



A Paradigmatic Model on the Role of Electronic Marketing Capabilities in Promoting Iranian Carpet Export Capacity

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Abstract

The purpose of this study is to investigate the role of e-commerce marketing capabilities in enhancing Iranian carpet export capabilities via a paradigmatic model. In fact, the present study seeks to identify various factors that may influence the role of electronic marketing capabilities in promoting Iranian carpet export capacity. The identified strategies obtained from the paradigmatic model in this study are ranked in order to develop an understanding of the strength of their effects on the outcomes of e-marketing at the international level. In terms of research philosophy, the present study is based on interpretive paradigm and is considered an applied-developmental research in terms of research orientation. The data were collected using semi-structured interviews and a standardized questionnaire. The study population consisted of experts and managers of the carpet industry in Iran, who were selected using purposive sampling. Data analysis was carried out using theme analysis approach in MAXQDA software, and quantitative data were analyzed using interpretive structural modeling in Excel software. The main finding of the present study is to introduce a paradigmatic model of the role of e-commerce marketing capabilities in promoting Iranian carpet export capability. This model identifies and introduces contextual, causal, strategic, and intervening factors as well as the implications of developing e-marketing capabilities with the primary concern of promoting the country's carpet export capabilities. In addition, in the quantitative

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phase of the study, thirteen strategies affecting two categories of short-term and long-term outcomes were ranked based on the strength of their impact on outcomes.

Keywords *Marketing Capabilities; E-Commerce; Export; Carpet; Theme Analysis; Fuzzy Interpretive Structural Modelling (FISM)*

Introduction

The importance of exports in current global markets is undeniable. Exporting is one of the crucial ways a company can interact with and participate in international markets. Exporting is expected to grow dramatically in future as a result of recent developments in communication, transportation, and information technology. Despite remarkable developments in electronic commerce (e-commerce) technologies, there has been few studies to examine the application of these technologies by exports to enhance their exporting efficiency. E-commerce is considered as one of the most radical developments in the last twenty years, which has prompted a revolutionary change in the world trading practices creating customer-oriented supply chains, expanding customer services, increasing returns and revenues, and decreasing costs (Gregory et al,2018).Companies located in different countries tend to export their products due to domestic markets saturation or foreign markets attractiveness. According to Keegan (2011), some of the common export-related problems that companies typically face include sales promotion difficulties (e.g. advertising, packaging, vendor activity, marketing information, and coordination of distribution) and the problem of gaining information on foreign markets (e.g. identification and selection of markets, trade restrictions, and foreign competitions). Due to the competitive nature of global markets, there are barriers that potentially impede entry into export markets and gaining desired results. Exporting companies struggle to overcome these barriers and improve their export

performance. Iranian carpet, especially of the handwoven type, enjoys outstanding cultural and artistic characteristics and has always had a niche in Iran's non-oil export basket. For long, carpet was the primary means of importing currency to the country accounting for 7% of the total employment and providing for livelihoods of several million people in Iran. Carpet industry is one of the most potent industries second to the petrochemical industry. Unfortunately, Iranian carpet has seen a fragile comedown in the arena of global competitions due to organizational, structural, administrative, manufacturing, commercial and business deficiencies. Besides, inattention to the principles of marketing and trade, that include the manufacturing process as well, has posed serious risks to the competitive advantage of Iranian carpet at the domestic and international levels. Successful experiences of other countries inform of the realities of the business environment and other key factors. Considering the researchers' emphasis on the capabilities of the Internet and information technologies in international activities and the scarcity of research on the role of e-commerce marketing capabilities in promoting Iranian carpet exports, the present study aims to provide a paradigmatic model via a combined approach based on expert opinion. The model may contribute to carpet industry managers' understanding of scientific developments in e-commerce and provide a practical and scientific foundation for boosting Iranian carpet exports. The effects of strategies on outcomes will be analyzed based on the strategies and outcomes identified from the model using fuzzy interpretive structural modelling (FISM). To this end, strategies are ranked based on their effects on outcomes in order to identify the most effective strategies.

Theoretical Foundations and Research Background

One of the subsets of e-commerce is e-marketing. Some companies have successfully used e-marketing to both earn substantial revenues and gain competitive advantage in the domestic and international markets. Due to a dramatic boost in online shopping and sales over the last years, e-marketing activities have attracted attentions (Chen & lin, 2013). E-marketing not only provides opportunities but also lifts considerable threats. E-marketing, however, requires the establishment of e-commerce infrastructure in organizations and the society at large. It also requires that managers and staff at the marketing and sales departments nurture a thorough understanding of the principles and processes of e-marketing (Bigham & Doaie, 2015). Marketing capabilities can be defined as a set of complex resources and skills in marketing emanating from the process of acquiring knowledge and integrating it with extended values and norms through organizational processes. Research has shown that e-marketing capabilities exert positive impacts on export outcomes of a company via such activities as marketing research and marketing network (Peteraf & Bergen, 2003). For example, the Internet provides quick access to quality marketing information across the world – information that supports corporate decision-making, facilitates internal and external relations, develops marketing capabilities, and exerts a positive effect on corporate performance through e-commerce and online sales (Bianchi & Mathews, 2016). Some researchers contend that e-marketing capabilities positively affect the international performance of exporters (Moon & Jain, 2007). Moreover, researchers have reported a significant positive correlation of developed e-marketing activities with market growth (Mathews et al., 2016), companies' performance at industrial markets (Chung et al., 2016), and their demonstrated competitive intelligence (Carvalho et al., 2019). A comparison of known marketing capabilities between international and

general marketing reveals a number of seven marketing capabilities that have proved unique in studies on international markets and that can be underscored as international marketing capabilities (Morgan et al., 2018):

- Product innovation capability of multinational companies (Sheng et al., 2015)
- Global brand management capability (Matanda & Ewing, 2012)
- Capabilities that are extractable and discoverable from intra- and extra-organizational resources (Lisboa et al., 2011)
- International customer support capability (Khavul et al., 2010)
- Adaptability (Lu et al., 2010)
- Optimal competition at the local market (Wu et al, 2007)
- Capability of global management of accounts and finances (Shi et al., 2005)

Many researchers such as Mathews et al (2015) have shown that international marketing capabilities, as the vital corporate capabilities contributing to sustained presence at highly competitive international markets, are profoundly influenced by the application of new information and communication technologies in marketing, which ultimately leads to market growth of companies in such environments. Thus, companies' use of e-marketing, especially in complicated and ambiguous markets, is a key approach to success in markets. Surveys show that handwoven carpet marketing in Iran is barely done scientifically, and the marketing practice for this invaluable product is almost traditional. Customers are typically sought for after the carpet is produced. There is scarcity of research on handwoven carpet marketing in Iran. A study reported that common practices are traditional in Iranian handwoven carpet advertising and marketing, which is not suitable for global markets. Since Iranian handwoven carpet has long been traded in the global markets, it requires supportive advertising to maintain its status in the markets. This in turn requires all-out coordination in advertising,

responding to customer needs, understanding changes in customer groups, control of competitors' behavior, and use of new methods of trading. Some of the problems in marketing, supply, and customer service in global markets have created grave difficulties for Iranian handwoven carpet industry. Thus, carpet production and export have waned in recent years and held a lower place vis-a-vis foreign competitors. Considering the fact that Iranian handwoven carpet has had no change in either quality or price, and foreign carpets have no clear advantage over Iranian carpet in terms of quality, design, craftsmanship, and price, the potential problems may lie in a lack of advertising and marketing as well as insufficient training of marketers. Deficient marketing in carpet industry has played an important role in the comedown of handwoven carpet export. The major problems with Iranian carpet industry are political and economic sanctions as well as insufficient advertising and marketing to increase exports and attract customers, that is, market and product development strategy (Saeedi & Haghshenas, 2011). Marketing and advertising are necessary for handwoven carpet industry. New marketing practices via information technology can alleviate problems in handwoven carpet industry. In the current super-competitive world, every organization needs to use e-marketing techniques to guarantee its survival. Inattention to the rapid development of information technology particularly e-marketing, adherence to traditional marketing practices in the digital age, and disregard for new markets have posed serious problems to the handwoven carpet industry. Some justifications for the use of e-marketing practices in carpet trade are as follows:

- Websites and chatrooms can enhance the credibility of handwoven carpet brand. Websites can significantly win the trust of potential customers. A professional design, good pictures with annotations,

relevant information on products, and contact information builds trust in the company (Osat Hazrati, 2008).

- Websites provide new ways of access to the companies at any time from everywhere. Good websites provide the handwoven carpet market with ample opportunities so that people, who might have otherwise been barred from the market, can readily reach the market.
- New technologies facilitate new customers' access to the market. Users can easily introduce a website to other potential customers. Web addresses are remembered easier than phone numbers. Besides, various contact modes makes it easy to communicate (Bigham& Doaie, 2015).
- Selling handwoven carpet via an online shop is an excellent way to increase sales because it offers a permanent, easy-to-reach window that costs much less than a traditional store. Additionally, more people will be able to access the shop. Sales information on the website increases the chance that people are prompted to click "buy" (Yazdani, 2015).
- Electronic advertising adds to the value of advertisements. Adding the website address in advertisements, business cards, and company signature is a good way to attract customers. Giving the website address to people helps them react to the website advertisements whenever they hear about it or see website advertisements. It is easier to visit a website than to write a letter, go to a store in person, or even make calls. People can easily receive website information and advertisements. It is easier to visit a website, as there are no formalities or pressures on the visitors (Bigham& Doaie, 2015).

Considering the above, one can assume that various channels of e-marketing in carpet export activities may both draw companies close to customers and their interests and keep down the costs of creating, maintaining and developing company-customer relations. Therefore, it is crucial to enhance the use of e-marketing in carpet exports because the industry is in pressing need to identify oneself and reintroduce its qualities and capabilities in various markets in competition with emerging producers in Turkey, China, and India. Some research shows that use of e-marketing and new approaches to e-marketing are key factors contributing to sales and exports of Iranian carpets in domestic and international markets. Yazdani (2015) contend that digital marketing activities may considerably contribute to exports in the Iranian carpet industry. These findings underscore the use of diverse e-marketing channels in carpet export activities. The present study seeks to investigate the factors affecting e-marketing practices in Iranian carpet export activities. As the use of e-marketing and its diverse channels and tools exert positive effects on enhanced carpet sales at domestic and international markets, the present study aims to investigate the factors that may support effective use of these tools and channels in carpet exports. Understanding interests, buying habits, and the factors affecting buying behavior play vital roles in market system and market studies. Carpet industry is no exception to this rule. Most of the previous studies on carpet marketing and exports emphasize that quality relations between exporting companies and natural/industrial customers play a key role in promoting export performance (Siyavooshi et al,2018). Considering the advantages and characteristics of e-marketing, one can confirm the effective role of this new approach to marketing in developing the quality of relations between carpet companies and international customers. Abbasi and Kazemi (2018) asserted that use of media, including social media, is one of the best ways to promote Iranian

handwoven carpet brand in foreign markets. Therefore, it is necessary to study the factors affecting e-marketing in carpet exports meticulously.

Export performance is the outcome of a company's activities at export markets. Increased exports, globalization of products and services, and internationalization of companies add to the importance of export performance of exporting companies. Considering the importance of export performance, different studies are conducted in different countries addressing the factors contributing to export performance in different industries; each study has examined different variables that researchers assumed important in affecting export performance either directly or indirectly. Since exporting is a strategic choice for a company, the goals can vary among companies, industries, national statuses, and timeframes. For example, in their analysis of 100 research articles on exports Katsikeas et al (2000) identified 42 different performance indicators. Sousa (2004) also identified 42 performance indicators in a study on export-related research output. Export performance measures are commonly divided into three groups: economic and financial criteria, non-economic and non-financial criteria, and general criteria. Economic criteria are further divided into sales-related criteria, profit-related criteria, and market-share-related criteria (Beleska, 2014). Non-economic criteria are subdivided into market- and product-related criteria. Studies have addressed market-related criteria more than other criteria. Product-related criteria pertain to the volume of new products exported, export ratio to product categories, and ratio of exports to product development. Some researchers have also drawn on the general approach to measure export performance. Export managers' satisfaction with overall outcome-oriented export performance is one of the general criteria (Mosleh et al, 2017). Another general criterion is the perceived export success and the degree to which export goals are met. According to the Iran National Carpet Center, the value (in USD) and

weight of handwoven carpet exports increased by 18% in 2017 as compared with 2016. However, the weight of handwoven carpet exports decreased by minus 6 percent. According to the center, 28 out of the 72 importing countries imported over one million in USD of handwoven carpets from Iran in 2017, with the USA ranking as the largest importer buying in a carpet value of 126 million in USD and a share of about 30% of total imports. Statistics demonstrate a necessity to increase Iranian handwoven carpet sales. Researchers believe that new marketing techniques may prove facilitative in this regard. It is thus necessary to conduct research with a comprehensive approach and an integrated model. The research methodology and the results leading to the development of the paradigmatic model are discussed in the following section.

Research Methodology

The study adopted a mixed-method approach to address the questions. Qualitative and quantitative data were used to answer the research questions. The process involved data collection, analysis, and integration of quantitative and qualitative data. The qualitative approach, using interview, was adopted to develop a paradigmatic model of the role of e-commerce marketing capabilities in boosting Iran's carpet exports by means of thematic analysis (identifying causal, contextual, and intervening factors as well as strategies and outcomes of using e-marketing in carpet exports). Moreover, interpretive structural modeling (ISM) was used to rank and study the effect of identified strategies on the role of e-marketing in carpet industry. Warfield (1974) introduced ISM as a tool to analyze complex systems. In this method, the analysis of systems is done through identification of the underlying interactive relations among certain components of the system and creation of a hierarchical structure of the relations among these components (Fu et al,

2017). Digraphs theory is used in ISM method to introduce the system units and the interactive relations among them. Moreover, matrix operation theory and/or computer aided calculation are used to develop an interpretable structural model (Chang et al, 2013). Semi-structured interview was used to collect the data, whereby the same questions, phrased in advance, were put to all respondents who were free to offer their answers in their desired ways. In the quantitative phase, a standardized questionnaire was used to rank the impact of identified strategies. In this regard, fuzzy interpretive structural modelling (FISM) was used to rank the potential effects of identified strategies on the outcomes of boosting e-commerce marketing capabilities in Iranian carpet exports. The questionnaire consists of a standard item examining the strength of the effect of factor A on factor B. The research population, from whom the quantitative and qualitative data were collected, consisted of marketing experts, carpet industry managers, and especially experienced experts of carpet export. The reason for selecting such a research population was that they had a good command of the various marketing and sales activities in carpet industry, and that they knew of various aspects of those activities in the international environments of marketing and sales. The researcher tried to reach and interview the most elite experts of e-marketing in Iran's carpet industry. The panel of experts were selected using snowball sampling method whereby future sample members were chosen by the aid of the earlier members so that the sample grew larger and larger like a snowball. Therefore, in a mixed-method research with interview and questionnaire tools, the subjects are asked if they suggest other people for interview, and the sample grows accordingly. In this study, the researcher selected future members by the aid of existing panel members. In the quantitative phase, the researcher sought the opinions of seven experts. In the qualitative phase, the seven experts were also interviewed as the sources of qualitative data. The researcher conducted semi-structured interviews with qualified experts to collect the research data. All experts had a history of engagement in carpet export activities and were aware of the technicalities of those activities. Four of the experts had directly experienced e-marketing activities in different firms and had

objective and practical knowledge of the contributing factors and outcomes of using e-marketing. The interviews were continued to the point of theoretical saturation until no new data were obtained in the seventh interview. In order to assure theoretical saturation, the researcher interviewed two more experts only to obtain no new data. Thus, the seven interviews were the basis for research data, and the snowball sampling was terminated. The validity of the quantitative research tool was assured by examining construct validity, internal validity, interpretive validity, and descriptive validity. The reliability of the tool was examined via review during the coding practice and informed interrater analysis in order to assure the coding accuracy. Besides, a second interviewer conducted parallel interviews, and the obtained data were cross-checked and compared to assure the reliability of the tool. There was no need, though, to examine the validity and reliability of the questionnaire as it comprised a single general question.

Findings

As discussed above, the panel of experts freely expressed their opinions about the interview questions on the role of e-commerce marketing in promoting carpet export capabilities. During interviews, complementary questions were asked from the interviewees based on the ideas communicated by the respondents. The interviews took between 45 and 60 minutes depending on the interviewees' openness and inclination to respond. The researcher tried to have the interviewees take their time answering the questions. Following every interview, the audio records and researcher notes were transcribed and arranged in Microsoft Word to make the future analyses easier. The data were then analyzed in MAXQDA software using thematic analysis approach in order to lay the foundation of the paradigmatic model of research (emerged from experts' opinion) for the carpet industry. The classification of open codes to concepts and cataloguing of concepts into categories were done based on the extracted themes and the codes dug out of the themes in the process of

developing the paradigmatic model of e-commerce marketing in Iran's carpet industry and extracting open codes. Eventually, different components of the paradigmatic model were identified, including causal, contextual, and intervening factors as well as strategies and outcomes of using e-commerce marketing in carpet exports. The paradigmatic model may be developed based on these factors. Some of the data tabulations are presented in the following tables. Figure 1 illustrates the paradigmatic research model developed from open codes, concepts, and categories. Table 1 shows the final categories extracted from open codes, integration of codes into concepts, and eventually assimilation of concepts pertaining to the first research question: "what in your opinion are the causal conditions for the carpet industry to use e-commerce marketing capabilities in promoting export capabilities?" The results are illustrated in the table. Causal conditions are the conditions affecting axial categories and are necessary but not sufficient conditions to achieve the outcomes of strategies. In other words, they are absolutely general conditions directly affecting the axial category (that is, the role of e-marketing in prompting carpet export capabilities) and provide foundations for adopting strategies to this goal.

Table 1

Ultimate Categories of Causal Factors Affecting the Role of E-marketing in Promoting Iran's Carpet Export Capabilities

Document Name	Code	Start	End	Section	Indicator
1	Causal factors/managers' support of e-marketing	5	5	Iranian silk carpet should resuscitate its originality and status by enjoying governmental and institutional support, such as the Iran National Carpet Center and	Managers' support of e-marketing

Document Name	Code	Start	End	Section	Indicator
1	Causal factors/ Branding in cyberspace	5	5	Chamber of Commerce, of e-marketing activities in carpet companies through either website developments or social media coverage. This quality, however, has not yet been branded for Iran so that customers are not convinced to pay a high price for the product. Iranian silk carpet is excellent for use in damp environments and does not wear out while Armenian and Turkish carpets do not enjoy these characteristics.	Branding in cyberspace
2	Causal factors/ Branding in cyberspace	21	21	China, India and even Pakistan, having abundant and cheap labor, have succeeded to surpass Iran by reducing the quality and price of their products. Thus, it is necessary to use e-commerce and establish the quality of Iranian handwoven carpet as a global brand.	Branding in cyberspace
1	Causal factors/ Better advertising of quality in cyberspace	5	5	The knots, ties, and quality of Iranian carpet should be advertised because it is very expensive due to its superb quality. Therefore, it is necessary to explain the quality and high prices of Iranian carpet to the potential customers via e-marketing advertisements.	Better advertising of quality in cyberspace

Document Name	Code	Start	End	Section	Indicator
2	Causal factors/ Better advertising of quality in cyberspace	21	21	China, India and even Pakistan, having abundant and cheap labor, have succeeded to surpass Iran by reducing the quality and price of their products. Thus, it is necessary to use e-commerce and establish the quality of Iranian handwoven carpet as a global brand.	Better advertising of quality in cyberspace
3	Causal factors/ Better advertising of quality in cyberspace	18	18	In competition with other countries, the advantages of Iranian carpet should receive due attention as it is much more expensive – advantages such as quality; natural and non-chemical dyeing; high endurance; and diversity of design, pattern, and color.	Better advertising of quality in cyberspace
4	Causal factors/ Identification of international customers	6	6	Identification of potential customers in global markets, their needs and desires in terms of pattern, color, dimensions, and row count size will contribute to the reputation and promotion of Iranian carpet in global markets.	Identification of international customers

Source: Researcher's findings

Table 2 shows the final categories extracted from open codes, integration of codes into concepts, and eventually assimilation of concepts pertaining to the second research question: “what in your opinion are the intervening conditions for the carpet industry to use e-commerce marketing capabilities in promoting export capabilities?” The results are illustrated in the table. Intervening conditions are the general contextual conditions affecting

strategies. In other words, contextual conditions are considered as general factors directly affecting e-marketing promotion strategies in Iran's carpet exports and providing sufficient conditions for the development of strategies. Analyses of experts' opinions revealed six dimensions including the extension of marketing knowledge in firms, international relations and communication, reduction of export costs, reduction of manufacturing costs, developing modern thinking, and entry into new markets.

Table 2

Categories of Intervening Factors Affecting the Role of E-marketing in Promoting Iran's Carpet Export Capabilities

Document Name	Code	Start	End	Section	Indicator
2	Intervening factors/ Extension of marketing knowledge in firms	16	16	Nowadays, without having modern knowledge of marketing activities and with dominance of traditional orientations in carpet industry especially handwoven carpet, one cannot expect a niche for e-marketing in the industry. Thus ,development of knowledge especially new marketing knowledge can increase the perceived urgency of IT-based marketing approaches.	Extension of marketing knowledge in firms
3	Intervening factors/ Extension of marketing knowledge in firms	4	4	Besides, since handwoven carpet is a luxurious good and is not a basic need for consumers, it should be traded in a calm and stress-free condition through using new marketing tools and	Extension of marketing knowledge in firms

Document Name	Code	Start	End	Section	Indicator
				presenting in well-known websites.	
4	Intervening factors/ International relations and communication	5	5	Good political relations and communications as well as political consultations in introducing cultural, ethnographic, and tourism issues. National and ethnographic customs and image of Iranian lifestyle among cultural and sociological issues.	International relations and communication
3	Intervening factors/ International relations and communication	4	4	Besides, since handwoven carpet is a luxurious good and is not a basic need for consumers, it should be traded in a calm and stress-free condition through using new marketing tools and presenting in well-known websites.	International relations and communication
5	Intervening factors/ Reduction of export costs	4	4	From economic perspective, we should reduce the costs from production to exports. We should support weavers and exempt exporters from taxes. This will increase their motivation to use new technologies in manufacturing, marketing, and sales.	Reduction of export costs
5	Intervening factors/ Reduction of manufacturing costs	4	4	From economic perspective, we should reduce the costs from production to exports. We should support weavers	Reduction of manufacturing costs

Document Name	Code	Start	End	Section	Indicator
5	Intervening factors/ Developing modern thinking	2	2	and exempt exporters from taxes. This will increase their motivation to use new technologies in manufacturing, marketing, and sales. Identification of the needs and desires of the customers at target markets, familiarizing merchants and manufacturers with digital marketing techniques, e-commerce, international trade, and overall development of advertisements and digital marketing can alleviate the problems of the industry and raise Iranian carpet status among the world-class carpet exporters.	Developing modern thinking
6	Intervening factors/ Developing modern thinking	6	6	Holding training classes by trade unions to teach cyberspace literacy can well change traditional thinking in carpet industry managers and align them with new technologies.	Developing modern thinking
6	Intervening factors/ Developing modern thinking	6	6	Building websites and blogs for members to introduce and sell the art of carpet to the international community is one of the main steps in modernizing carpet industry managers to promote the use of new marketing approaches.	Developing modern thinking

Document Name	Code	Start	End	Section	Indicator
6	Intervening factors/ Developing modern thinking	6	6	Employing technology, developing carpet industry, and adopting a modern approach against the radical traditional view of the carpet industry	Developing modern thinking
7	Intervening factors/ Entry into new markets	5	5	In order to compensate for the multitude of problems in handwoven carpet industry, one should work out viable solutions including entry into new markets via e-marketing and electronic advertising.	Entry into new markets
7	Intervening factors/ Entry into new markets	5	5	Emerging markets such as Russia, China, Belarus, and South Africa can help boost Iran's carpet exports. However, success in these markets requires sustained advertising and use of new marketing tools.	Entry into new markets

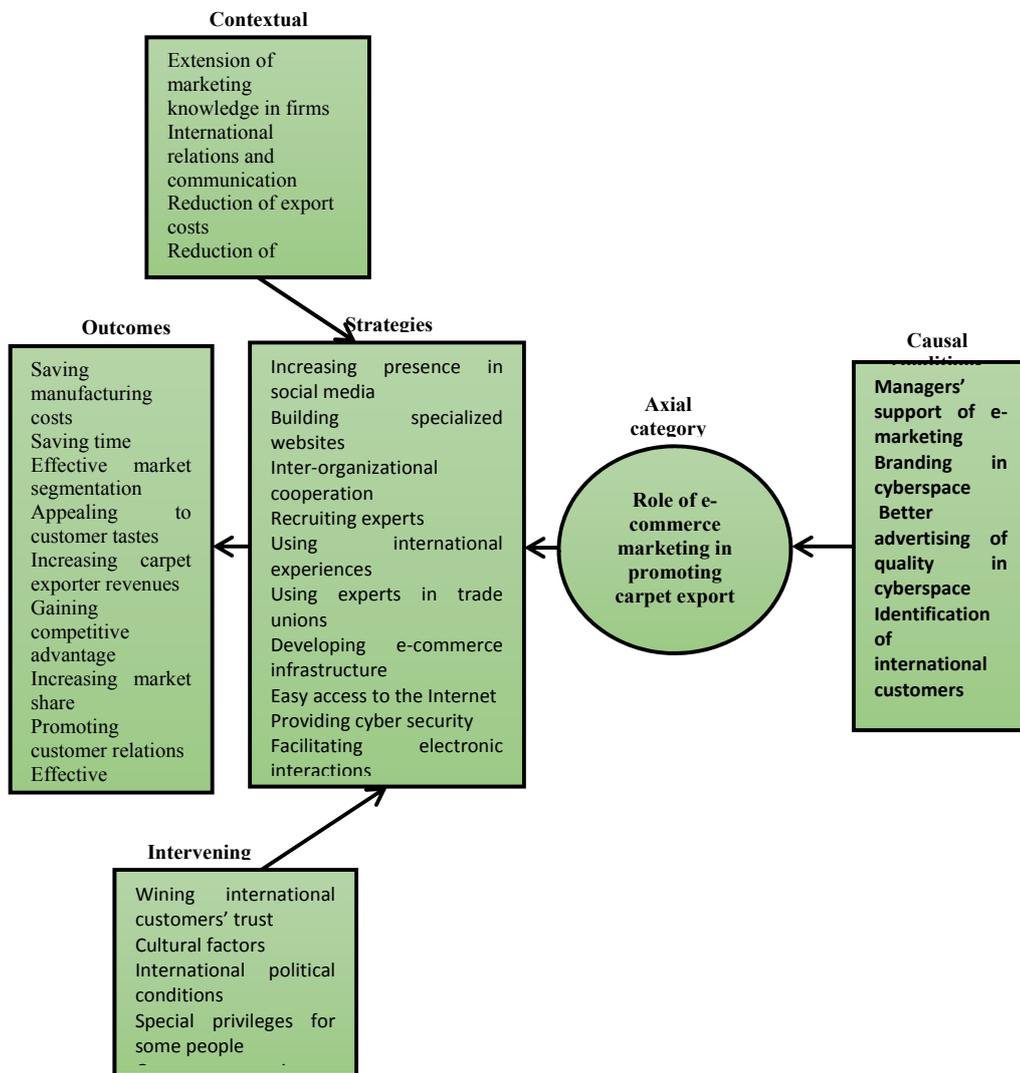
Source: Researcher's findings

The following results were obtained with regard to contextual conditions and based on the ultimate categories extracted from open codes, integration of codes into concepts, and eventually assimilation of the concepts pertaining to the third research question: "what in your opinion are the contextual conditions for the carpet industry to use e-commerce marketing capabilities in promoting export capabilities?" Contextual conditions are especial conditions affecting strategies. These conditions are commonly out of firms' control and are systematic and underlying factors in the environment where a phenomenon operates. Along with intervening factors, contextual factors form the foundation of axial category strategies. Again, contextual factors, as the

general and environmental factors governing the activities of carpet export companies, play a key role in developing strategies for better e-marketing activities in Iran's carpet exports. Analysis of the interviews with research participants revealed six dimensions as contextual factors including international customers' trust, cultural factors, international political conditions, special privileges for some people, and government services to manufacturers. With regard to the outcomes of using e-commerce marketing in carpet export, the ultimate categories extracted from open codes, integration of codes into concepts, and eventually assimilation of concepts helped answer the fourth research question: "what in your opinion are the outcomes of using e-commerce marketing capabilities in promoting carpet export capabilities (i.e. outcomes of using e-commerce marketing capabilities in export activities)?" Outcome is the result of applying a strategy. Analysis of experts' opinions revealed that the outcomes of using e-marketing in Iran's carpet export activities included saving manufacturing costs, saving time, effective market segmentation, appealing to customer tastes, increasing carpet exporter revenues, gaining competitive advantage, increasing market share, promoting customer relations, effective management of marketing costs, and attracting foreign investors. Considering the strategic factors contributing to the development of e-commerce marketing in Iran's carpet exports, the ultimate categories extracted from open codes, integration of codes into concepts, and eventually assimilation of concepts helped answer the fifth research question: "what in your opinion are the key strategies of using e-commerce marketing capabilities in promoting Iran's carpet export capabilities?" Strategies are operational plans developed to govern activities towards a certain goal. Analysis of interviews with research participants helped identify 13 key strategies contributing to effective e-marketing capabilities in carpet export including increased presence in social media, building specialized websites,

inter-organizational cooperation, recruiting experts, using international experiences, using experts in trade unions, developing e-commerce infrastructure, easy access to the Internet, providing cyber security, facilitating electronic interactions, providing training on new marketing approaches, smart use of governmental support, and creating data banks of carpet export. The paradigmatic research model is developed as follows based on the dimensions identified for causal, contextual, and intervening factors as well as strategies and outcomes of using e-commerce capabilities in Iran's carpet export activities.

Figure 1
Paradigmatic Model of the Research



The quantitative phase of the research included categorization of the outcomes of developing e-marketing capabilities in carpet exports into short-term and long-term outcomes. Moreover, the strategies were ranked in order to identify the effect of strategies on outcomes. Based on the results of the paradigmatic model, economic or short-term outcomes involve reduction of manufacturing costs, reduction of marketing costs, increasing revenues, and gaining competitive advantage. Stakeholder-oriented or long-term outcomes include effective market segmentation, appealing to customer tastes, increased market share, promoting customer relations, saving time, and attracting foreign investment. Therefore, FISIM was carried out twice to produce ranked models of strategies for the two types of outcomes. Although long steps are taken to do FISIM, the results are discussed briefly. The fundamental step is collecting data from experts by asking a standard question. This step constitutes identifying the strength of interactive relations among the 13 strategies and developing a Structural Self-Interaction Matrix (SSIM). The strength of relations is determined by paired comparisons between factors in pairs. Table 3 illustrates the strength of relations identified via experts' objective judgements and opinions based on fuzzy linguistic scale.

Table 3

Verbal Expressions to Identify the Strength of Interactive Relations

Verbal Expressions	Triangular Fuzzy Numbers
Very strong	(0.75,1,1)
Strong	(0.5,0.75,1)
Moderate	(0.25,0.5,0.75)
Weak	(0,0.25,0.5)
Very Weak	(0,0,0.25)

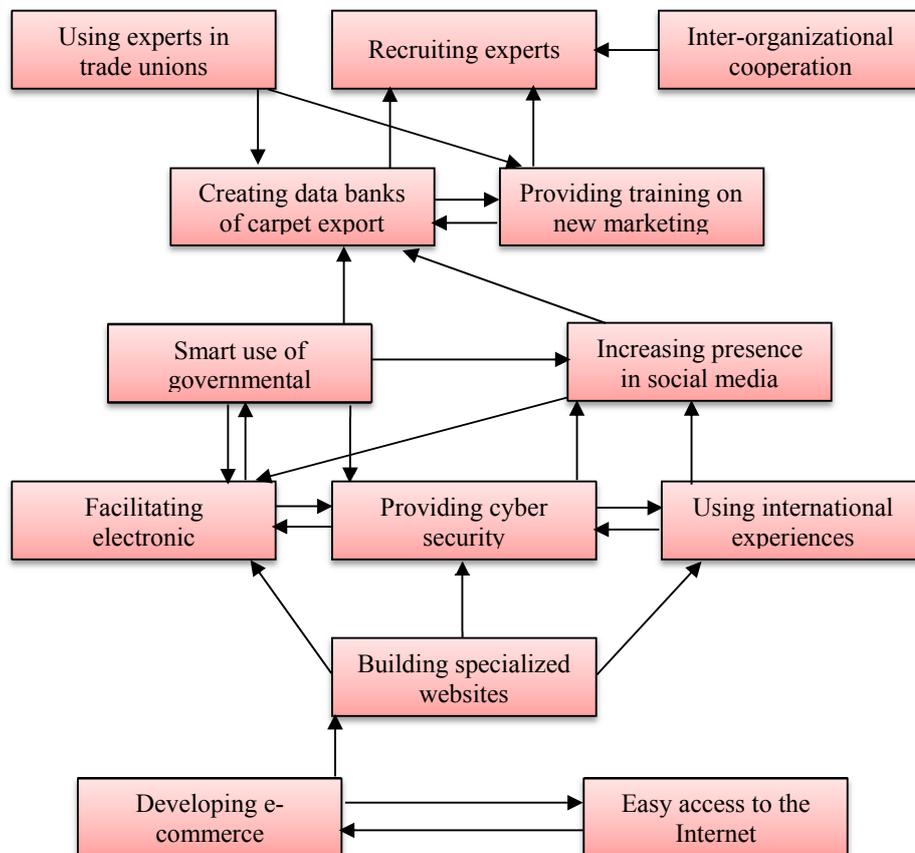
Following integration, normalization, and defuzzification of experts' opinion matrix, a threshold was identified for the matrix, and thus weak relations (elements smaller than the threshold) were removed. The result is called an incidence matrix. The final reachability matrix is obtained by applying the rule of transferability. This matrix was used in FISM to rank the strategies. Table 4 illustrates a sample of such ranking.

Table 4
Strategy Ranking in the Fourth Phase

	Input Set	Output Set	Common Set	Ranking
S2	8,7,2	10,9,5,2	2	-
S5	10,9,8,7,5,2	10,9,8,7,5	10,9,8,7,5	4
S7	9,8,7,5	10,9,8,7,5,2	9,8,7,5	-
S8	10,9,8,7,5	10,9,8,7,5,2	10,9,8,7,5	-
S9	10,9,8,7,5,2	10,9,8,7,5	10,9,8,7,5	4
S10	10,9,8,7,5,2	10,9,8,5	10,9,8,5	4

The table shows strategy ranking in the fourth phase, that is, strategies 5, 9, and 10 are at the fourth level. One, however, should note that a smaller number of level (rank) indicates a greater importance of the factors at that level. The interpretive structural modeling of the effects of strategies on short- and long-term outcomes were determined based on the rankings. As an example, the model of ranked strategies for short-term outcomes is illustrated below.

Figure 2
Ranked Strategy Model for Short-term Outcomes



Based on this model, developing e-commerce infrastructure and easy access to the Internet are two key strategies with the highest caliber that can effectively contribute to short-term outcomes of using e-commerce marketing capabilities in Iran's carpet export activities. Building specialized websites ranks second in terms of importance. The arrows in the figure indicate internal

strategy relations, implying that effective implementation of some strategies affects other strategies, or implementation of a strategy is a prerequisite of others. With regard to the effect of strategies on long-term outcomes, the results showed that increasing presence in social media is an underlying factor and is the most effective strategy in achieving stakeholder-oriented outcomes of developing e-commerce marketing capabilities in promoting Iran's carpet export capabilities. Next are building specialized websites and providing cyber security as the most important strategies.

Discussion and Conclusion

The importance of exporting handwoven carpets as one of the Iran's major non-oil export opportunities requires researchers to devise systematic, applied models to improve carpet export performance in domestic and foreign markets. Besides, one of the key aspects of successful export performance of carpet firms is effective marketing practice. As discussed above, various channels and tools of e-marketing are the major capabilities that companies can use to improve their performance in different markets. However, despite the importance of e-marketing in Iran's carpet industry, the researcher could not identify any studies addressing the contribution of e-marketing capabilities to carpet exports. A paradigmatic model accounting for the role of e-commerce marketing capabilities in promoting Iran's carpet export capabilities was developed through adopting a qualitative analytic approach. The dimensions of the model hinged on the research questions. The research questions addressed causal, contextual, and intervening factors as well as strategies and outcomes of developing e-commerce capabilities in carpet export activities. The conditions and factors were identified and presented in the paradigmatic model based on the results of interviewing experts, extracting open codes using MAXQDA software, and analyzing codes to extract concepts and

categories. According to the model, carpet export firms can adopt 13 general strategies to develop the role of e-commerce marketing in their export activities. The strategies in turn are subject to contextual and intervening factors. That is, the firms should pay special attention to these factors in developing their e-commerce marketing activities to reach their export markets. These are underlying factors that require special attention. The results revealed four causal factors. As discussed above, causal factors are conditions that affect the axial category and provide necessary but not sufficient conditions to achieve the outcomes of strategy implementation. These four factors occupy a crucial role in developing e-commerce in carpet export activities. They include managers' support of e-marketing, branding in cyberspace, better advertising of quality in cyberspace, and identification of international customers. Carpet manufacturing and export companies may draw on these underlying factors to effectively employ e-commerce marketing capabilities especially in complex international markets. Eventually, the results showed that effective use of e-commerce marketing capabilities in carpet exports could lead to ten distinct outcomes including appealing to customer tastes, gaining competitive advantages, and promoting customer relations, among others. The results of quantitative analysis demonstrated that developing e-commerce infrastructure and easy access to the Internet lie at the foundation, the sixth level, and are the major strategies contributing to e-commerce marketing capabilities in Iran's carpet export activities. With regard to the effect of strategies on long-term outcomes, increasing presence in social media lies at the foundation, the seventh level, and is considered as the major strategy contributing to stakeholder-oriented outcomes of developing e-commerce marketing in Iran's carpet exports. As one of the main findings of the quantitative phase, the analyses showed that traditional and ineffective approaches to marketing were responsible for repression of Iran's

carpet industry in international markets compared with foreign competitors. It is thus necessary to remedy the deficiency by adopting new marketing approaches. Doaie et al. (2013) asserted that e-marketing should replace traditional marketing in order to facilitate business affairs and handwoven carpet exports. Bigham and Doaie (2015) on the feasibility of e-marketing in handwoven carpet market, contended that traditional approaches governing handwoven carpet market at domestic and international levels were the major barriers to the development of electronic approaches to carpet marketing. The present findings revealed the role of strategies such as training on new marketing approaches, which is consistent with the findings of Bigham and Doaie (2015). Building specialized websites and systematic use of international experiences were two important strategies identified in the present study. These two findings were addressed earlier by Yazdani (2015) who studied dimensions of digital marketing in Iran's oil industry. They asserted that a lack of up-to-mark websites in oil marketing and sales might crush hopes of industry development in future. The present findings also emphasized the role of using international experiences. Malik and Prasad (2015) maintained that increased presence in social media resulted from the interactions of multiple factors including governmental support, development of training and organizational capacities in firms, which are consistent with the present findings of the paradigmatic model. In their study on Iran's carpet industry, Tabatabaei et al (2014) showed that financial and non-financial governmental support in the form of providing training on modern marketing and sales would contribute to export performance of carpet firms. This is consistent with the present findings on the role of governmental support in the paradigmatic model. In a study on key performance indicators contributing to carpet export capabilities in India, Guerra and Toker(2012) emphasized, among others, the role of increased presence in social media and

implementation of new approaches to production planning to reduce manufacturing costs. These are identified as a strategy and a contextual factor, respectively, in the paradigmatic model of the present study. Consistent with present findings, Gito and Kumar (2014) argued that effective market segmentation was a key outcome resulted from using new marketing approaches such as digital marketing in Indian handwoven carpet exports. Based on the results obtained from data analysis and the paradigmatic model, Iranian carpet exporters should engage in such activities as branding, top managers' support of e-marketing, advertising, and identification of international customers to pave the way for adopting strategies for better e-commerce marketing activities and to pursue the most effective strategies supporting e-commerce marketing according to internal and environmental factors. The results showed that carpet export firms should basically concentrate on international political conditions and smart use of governmental services to exporters, promoting modern thinking among managers and staff, and developing international relations with customers and partner companies. These strategies and concentrations may help implement e-marketing strategies in export markets.

References

- Abbasi R, kazemi Z.(2018). Identification of suitable promotional and promotional tools for promoting the handmade carpet brand in foreign markets. *goljaam*. 14 (33), 183-200.
- Beleska-Spasova, E. (2014). Determinants and measures of export performance—comprehensive literature review. *Journal of Contemporary Economic and Business Issues*, 1(1), 63-74.
- Bianchi, C., & Mathews, S. (2016). Internet marketing and export market growth in Chile. *Journal of Business Research*, 69(2), 426-434.

- Bigham, Z., Doai, H. (2015). The Feasibility of Implementing Electronic Marketing in The Fars Province Handmade Carpet Market. *New Marketing Research Journal*, 5(1), 1-20.
- Carvalho, W. D., Mustin, K., Hilário, R. R., Vasconcelos, I. M., Eilers, V., & Fearnside, P. M. (2019). Deforestation control in the Brazilian Amazon: A conservation struggle being lost as agreements and regulations are subverted and bypassed. *Perspectives in Ecology and Conservation*, 17(3), 122-130.
- Chang, A. Y., Hu, K. J., & Hong, Y. L. (2013). An ISM-ANP approach to identifying key agile factors in launching a new product into mass production. *International Journal of Production Research*, 51(2), 582-597.
- Chen, H. J., & Lin, S. H. (2013). Managerial optimism, investment efficiency, and firm valuation. *Multinational Finance Journal*, 17(3/4), 295-340.
- Fu, K., Xia, J. B., Zhang, X. Y., & Shen, J. (2017). System structural analysis of communication networks based on DEMATEL-ISM and entropy. *Journal of Central South University*, 24(7), 1594-1601.
- Gito, P. and Kumar, C. (2014). Export market's segmentation performance and marketing of Indian carpet industry: A BCG matrix approach, *Pacific Business Review International*, 6(11), 1-3.
- Gregory, G.D., Ngo, L.V., & Karavdic, M. (2019). Developing e-commerce marketing capabilities and efficiencies for enhanced performance in business-to-business export ventures. *Industrial Marketing Management*, 78, 146-157.
- Guerra-López, I., & Toker, S. (2012). An application of the impact evaluation process for designing a performance measurement and evaluation framework in K-12 environments. *Evaluation and program planning*, 35(2), 222-235.
- Katsikeas, C.S., Leonidou, L.C., & Morgan, N.A. (2000). Firm-level export performance assessment: review, evaluation, and development. *Journal of the Academy of Marketing Science*, 28(4), 493-511.
- Keegan, W. J. (2011). *Global Marketing Management*, Export marketing, 670 pages
- Khavul, S., Pérez-Nordtvedt, L., & Wood, E. (2010). Organizational entrainment and international new ventures from emerging markets. *Journal of Business Venturing*, 25(1), 104-119.
- Lisboa, A., Skarmeas, D., & Lages, C. (2011). Entrepreneurial orientation, exploitative and explorative capabilities, and performance outcomes in export

- markets: A resource-based approach. *Industrial marketing management*, 40(8), 1274-1284.
- Lu, Yuan, Lianxi Zhou, Garry Bruton, and Weiwen Li (2010), "Capabilities as a Mediator Linking Resources and the International Performance of Entrepreneurial Firms in an Emerging Economy," *Journal of International Business Studies*, 41 (3), 419–36.
- Malik, M. Rashid & Prasad, Rekha (2015). "Indian Carpet Industry after Trade Liberalization. Problems and Prospects", *Academic Journal of Economic Studies*, vol. 1(3), pages 79-87.
- Matanda, T., & Ewing, M. T. (2012). The process of global brand strategy development and regional implementation. *International Journal of Research in Marketing*, 29(1), 5-12.
- Mathews, S., Bianchi, C., Perks, K. J., Healy, M., & Wickramasekera, R. (2016). Internet marketing capabilities and international market growth. *International Business Review*, 25(4), 820-830.
- Moon, B. J., & Jain, S. C. (2007). Determinants and outcomes of internet marketing activities of exporting firms. *Journal of Global Marketing*, 20(4), 55-71.
- Morgan, N. A., Katsikeas, C. S., & Vorhies, D. W. (2012). Export marketing strategy implementation, export marketing capabilities, and export venture performance. *Journal of the academy of marketing science*, 40(2), 271-289.
- Mosleh, A., Bahreynizadeh, M., Karimi Ghahfarokhi, S. (2017). The effect of strategic orientation on export performance in the exportin company Bushehr. *New Marketing Research Journal*, 6(4), 125-140.
- Osat Hazrati, A. (2008). Surveying the influence of internet marketing in Iran's carpet industry export performance, MA Thesis, Faculty of Management, Islamic Azad University, Central Tehran Branch.
- Peteraf, M. A., & Bergen, M. E. (2003). Scanning dynamic competitive landscapes: a market-based and resource-based framework. *Strategic management journal*, 24(10), 1027-1041.
- Saeedi, N., Haghshenas, F. (2011). Categorizing the Driving Affecting Factors on Iran Carpet Industry competitiveness by Fuzzy Topsis Technique. *New Marketing Research Journal*, 1(1), 127-154.

- Sheng, M. L., Hartmann, N. N., Chen, Q., & Chen, I. (2015). The synergetic effect of multinational corporation management's social cognitive capability on tacit-knowledge management: Product innovation ability insights from Asia. *Journal of International Marketing*, 23(2), 94-110.
- Shi, H. H., Huang, C. J., Zhu, S. X., Yu, X. J., & Xie, W. Y. (2005). Generalized system of imposex and reproductive failure in female gastropods of coastal waters of mainland China. *Marine Ecology Progress Series*, 304, 179-189.
- Siyavooshi M, Ghafournia M, Vesali N. (2018). Investigating factors affecting the European union importers' buying decision making to buy Iranian handmade carpet: *goljaam*, 14 (33) ,125-144.
- Sousa, C.M.P. (2004). Export performance measurements: An evaluation of empirical research in the literature. *Academy of Marketing Review*, 2004 (9), 1-22.
- Tabatabaei, S. M., Ghane, M., Hamadani, A. Z., & Hasani, H. (2014). Modeling the functional compression properties of hand-knotted carpets using factorial design and response surface methodology. *Fibers and Polymers*, 15(9), 1977-1984.
- Warfield, J. N. (1974). Developing interconnection matrices in structural modeling. *IEEE Transactions on Systems, Man, and Cybernetics*, (1), 81-87.
- Wu, F., Yenyurt, S., Kim, D., & Cavusgil, S. T. (2006). The impact of information technology on supply chain capabilities and firm performance: A resource-based view. *Industrial Marketing Management*, 35(4), 493-504.
- Yazdani, N. (2015). Evaluating Effectiveness of Internet-Based Advertising in Iranian Carpet Market. *New Marketing Research Journal*, 5(1), 43-58.