

## Effect of Competitive Intelligence Dimensions on Effectiveness of Marketing Strategies: A Path Analysis Approach

Mohammad Bahrami Gahrui<sup>1\*</sup>, Zahra Omid<sup>2</sup>

<sup>1</sup> Ardestan branch, Islamic Azad University, Ardestan, Iran;

<sup>2</sup> Dolatabad Branch, Islamic Azad University, Isfahan, Iran

\*Email: [rm.search2011@gmail.com](mailto:rm.search2011@gmail.com)

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### Abstract

One of the features of new organizations is the accumulation of excessive knowledge on a competitive scale, so that the information enhancement in organizations and the need for their analysis and proper and logical use in organizational decisions within the last two decades has led to the emergence of a phenomenon called Competitive Intelligence. Competitive Intelligence is considered as a strategic management tool and also as one of the world fastest domains in business development. The objective of this article is to identify the impact rate and prioritization of the categories and components of competitive intelligence patterns together with the effectiveness of marketing strategies in order to increase awareness and provide a better recognition of operational and executive solutions. In this paper, after introducing a competitive intelligence pattern, we used a questionnaire to identify the pattern components impact on the effect of marketing strategies among the Food Industry staff in Sari who were selected by stratified random sampling. The statistical analysis has shown that quality differences, barriers to entry and price sensitivity components and also competitive rivalries category have had the greatest impact on the effectiveness of marketing strategies.

**Keywords:** Competitive intelligence, marketing strategies, food processing companies, Porter's competitive forces, path analysis

### Introduction

Today, companies have to develop and preserve a competitive advantage for themselves to cope with rapid environmental change and competition. In the meantime, companies that focus on reviewing and updating their organizational strategies using information obtained through environmental surveys will be even more successful (Cavallo et al., 2021). Companies have concluded that accurate knowledge and more information about themselves and the competitive environment is vital to achieving sustainable competitive advantage. Hence, information is recognized as one of the most important items of strategic assets and marketing tools. Gathering and assessing information about competing companies is necessary to formulate and implement practical and victorious strategies for the organization.

Gathering information has always been discussed in terms of tracking and understanding competitors' reactions as a special aspect of marketing activities. The main focus of information gathering should be based on complete information that is transmitted in an intelligent competitive environment between individuals and groups (Gaspareniene et al., 2013; Yin, 2018). Competitive intelligence is a process whose product is evaluated information. Its most important task is to support the decision-making processes that are usually accomplished by executives. The need for intelli-

gence in reducing uncertainty and risk in decision-making is evident. The main purpose of competitive information analysis is better insight of the industry and its competitors and thus achieving more acceptable results in business.

Competitive intelligence is the process of gathering and using information related to products, customers and competitors to implement the strategic planning of the organization. The Association of Competitive Intelligence Experts describes competitive intelligence as a systematic program to gather, analyze and manage external information that can affect the programs, decisions and operations of the company (Boos, 2008). Prior (2009) believes that competitive intelligence should be based on high-level processed and applicable information, and this clearly shows the difference between public information and information based on competitive intelligence. Successful companies in the field of competitive intelligence can satisfy customers by providing the best and most valuable services. This can be done by examining available topics such as competitors' product prices, financial reports, competitors' sales strategies, as well as focusing on the future and warnings about opportunities and environmental threats.

The effectiveness of marketing activities can play an important role in companies' success. Investigating the subject shows that there is considerable disagreement among researchers and theorists as to what factors may influence the effectiveness of marketing activities. Given the importance of the effectiveness of marketing strategies, research in this area is still ongoing and being completed. Much of the environmental factors investigation has introduced competing organizations and determined strengths and weaknesses points, opportunities, threats, long-term goals, and strategies. Gathering and evaluating information about a competing organization is the first step in developing strategies. In other words, competitive intelligence as one of the important tools in strategic planning of the organization and management process, allows companies and organizations to predict events that occur in a competitive environment (Ahiauzu and Nwokah, 2008). Thus, companies that use competitive intelligence programs are better aware of competitors' prospects. They will be able to increase their competitive advantage with the help of wise strategies.

Today, many efforts are made to implement competitive intelligence in various organizations. However, due to the novelty of the topics related to competitive intelligence, few studies have examined in detail the relationship between this area and the effectiveness of marketing strategies in organizations. In other words, although many studies have referred to the effectiveness of marketing strategies using competitive intelligence in organizations, no comprehensive study has been conducted on understanding the process of the impact of competitive intelligence on the effectiveness of marketing strategies in organizations, especially in the field of marketing. Therefore, the main question of this research is what effect the categories and components of competitive intelligence have on the effectiveness of marketing strategies, and what is the optimal mechanism of its effectiveness with the path analysis approach?

### ***Theoretical Framework***

#### ***Competitive Intelligence***

The concept of intelligence dates back to more than 2000 years ago (Johari and Stephen, 2006). According to Kahaner (1998), competitive intelligence means the process of monitoring the competitive environment with the aim of providing practical intelligence, which results in creating a competitive edge for the organization. Competitive intelligence is not a new concept in the literature. The term entered the business literature in the first half of the industrial era. This concept seems to have been first used in the 1930s. However, it was from until the early 1960s that more and more writings on competitive intelligence, strategic intelligence, and environmental scanning were

published. Also, Business Intelligence System (BIS) and Management Information System (MIS) emerged in the 1980s, enabling the use of environmental information with maximum efficiency. Some authors have claimed that Michael Porter (1980), a well-known researcher in strategic management, created the concept of competitive intelligence by introducing the Five Competitive Forces and Generic Strategies. Porter pioneered in creating the Society for Competitive Intelligence Professionals in 1986 and published the first issue of the Journal of Competitive Intelligence in 1990. Competitive intelligence is one of the concepts that grew rapidly, so that the Society for Competitive Intelligence Professionals grew by 40 percent each year.

Competitive intelligence is a process of gathering data and information about the competitive environment and competitors' activities and turning it into purposeful, timely, and strategic intelligence, in order to help managers, make strategic decisions. In this process, permitted and ethical tools and techniques are used to gather information. Monitoring and navigating the competitive environment are done with the aim of making strategic decisions. Competitive intelligence allows senior executives of organizations to make their decisions based on knowledge of examined information in a timely (intelligent) way. Increasing the competitiveness of the company is provided with the help of smart strategic decisions. Competitive intelligence is an integral part of the emerging phenomenon of the knowledge-based economy.

Gilad (1999), a well-known theorist of intelligence, states that competitive intelligence is the company's overall cognition of the environment in which it competes and also, is the result of dissecting countless particles of information that are bombarding the company every day. This knowledge provides managers with a whole picture of the current situation and the future of the competition stage so that they can make better decisions. According to the French School of Management, competitive intelligence means the art of finding, collecting, processing and storing information, in order to access and use employees at all levels of the organization so that they can build a bright future for the organization. They will also be able to defend their position in the face of competitive threats.

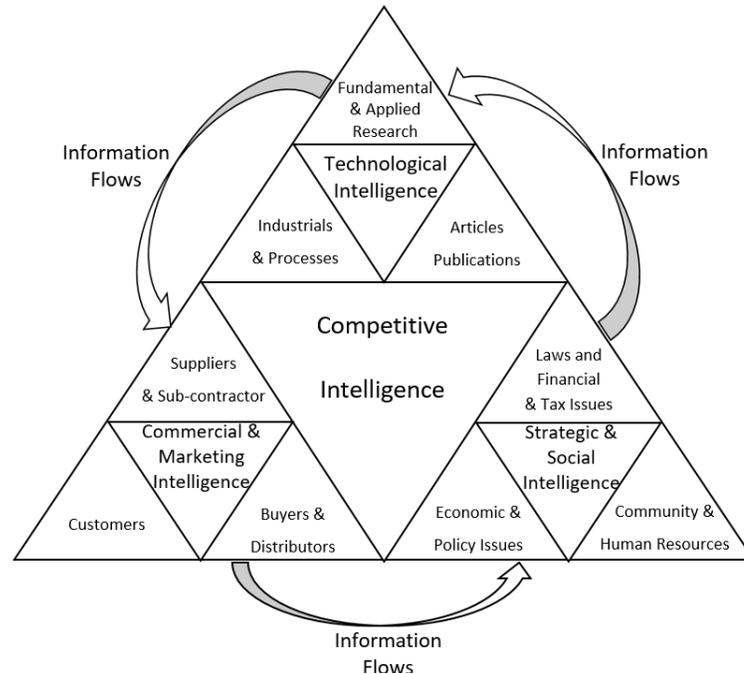
From the point of view of the French School of Management (GTILAB) theory, the dimensions of competitive intelligence are related to each other and are classified into four main categories (Figure 1), which are:

A) Business (marketing) awareness: This awareness is necessary to prepare a roadmap of current and future trends of customers and their preferences, new markets, innovative segmented opportunities, and profound changes for marketing and distribution. Hence, the information of customers, buyers, suppliers, and distributors is first gathered and then analyzed.

B) Opponent's situation awareness: This awareness can significantly help to evaluate the competitive strategy of the organization in relation to changes in the structure of competitors, their alternative products, and newcomers to the industry.

C) Technological and technical awareness: This type of awareness is necessary to evaluate the costs and benefits of current and future technologies, as well as predict future technologies. It deals with basic and applied research, factories, processes, norms and patents.

D) Strategic and social awareness: This awareness includes laws, financial, tax, political, economic, social and manpower issues.



**Figure 1. Intelligence dimensions (Rouach & Santi, 2001)**

#### *Competitive Intelligence Models*

**SWOT analysis model:** It is a straightforward and practical analytical model that systematically determines each of the strengths and weaknesses and opportunities and threats. This model reflects the strategies appropriate to the current situation in the profession. In this method, efforts are made to analyze the external and internal requirements, and an appropriate strategy is developed for the survival of the company based on it. This model is based on the Harvard policy approach. In this model, opportunities and threats depict the major favorable or unfavorable challenges that exist in the company's industrial environment. In contrast, it shows the strengths and weaknesses, including competencies, abilities, skills, and shortcomings, in the internal environment of the organization. After determining environmental factors (opportunities and threats) and internal factors (strengths and weaknesses), as well as distinguishing their key factors from non-key types, it is time to propose and select strategies (Anita and Hesford, 2000).

**Porter's five forces analysis:** Porter's model of competitive forces is one of the well-known frameworks for competitive analysis (Porter, 1985). It has been used to create companies' competitive strategies to increase their competitive margin. This model introduces five competitive forces, including the threat of new competitors, the bargaining power of suppliers, the bargaining power of customers (buyers), the threat of alternative products or services, and competition among companies in the industry. These items endanger a firm's competitive standing in a particular industry (Figure 2). Although the details of the model (Table 1) vary from industry to industry, five forces are common to all industries and can specify the profitability of an enterprise or part of it (Teece, 1997). A firm must constantly and periodically evaluate these forces to find its position in the industry and defend itself against them (defensive strategy) or exploit them in such a way as to attain a competitive advantage over them (aggressive strategy) (Teece, 1997). Porter (1985) explains how a company can affect the structure of the industry for its own benefit, thus developing a strategy to create an

endurable and advantageous position to deal with these aspects. Porter (1985) proposed three strategies including cost leadership, differentiation, and focus (Figure 3) that organizations can use to achieve above-average enactment in an industry. In other words, by choosing a competitive strategy, companies determine the scope of supply of their products and services to the market. Cost leaders refer to companies that offer their products and services to a large and large market and seek advantage and superiority by reducing costs. This is, while some corporations endeavor to distinguish themselves from their competitors by offering unique and outstanding products to the market. Some corporations may also acquire an advantage by following focus strategies, with an emphasis on reducing costs and/or uniqueness, and differentiating their products and services by targeting small and limited markets.

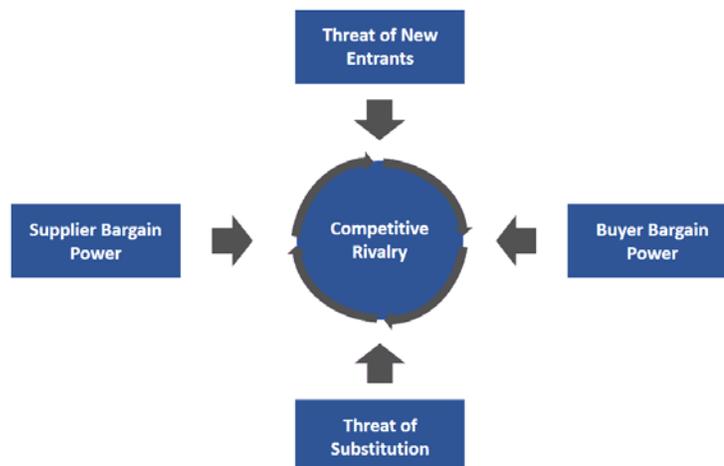


Figure 2. Porter's five forces (Porter, 1985)

Table 1. Classification of categories and components in the Porter Five Forces model

Categories	Components	Categories	Components
1- Competitive Rivalries	1- Number of competitors 2- Quality differences 3- Other differences 4- Cost of change 5- Customer loyalty 6- Costs of leaving market	4- Buyer Power	15- Number of customers 16- Size of each order 17- Competitor comparison 18- Price sensitivity 19- Ability to substitute 20- Cost of change
2- Threat of Substitution	7- Substitute performance 8- Cost of change	5- Supplier Power	21- Number of suppliers 22- Size of suppliers 23- Uniqueness of service 24- Ability to substitute 25- Cost of change
3- Threat of New Entry	9- Time and cost of entry 10- Specialist knowledge 11- Economies of scale 12- Cost advantages 13- Technology protection 14- Barriers to entry		

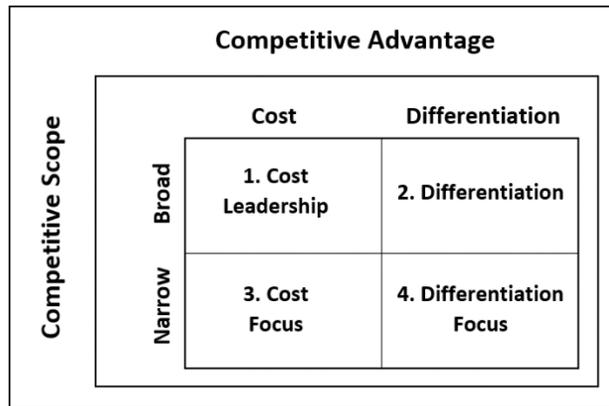


Figure 3. Porter's generic strategies for competitive advantages (Porter, 2004)

According to the question, the research model will be based on Figure 4:

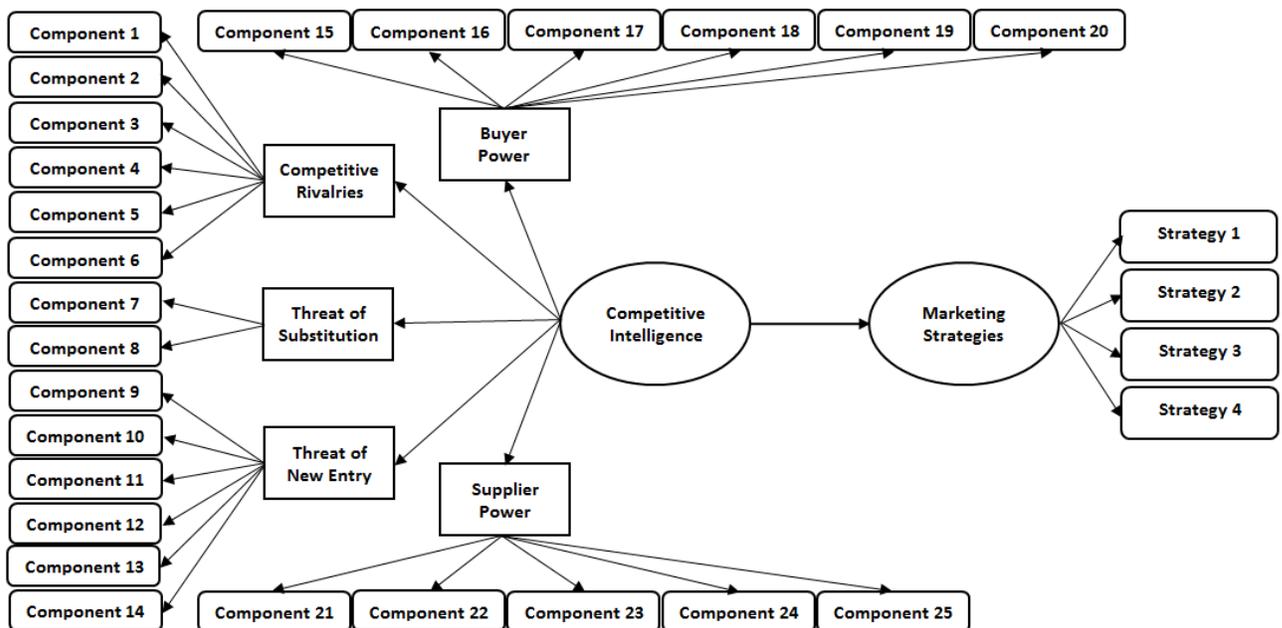


Figure 4. Research conceptual model on how Competitive intelligence influences marketing strategies

**Literature review**

Different process-oriented and consequentialism approaches have been used in evaluating competitive intelligence from a marketing perspective. The following is a summary of the results of some of them.

Cavallo et al. (2020) in a multiple case study with a connecting the dots approach examined how competitive intelligence relates to the strategy formulation process of firms. Their study revealed that competitive intelligence practices, despite their strategic relevance and diffusion, are still widely used for tactical use. They also showed how competitive intelligence practices can provide information, support, and integration to the strategy development process. Aligholi and Fatemi

(2017) in their study examined the relationship between the dimensions of competitive intelligence and the effectiveness of marketing strategies in some firms. The use of correlation coefficient in their research indicated that the dimensions of competitive intelligence have a positive and significant effect on the effectiveness of marketing strategies. Jamil (2013) studied the concept of market intelligence through a case study of persistent knowledge to manipulate marketing strategy and its complement to competitive intelligence through raw and scattered data. Based on the results of this research, the conceptual definition of market intelligence was developed through its complement to the organizational process of competitive intelligence. Nwokah & Frannces (2009) conducted a study on competitive intelligence and its relationship to the marketing efficacy of Nigerian corporations. Five variables including market opportunities, competitors' threats, competitors' risks, key assumptions, key vulnerabilities are defined for competitive intelligence and for marketing effectiveness, five variables of customer satisfaction, marketing information, integrated marketing activities, strategic orientation, and operational efficiency are defined. The statistical population of this study included 108 companies from the large companies of the Nigerian Stock Exchange. The results of the study reveal that there is a positive and significant relationship between competitive intelligence and the marketing effectiveness of large companies. Ahiauzu & Nwokah (2008) stated in their research that five variables have been defined for marketing effectiveness including customer satisfaction, marketing information, integrated marketing activities, strategic orientation and operational efficiency. They finally concluded that marketing effectiveness has a positive and significant relationship with competitive intelligence. Jendal (2002) conducted a study entitled Competitive Intelligence and its relationship with the performance of New Zealand manufacturing companies. In this research, the competitive intelligence model of managers is defined based on the theory of the French School of Management. Organizational performance is defined in terms of three variables: sales growth, market share, and profitability. The findings of the study show that there is a positive and significant relationship between managers' competitive intelligence and corporate performance. Appiah-Adu et al. (2001) conducted a study examining the relationship between marketing effectiveness and business performance in the UK financial services industry. According to Cutler's model, he defined five variables including customer satisfaction, marketing information, integrated marketing information, operational efficiency, and strategic orientation to measure marketing effectiveness. The effects of different dimensions of marketing effectiveness on profitability and growth, as well as customer-based performance indicators, have been investigated in his research. The results reveal that organizational variables such as customer satisfaction, operational efficiency, marketing information, and integrated marketing activities are generally positively and significantly related to business performance.

### **Methodology**

The present study is applied in terms of purpose and descriptive-survey in terms of data collection. The population in this study consists of all employees of the food industry in Sari. The list was obtained by contacting the Department of Industry, Mines and Trade. The total number of these employees was 150 and the sample size was estimated at 109 people using simple random sampling method and Cochran's formula. The questionnaires were distributed by stratified random sampling method and finally 105 questionnaires were collected. The reliability of the instrument was measured by Cronbach's alpha method based on SPSS22 software in two stages of initial distribution and final distribution and separately for each category or policy, each component and the whole questionnaire. In the final stage, the lowest coefficient (0.815) was related to change cost component and

the highest coefficient (0.923) was related to quality differences component. In total, Cronbach's alpha coefficient of the questionnaire was estimated to be 0.979. These indicators will be comprehensively reported based on the outputs of Smart PLS software. Path analysis has been used to determine the effect relationship and prioritize between variables. The results of Kolmogorov-Smirnov test showed that the data were not normal, therefore, Smart PLS 2.0 Release software was used for data analysis and the indicators listed in Table 2 will be reviewed and reported.

**Table 2. Criteria evaluated in Smart PLS software in order to check the model fit**

Path analysis steps		Index	Acceptable interval	Source
Measurement model	Reliability	Cronbach's Alpha	> 0.7	Cronbach (1951)
		Composite Reliability	> 0.7	Nunnally (1978)
	Convergent validity	Load Factor	> 0.4	Hulland (1999)
		Average Variance Extracted (AVE)	> 0.5	Fornell & Larcker (1981)
	Divergent validity	Reciprocal Load Method	More correlation between indicators than related structures	Wang & Hong (2002)
		Fornell-Larcker criterion	Higher AVE value of each structure with common variance between that structure and other structures	Fornell & Larcker (1981)
	Model fit	Communality	AVE > 0.5	Leguina (2015)
Structural equation model fit	T-value	More than 1.96 with 95% confidence level	-	
	R squares ( $R^2$ )	The closer to 1, the better	Chin (1998)	
	Stone-Geisser ( $Q^2$ )	Three values 0.02, 0.15 and 0.35, respectively, as low, medium and strong predictive power	Stone & Geisser (1975); Henseler et al. (2009)	
	Redundancy	A higher value indicates a better fit		
Overall model fit	GOF	Three values 0.01, 0.25 and 0.36, respectively, as low, medium and strong	Tenenhaus et al. (2004); Wetzels et al. (2009)	
Testing hypotheses	z value	More than 1.96 with 95% confidence level	-	
	Standardized coefficients of paths	$\geq 0.4$	Leguina (2015)	

## Results

We first examined the reliability and validity of the model to analyze the research. Table 3 shows the reliability and validity indicators of the model. We will examine the model to answer the hypotheses by proposing the following hypotheses:

H0: Categories and components of competitive intelligence do not have a positive and significant impact on the effectiveness of marketing strategies;

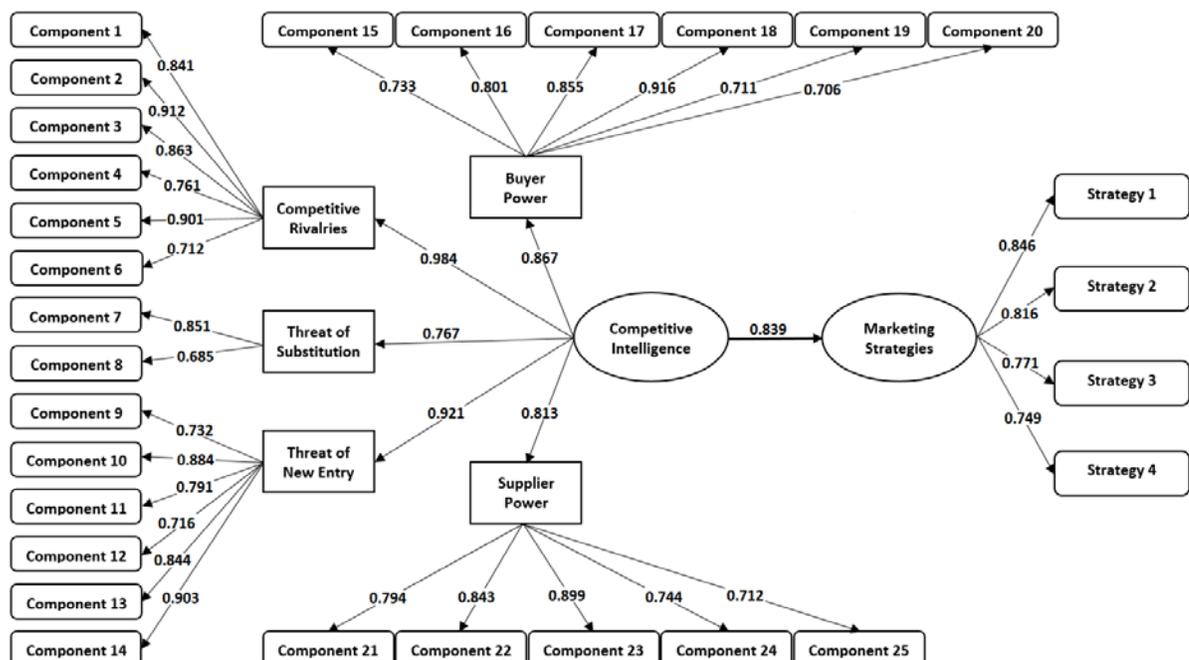
H1: Categories and components of competitive intelligence have a positive and significant impact on the effectiveness of marketing strategies;

We first examine the criteria of reliability and validity to examine the answer to the hypotheses.

**Table 3. Reliability and validity criteria for the relationship between competitive intelligence categories and marketing strategies**

Variables and indexes	Cronbach's Alpha	Composite Reliability	AVE
	> 0.7	> 0.7	> 0.5
1- Competitive Rivalries	0.896548	0.945479	0.848954
2- Threat of Substitution	0.824562	0.852357	0.754123
3- Threat of New Entry	0.881264	0.916578	0.805231
4- Buyer Power	0.863356	0.894697	0.792365
5- Supplier Power	0.852279	0.871597	0.771246
Marketing Strategies	0.871169	0.945588	0.794188

According to the data in Table 3, it can be concluded that the variables have acceptable reliability and validity with these three indicators. The measurement of the load factor shown on the arrows in Figure 5, all of which are higher than 0.4, confirms that the variance between the structure and its indices is greater than the variance of the measurement error of that structure. Also, reliability for this measurement model is acceptable and there is no need to change or delete a category or component.



**Figure 5. A drawn model of the relationship between categories and components of competitive intelligence with marketing strategies based on standardized coefficients of load factor**

Reciprocal factor loads (divergent validity) is one of the indicators that should be placed in each structure with its own structure more than other structures. This study confirmed the reciprocal factor loads. The data in Table 4 confirms this statistical index.

**Table 4. Measuring the cross-factor loads of competitive intelligence categories**

	<b>Competitive Rivalries</b>	<b>Threat of Substitution</b>	<b>Threat of New Entry</b>	<b>Buyer Power</b>	<b>Supplier Power</b>	<b>Marketing Strategies</b>
Component 1	<b>0.840648</b>	0.795434	0.658934	0.771207	0.668934	0.484532
Component 2	<b>0.911565</b>	0.887715	0.557867	0.595433	0.769021	0.498567
Component 3	<b>0.862812</b>	0.670023	0.507613	0.755590	0.666843	0.619834
Component 4	<b>0.761187</b>	0.694311	0.543411	0.609812	0.719670	0.498671
Component 5	<b>0.901254</b>	0.554856	0.774123	0.678734	0.797645	0.807874
Component 6	<b>0.712267</b>	0.698567	0.568834	0.632367	0.509890	0.611123
Component 7	0.768765	<b>0.850896</b>	0.458756	0.568765	0.555413	0.760132
Component 8	0.432312	<b>0.685235</b>	0.490786	0.345432	0.554370	0.568745
Component 9	0.645632	0.545098	<b>0.732012</b>	0.490676	0.664510	0.691354
Component 10	0.768098	0.721345	<b>0.883678</b>	0.777890	0.856567	0.509878
Component 11	0.567870	0.612345	<b>0.791034</b>	0.732350	0.541089	0.546567
Component 12	0.667733	0.604356	<b>0.716456</b>	0.519890	0.478984	0.443310
Component 13	0.734510	0.723540	<b>0.844467</b>	0.397689	0.721122	0.770186
Component 14	0.623419	0.598099	<b>0.902897</b>	0.485671	0.806545	0.798110
Component 15	0.587623	0.660998	0.435450	<b>0.733225</b>	0.490018	0.456598
Component 16	0.710989	0.689195	0.690654	<b>0.801457</b>	0.735666	0.399889
Component 17	0.790878	0.509098	0.551232	<b>0.854877</b>	0.590890	0.721345
Component 18	0.770775	0.509812	0.597721	<b>0.915556</b>	0.687678	0.449658
Component 19	0.556457	0.511123	0.600934	<b>0.711176</b>	0.532345	0.687546
Component 20	0.498856	0.476798	0.590932	<b>0.706445</b>	0.577769	0.611213
Component 21	0.632309	0.476709	0.456465	0.498212	<b>0.794145</b>	0.588771
Component 22	0.776655	0.664546	0.532123	0.611221	<b>0.843409</b>	0.668757
Component 23	0.786876	0.734656	0.423457	0.576001	<b>0.898921</b>	0.509812
Component 24	0.634587	0.612954	0.704564	0.613454	<b>0.744212</b>	0.398898
Component 25	0.594557	0.434465	0.390077	0.434097	<b>0.712335</b>	0.333540
Strategy 1	0.709076	0.690453	0.623234	0.509321	0.443456	<b>0.845698</b>
Strategy 2	0.413298	0.440300	0.499341	0.576874	0.505576	<b>0.816097</b>
Strategy 3	0.490043	0.578889	0.512320	0.550903	0.554123	<b>0.771231</b>
Strategy 4	0.702343	0.613400	0.332446	0.488543	0.632180	<b>0.749432</b>

Another divergent validity index is Fornell and Larker's criteria, in which the original diameter numbers must be greater than their bottom and left values. The statistical analysis showed that this criterion is also acceptable. Table 5 shows the Fronel-Larker standard output.

**Table 5. Fronel-Larker criterion for competitive intelligence categories**

Categories	Competitive Rivalries	Threat of Substitution	Threat of New Entry	Buyer Power	Supplier Power
Competitive Rivalries	<b>0.9311</b>				
Threat of Substitution	0.8845	<b>0.8607</b>			
Threat of New Entry	0.9022	0.7854	<b>0.9100</b>		
Buyer Power	0.8902	0.8454	0.8920	<b>0.9034</b>	
Supplier Power	0.7999	0.8388	0.8317	0.8671	<b>0.8811</b>

All the criteria of common values are above 0.5 and the coefficients  $R^2$  respectively categories were 0.83, 0.88, 0.79, 0.69 and 0.86, and the rest of the changes in this model depend on other factors and variables that are not mentioned in this model. Although its percentages are very low, they should be considered anyway. The  $Q^2$  and Redundancy criteria for each of the five variables are at an acceptable or strong level and above 0.5. In general, examining these 4 indicators, it can be said that the model has a good fit for the model part of measuring and evaluating the structural fit. Table 6 shows the information of these 4 indicators separately.

**Table 6. Segment Fit Evaluation Criteria Measurement Models and Structural Fit Evaluation of Competitive Intelligence Categories**

	Communality	$R^2$	$Q^2$	Redundancy
Competitive Rivalries	0.754651	0.830091	0.765786	0.783456
Threat of Substitution	0.617656	0.639213	0.665357	0.687678
Threat of New Entry	0.702312	0.789011	0.759033	0.732345
Buyer Power	0.665489	0.691222	0.728754	0.719822
Supplier Power	0.645456	0.656703	0.689876	0.696651
Marketing strategies	0.612069	0.588340	0.495687	0.445654
Mean	0.6663	0.6991	0.6841	0.6776

T-value coefficients between the categories and components in Figure 6 are greater than 1.96, and it follows that the relationship of all categories and components with the strategies are significant and there is no need to change the model.

The GOF value, which is calculated manually, is equal to 0.707, and according to the classification announced for the strength of this index, its acceptable fit can be concluded. Finally, the hypotheses of this section are summarized as follows:

Considering all the studied indicators and the significance of t-test coefficients and the appropriateness of standard path coefficients, it is inferred that the model has a proper fit and the null hypothesis is not accepted and the categories and components of the model have a positive and significant effect on the strategies. Based on the effectiveness rate results, the priority of categories and components according to the standardized coefficients of factor loads are described in Table (7).

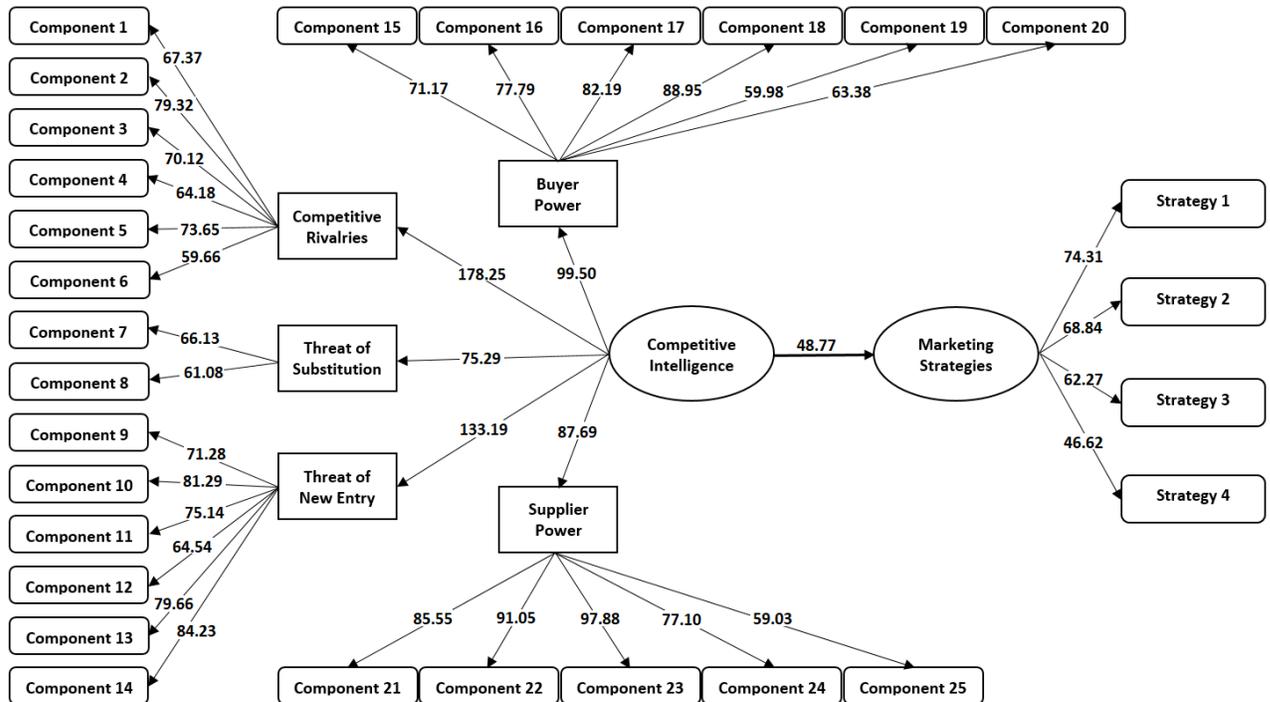


Figure 6. T-value coefficients to fit the model of the categories and components of competitive intelligence with marketing strategies

Table 7. Prioritization of categories and components of competitive intelligence according to standardized coefficients of factor loads

Categories and components / Standardized load factor coefficients			
<b>Competitive Rivalries</b>	<b>0.984</b>	<b>Buyer Power</b>	<b>0.867</b>
Quality differences	0.912	Price sensitivity	0.916
Customer loyalty	0.901	Competitor comparison	0.855
Other differences	0.863	Size of each order	0.801
Number of competitors	0.841	Number of customers	0.733
Cost of change	0.761	Ability to substitute	0.711
Costs of leaving market	0.712	Cost of change	0.706
<b>Threat of Substitution</b>	<b>0.767</b>	<b>Supplier Power</b>	<b>0.813</b>
Substitute performance	0.851	Uniqueness of service	0.899
Cost of change	0.685	Size of suppliers	0.843
<b>Threat of New Entry</b>	<b>0.921</b>	Number of suppliers	0.794
Barriers to entry	0.903	Ability to substitute	0.744
Specialist knowledge	0.884	Cost of change	0.712
Technology protection	0.844		
Economies of scale	0.791		
Time and cost of entry	0.732		
Cost advantages	0.716		

### **Discussion**

According to the research findings and data analysis of the impact of competitive intelligence on the effectiveness of marketing strategies, it can be concluded that Porter's five forces in the Iranian food industry are prioritized in the following order:

1) Competitive Rivalries; 2) Threat of New Entry; 3) Buyer Power; 4) Supplier Power; 5) Threat of Substitution.

In Competitive Rivalries, the greatest impact on the effectiveness of marketing strategies has been observed by Quality Differences. When there is a lot of competition between companies, companies try to win this competitive game. One way to get ahead of the competition is to differentiate the quality of your products. Intense and very close competition between food quality affects the effectiveness of marketing strategies to create more added value. The findings of this section are consistent with the findings of Botten & Mc Manus (1999), Crook et al. (2003) and Enz (2010). According to the obtained results, it is suggested that food companies increase the effectiveness of marketing strategies by differentiating between the quality of food products and providing price competition due to cost reduction.

In Threat of New Entry, the greatest influence on the effectiveness of marketing strategies has been observed by Barriers to Entry. New entrants to the food industry are always looking to pick differentiation strategies in order to compete with other existing rivals in order to attract new customers. Through the use of marketing strategies, old companies in the food industry can take a big step towards staying in the competition and being ahead of other competitors, especially newcomers, due to having more resources in the food market. The findings of this section are consistent with the findings of Covin and Slevin (1990) and Karagiannopoulos et al. (2005). New companies in this area will increase the efficacy of marketing strategies by taking measures that reduce the competitiveness of new companies entering this field.

In Buyer Power, the most impact on the effectiveness of marketing strategies has been observed by Price Sensitivity. The higher the bargaining power of customers, the lower the prices of companies in order to satisfy customers and increase their number and thus increase the effectiveness of marketing strategies. They do not pay attention to offering products with distinctive services due to customers' excessive sensitivity to price. The findings of this section are consistent with the results of research by Karagianopoulos et al. (2005), Ormanidhi & Stringa (2008) and Enz (2010). According to the obtained results, it is suggested that in environments where customers are sensitive to the price of food companies' services, they increase marketing strategies by providing lower quality services and more appropriate prices.

### **Conclusion**

According to the findings of this study, organizations should attempt to determine challenges and technical options through a persistent and systematic process and take steps to develop a competitive advantage. Also, since competitive intelligence was adequate in changing organizational products and processes, the food industry should be able to take steps to enhance the competitive interaction by setting up special units for competitive intelligence. Managers should comprehend that the organization's competitive intelligence programs should replace the superficial conjectures of managers, so it is suggested that this research be investigated in other areas to demonstrate the significance of this issue to company managers.

## References

- Aligholi, M., & Fatemi, S. M. (2017). Analysing Relationship between Competitive Intelligence and Effectiveness of Marketing Strategies (Studied Industrial City of Ardabil). *Journal of Business Management*, 9(2), 375-394.
- Anita, K., & Hesford, J. (2007). A Process-Oriented View of Competitive Intelligence and its Impact on Organizational Performance. *Journal of Competitive Intelligence and Management*.
- Appiah-Adu, K., Fyall, A., & Singh, S. (2001). Marketing effectiveness and business performance in the financial services industry. *Journal of Services Marketing*.
- Bose, R. (2008). Competitive intelligence process and tools for intelligence analysis, *Industrial Management & Data Systems*, 108 (4): 510-528.
- Botten, N. and McManus, J., 1999. *Competitive Strategies for Service Organizations*, West Lafayette, Indiana: Purdue University Press.
- Cavallo, A., Sanasi, S., Ghezzi, A., & Rangone, A. (2020). Competitive intelligence and strategy formulation: connecting the dots. *Competitiveness Review: An International Business Journal*.
- Cavallo, A., Sanasi, S., Ghezzi, A. and Rangone, A. (2021). Competitive intelligence and strategy formulation: connecting the dots, *Competitiveness Review*, 31(2), 250-275. <https://doi.org/10.1108/CR-01-2020-0009>
- Clark (2001). *Managing Frontiers in Competitive Intelligence, Competitive Intelligence in Services*, Edited by Fleisher & Bensoussan, Quorum Books, Westport.
- Covin, J.G., and Slevin, D.P., 1990. New venture strategic posture, structure, and performance: An industry life cycle analysis. *Journal of Business Venturing*, 5(2), pp. 123–35.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.
- Crook, T.R., Ketchen, D.J. and Snow, C.C., 2003. Competitive edge: A strategic management model. *Cornell Hotel and Restaurant Administration Quarterly*, 44(3), pp. 44-53.
- Eid, Elsayed (2006). *Competitive Intelligence and its Effect on UK Banking Strategy*. Doctor of Philosophy. Leicester Business School.
- Enz, C.A. (2010). *Hospitality strategic management: Concepts and cases*. New Jersey: John Wiley & Sons, Inc.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing research*, 39-50.
- Gaspareniene, L., Remeikiene, R., & Gaidelys, V. (2013). The opportunities of the use of competitive intelligence in business: literature review. *Journal of Small Business and Entrepreneurship Development*, 1(2), 9-16.
- Gilad, B. (1999). Competitive Intelligence: The real knowledge management. *Knowledge Management*, 12, 33.
- Jamil, G. L., (2013), Approaching Market Intelligence Concept through a Case Analysis: Continuous Knowledge for Marketing Strategic Management and its Complementarity to Competitive Intelligence, *Procedia Technology*, 9, 463-472.
- Juhari, A.S., & Stephens, D.P. (2006). Tracing the origins of competitive intelligence throughout history. *Journal of Competitive Intelligence and Management*, 3(4), 61-82.
- Kahaner, L. (1998). *Competitive Intelligence*, Touchstone Books. New York, USA.

- Karagiannopoulos, G.D., Georgopoulos, N. and Nikolopoulos, K., 2005. Fathoming porter's five forces model in the Internet era. *The Journal of Policy, Regulation and Strategy for Telecommunications*, 7(6): 66–76.
- Mugo, H.W., Wamjau, K. & Ayodo, Eunice M.A. (2012). An Investigation into Competitive Intelligence Practices and Their Effect on Profitability of Firms in the Banking Industry: A case of Equity Bank. *International Journal of Business and Public Management*, 2(2), 61-71.
- Ngugi, J.K., et al., (2012). Competitive Intelligence Practices and Their Effect on Profitability of Firms in the Kenyan Banking Industry. *International Journal of Business and Social Research (IJBSR)*, 3(2), 11-18.
- Nwokah, N. G., & Ahiauzu, A. I. (2008). Managerial competencies and marketing effectiveness in corporate organizations in Nigeria. *Journal of management development*. 27(8): 58-78.
- Nwokah, N.G., Frannces E. (2009). Competitive intelligence and marketing effectiveness in corporate organization in Nigeria, *African Journal of Marketing Management*, 1(1), PP.010-022.
- Ormanidhi, O. and Stringa, O. (2008). Porter's model of generic competitive strategies. *Business Economics*, 43(3), pp. 55–64.
- Porter, M.F. (1980). *Competitive strategy: Techniques for analyzing industries and competitors*, New York: The Free Press.
- Porter, M. (1985). *Competitive advantage-creating and sustaining superior performance*, Free Press, New York.
- Porter, M.E. (1990). *The competitive advantage of nations*, New York: The Free Press.
- Porter, M. (1991). Towards a dynamic theory of strategy, *Strategic Management Journal*, 12, pp.95-117.
- Porter, M.E. (2004). *Competitive strategy: Techniques for analyzing industries and competitors*, New York: The Free Press.
- Porter, M. E.(2004). *Competitive advantage: Creating and Sustaining Superior performance*, New York: The Free Press.
- Prior, V. (2009). *Glossary of terms used in competitive intelligence and knowledge management*. Virginia: SCIP–Strategic and Competitive Intelligence Professionals.
- Rouach, D. & Santi P. (2001). Competitive Intelligence Adds Value: Five Intelligence Attitudes, *European Management Journal*, 19(5): 552–559.
- SCIP, (n.d), [Online], Society of Competitive Intelligence Professionals, [Retrieved November 19, 2011, <http://www.scip.org/>].
- Teece, D. J., Pisano, G., Shuen, A., Dynamic capabilities and strategic management, *Strategic Management journal*, 18(7), pp.509-533, 1997.
- Tenenhaus, M., Amoto, s., & Esposito Vinzi, V. (2004). A global goodness-of-fit index for PLS structural equation modeling. In *Proceedings of the XLII SIS scientific meeting* (pp. 739-742).
- Yin, C. Y. (2018). Measuring organizational impacts by integrating competitive intelligence into executive information system. *Journal of Intelligent Manufacturing*, 29(3), 533-547.