreement with the statement.

#### 3.3.2 Entrepreneurial orientation scale

The measurement of entrepreneurial orientation is adapted by Covin and Slevin (1989) based on factors such as accepting risks to find the opportunities for growth in market, a great deal of decision is accompanied by lack of confidence, emphasizing on research and development, trying to perform actions before rivals, introducing a large amount of goods and services is to our rivals by ourselves, The emphasis on vast activities with regard to finding positions, products and services compared to rivals in market,



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

providing the staff with the opportunity to have creativity and then to apply it in their own deed, being more capable of recognizing new opportunities than rivals. Each item was measured using a five point Likert scale ranging from 1 to 5, where 1 shows that the respondent strongly disagrees with the statement and 5 indicates strong agreement with the statement.

#### 3.3.3 Technology orientation scale

Technology orientation which is adapted by Vorhies et al. (2009), was measured by factors including being the first company to introduce new products/ services, managerial methods, operational technologies, great emphasis on R & D, being forerunner in technology and innovation. Each item was measured using a five point Likert scale ranging from 1 to 5, where 1 shows that the respondent strongly disagrees with the statement and 5 indicates strong agreement with the statement.

#### 3.3.4 Production capability scale

Production capability was adapted by Kabagambe (2012), which was measured by factors including quality control process, the development of new products, and range of products, developing products according to customer specifications, product quality, product uniqueness, and warranty and service arrangements. Each item was measured using a five point Likert scale ranging from 1 to 5, where 1 shows that the respondent strongly disagrees with the statement and 5 indicates strong agreement with the statement.

#### 3.3.5 Marketing and sales capability scale

The measurement of Marketing and sales capability is adapted by Kabagambe (2012) based on factors like export pricing abilities, managing export distribution channels, abilities in managing export marketing communications, capabilities of the firm's export salesforce, export market research skills, export marketing planning skills, and export marketing implementation skills. Each item was measured using a five point Likert scale ranging from 1 to 5, where 1 shows that the respondent strongly disagrees with the statement and 5 indicates strong agreement with the statement.



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

### 3.3.6 Information capability scale

Informational capability was adapted by Kabagambe (2012), which was measured by factors including understanding overseas customer requirements, establishing and maintaining close supplier relationships, establishing and maintaining close overseas distributor relationships, capturing important market information, acquiring export market related information, making contact in the export market, and monitoring competitive products in the export market. Each item was measured using a five point Likert scale ranging from 1 to 5, where 1 shows that the respondent strongly disagrees with the statement and 5 indicates strong agreement with the statement.

#### 3.3.7 Export performance scale

Export performance is the extent to which the organization's objectives (strategic goals and economic goals) for exporting a product through the design and implementation of export marketing strategies could be fulfilled (Cavusgil, 1994). Export performance measurement was adapted by Murray (2011) through improving competition at the international level, strengthening the strategic position, and increasing global market share, profitability, increasing sale share, and having access to rapid growth. Each item was measured using a five point Likert scale ranging from 1 to 5, where 1 shows that the respondent strongly disagrees with the statement and 5 indicates strong agreement with the statement. (Table 1)

**Table 1. Measurement model results** 

Construct and scale items	Loading	CR	AVE	Cron bach'
				S
				alpha
market orientation) Adapted from Slater and				
Narver, 1990) a	0.682			
q3: Understand customer needs	0.689			
q4: Customer satisfaction objectives	0.776			
q5: Measure customer satisfaction	0.765			
q6: After-sales service	0.750			
q7: Salespeople share competitor	0.783			
information	0.559			
q8: Respond rapidly to competitors'	0.759	0.94	0.55	0.89
actions	0.825	0.94	0.55	0.89
q9: Top managers discuss competitors'	0.727			
strategies	0.824			
q10: Target opportunities for	0.736			
competitive advantage	0.728			
q11: Interfunctional customer calls				
q12: Information shared among				
functions				
q13: Functional integration in strategy				



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

q14: All functions contribute to				
customer value				
q15: Share resources with other				
business units				
Entrepreneurial orientation (Adapted from				
Covin and Slevin, 1989) <sup>a</sup>	0.507			
q16: Accepting risks to find the	0.851			
opportunities for growth in market	0.784			
q17: A lot of decision accompanied by	0.759			
lack of confidence	0.822			
q18: Emphasize on research and	0.761			
development.	0.564			
q19: Trying to perform actions before rivals	0.564			
q20: Introducing a large amount of	0.794			
goods and services to our rivals	0.774	0.90	0.55	0.85
q21: Emphasizing on vast activities		0.70	0.55	0.05
with regard to finding positions,				
products and services compared				
to rivals in market				
q22: Providing the staff with the				
opportunity to have creativity				
and then to apply it in their own				
deed				
q23: Capability of recognizing new				
opportunities more than rivals				
Technology orientation (Adapted from Vorhies				
et al. 2009) <sup>a</sup>	0.751			
q24: Being the first company to				
introduce new products/ services,	0.860			
managerial methods and		0.79	0.65	0.82
operational technologies		0.79	0.03	0.62
q25: Great emphasis on R & D, being				
forerunner in technology				
and innovation				
Imposation can ability (A I and I form Color				
Innovation capability (Adapted from Calantone,	0.824			
Cavusgil and Zhao, 2002) <sup>a</sup> q26: Frequently trying out new ideas	0.834 0.804			
q20. Frequently trying out new ideas q27: Seeking out new ways to do	0.804			
things	0.868			
q28: Creativity in methods of	0.838			
operation	0.791	0.93	0.70	0.91
q29: Being the first to market with		0.93	0.70	0.91
new products and services				
q30: Innovation being perceived as too				
risky and is resisted				
q31: New product introduction being				
increased over the last 5 years				
Production competencies (Adapted from				
Kabagambe et al., 2012) <sup>a</sup>	0.725			
q32: Quality control process	0.682			
q33: Development of new products for	0.638	0.92	0.61	0.89
	l	I		
export customers	0.790			
export customers q34: Range of products offered on the export market	0.790 0.887 0.851			



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

q35: Developing products according to customer's specifications q36: Product quality q37: Product uniqueness q38: Warranty and service arrangements	0.857			
Sale and marketing competencies (Adapted from Kabagambe et al., 2012) <sup>a</sup> q39: Export pricing abilities q40: Managing export distribution channels q41: Abilities in managing export marketing communications q42: Capabilities of the firm's export sales force q43: Export market research skills q44: Export marketing planning skills q45: Export marketing implementation skills	0.882 0.844 0.729 0.840 0.850 0.790 0.851	0.94	0.69	0.92
Informational competencies (Adapted from Kabagambe et al., 2012) a q46: Understanding overseas customer requirements q47: Establishing and maintaining close supplier relationships q48: Establishing and maintaining close overseas distributor relationships q49: Capturing important market information competencies q50: Acquiring export-market related information q51: Making contact in the export market q52: Monitoring competitive products in the export market	0.760 0.761 0.596 0.770 0.761 0.674 0.832	0.89	0.55	0.86
Export performance (Adapted from Murray et al., 2011) <sup>a</sup> q57: Export has strengthened our strategic position q58: Export has significantly increased our global market share <sup>a</sup> Based on a five-point Likert scale, where 1=not a	0.904 0.788	0.86	0.75	0.76

<sup>&</sup>lt;sup>a</sup> Based on a five-point Likert scale, where 1=not at all and 5=very much

#### 4.RESULTS

#### 4.1 General view

We evaluated the adequacy of the measurement model following the instruction of Hulland (1999). For this purpose, we calculated the reliability of each item, the convergent validity of the measures related to individual constructs, and the discriminant validity. In partial least square (PLS), for evaluating the reliability of each individual

<sup>&</sup>lt;sup>b</sup> questions of "q1", "q2", "q53", "q54", "q55" and "q56" are removed because loading factor was under than 0.4 for these questions.



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

item, the loadings of the measures with their respective constructs should be calculated. We eliminated those items whose loadings were below 0.4 (the threshold 0.4 is suggested for factor analysis) or 0.5 (Hulland 1999). To evaluate the convergent validity in PLS, it is need to calculate either one or more than one of the measures below: a) Average Variance Extracted (AVE), b) Cronbach's alpha, and c) Composite Reliability (CR)

Fornell and Larcker (1981) proposed AVE or the internal consistency to evaluate convergent validity and argue that in comparison to Cronbach's alpha, AVE is better given that AVE uses the item loadings calculated within the nomological network. However, the interpretation of the values obtained by Cronbach's alpha and AVE is same, and Nunnallys' instructions (1978) can be used for both. Nunnally recommends 0.7 as a threshold for 'modest' CR, (Nunnally 1978). According to Cool and his colleagues (1989), a value below 0.50 is inappropriate, because in this case more variance is caused by error. Fornell and Lacker (1981) suggest that AVE, squared correlation between two constructs, should be used for evaluating the discriminant validity in PLS. The AVE value can be interpreted in a correlation matrix. The matrix contains the correlations between constructs in the lower left off-diagonal elements and the square roots of the average variance extracted values which is calculated for each single construct along the diagonal. To be sure of the adequacy of discriminant validity, following Hulland's instruction, we made sure that diagonal elements are significantly bigger than the off-diagonal elements in the matching rows and columns.

Questions 1, 2, 53, 54, 55 and 56 were eliminated because loadings were below 0.4 in a model and we tested the measurement model. As it is shown in Table 1 all items have loadings above 0.4 (Hulland 1999), Cronbach's alpha is bigger than 0.7 (Cronbach 1951), CR is bigger than 0.7 (Nunnally 1978), and AVE stands above 0.5 (Fornel and Larker 1981). This means that the measurement model we have proposed has adequate assessment (See Table. 1).

#### 4.2 Analytical findings

The first and main scale for examining the relation between the contents in structural part of the model is t-value. If the results show figures more than 2.010, its meaning would be the accuracy of relation between the contents of the model and consequently,



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

support of hypotheses in confidence level of 95%. Important to say that, t-value results just show the accuracy of relations but not the severity of them. For testing severity of relations, R Square scale would be utilized. This scale is used for connecting the measuring and structural parts of the model and demonstrates the effect that an independent variable has on a dependent variable.  $R^2$  scale is just calculated for the dependent variable of the research model, and the figures for the independent variables are zero. Chin (1998) has announced the amounts of 0.19, 0.33 and 0.67 for criteria amounts of weak, medium and strong of this scale (Davari and rezazadeh, 2013).

In this research, amounts of t-value scale have been calculated using Boot Strapping examination. Accordingly, as shown in table 3, t-values of research show that all hypotheses are supported due to values resulted more than 2.010.

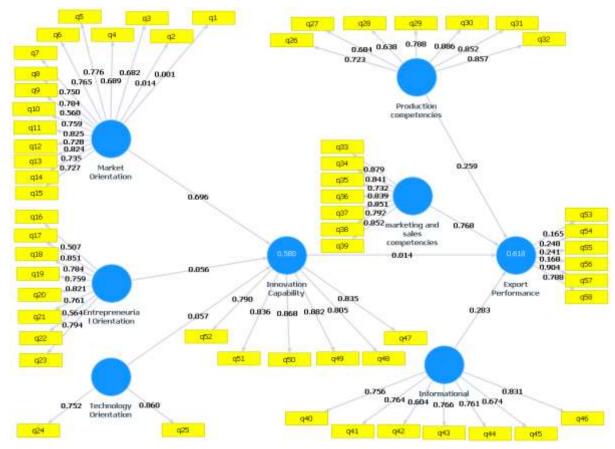


Figure 2: Loading coefficients of the research model



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

In addition, as mentioned above,  $R^2$  scale is just calculated for the dependent variables of the model, and the amount of this scale for the independent variables are zero. The more the amount of this scale is for dependent variables, the better practice of the research model would be (Chin, 1998). In the model presented from Smart PLS software (figure 2), R Square amounts are shown in circles. Herewith, the amounts of R Square of this research are available in table 2. Regarding the attained figures of  $R^2$  for export performance and innovation capability variables, and because their amounts are between 0.33 and 0.67, they confirm the appropriation of practice of the structural model in relatively strong level

Table 2. R Square amounts of dependent variables of the model

Variable	R Square
Export performance	0.62
Innovation capability	0.58

### 4.3. Hypothesis testing

For testing our research hypotheses, we took advantage of the t-test (t-value) and calculated standard coefficients. In PLS, hypothesis testing is performed when the measurement model, the structural model, and the overall measure of the model are assessed and analyzed.

Meaning coefficients of model paths show whether the research hypotheses are meaningful or not. As mentioned before, if these coefficients are more than 2.010, it means that the related hypothesis is meaningful in confidential level of 95%, and the hypothesis is confirmed. In addition, if these coefficients are more than 2.680, it shows the meaningfully of hypotheses in 99% confidential level. Finally, more than 3.505 is meant the meaningfully of hypotheses in 99.9% of confidential level. In this way, the hypotheses testing and whether they are/not supported, is specified by Boot Strapping examination and t-value amounts (table 3). The next step would be to specify the severity of the effects of variables on each other with application of standard coefficients of paths. Standard coefficients of paths between variables declare that the one variable, in the related path of changes, specifies the other variable. These coefficients, with meaning coefficients of each hypothesis, display the result of each hypothesis. Table 3 reflects the results of structural model for testing the research hypotheses. Regarding the



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

presented amounts in this table, when the meaning coefficients are more than 1.96, the related hypothesis is supported.

Table 3. Results of hypothesis

Paths	T Statistics	standard coefficients	Results
Market orientation	4.503	0.696	Supported
==→ Innovation capability			
Entrepreneurial	3.262	0.056	Supported
orientation ==→ Innovation			
capability			
Technology orientation == <b>→</b>	3.471	0.059	Supported
Innovation			
capability			
Innovation capability ==→	3.124	0.223	Supported
Export performance			
Production	3.408	0.266	Supported
competencies ==→ Export performance			
Marketing and sales	3.346	0.794	Supported
competencies == <b>→</b>	3.130	0.230	Supported
Export performance			
Informational			
competencies ==			
Export performance			

### 4.4ResultsofHypothesis testing

First hypothesis: Market orientation has effect on innovation capability.

Due to research findings, the first hypothesis is supported with the meaning coefficient (t-value) of 4.503 and standard coefficient of 0.696 in confidential level of 99.9%. The meaning coefficient of this hypothesis is more than 3.505 which shows the direct effect of market orientation on innovation capability with the effect coefficient of 0.696.

**Second hypothesis**: Entrepreneurial orientation has effect on innovation capability.

Due to research findings, the second hypothesis is confirmed with the meaning coefficient (t-value) of 3.262 and standard coefficient of 0.056 in confidential level of 99%. The meaning coefficient of this hypothesis is more than 2.680, which shows the direct effect of entrepreneurial orientation on innovation capability with the effect coefficient of 0.056.

**Third hypothesis**: Technology orientation has effect on innovation capability.

Due to research findings, the second hypothesis is confirmed with the meaning coefficient (t-value) of 3.471 and standard coefficient of 0.059 in confidential level of 99%. The meaning coefficient of this hypothesis is more than 2.680, which shows the



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

direct effect of technology orientation on innovation capability with the effect coefficient of 0.059.

Forth hypothesis: Innovation capability has effect on export performance

Due to research findings, the second hypothesis is confirmed with the meaning coefficient (t-value) of 3.124 and standard coefficient of 0.223 in confidential level of 99%. The meaning coefficient of this hypothesis is more than 2.680, which shows the direct effect of innovation capability on export performance with the effect coefficient of 0.223.

Fifth hypothesis: Production competencies has effect on export performance

Due to research findings, the second hypothesis is confirmed with the meaning coefficient (t-value) of 3.408 and standard coefficient of 0.266 in confidential level of 99%. The meaning coefficient of this hypothesis is more than 2.680, which shows the direct effect of production competencies on export performance with the effect coefficient of 0.266.

**Sixth hypothesis**: Marketing and sales competencies has effect on export performance Due to research findings, the second hypothesis is confirmed with the meaning coefficient (t-value) of 3.346 and standard coefficient of 0.794 in confidential level of 99%. The meaning coefficient of this hypothesis is more than 2.680, which shows the direct effect of marketing and sales competencies on export performance with the effect coefficient of 0.794.

**Seventh hypothesis**: Informational competencies has effect on export performance Due to research findings, the second hypothesis is confirmed with the meaning coefficient (t-value) of 3.130 and standard coefficient of 0.230 in confidential level of 99%. The meaning coefficient of this hypothesis is more than 2.680, which shows the direct effect of informational competencies on export performance with the effect coefficient of 0.230.

#### 5. CONCLUSIONS AND DISCUSSIONS

This research was done employing a research model which was developed based on previous studies. The main goal of this study was to investigate the relationship between the dimensions of strategic orientation including market orientation, technological orientation and entrepreneurial orientation on innovation capability and the effects of



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

innovation capability and firm competencies dimensions such as production competencies, marketing and sales competencies, information competencies on export performance. This subject is important because the findings can address firms to find strategies for growth opportunities in this competitive environment. Results gained from hypotheses testing state the following information:

All aspects of strategic orientation affect innovation capability. Innovation capability and firm competencies dimensions affect export performance. In addition, innovation capability has a mediating role between the aspects of strategic orientation and export performance.

The above mentioned results suggest that the success of enterprises in export markets depends on competency in production, marketing and sales as well as on the collection of appropriate information. Furthermore, innovation capability plays an important role in export activities. For developing innovation capability, a firm should pay special attention to market orientation, entrepreneurial orientation and technology orientation.

#### 6. MANAGERIAL IMPLICATIONS

Firms that sell products to various customers in international markets should note that it would be better to present a wide range of products so that the firm has a good diversity for customers. They should scan the needs and wants of customers in different target markets in order to match their productions on the basis of each target market. Firms should have close control over the quality of the products and production process. They should also provide particular products for foreign customers by taking advantage of innovation and considering special product characteristics by foreign customers and target market expectations.

Considering the effects of marketing and sales competencies on export performance, after sales services should be applied for foreign customers, their tastes should be taken into account, and continuous improvement of the products qualifications should be regarded. Firms should scan their competitors in price setting for foreign markets and offer competing prices for their products. In addition, it is suggested that they improve their distribution channels. Finally, enterprises would be offered to keep their R&D capable an up-to-date, and improve their talents in marketing planning and marketing research.



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

It is necessary for firms to maintain their information about foreign markets, target markets and export markets up-to-date. They should be actively in search of new ideas and apply them in their products and services.

#### REFRENCES

- Andersen, O. (1989). On the internationalization process of firms: A critical analysis. Journal of International Business Studies, 209-231.
- Barney, J.B. 1991. Firm Resources and Sustained Competitive Advantage. Journal of Management. 17 (1), 99–120.
- Covin, J.G. and Slevin D.P (1989). Strategic Management of Small Firms in Hostile and Benign Environments, Strategic Management Journal, 10, 75-87.
- Day, G. (1994). The capabilities of Market driven organizations. Journal of Marketing, 37-52.
- Elango, B., & Pattnaik, C. (2007). Building capabilities for international operations through networks: a study of Indian firms. Journal of international business studies, 38(4), 541-555.
- Grant, R., 1991. The Resource-Based Theory of Competitive Advantage: İmplications for Strategy Formulation, California Management Review, c. 33: 114-135.
- Gatignon, H. and Xuereb J.M. (1997). Strategic Orientation of the Firm and New Product Performance. Journal of Marketing Research, 34 (February), 77–90.
- Hatami, M., and Ameri Siahooei, E. (2013). Examines criteria applicable in the optimal location new cities, with approach for sustainable urban development. Middle-East Journal of Scientific Research, 14(5), 734-743.
- Hatami, M., and Shafieardekani, M. (2014). The Effect of Industrialization on Land Use Changes; Evidence from Intermediate Cities of Iran. International Journal of Current Life Sciences, 4(12), 11899-11902.
- Hult G and Ketchen Jr DJ. (2001). Does Market Orientation Matter? A Test of the Relationship Between Positional Advantage and Performance. Strategic Management Journal, 22(9) 899–906.
- Hurley, R.F. and Hult, G.T.M. (1998). Innovation, Market Orientation, and Organisational Learning: An Integration and Empirical Examination. Journal of Marketing, 62 (7) 42.



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

- Jaworski B.J. and Kohli A.K. (1993). Market Orientation: Antecedents and Consequences. Journal of Marketing, 57, July, 52-70.
- Kabagambe, L. B. (2012). Firm competencies and export performance: A study of small and medium manufacturing exporters in competencies in Uganda. European Scientific Journal, 48-67.
- Kermani, B., Xiao, M., Stoffels, S. M., and Qiu, T. (2018). Reduction of subgrade fines migration into subbase of flexible pavement using geotextile. Geotextiles and Geomembranes, 46(4), 377-383.
- Kermani, B., Xiao, M., Stoffels, S. M., and Qiu, T. (2017). Measuring the migration of subgrade fine particles into subbase using scaled accelerated flexible pavement testing—a laboratory study. Road Materials and Pavement Design, 1-22. DOI: 10.1080/14680629.2017.1374995.
- Kohli, A.K. and Jaworski, B.J. (1990). Market Orientation: The Construct, Research Propositions and Managerial Implications, Journal of Marketing, 54(2) 1-18.
- Kuppusamy, J. &. (2008). an analysis of competencies and moderating influence of demographic profiles: Evidence from exporting organizations. Communications of the IBIMA, 143-155.
- LaPatterson, V., (2005). Determinants of export performance across survive types: A conceptual model. Journal of Services Marketing, 379-391.
- Lumpkin, G. T. and Dess, G.G. (2001). Linking Two Dimensions of Entrepreneurial Orientation to Firm Performance: The Moderating Role of Environment and Industry Life Cycle. Journal of Business Venturing, 16, 429-445
- Matsuno, K., Mentzer J.T, and Ozsomer A. (2002). The Effects of Entrepreneurial Proclivity and Market Orientation on Business Performance. Journal of Marketing, 66 (July). 18-32.
- Mohsenzadeh, M., & Ahmadian, S. (2016). The Mediating Role of Competitive Strategies in the Effect of Firm Competencies and Export Performance. Procedia Economics and Finance, 36, 456-466.
- Morgan, N. K. (2004). Antecedents of export venture performance: A theoretical model and empirical assessment. Journal of Marketing, 90-108.



Revista Publicando, 5 No 15. (2). 2018, 834-857. ISSN 1390-9304

- Narver, J. C. and Stanley F. Slater, (1990). The Effect of a Market Orientation on Business Profitability, Journal of Marketing, 54 (October), 20–35.
- Narver, J.C., Slater, F.S. and Tietje, B. (1998). Creating a Market Orientation, Journal of Market-focused Management, 2 (3) 241-255.
- Noble, C. H., Sinha R.K, and Kumar A. (2002), Market Orientation and Alternative Strategic Orientations: A Longitudinal Assessment of Performance Implications. Journal of Marketing, 66 (October), 25–39.
- O'Cass, A. (2003). Examining firm and environmental influences on export marketing mix strategy and export performance of Australian exporters. European Journal of Marketing, 366-384.
- Piercy, N. K. (1978). Sources of competitive advantage in high performing exporting companies. Journal of World Business, 378-393.
- Rauch, A. W. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future ntrepreneurial Theory & Practice, 1042-2578.
- Ritter, T. (2006). Communicating firm competencies: Marketing as different levels of translation. Industrial Marketing Management, 1032-1036.
- Romijn, H., & Albaladejo, M. 2002. Determinants of İnnovation Capability İn Small Electronics and Software Firms İn Southeast England. Research Policy, 31(7), 1053–1067.
- Slater, S. F. and Narver J. C, (1995). Market Orientation and the Learning Organization. Journal of Marketing, 59 (July), 63-74
- Tutar, H., Nart, S., & Bingöl, D. (2015). The Effects of Strategic Orientations on Innovation Capabilities and Market Performance: The Case of ASEM. Procedia-Social and Behavioral Sciences, 207, 709-719.
- Vorhies, D.W., Morgan, R.E. and Autry, C.W. (2009). Product- Market Strategy and Marketing Capabilities of the Firm: Impact on Market Effectiveness and Cash Flow Performance. Strategic Management Journal, 30, 1310-1334.
- Zehir, C., Köle, M., & Yıldız, H. (2015). The mediating role of innovation capability on market orientation and export performance: An implementation on SMEs in Turkey. Procedia-Social and Behavioral Sciences, 207, 700-708.