

## **Awareness of Competition at Senior Management and its Effect on Firm Performance\***

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### **Abstract**

*The purpose of this research is to introduce “awareness of competition” and this phenomenon’s theoretical and empirical bases as a new and alternative way to increase company profitability, and to examine its effect on firms performance. A scale was developed to measure the awareness of competition level of top management teams and a survey was conducted with the participation of 380 managers. Findings obtained from the analysis, shown that a positive correlation between the firm performance and the instinct for benefiting from the opportunities, strategic vigilance, motivation for competition, competitive market information that are dimensions of awareness of competition.*

**Keywords:** Awareness of competition, competition, firm performance, management psychology, organizational behaviour.

### **1. What is Awareness of Competition?**

The literature review for awareness of competition shown that there are too little on the concept and therefore it can say that the concept is not clearly defined. The notion of “awareness of competition”, in terms of management literature, was first introduced by Baroutsis and Horton in a study in 1973 that name is "The economic strategy for environmental quality". Subsequently, Kelly and Booth (2004) have also used the term in a similar manner but unfortunately they handled the subject groundling. In fact, it is possible to say that a concept like this is a new phenomenon for the management literature.

Baroutsis and Horton (1973:67) used the awareness of competition term for businessmen as a cognitive ability that enables them to gain a competitive advantage. According to the researchers, if a businessman is not able to take advantage of opportunities, his competitors would have an edge over him, they can sell lower than his firm’s in the market, eventually bereaving his customers and debar from his and his saffs’ means of living. Baroutsis and Horton put forward that the thing what being motivated firms is awareness of competition which encourages companies to producing with the lowest costs, to research the more efficient methods, to make innovations, to produce the more advanced products.

Similarly, Kelly and Booth (2004:9) also handled awareness of competition concept as an intellectual capability for senior managers. Because according to them, the firms which spurring to competitors and riposte their competitive strategies, particularly competitive threats, be aware of market commonality the firms which spurring to competitors and riposte their competitive strategies, particularly competitive threats, be aware of market commonality and resource similarity. It was determined that other resource about awareness of competition was not mostly discussed as an individual susceptibility that managers should have. It is possible to see that there are two different perspectives at this subject. These resources treated awareness of competition in terms of macro (economic) and micro (intra-organizational competition) dimensions. In resources that handled awareness of competition as macro perspective from a legal point of view, competitive action is dominated by legal bases.

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In other words it is possible to say that they have tried awareness of competition concept to fitting the legal ground. Examining those resources in detail, it is clear that the growth of capitalism and economic pressure in the early twentieth century bring forward the issue of lack of awareness (Carr, 2003:4). Furthermore, the lack of awareness of competition specifically in developed countries is stem from an opposite competitive cultures in which dominate dishonest competition ideology, rather than legal/regulated competition (Dabbah, 2010:320). The solution to this unfair competition is to fill the lack of awareness, by this way it can be constituted an efficient competitive environment in market (Malinauskaite, 2011:242). Indeed, one of the fundamental purposes of World Trade Organisation (WTO) is to create the sense of competitive culture and eventually to accomplish a legal concurrence eliminating the disablers of trade and unfair competition (Jenny, 2004:35). Correspondingly, it is possible to see that the Korean Federal Trade Commission (KFTC) is also pursuing such laws to increase this awareness (Gerber, 2010:221). The Office of Fair Trading (OFT) in USA is also carrying out research in order to determine the level of awareness of competition (Bailey, 2014:241). When we consider the micro aspects of awareness of competition, it was seen in some studies that this concept was handled in terms of the competition between employees. One of the resources (Matsuo, 2005:21) indicates that some departments in a firm such as marketing where the individual performance is rewarded with financial bonuses, the competition between individuals is more perceivable. In addition to this information, in other resources stated that the awareness of this competition useful to boost the individual's level of performance (Stain, 2007:57) and the level of awareness of competition is gradually increase in social environment where they living in (Sun, 2006:28).

On the basis all of this informations, the awareness of competition in terms of managerial concept, can be defined as an individual susceptibility that able to perceive existing and probable attacks of competitor, take advantages by this attacks, and its the possible results for their organizations, thus able to estimate necessary regulations and innovations for can gain profit. Accordingly the entrepreneur or manager who has highly awareness of competition, can estimate strategies that have been used by the competitors, and why they have used them, in this way they can fore see effects implementation this strategies on both their firms and other firms in the market, and they know how can riposte to attacks of competitors. They act considering the situation of their firms in the past, present and future. When viewed this aspects, it can say that awareness of competition is a mindfulness that is valid throughout the competition process, from reading the environmental signals to creating strategies, from implementing these strategies to have being their results, and from evaluating them to boning the direction of organization.

## **2. Components of Awareness of Competition**

Based on the views of awareness of competition as an individual property and the micro aspects, it is possible to determine some common characteristics of awareness of competition as follows.

### **2.1 The Instinct of Benefiting from Opportunities**

While the senior management team is determining the corporate strategies, they need to compare environmental threats and opportunities with company's internal weaknesses and strengths. In this comparison that has been done before strategical decision making progress, the power of ability to describing environmental signals is so important for success of the strategy. Because the firm merely can get competitive advantage against competitors according as convert threats into opportunities. This is the instinct of benefiting from opportunities that is a managerial and entrepreneurial characteristic.

Any activity for development is only realised and considered when there is a chance for making a profit (Holcombe, 2007:76). The recognition of opportunities can also be defined as a proactive trait (Lindsay, 2006:227; Lumpkin and Dess, 1996:431). It is possible to say that when people have proactive mind sets, the opportunities may be recognized more effectively (Mercer, 1998:44). Baroutsis and Horton (1973:67) suggest that the real motivator for manufacturers to produce specific goods is actually the feasible profitability. This statement finds its roots in the argument that without the presence of any possible profit opportunity, manufacturers won't be able to determine whether the consumers demand is greater than the worth of the product (Sirico, 2012:88; Wessels, 2000:487; Potter and Lloyd, 1998:34). In a similar way, the profit signal that above average, would be perceived as an opportunity to enter the market or growth; meanwhile, the profit signal that below the average would be perceived an warning of exit the market or downsizing (Hirschey, 2009:14). However, it is need to say that proactivity is not a determinant to increase the firm performance (Ambad and Wahab, 2013:102).

Another alternative to increase the profits is to decrease the production costs of the current product. The reason such instincts are raised is to decrease the production costs of the goods, as the companies have to pass on even the small amount of increase of the production on to the selling price of the product. Increased product price is known to be one of crucial impact on product rejection by customers and also damages the company's competitive advantage.

## **2.2 Strategic Vigilance**

In order to achieve and maintain a competitive advantage over the competitors, firms must need to have unique or differentiated products or produce lower the costs (Montgomery and Porter, 1990: xv).

The strategic vigilance of top managers in a company is explained by whether they have strong in terms of certain intellectual traits. Such features are as follow.

### **2.2.1 The Ability to Recognize Competitor's Opportunities and Advantages**

Under any circumstances, no matter how a company be succeed, its entrepreneur or manager should always consider the fact that the competitors are unpredictable and the a new attack can gone from them. Because every firm that wants to maintain an edge of competition over the competitors, would seek a way in order that customers prefer their own product. So they consistently research new products or new usage area of current product, even new production process. Because they aware of the fact that every innovation which caught customer's attention, would put in front their firms of competitors. According to D'Aveni (1994:246) if two companies would recognize a chance to become superior in competition, the faster one gain it. In addition to this information, the researcher alleged that whoever is insensible to create or recognize an opportunity, he/she is lacking of awareness.

### **2.2.2 Being Conscious of the Possibility of Losing Customers if the Competitors Reduce the Cost of their Product**

Another way to a gain competitive advantage in the market place is reduce to the cost of the manufactured products which can be seen as the main concern of customers. It is possible to see the tendency of consumers is to pay the least amount in return for good quality products. For that reason, the decision making progress usually leads to the consumer choosing one the lowest priced product in similar quality. In that case, among the companies that are manufacturing products with same features, keeping the lowest pricing policy one, would cause competitors to loss of their customers.

### **2.2.3 Being Aware of the Prospect of Loss of Income throughout the Company Resulting from a Lack of Demand**

Companies are meeting their basic needs with the income earned. These requirements are primarily the production costs; this is also reflected in the pricing policy of the product. On the other hand, another crucial expenditure - that is the hardest cut down implementing - is the employee salaries. The employees are not willing to work under a certain amount of income, and naturally they are also expecting to obtain the best payment option there is. On the other hand, customers are the central source of income for every company. If a company manages to increase their customer base, the income and payments to employees would increase accordingly. It is truth its reverse. That is to say, firm's income will decrease as long as amount of the customers who buying the firm's products, are decline. If it is continue like so, that means the salaries of employees is imperilled. For this reasons motivate firms to developing competitive strategies which would increase their income, and to spurting which catch customer's attention on their own from competitors.

## **2.3 Motivation for competition**

A company's motivation to compete can also be measured with their efforts to produce better, more quality and cost effective products. Rapidly and continuously changing characteristics of customer demands have enabled the development of customer-oriented production and marketing approaches, as well as increased attention on innovation and creativity in order to meet relevant demands. Even new organizing forms such as clustering which has alleged (Yıldız & Aykanat, 2015:1196; Aykanat & Yıldız, 2015:77) an important model for innovational development have showed up as a result of this tendency In today's firms have tried to develop preferable brand-new options for products that beyond the desire of customers, even they has not been aware of them.

On the other hand, every firm want to produce their product as impossible as the lowest cost in the market, for provide a competitive advantage. As Tully (2011:128) argued, one of the most effective ways to lower production costs is to lower the profits, too. In other words, sacrificing a portion of the profits. Another way to lower production costs, as it was stated by Havas (2000:110), is to use advanced production techniques. With this method, the production phase can be more efficient and help decrease the production costs while maintaining quality standards.

## **2.4 Competitive market information**

As it is stated by Kelly and Booth (2004:9) and later by Chen (1996), it is possible to say that the awareness of competition is directly linked to “market commonality” and “resource similarity” and how these factors affect the competitive responses of firms. Based on Hitt et al. (2013) and Chen’s (1996) researches, these terms can be explained as below.

### **2.4.1 Market commonality**

Chen (1996:106-107) has preferred to use “multiple-point competition” in order to explain market commonality. According to his research, the theme of multiple –point competition is measured by the average number of markets that a firm competes with all of their rivals, excluding the main market they operate. This is also expressed as multimarket contact. Chen’s research states that market commonality can be defined as the level of existence a firm reaches once it has managed to outgrow the main firm already in that market. It is possible to say that the existing firm’s capacity to compete with the main firm in market, depends on their strategic strength and endurance. On the other hand, Hitt, et al., (2013:38) stated that different firms can compete with each other in multiple markets in different industries and this leads those firms to be interacting with each other: this is named as market commonality. According to the researchers, market commonality is related to the number of the markets that a firm competes with its competitors. Market commonality also enables the competition to gain strength when different companies with similar product have the same target audience. From this point of view it is possible to say that companies that compete with each other across different fields are competing in multiple-point markets. Coca-Cola and PepsiCo are competing with each other in different markets such as bottled-water and soft drinks as well as different geographies from USA to foreign markets.

### **2.4.2 Resource similarity**

According to Hitt et al. (2013:38) the resource similarity can be defined as: the comparison of a company’s physical and non-material resources in terms of type and quantity against their competitors. In accordance with this view, companies that have similar type and quantity of resources would suffer from comparable weaknesses as well as using alike strategies based on their similar strengths. Such examples stated by Hitt et al., (2007:142) showed the similarities of the strategic business plans of companies with similar resources, such as FedEx and United Parcel Service. These companies were comparable in their ability to use information technologies, increasing the effectiveness of service quality and finding the most effective low cost service opportunities.

According to Chen (1996) the resource similarity is also the ability to compare a company’s profitability in terms of type and quantity with their competitors. The ability to define the similarities of resources also has a crucial impact on the ability to foresee possible business outcomes. It is possible to say that the similar resources would lead companies to utilise similar strategic business plans. On the other hand, companies with unrelated resources would have a competitive edge over their competitors, as these results in it being difficult to determine the strategic plans and outcomes for those companies.

Chen (1996:107) appertaining to concept of competitive market information and resource similarity, was able to develop a different perspective based on the companies in question and form a competitive analysis model as it is shown below (Figure 1). According to Chen (1996:108), based on market commonality and resources similarity, it is possible to investigate the concept of competitiveness in four sections. The first area focuses on the firm and its competitors who have a high level of resource similarity and market commonality. The Venn diagram explains the resource similarity via the shape of the figures and the market commonality with the level of intersection between those figures. As was pointed out before, building and managing market commonality is superior to merely sharing the market. Therefore the diagram is to give a vague overview about the competition rather than a model from which to draw conclusions. Firms in area are alike and have important intersections. It is possible to say that those firms are directly linked and well-informed about one another. Alternatively, the companies in part IV have similar resources but are not direct competitors.

### 3. Methodology

In this section details of; type and samples of the research, how the data was obtained, and the program that has been used to analyse the data were covered.

#### 3.1 Purpose of the Research and Hypotheses

The main purpose of this study is to introduce awareness of competition as a new concept to the management literature; constitute the theoretical background and provide empirical research findings in order to support hypotheses suggested in this research. Thus, this research is aiming to present a new insight to the companies in order to improve profits as well as maintain their competitive advantage over their competitors.

The hypotheses developed to represent the purpose of this study are as follows;

H1: There is a substantive relationship between awareness of competition on an individual level and firm performance.

H2: The instinct to benefit from opportunities has a significant and positive impact on firm performance.

H3: Strategic vigilance of individuals has a significant and positive impact on firm performance.

H4: Individual's motivation for competition has a significant and positive impact on firm performance.

H5: Individual's competitive market information has a significant and positive impact on firm performance.

#### 3.2 Developing the Data Gathering Tools

In order to represent empirical evidence for awareness of competition, a scale was developed based on the information provided by the theoretical framework for this research. This scale was formed on four aspects of awareness of competition; the instinct to benefit from opportunities, strategic vigilance, motivation for competition, competitive market information. However, the scale that was developed for this research has never been used before. For that reason the scale was used in a pilot study prior to the research. The study was conducted on 40 company managers operating in Afyon. The purpose of the pilot study carried out is to gather information and measure the credibility and validity of the scale based on individual's responses.

The data obtained from this study was analysed with the SPSS 20 program and some items which were believed to decrease the reliability of the scale were removed or replaced with new questions to refactor the scale. On the revised awareness of competition scale survey (ACS), all queries were formed in a positive way. The given responses were structured as a multiple choice; completely false (1), mostly false (2), neither true nor false (3), mostly true (4), completely true (5). The answers are assigned a score, as shown by the corresponding bracketed number. The lowest possible score obtained from the scale is equal to be the number of the items on the scale, 31 completely false responses. In order to measure the firm performance, a scale developed by Naktiyok (2004:242) was presented to senior management teams. This scale has multiple choice answers to a set of questions such as "outstanding compared to competitors" (in the segment of first 20% in their sector) (1); "above average compared to competitors" (in the segment of 21%-40) (2); "average in relation to competitors" (in the segment of 41%-60%) (3); "below average compared to competitors" (in the segment of 61%-80%) (4); and "very poor compared to competitors" (in segment of the last 20% in their sector) (5).

#### 3.3 Sample Size and Methods Used to Analyse the Data

In order to determine the direction and the strength of the relationship between senior manager's awareness of competition and firm performance, a representative group from companies operating in capital of Turkey, Ankara, in organized industrial site were queried for this survey. From this block totalling 2300 companies, 329 companies were selected to be included in this research (Sample Size Calculator, 2015). 415 questionnaires were presented to the senior managers. A small portion of the questionnaires were eliminated as not adequately complete, resulting in 380 suitable completed questionnaires for analysis. The data gathered was analysed by the SPSS 20 Lisrel 8.8 program. In order to determine the validity and the reliability of the scales used in this research, and to assign the Cronbach's alpha coefficient, the Exploratory Factor Analysis (EFA) method was used. EFA analysis is intended to explore the structure of the factors measured by the scale rather than examining the hypothesis (Tavsancil, 2006). In addition, the Bartlett Sphericity test is calculated to determine the validity and the adequacy of the data that was used. To measure the relationship between senior managers awareness of competition and firm performance, structural equation modelling was used. The impact of awareness of competition on firm performance was investigated via potential variables. The relationship between awareness of competition and performance variables was explained with a comparative model.

## **4. Findings**

### **4.1 Results from Research Sampling**

Of the senior managers participating in this study, the majority consist of male managers (92,6%), whereas only a small minority were women (7,4%). The age of the managers were mainly 51 and above (45,3%) while almost half of the participants have had 21-30 years of experience (49,2%). Participants with a high school degree was (53,9%). Participants with a postgraduate degree were only 9,5%. Almost all of the participants are working in the food industry.

### **4.2 Findings about the Reliability of the Scale**

Reliability of the scale was measured by using the Cronbach alpha coefficient method. Reliability coefficients of the scales used in this research and the sub dimensions of the questionnaires are shown in Table 1. It is possible to see from Table 1 that the consistency coefficient (Cronbach alpha) for the 31 items on the awareness of competition scale was determined to be 0,843. On the other hand, exploring the reliability values for sub aspects of awareness of competition, the Cronbach alpha coefficient for “the instinct for benefiting from opportunities” was determined to be 0,764; Cronbach alpha coefficient for “strategic vigilance” was determined to be 0,802; Cronbach alpha coefficient for “motivation for competition” was determined to be 0,737; Cronbach alpha coefficient for “competitive market information” was determined to be 0,857. Moving to the firm performance scale, the Cronbach alpha coefficient for the total value for 5 items on the scale was determined to be 0,911. Considering the fact that the average Cronbach alpha coefficient value is accepted to be 0,70 (Morgan, 2004:122); both of the scales were found to be highly reliable.

### **4.3 Findings about the Validity of the Scale**

After determining the reliability of the scales used in this research, the scales in question were analysed with different methods such as convergent validity, face validity and discriminant validity method in order to establish the validity values. Considering the fact that the awareness of competition scale questions haven't needed to be clarified for the participants, it is possible to say that the face validity of the scale was checked. Exploratory factor analysis was also used in order to determine the validity values of the scales used in this research. In order to determine the validity of the size of the sample, Kaiser-Meyer-Olkin (KMO) values were also included in the analysis. The results for KMO values that were expected to be greater than 0,60 and the significance values of Bartlett Sphericity test that were expected to be greater than 0,000 were presented below (Leech, et al., 2005:82). The actual KMO value for the awareness of competition scale was determined to be 0,863. Before moving into factor analysis, the Bartlett Sphericity test was conducted in order to determine whether a portion of the data was caused by multivariate distribution. This test gave the result of  $\chi^2$ . As a result of statistical analysis performed for this research, the Bartlett Sphericity test outcome was determined to be significant to the study ( $\chi^2=5134,000$ ,  $df=465$ ,  $p<0,00$ ). Based on the results of the Bartlett Sphericity test and the KMO values, it is possible to say that the size of the sample group is adequate for this research. The result of the exploratory factor analysis - which was conducted to determine the validity values of the scale - is shown in Table 2.

When Table 2 is examined, it is possible to see that the total of 31 items are divided into four different aspects; the instinct for benefiting from opportunities, strategic vigilance, motivation for competition, competitive market information. 47,89% of the variance is contained within these aspects. A total variance ratio greater than 0,40 is considered to give validity to research (Paulhus, et al., 1998). Thus, the structure resulting from these factors was found to support the theoretical hypotheses of this research. The exploratory factor analysis conducted on the firm performance scale showed the KMO values of 0,884. In order to perform a statistical factor analysis for this scale, a Bartlett Sphericity test was conducted and the results found to be credible for the study ( $\chi^2=5134,000$ ,  $df=465$ ,  $p<0,00$ ). According to these results, the sample group was found to be adequate for the research. The results for the factor analysis conducted on the firm performance scale are presented in Table 3. As Table 3 shows, the 5 items of the scale were grouped under a single aspect. The variance explanation ratio of these factors was found to be 74,19%, which supports the validity of the scale.

### **4.4 Findings About the Confirmatory Factor Analysis**

In this study was used Confirmatory Factor Analysis method to determine whether model developed based on theoretical knowledge is confirmed or not, and to specify that is expected model fit to observed model (Kline, 2011).

In the model obtained by this analysis (Figure 2) Structural values of Awareness of Competition Scale is  $\chi^2=1368, 50$ ,  $df= 422$ ,  $p= 0,000$  and  $RMSEA= 0,077$ . According to other indices evaluation results of model's fit are presented in Table 4 (Resource for evaluating criteria: Schermelleh-Engel ve Moosbrugger, 2003:36).

In Table 4 shown that Awareness of Competition Scale is valid and it's fit to structure with four factors. On the other hand in the model obtained by this analysis (Figure 3) Structural values of Firm Performance Scale is  $\chi^2=9,43$ ,  $df= 4$ ,  $p= 0,000$  and  $RMSEA= 0,060$ . In reference to other indices evaluation results of model's fit are shown in Table 5. In Table 5 shown that Firm Performance Scale is valid and it's fit to structure with one factor (Resource for evaluating criteria: Schermelleh-Engel ve Moosbrugger, 2003:36).

#### 4.5 Findings about the Structural Equation Modelling Analysis

Structural Equation Modelling (SEM) was used in order to analyse the data gathered for this research. Tavşancıl (2006:125-130) argued that latent variables such as intelligence, interest, emotions and manners can only be observed indirectly via behavioural patterns or via a particular set of measurement systems. This model uses indicators from an explanatory structure that focuses on the four aspects of awareness of competition as a latent variable and firm performance as an observable variable (Simsek, 2007). At this stage, the established model was explained via fit indices. Furthermore, this model presents the relationship between different aspects of awareness of competition and firm performance separately. Thus, awareness of competition as a latent variable revealed by the different sub-aspects and its relationship with the firm performance variable can be described structurally.

At the end of all the analysis, the structural relationship between awareness of competition and firm performance is represented on Figure 4. In Table 6 shown that Awareness of Competition and Firm Performance model has moderate fit or perfect fit according indexes below (Resource for evaluating criteria: Schermelleh-Engel ve Moosbrugger, 2003:36). The model established from the analysis and how it is related to this research's hypothesis is explained below;

H1: There is a substantive relationship between awareness of competition on an individual level and firm performance.

In the established model, the chi-square value is found to be  $=1710, 222$ ,  $sd=588$ ,  $p=0,000$  and  $RMSEA$  value is found to be  $0,071$ . According to the fit index presented above, the structural equation model was found moderate fit. In other words, an individual's instinct to benefit from opportunities, strategic vigilance, motivation for competition and competitive market information is linked to the model that has been founded between presumed awareness of competition and firm performance. This makes the model statistically meaningful. Thus, based on this model the relationship between awareness of competition and performance can be identified on sub levels and factors.

H2: The instinct to benefit from opportunities has a significant and positive impact on firm performance.

As shown in Figure 4, the coefficient values of variables between the instinct to benefit from opportunities and performance was proved to be  $0,71$ . One unit increase on the instinct to benefit from opportunities variable gives an equivalent  $0,71$  percent increase in firm performance. This coefficient is positively correlated and statistically significant at  $0,05$  level. Based on this coefficient level it is possible to say that an increase on the instinct to benefit from opportunities would also mean an increase in firm performance. Similarly a decrease on the instinct to benefit from opportunities would cause a decrease in firm performance.

H3: Strategic vigilance of individuals has a significant and positive impact on firm performance.

As shown in Figure 4, the coefficient values of variables between the strategic vigilance and firm performance was proved to be  $0,56$ . This finding would imply that one unit increase in strategic vigilance is also an increase of  $0,56$  percent in firm performance. This coefficient is positively correlated and statistically significant at  $0,05$  level. Based on this coefficient level it is possible to say that an increase on the strategic vigilance would also mean an increase in firm performance. Similarly a decrease on strategic vigilance would cause a decrease on firm performance.

H4: Individual's motivation for competition has a significant and positive impact on firm performance.

As shown in Figure 4, the coefficient values of variables between the motivation for competition and firm performance was presumed to be  $0,63$ . This finding would imply that one unit increase on motivation for competition is also an increase of  $0,63$  percent on firm performance.

This coefficient is positively correlated and statistically significant at 0,05 level. Based on this coefficient level, it is possible to say that an increase on the motivation for competition would also mean an increase on firm performance. Similarly a decrease on motivation for competition would cause a decrease on firm performance.

H<sub>5</sub>: Individual's competitive market information has a significant and positive impact on firm performance.

As it is shown on Figure 4, the coefficient values of variables between the competitive market information and firm performance was presumed to be 0,75.

This finding would imply that one unit increase on competitive market information is also an increase of 0,75 percent on firm performance. This coefficient is positively correlated and statistically significant at 0,05 level. Based on this coefficient level, it is possible to say that an increase on competitive market information would also mean an increase on firm performance. Similarly, a decrease on competitive market information would cause a decrease on firm performance.

## 5. Conclusions

Gaining a competitive advantage over competitors in order to increase profitability and manage sustainable growth has been the primary purpose of organizations and has influenced a great amount of academic researches for decades. Within the rapidly changing turbulent business environment, companies are facing intense competition and increasing numbers of strong competitors. Furthermore, global competition is also prevalent with the extensiveness of globalization, which has also enabled the increased attention of human capital. The main purpose of this study was to explore how an individual's awareness of competition that is taking place in the external environment effects their management decisions.

In order to determine if such a relationship between awareness of competition and firm performance exists, a theoretical background for awareness of competition was explored and components of such a concept were determined. Afterwards, a research tool developed via the theory was conducted on senior management teams of 380 companies. The data gathered with this research was analysed by using SPSS 20 and Lisrel 8.8 programs. Findings based on this analysis are explained below; the reliability analysis performed on the scale that was developed to measure awareness of competition found the scale to be reliable, based on the Cronbach Alpha coefficient (0,843). In order to determine the validity of the scale, exploratory analysis conducted proved that the scale possesses the coefficient values for validity.

A Structural Equation Model was established during the final stage of this research. In order to determine the relationship between the different components of awareness of competition such as the instinct to benefit from opportunities, strategic vigilance, motivation for competition and competitive market information, a structural model was founded. The model was explained by using the fit index and the values were found to be statistically significant ( $p=0,000$ ) and accurate ( $RMSEA=0,071$ ).

According to this model, a substantial and positive relationship was found between firm performance and the different aspects of awareness of competition such as the instinct of benefiting from opportunities (0,71), strategic vigilance (0,56), motivation for competition (0,63) and competitive market information (0,75). Based on these outcomes, it is possible to say that there is a strong positive correlation between the instinct to benefit from opportunities, strategic vigilance, motivation for competition and competitive market information. The theoretical and empirical findings of this research are hoped to be used as a baseline to be expanded upon in the future. This will provide a new concept of appreciation for companies.

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### Tables and Figures

**Table 1. Reliability values of acs and firm performance**

	Number of	Cronbach
The instinct of benefiting from opportunities	6	0,764
Strategic vigilance	9	0,802
Motivation for competition	8	0,737
Competitive market information	8	0,857
Awareness of Competition Scale	31	0,843
Firm Performance Scale	5	0,911

**Table 2. The results of the exploratory factor analysis for acs**

Items and Factor Loadings					
	The Instinct of Benefiting from Opportunities	Strategic Vigilance		Motivation for Competition	Competitive Market Information
It1	0,835		It16	0,676	
It2	0,801		It17	0,702	
It3	0,787		It18	0,810	
It4	0,575		It19	0,589	
It5	0,463		It20	0,731	
It6	0,497		It21	0,593	
It7		0,430	It22	0,669	
It8		0,457	It23	0,552	
It9		0,402	It24		0,553
It10		0,650	It25		0,656
It11		0,559	It26		0,665
It12		0,582	It27		0,717
It13		0,775	It28		0,578
It14		0,647	It29		0,735
It15		0,684	It30		0,745
			It31		0,754

**Table 3. The results of the exploratory factor analysis on firm performance scale**

It	Factor
M	0,863
M	0,906
M	0,878
M	0,846
M	0,812

**Table 4: evaluation of structure by means of fit indexes (awareness of competition scale)**

Fit Index	Perfect Fit	Moderate Fit	Model	Result
RMSEA	$0 < RMSEA < 0,05$	$0,05 \leq RMSEA \leq 0,10$	0,077	Moderate Fit
CFI	$0,97 \leq CFI \leq 1$	$0,95 \leq CFI \leq 0,97$	0,96	Moderate Fit
GFI	$0,95 \leq GFI \leq 1$	$0,90 \leq GFI \leq 0,95$	0,94	Moderate Fit
AGFI	$0,90 \leq AGFI \leq 1$	$0,85 \leq AGFI \leq 0,90$	0,94	Perfect Fit
NFI	$0,95 \leq NFI \leq 1$	$0,90 \leq NFI \leq 0,95$	0,94	Moderate Fit
NNFI	$0,97 \leq NNFI \leq 1$	$0,95 \leq NFI \leq 0,97$	0,97	Perfect Fit

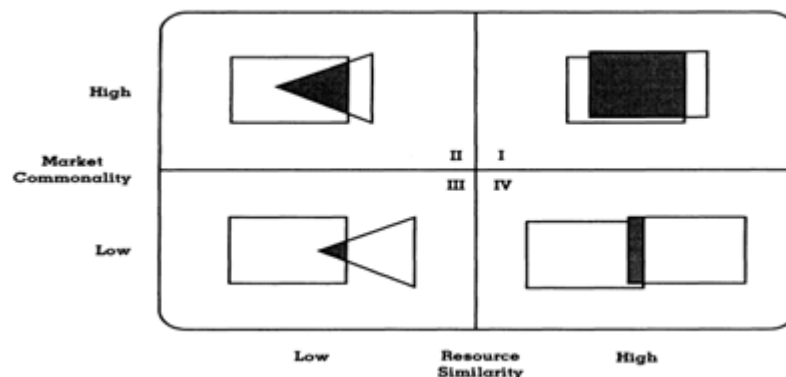
**Table 5: Evaluation of model by means of fit indexes (firm performance)**

Fit Index	Perfect Fit	Moderate Fit	Model	Result
RMSEA	$0 < RMSEA < 0,05$	$0,05 \leq RMSEA \leq 0,10$	0,060	Moderate Fit
CFI	$0,97 \leq CFI \leq 1$	$0,95 \leq CFI \leq 0,97$	0,99	Perfect Fit
GFI	$0,95 \leq GFI \leq 1$	$0,90 \leq GFI \leq 0,95$	0,98	Perfect Fit
AGFI	$0,90 \leq AGFI \leq 1$	$0,85 \leq AGFI \leq 0,90$	0,99	Perfect Fit
NFI	$0,95 \leq NFI \leq 1$	$0,90 \leq NFI \leq 0,95$	0,97	Perfect Fit
NNFI	$0,97 \leq NNFI \leq 1$	$0,95 \leq NFI \leq 0,97$	0,97	Perfect Fit

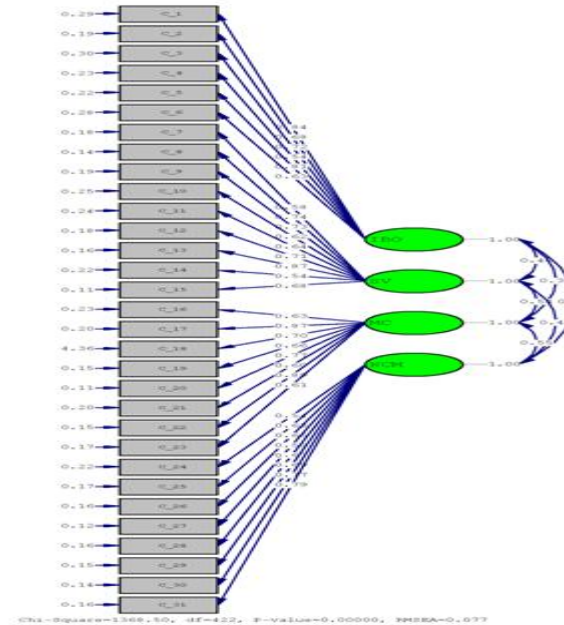
**Table 6. Evaluation of model by means of fit index (awareness of compet. and firm perf.)**

Fit Index	Perfect Fit	Moderate Fit	Model	Result
RMSEA	$0 < RMSEA < 0,05$	$0,05 \leq RMSEA \leq 0,10$	0,071	Moderate Fit
CFI	$0,97 \leq CFI \leq 1$	$0,95 \leq CFI \leq 0,97$	0,97	Perfect Fit
GFI	$0,95 \leq GFI \leq 1$	$0,90 \leq GFI \leq 0,95$	0,95	Perfect Fit
AGFI	$0,90 \leq AGFI \leq 1$	$0,85 \leq AGFI \leq 0,90$	0,97	Perfect Fit
NFI	$0,95 \leq NFI \leq 1$	$0,90 \leq NFI \leq 0,95$	0,95	Perfect Fit
NNFI	$0,97 \leq NNFI \leq 1$	$0,95 \leq NFI \leq 0,97$	0,96	Moderate Fit

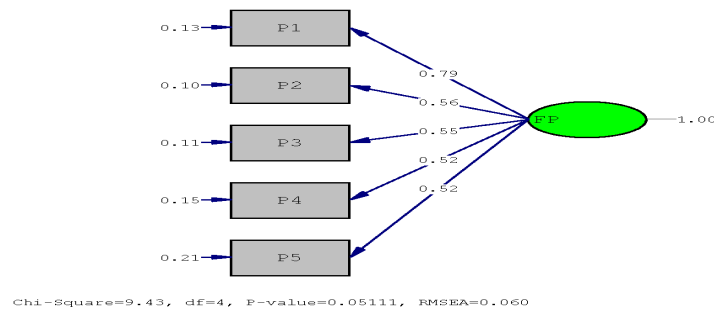
**Figure 1: A framework of competitor analysis (chen, 1996:108)**



**Figure 2: Confirmatory factor analysis of awareness of competition**



**Figure 3: Confirmatory factor analysis of firm performance**



**Figure 4: Structural equation model between awareness of competition and firm performance**

