

Strategic Thinking and Organizational Success: Perceptions from Management Graduates and Students

Yashar Salamzadeh *

Senior Lecturer, Graduate School of Business, Universiti Sains Malaysia (USM), Malaysia
Email: yashar@usm.my, yasharsalamzadeh@gmail.com

Vahideh Zare Bidaki

MBA in Strategic Management, Farabi Institute of Higher Education, Iran

Taghi Vahidi

PhD candidate in Business management (Marketing Management), Islamic Azad University of Shahrood, Iran

** Corresponding Author*

Abstract

Purpose: This research aims to identify the impact of strategic thinking of managers on organizational success. The essence and importance of this research represents the fact that the current organizations lack to respond the environment variations via the past or ordinary approaches; thus, having strategic thinking among the managers may be considered as a robust foundation for better execution of strategic plans in organizations. The main question of the research is on the impacts of strategic thinking on organizational success.

Design/Methodology: The major hypothesis of the study is specified as: “The strategic thinking of the managers has a positive and significant association with organizational success”. Our Research methodology is descriptive and its conceptual model has been designed based upon the theoretical studies and focus groups. Our tool is a researcher-made questionnaire which has been set on the basis of the defined hypotheses and previous researches. Statistical population of the research are graduates and graduate students of management in Iran and analysis is done using PLS.

Findings: The results of the study revealed that there is a positive and significant correlation between Strategic thinking of managers and organizational success. Therefore, one can conclude that an organization will benefit from a considerable success when the extent of strategic thinking of managers is high. Also, when managers undermine or lack the strategic thinking, the organizational success will be decreased considerably. Hence, it is recommended that managers attempt to realize the importance of strategic thinking and try to empower it among themselves; meanwhile, they should enhance the participative work morale, synergic cooperation, foresight, creativity, entrepreneurial minset and healthy competition among the staff.

Originality/Value: This research is the first research concentrating on these variables in Iranian Context on one hand and tries to develop a practical outcome according to its conceptual model on the other hand. Development of the model both on Strategic Thinking and Organizational Success is also a contribution of this research. As main end users of our results are top managers, it had been in consideration that the conceptual model and also the results should be presented in a way to be usefull for managers in real world exercises.

Keywords: Strategic Thinking, Managers, Organizational Success, Graduates, Graduate Students, Iran

Introduction

Based on Shadfard et al. (2013), by increasing organizational problems and their complexity, better solutions than strategic planning, Such as strategic Thinking, are needed, because managers who have strategic thinking, will have a better performance. These researchers also state that strategic thinking is complementary to strategic planning and is a proper approach in leading organizations; meanwhile, it will lead to systematic problem solving, better opportunity recognition, better allocation of scarce resources and achieving desired results.

Strategic thinking can be used in any organization seeking to gain a competitive edge. With a focus on improvement, often through creativity and innovation, strategic thinking builds a vision for an organization's future (Haycock, et al., 2012).

Managers play a very important role not only in strategic analysis and efforts but also as a part of decision-making process in strategy implementation. In fierce competition, organizations need their managers to be strategists (Karakaya et al., 2016). According to Moon (2013), there is a positive correlation between strategic thinking and marketing performance. Mainardes et al. (2014) state that strategic thinking has acquired the status of an indispensable factor in leading and managing organizations, whether for profit or not for profit ones.

Based upon a 2008 study by Switzer, strategic thinking is a practice whose time has come and as rapid-fire change continues, leaders will increasingly rely on strategic thinking to sense the right direction. According to Nathan (2015), strategic thinking is a more precise exercise that holds certain characteristics and as a threshold concept, it is critical to the new understanding of management in general. Developing strategic thinking has created a new horizon in the realm of strategic management and is used as a central issue in today's complex business environment (Kamangar et al., 2013).

This study aims to investigate the strategic thinking of managers, and since this kind of thinking impacts organizational success, the study is going to offer some guidelines for developing the organizational success if the impact is positive and significant. Moreover, the study intends to answer this question: What is the level of correlation between strategic thinking of managers and organizational success?

Literature Review

The Strategic Thinking of Managers

According to Nuntamanop et al. (2013), strategic thinking is important for both strategy development and strategic management; meanwhile, it contributes to corporate outputs and profitability. Kazmi and Naaranoja (2015) state that employing the strategic thinking term means that the leader combines elements like analysis, exploration, understanding, defining a multifaceted situation and then develop action plans that will bring the greatest possible positive impact towards a pre-defined goal.

Defining strategic thinking is still an in-progress work in academic world. Early efforts to define the term combined ideas such as conceptual thinking, information seeking, clarifying complex data and situations and learning from experiences. Many definitions for strategic thinking have emerged. They range from "thinking about planning" to engaging in a holistic approach to organizational life (Bouhali et al., 2015). Strategic Thinking is a process through which a manager learns how to define his business view by applying teamwork, critical thinking and continuous improvement (Kiaei et al., 2016).

Strategic thinking ability is an important ingredient that entrepreneurs must have in order to determine business success (Hassan, et al., 2016).

Strategic thinking is seen as the generation and application of distinctive business ideas and opportunities intended to create competitive advantage for a business. It is also seen as the ability to come up with an effective plan in line with organizational objectives within a particular economic situation (Ibrahim Olaniyi & Elumah Lucas, 2016).

Strategic thinking, could be defined as the general perception, preference and logic of inference in the process of strategy making and conducting. Strategic thinking varies from one state to another, originates from a nation state’s history and culture and remains stable and influential on people’s behaviors across different periods of time (Pan, 2016).

Strategic thinking requires managers to think beyond routine procedures in order to concentrate on intended long-term strategic business purposes (Salamzadeh, et al., 2015).

Sanders (1998) adds to the discussion by explicitly linking strategic thinking to system thinking as informed by the science of complexity (Bouhali et al., 2015). Modern theorists emphasize on the significance of three main cognitive processes, namely system thinking, reframing, and reflection as the success factors for organizational leaders in dealing with situational complexity (Kazmi, et al., 2016).

Based upon Mintzberg (1994), there is a clear distinction between strategic thinking and other concepts; strategic planning is not strategic thinking. In this way strategic planning focuses on analysis and deals with the articulation, elaboration and formalization of existing strategies. But as it can be seen in Figure 1, Strategic thinking, on the other hand, emphasizes on synthesis, using intuition and creativity to create “an integrated perspective of the enterprise”. Mintzberg claimed that strategic planning is a process that should occur after strategic thinking (Sharifi, 2012).

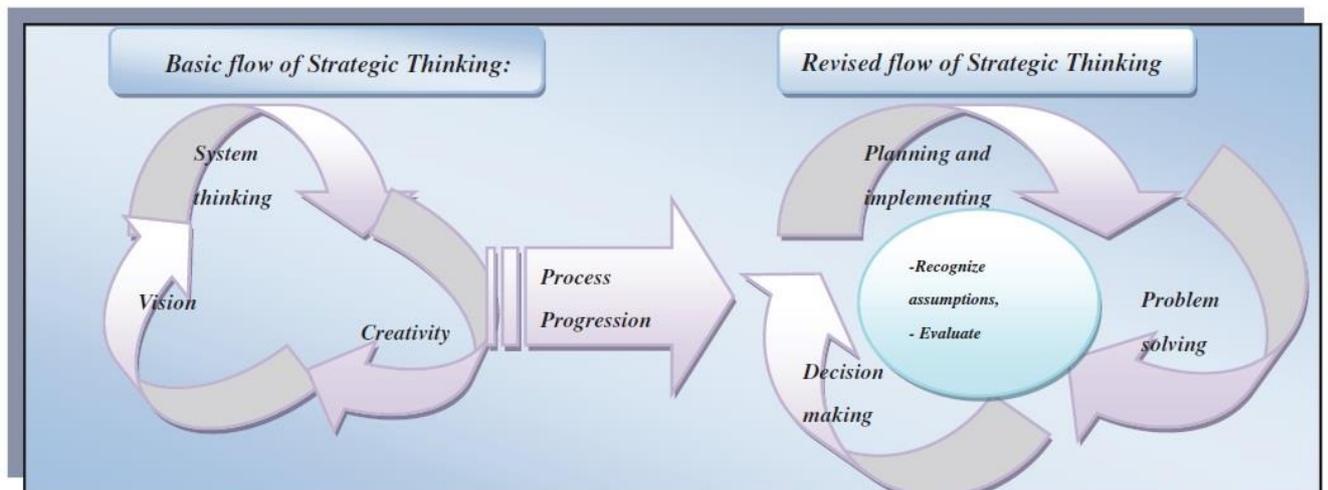


Figure 1: Reflection of Strategic thinking process progression (Kazmi & Naaranoja, 2015)

Also as it can be seen in Figure 2, some other researchers believe that Strategic thinking is a combination of five factors, Namely: System Perspective, Intent Focus, Intelligent Opportunism, Thinking in Time and Being Hypothesis Driven (Sharifi, 2012).

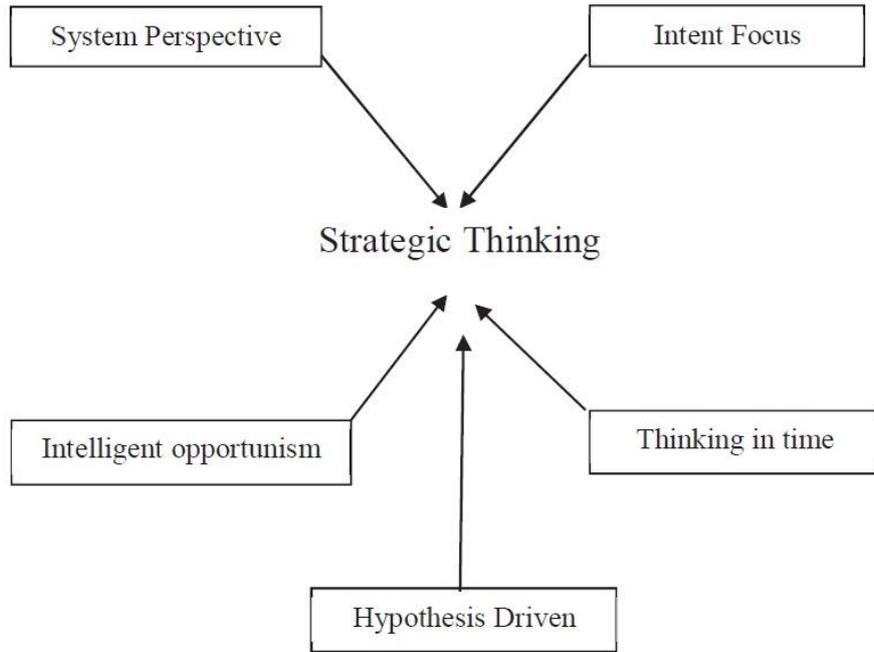


Figure 2: A model of comprising elements of strategic thinking (Sharifi, 2012)

As it can be seen in Figure 3, some other researchers developed models on how strategic thinking could be described as a capability and how it could be developed (Young, 2015).

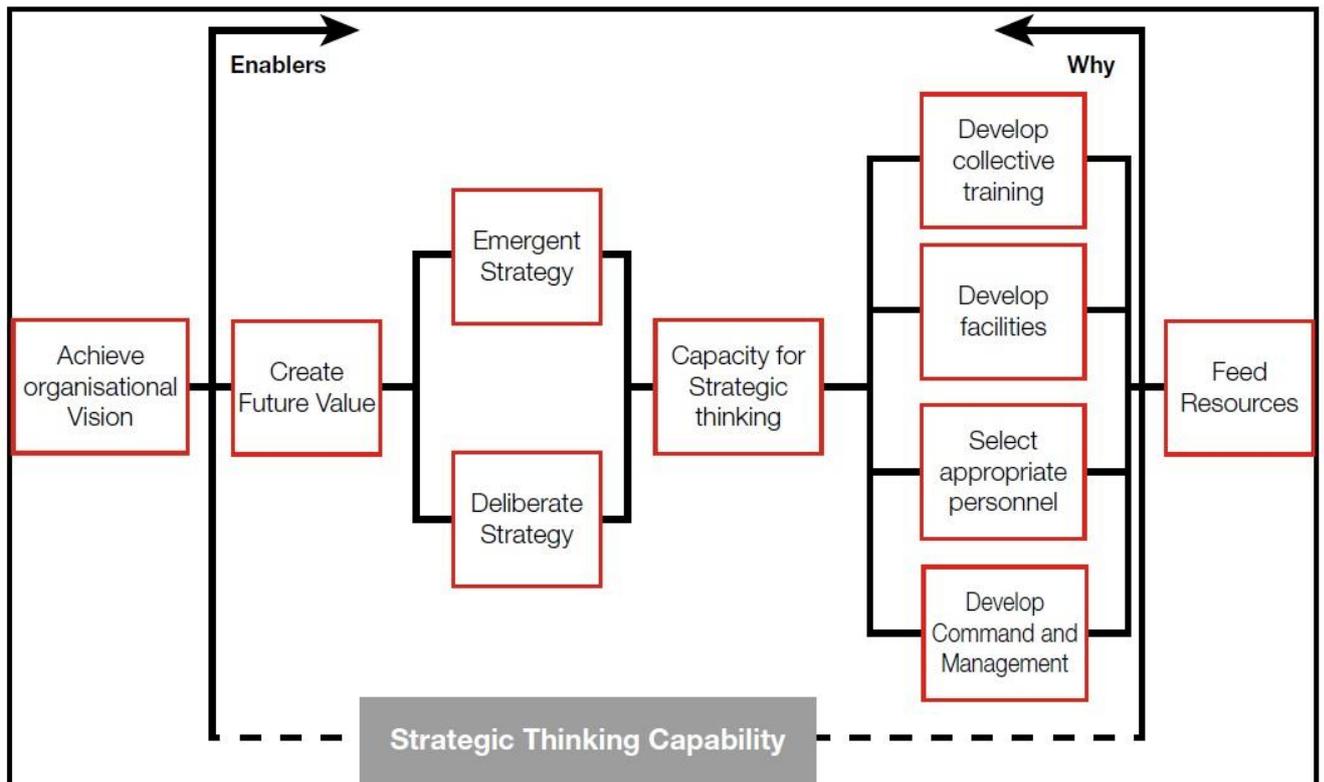


Figure 3: A brief description of how strategic thinking could be described as a capability (Young, 2015)

Organizational Success and Strategic Thinking

Strategic thinking can conceptualize different definitions of strategy and also how strategy affects performance. Strategic planning and strategic management thinking resonating with the formal, mechanistic processes, routines and plans seem to be a widespread public sector practice (Johnsen, 2014). Nuntamanop et al. (2013) defined strategic thinking as a process of thinking about an organization and how to develop a strategy which includes vision, creativity, flexibility, and entrepreneurial approach.

While more refined definitions of strategic thinking are still emerging, the main focus usually remains on the goals or outcomes of the organization. Even in system approach, strategic thinking is compared to a disciplined approach of thinking about outcomes of an organization and relationships amongst the many parts of the organizations (Fairholm, 2009).

Liedtka (1998), believes that although strategic thinking starts from individuals, they need to use an organizational context that supports strategic thinking and discourse in organizational environment, which is a basis to create new strategies, and can change competition rules, and provide a quite different prospect from current status (Shadfard, et al., 2013).

Leaders with good strategic thinking can emerge because of their innate talent or because they develop that talent, or due to a combination of the two. Therefore, a crucial skill for organizations is to be able to discover ways to identify and produce future leaders with the ability of strategic thinking (Benito-Ostolaza & Sanchis-Llopis, 2014). Taboli & Baghdadam (2016) address the role of strategic thinking as an effort for innovation and the embodiment of a new and very different future for organization, which may lead to redefinition of the principal strategies or even Environment in which the company operates.

Research Methodology

The paradigm of this study is an interpretive one and the study is an applied-descriptive research. The research contains a deductive approach, since the result has been obtained via putting the accepted realities together. In addition, the analysis method is on the basis of an investigation from a holistic viewpoint toward the details, and thus, the quantitative method, i.e. questionnaire, has been used. The study is a field research and a descriptive survey has been utilized as the research strategy. Also, the data has been gathered using the questionnaire and the hypotheses have been analyzed through the statistical techniques such as SEM. The validity of the researcher designed questionnaire is confirmed by the experts and the reliability of the questionnaire is obtained via the Cronbach's Alpha with the approved amount of 0.968 as indicated in Table 1.

Table 1: Cronbach's Alpha

The main dimensions	Average
Strategic Thinking	0.936
Organizational Success	0.947
Total	0.968

The statistical population of the research is the graduates and graduate students of Management in Iran. Sample size calculation formula in infinite population with 5% error is used to get the final sample size. The required sample size is 384 samples and since the questionnaire return rate is 78%, the actual sample size is obtained 300.

Conceptual Model

In developing the model in Strategic thinking Variable, we have used a combination of different models according to our focus group sessions to reach to a customized model for Iranian Managers. From Salamzadeh et al (2015) we got "System thinking" and "Intelligent

opportunism” Dimensions. From Sharifi (2012) we added “Thinking in time” and “Being Hypothesis Driven” Dimensions and from Kazmia & Naaranojab (2015) and Salamzadeh et al. (2015) on Definitions of Strategic Thinking, the “Focusing on objective” Dimension is added. On the other side of our conceptual model, Organizational Success, We have defined the model according to our Focus Group sessions and academic resources including: Creating Value for customers (Gainer and Padanyi, 2005), Creating competitive Advantage for Organization (Wafa et al., 2013), Distinction from Competitors (Wiley, 2010), Understanding the Market (Market Orientation) (Han et al, 1998), Selecting Right Employees (Pfeffer and Veiga, 1999) and Development of Facilities (Bodaghi et al., 2014)

The conceptual model of the research based upon the theoretical studies has been designed as depicted in Figure 4 and All Hypotheses are driven from this Conceptual Model.

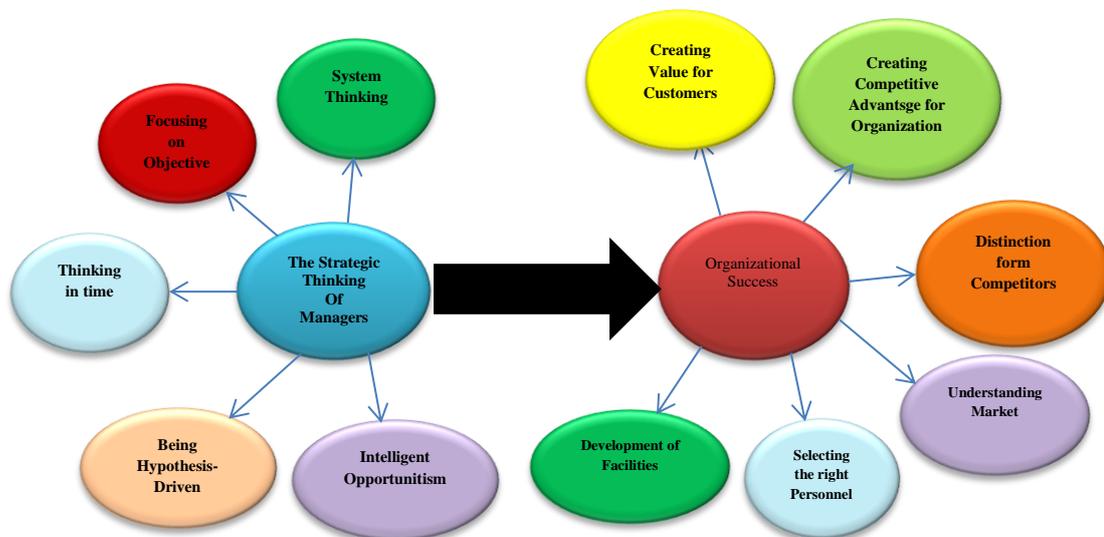


Figure 4: Conceptual Model of the Research

Data Analysis and Hypotheses Tests

For analyzing the obtained data, both descriptive and inferential statistics have been used. In addition, One Sample T-test has been used for analyzing data and research hypotheses and also for identifying the status of research variables; meanwhile, Confirmatory Factor Analysis has been utilized for measuring the specified model. Finally, Structural Equation Modeling (SEM) are applied for testing the research hypotheses. Kolmogorov–Smirnov test (K–S test) is also used for testing the normality of data. Furthermore, the research hypotheses have been tested using the Spearman Correlation Test after confirming the applied scale and in doing so, SPSS and PLS softwares are used for analysis. For analyzing data, the statistical correlation methods like linear regression have also been utilized.

The Objective of Research

This study examines the correlation between strategic thinking of managers and organizational success which is a key subject in an organization and can conduct the enterprise toward the right path for growth and development and also may lead to the improvement of organizational performances among the employees and managers.

Research Hypothesis

Based on the conceptual model, the hypotheses of the research are as follows:

Main Hypothesis: *The Strategic Thinking has a significant association with the Organizational Success.*

The sub-hypotheses:

1. “System Thinking” has a positive and significant correlation with Organizational Success.
2. “Focusing on Objective” has a positive and significant correlation with Organizational Success.
3. “Thinking at time” has a positive and significant correlation with Organizational Success.
4. “Being Hypothesis Driven” in managers has a positive and significant correlation with Organizational Success.
5. “Intelligent Opportunism” has a positive and significant correlation with Organizational Success.

Results

Demographics

The indices of descriptive statistics have been used for examining the demographical features of the respondents. These Demographic information include: gender, marital status, age, academic degree, work experience, and Experience on current position.

63 percent of respondents are Male and only 37 percent are female. 69 percent of them are married and the others are single. About 53 percent of respondents are between 31-35 years old, about 24 percent are between 36 and 40 and 16 percent of them are less than 30 and a small minority of respondents are more than 40 years old. 92 percent of respondents have Master Degree and Bachelor and PhD degrees are equal to 4 percent each. In terms of work experiences, 18 percent of respondents have less than 5 years experience while 41 percent have 6-10 years experience. 33 percent of respondents have 11-15 years of experience and 5 percent have 16-20 years and 3 percent more than 21 years of work experience. 41 percent of respondents are in their current position for 4 to 8 years, 28 percent between 9-13 years and 27 percent less than three years. 14-18 years in current position is relevant to 3 percent of respondents and about 1 percent of them are in their current position for more than 19 years.

Normality Test

Kolmogorov–Smirnov test (K–S test) is used in this study for testing the normality of data. If the data distribution is normal, the inferential statistical test may be utilized. The aforesaid test is carried out in the level of 5% error. If the significance level is equal to or greater than 5%, then the distribution of data is normal. The result of the normality test of data is presented in Table 2.

Table 2: Descriptive analysis of the variables

Variables	System Thinking	Focusing on Objective	Thinking at time	Being Hypothesis-Driven	Intelligent Opportunism	Strategic Thinking	Organizational Success
Number	300	300	300	300	300	300	300
Average	3.211	3.291	3.149	3.069	3.104	3.166	3.230
Standard Deviation	0.544	0.529	0.580	0.662	0.651	0.501	0.477
KS Statics	2.874	2.503	3.380	3.326	3.287	2.046	2.008
Significance	0.000	0.000	0.000	0.000	0.000	0.000	0.001

Based on the Kolmogorov–Smirnov test (K–S test), the significance level is less than the 5%. Thus, there is no reason to reject the null hypothesis and it can be concluded that the distribution of data is Normal.

Correlation between Variables

Correlation technique is used for examining the correlation between the variables. Correlation coefficient of Spearman is utilized for measuring the correlation between variables. The results of the analysis are separately presented in this section.

Correlation coefficient is a statistical tool for determining the type and degree of correlation between quantitative variables with other quantitative Ones. Correlation studies aim to examine the bilateral correlations of research variables so that the correlation coefficient shows the intensity and type of relation (if the relation is direct or indirect). The correlation coefficient is between -1 and 1 and it will be zero, if there is no relation between the variables. The results of examining the correlation between variables is presented in Table 3.

Hypotheses Testing and Partial Least Square (PLS)

Each hypothesis is analyzed based on Partial Least Square (PLS) technique. In addition, the final model of the study is also tested using PLS. It should be noted that the following points are very important in this technique:

1. Power of the correlation between factors (latent variable) and observed variable is shown by factor loading. The factor loading has an amount between zero and one. If the factor loading is less than 0.3, the relation is considered weak and it can be neglected. The factor loading between 0.3 and 0.6 is acceptable and if it is greater than 0.6, it would be desirable.
2. When the variables are identified, the significance test must be run. Bootstrap or Jackknife are used for examining the significance of the observed correlations. If the amount of t-value by Bootstrap in the level of 5% error is greater than 1.96, the observed correlation will be significant.

Generally, correlation between variables in the PLS can be categorized as follows:

1. Outer Model, which is equivalent with the Confirmatory Factor Analysis (CFA) in SEM (Structural Equation Modeling) and reveals the correlations between latent variables and observed ones.
2. Inner Model that is equivalent with the structural model (i.e., Path Analysis, in SEM) and examines the correlations between latent variables.

Outer Model

As stated above, the Outer Model is equivalent with CFA. It means that the outer model has been utilized for measuring the associations between the latent variables with their related questions. The outer model also establishes the relation between questions and constructs. In other words, if it is not proved that the questions can fully measure the latent variables, it won't be possible to test the associations. Here is the results for our model's constructs: In "System Thinking" Dimension, the values are between 0.632 and 0.854. In "Focusing on Objectives" Dimension, The values are between 0.708 and 0.850. In "Thinking in time" Dimension, The values are between 0.624 and 0.858. In "Being Hypothesis Driven" Dimension, the values are between 0.588 and 0.774. In "Intelligent Opportunism" Dimension, the values are between 0.633 and 0.833. In "Organizational Success" Dimension, the values are between 0.396 and 0.787.

Table 3: Correlation between research variables

		System Thinking	Focusing on Objective	Thinking at time	Being Hypothesis-Driven	Intelligent Opportunism	Strategic Thinking	Organizational Success
System Thinking	Correlation	1.000	0.527	0.505	0.501	0.586	0.754	0.571
	Significance	0	0.000	0.000	0.000	0.000	0.000	0.000
	# of Samples	300	300	300	300	300	300	300
Focusing on Objective	Correlation	0.527	1.000	0.420	0.456	0.565	0.721	0.532
	Significance	0.000	0	0.000	0.000	0.000	0.000	0.000
	# of Samples	300	300	300	300	300	300	300
Thinking at time	Correlation	0.505	0.420	1.000	0.599	0.574	0.758	0.569
	Significance	0.000	0.000	0	0.000	0.000	0.000	0.000
	# of Samples	300	300	300	300	300	300	300
Being Hypothesis-Driven	Correlation	0.501	0.456	0.599	1.000	0.620	0.824	0.581
	Significance	0.000	0.000	0.000	0	0.000	0.000	0.000
	# of Samples	300	300	300	300	300	300	300
Intelligent Opportunism	Correlation	0.586	0.565	0.574	0.620	1.000	0.821	0.668
	Significance	0.000	0.000	0.000	0.000	0	0.000	0.000
	# of Samples	300	300	300	300	300	300	300
Strategic Thinking	Correlation	0.754	0.721	0.758	0.824	0.821	1.000	0.711
	Significance	0.000	0.000	0.000	0.000	0.000	0	0.000
	# of Samples	300	300	300	300	300	300	300
Organizational Success	Correlation	0.571	0.532	0.569	0.581	0.668	0.711	1.000
	Significance	0.000	0.000	0.000	0.000	0.000	0.000	0
	# of Samples	300	300	300	300	300	300	300

Based on the results of the model presented above, the observed factors has a value greater than 0.3 and it reveals that there is a suitable correlation between the observed variables and their related latent variables. Thus, it can be concluded that all main variables have been properly measured and it would be possible to test the hypotheses of the research.

Convergent Validity

The convergent validity is calculated in this study as well. If one or more features are measured via two or more methods, the correlation between these measurements will provide two important index of validity. If there is a high correlation between the results of the tests which measure a single feature, the questionnaire has convergent validity. In order to obtaining the convergent validity, Average Variance Extracted (AVE) and Composite Reliability (CR) must be calculated; meanwhile the following relations have to be existed: $CR > 0.7$, $CR > AVE$ and $AVE > 0.5$ and as it can be seen in Table 3, all these criteria are fulfilled. On the other hand, the Cronbach's Alpha for all variables is greater than 0.6, So the reliability of the variables is confirmed. The Convergent Validity and Reliability of the research variables is depicted in Table 4.

Table 4: Convergent validity and reliability of the variables

	Cronbach's Alpha	AVE	CR
System Thinking	0.793	0.549	0.844
Focusing on Objective	0.826	0.631	0.897
Thinking at time	0.784	0.706	0.836
Being Hypothesis-Based	0.847	0.598	0.877
Smart Opportunism	0.806	0.631	0.849
Organizational Success	0.781	0.592	0.799

Hypotheses Tests

The correlation between the examined variables in each hypothesis is tested on the basis of a causative structure with the PLS technique. In the general model of the research shown in Figure 5, the measurement model (relation between the observed and latent variables) as well as the path model (the relation of the latent variables with each other) are presented. Also, measuring the significance of the relations by statistic t with Bootstrip technique is depicted in Figure 6. In this model, which is the output of Smart PLS, the summary of the results originated from standard factor loading for associations of the research variables is also presented. Moreover, the test of the hypotheses based on the relations between the variables is separately presented.

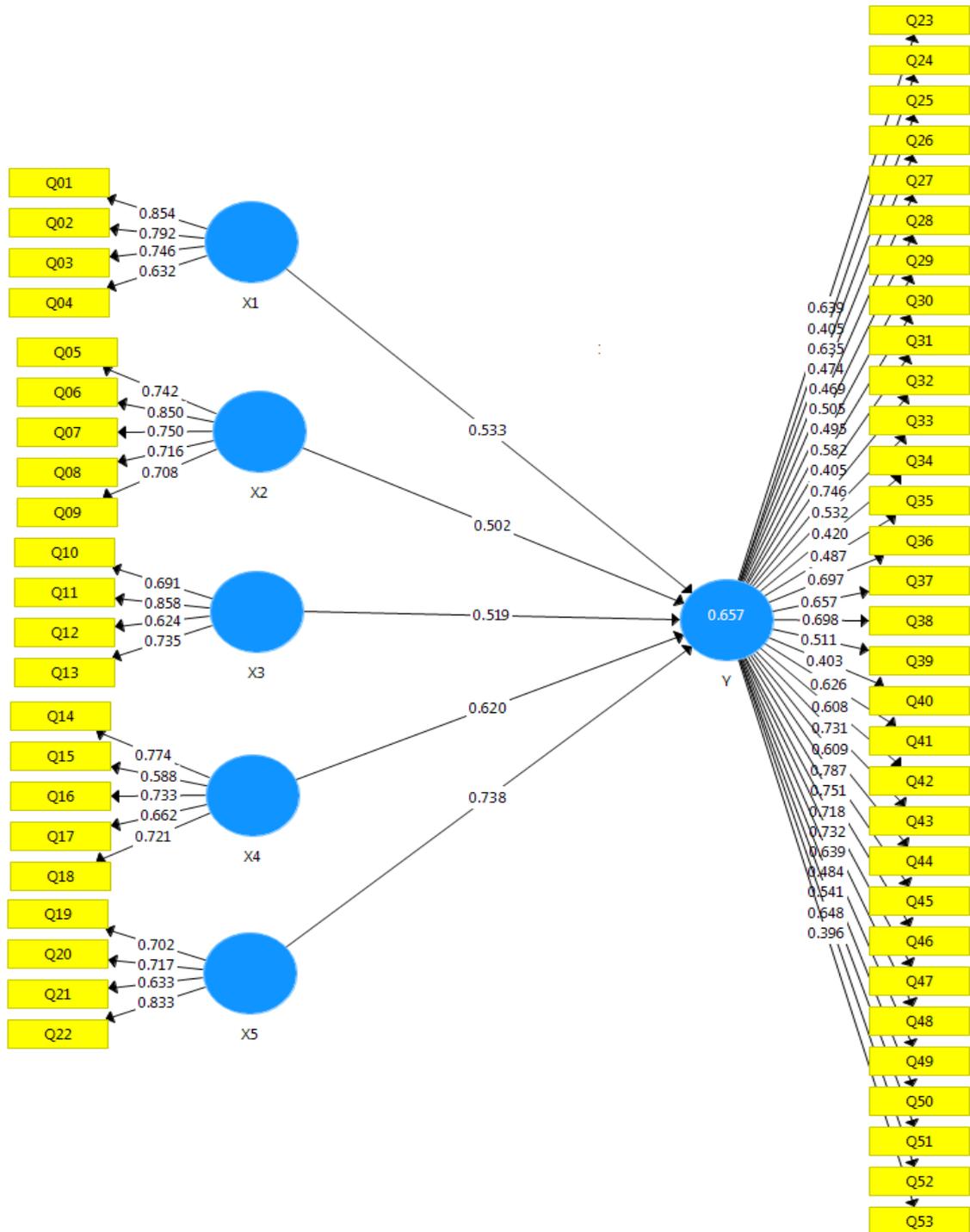


Figure 5: PLS for the general model of the research

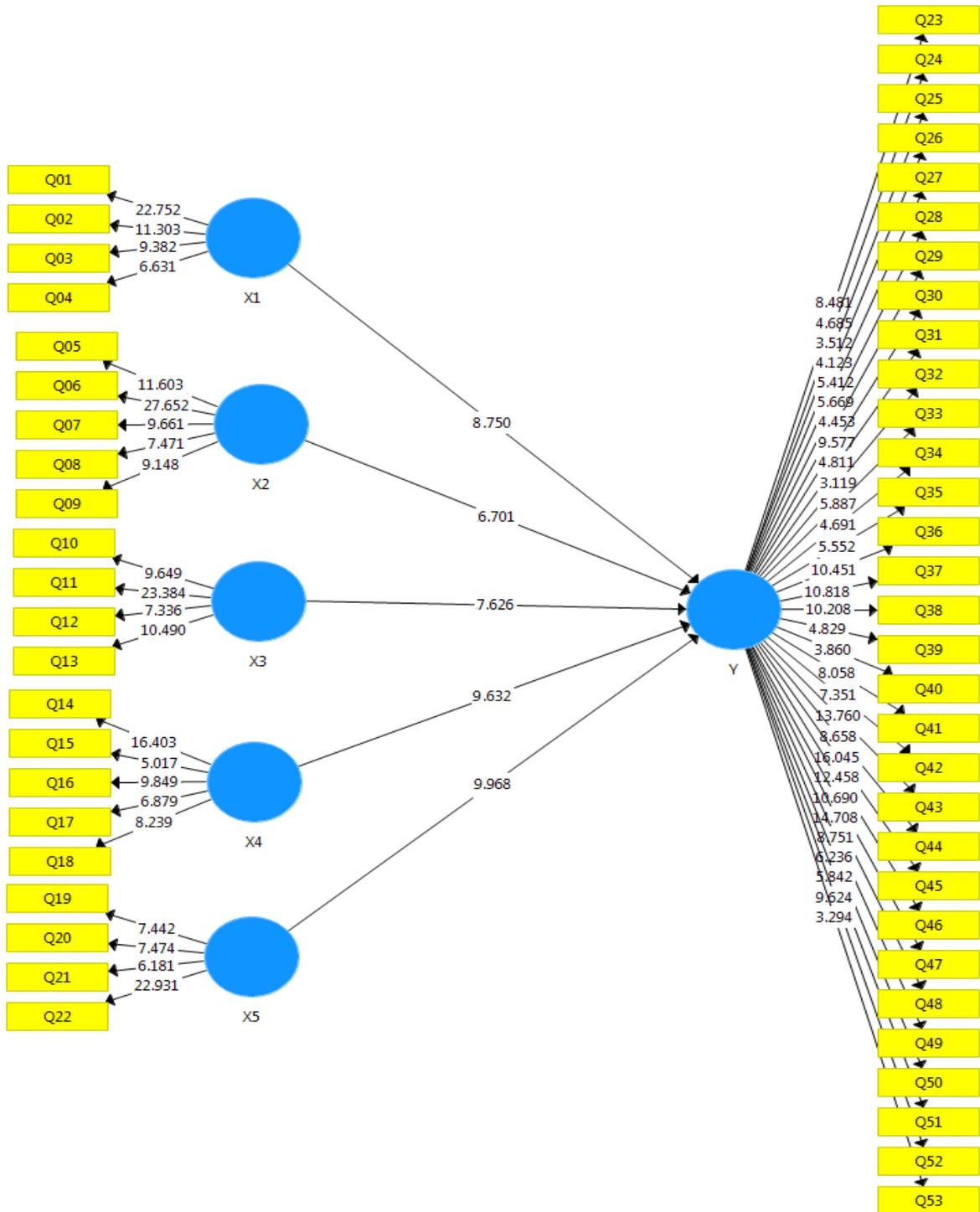


Figure 6: T-value for research general model using the Bootstrap technique

R-Square (R²) Criterion

The amount of R² for effective structure is 0.630 as shown in Figure 7. Thus, the goodness of fit in structural model considering the three values of fairness confirms the model.

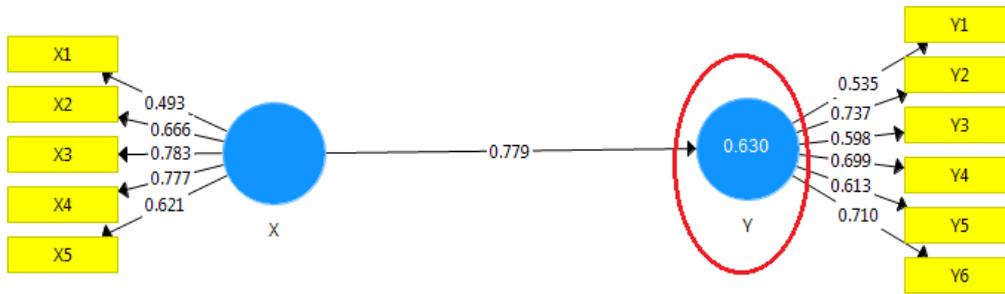


Figure 7: R² Value

Model Fitness (GoF criterion)

The GOF criterion is related to the overall part of the Structural Equation Modeling. It means that the researcher is able to control the overall part of research model after examining the goodness of fit. The GOF criterion can be calculated based on the following formula:

$$GOF = \sqrt{Avg(Communalities) \times R^2}$$

In addition, three values of 0.1, 0.25 and 0.36 have been introduced as the weak, average, and strong amounts for GoF. The amount of GoF criterion has been calculated as follows and shows a strong fit:

$$R^2=0.630$$

$$GOF = \sqrt{0.741 \times 0.630} = \sqrt{0.466} = 0.683$$

Hypothesis 1: “System Thinking” has a positive and significant correlation with Organizational Success.

Value of the relation between “System Thinking” and “Organizational Success” is calculated as 0.533, which is a considerable value. T-value is obtained 8.750 which is greater than the critical t-value of 5% error, i.e. 1.96, and it reveals that the observed correlation is significant. Therefore, one can conclude, with the 95% confidence level, that “System Thinking” in managers has a positive and significant relation with Organizational Success.

Hypothesis 2: “Focusing on Objective” has a positive and significant correlation with Organizational Success.

Value of the relation between “Focusing on Objective” and “Organizational Success” has been calculated as 0.502 which is a considerable value. The statistic t-value is obtained 6.701 which are greater than the critical t-value of 5% error, i.e. 1.96, and it shows that the observed correlation is significant. Therefore, it can be concluded, with the 95% confidence level, that “Focusing on Objective” in managers has a positive and significant relation with Organizational Success.

Hypothesis 3: “Thinking at time” has a positive and significant correlation with Organizational Success.

Value of the relation between the “Thinking at time” and “Organizational Success” has been calculated as 0.519 which is a considerable value. The statistic t-value is obtained 7.626 which is greater than the critical t-value of 5% error, i.e. 1.96, and it reveals that the observed correlation is significant. Therefore, it can be concluded, with the 95% confidence level, that “Thinking at time” in managers has a positive and significant relation with Organizational Success.

Hypothesis 4: “Being Hypothesis-Driven” has a positive and significant correlation with Organizational Success.

Value of the relation between “Being Hypothesis-Driven” and “Organizational Success” has been calculated as 0.620 which is a considerable value. The statistic t-value is obtained 9.632 which is greater than the critical t-value of 5% error, i.e. 1.96, and it reveals that the observed correlation is significant. Therefore, it can be concluded, with the 95% confidence level, that “Being Hypothesis-Driven” in managers has a positive and significant relation with Organizational Success.

Hypothesis 5: “Intelligent Opportunism” has a positive and significant correlation with Organizational Success.

Value of the relation between “Intelligent Opportunism” and “Organizational Success” has been calculated as 0.738 which is a considerable Value. The statistic t-value is obtained 9.968 which is greater than the critical t-value of 5% error, i.e. 1.96, and it reveals that the observed correlation is significant. Therefore, it can be concluded, with the 95% confidence level, that Smart Opportunism in managers has a positive and significant relation with Organizational Success.

Main Hypothesis: “Strategic Thinking” has a significant Association with the “Organizational Success”.

Value of the relation between “Strategic Thinking” and “Organizational Success” has been calculated as 0.779 which is a considerable value. The statistic t-value is obtained 8.228 which is greater than the critical t-value of 5% error, i.e. 1.96, and it reveals that the observed correlation is significant. Therefore, it can be concluded, with the 95% confidence level, that Strategic Thinking has a positive and significant relation with Organizational Success. In addition, factor loading of the relation between Strategic Thinking and Organizational Success is shown in Figure 8. Also the statistic t-value of the afore-mentioned variables has been depicted in Figure 9.

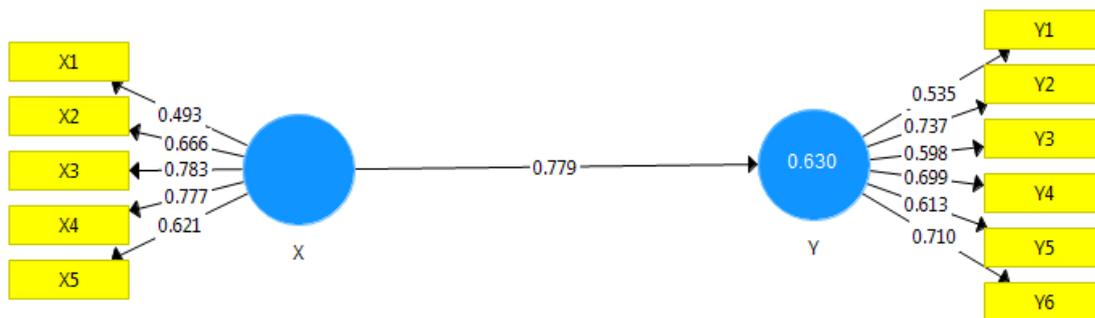


Figure 8: Factor loadings of the relation between Strategic Thinking and Organizational Success

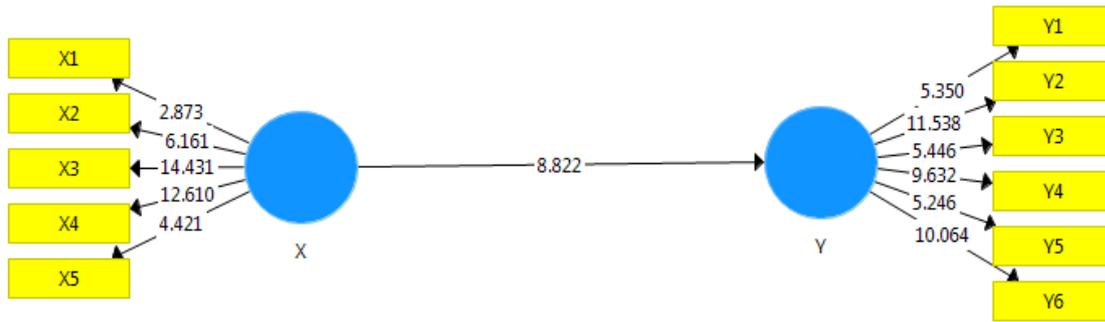


Figure 9: T-value of the relation between Strategic Thinking and Organizational Success

Status of Research Variables

One Sample T-test is used for examining the status of the research variables. The respondents’ viewpoints on the importance of each factor and studied dimensions is analyzed using One Sample T-test. The statistical statement of these research hypotheses are as follows:

$$H_0 : \mu \leq 3$$

$$H_1 : \mu > 3$$

Since the study is done in the confidence level of 95%, if p-value is less than the level of 5% error when calculating the average of each dimension, the null hypothesis will be rejected and the alternative hypothesis will be confirmed. In this case, the statistic t-test will be greater than the critical amount of $t_{0.05}$, i.e., 1.96. The results of One Sample T-test are presented in Table 5.

Table 5: Result of One Sample T-test

Research Variables	Average	t-value	p-value	Confidence Level of 95%	
				Lower Limit	Upper Limit
System Thinking	3.211	6.709	0.000	0.149	0.272
Focusing on Objective	3.291	9.525	0.000	0.231	0.351
Thinking at time	3.149	4.456	0.000	0.083	0.215
Being Hypothesis-Driven	3.069	1.798	0.073	-0.007	0.144
Intelligent Opportunism	3.104	2.772	0.006	0.030	0.178
Strategic Thinking	3.166	5.745	0.000	0.109	0.223
Organizational Success	3.230	8.367	0.000	0.176	0.285

According to above table, it can be concluded that all Variables except “Being Hypothesis Driven” lie in a desirable level and are in a status of being significantly more than the average value and “Being Hypothesis Driven” almost has an average status.

Ranking of the Variables

Friedman Test is used for ranking the status of the research variables. This test is equal to the parametric method for analyzing two-factor analysis in which k-treatment has randomly allocated to number of blocks. The results of Friedman Test is presented in Table 5.

Table 5: Results of the Friedman Test

Main Dimension	Average	Friedman Ranking	Rank
System Thinking	3.211	4.133	3
Focusing on Objective	3.291	4.585	1
Thinking at time	3.149	3.802	5
Being Hypothesis-Driven	3.069	3.527	7
Intelligent Opportunism	3.104	3.540	6
Strategic Thinking	3.166	3.973	4
Organizational Success	3.230	4.440	2

The dimension “Focusing on Objective” having Friedman Ranking of 4.585 gains the best status. The dimension “Organizational Success” with the value of 4.440 lies in the second important rank. In addition, the dimension “System Thinking” having the value of 4.133 is in the third rank. On the other hand, Z-statistic test has been utilized for examining the significance of the difference in importance ranking of the factors. P-value is estimated very low and equal to 0.000. Therefore, it would be possible to rely on above results.

Conclusion and Suggestions for Future Research

The current study aims to identify the impact of strategic thinking of managers on organizational success. The main finding of this research indicate that there is a positive and significant relation between Strategic Thinking of Managers and Organizational Success. This result is supported with the findings of Hassan et al. (2016), as they have emphasized that strategic thinking can be considered as an essential core towards the development and the sustaining of competitive advantage among organizations. They have also found that the strategic thinking ability can help organizations to determine methods towards reliable forecasting of the environment and as such reduces the problems associated with uncertainty of organizational decisions. Also the study by Bodaghi et al. (2014) reveals that strategic thinking, as an internal factor, affects the development and improvement of future organizational planning; meanwhile, strategic thinking positively effects the company improvements.

The results of the current study revealed that there is a positive and significant relation between strategic thinking and organizational success. Thus, it is suggested to managers to enhance the level and quality of strategic thinking in their organizations and invest on the managers’ strategic thinking as much as possible.

The findings of the study also show that “System Thinking” in managers has a positive and significant association with organizational success. Therefore, it is advised to use a different type of attitude and thought from the ordinary insights in the organization in order to enable a general, comprehensive and systematic perception about the organization in the minds of employees.

The results of the research indicate that there is a positive and significant relation between “Focusing on Objective” and organizational success. So, it is recommended that goals, plans, and control systems of the organization should determined via a cooperation between managers and their subordinates.

Another finding of the study reveals that there is a positive and significant association between “Thinking at Time” in managers and organizational success. Hence, it is suggested that the managers utilize this feature and establish a relation between the past, the present, and the future in their management and decision making processes.

Other result of the research indicates that “Being Hypothesis-Driven” has a positive and significant relation with organizational success. Based upon this finding, it is advised to reinforce the hypothesis-driven and trial-and-error skills together with the skill of discovering new ideas and strategies among the managers.

The last finding of the study reveals that “Intelligent Opportunism” in managers has a positive and significant association with organizational success. Thus, it is suggested to managers to utilize the new market opportunities and recognize opportunities in a more systematic way in order to be more successful in the present competitive environment.

Regarding the mentioned findings, now we state the main question of the research again: “what is the impact of the strategic thinking of managers on organizational success?”

The answer to the question is: “The strategic thinking of managers with all its indices (System Thinking, Focusing on Objective, Thinking at time, Being Hypothesis-Driven, and Intelligent Opportunism) have a positive impact on organizational success. In other words, the more the managers enhance and reinforce the mentioned indices, the better they increase and improve their organizational success”.

Study Limitations

The main limitation of this research is that we did not conduct our study on a specific industry and it is suggested to researchers to perform this study in specific industries and also comparison of our hypothesis on different industries can result in amazing results. By the way, using different aspects to organizational success from different points of view, may reach to new contributions in this field.

References

- Benito-Ostolaza, J., & Sanchis-Llopis, J. (2014). Training strategic thinking: Experimental evidence. *Journal of Business Research* 67(5), 785-789.
- Bodaghi K. N. H., Orangi, M., & Shahri-Mejarshin, A. (2014). Effect of Strategic Thinking on Organizational Improvement (Iranian Mellat Banks). *MAGNT Research Report (ISSN. 1444-8939)*, 2(4), 4045-4049.
- Bouhali, R., Mekdad, Y., Lebsir, H., & Ferkha, L. (2015). Leader Roles for Innovation: Strategic Thinking and Planning. *Procedia - Social and Behavioral Sciences*, 181, 72-78.
- Fairholm, M. R. (2009). Leadership and Organizational Strategy. *The Innovation Journal: The Public Sector Innovation Journal*, Volume 14(1), 21-39.
- Gainer, B., & Padanyi, P. (2005). The relationship between market-oriented activities and market-oriented culture: implications for the development of market orientation in nonprofit service organizations. *Journal of business research*, 58(6), 854-862.
- Han, J. K., Kim, N., & Srivastava, R. K. (1998). Market orientation and organizational performance: is innovation a missing link?. *The Journal of marketing*, 62(4), 30-45.
- Hassan, R. A., Wafa, S. A., & Noor, S. H. M. (2016). A comparative study on the level of strategic thinking among ethnic entrepreneurs in Sabah. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 6(2), 1-7.
- Haycock, K., Cheadle, A., & Bluestone, K. S. (2012). Strategic Thinking. *Library Leadership & Management*, 26(3/4), 1-23.
- Ibrahim Olaniyi, M. & Elumah Lucas, O. (2016). Strategic Thinking and Organization Performance: Study of Nigeria Firms. *Journal of Business Administration Research*, 5(1), 23-28.
- Johnsen, A. (2014). Strategic Management Thinking and Practice in the Public Sector: A Strategic Planning for All Seasons?. *Financial Accountability & Management*, 31(3), 243-268.

- Kamangar, F., Rohani, R., Salavati, A., & Sharif Karimi, M. (2013). Developing Strategic Thinking. *J. Basic. Appl. Sci. Res.*, 3(6), 546-552.
- Karakaya, A., Yilmaz, K., & Demiral, G. (2016). Strategic Capabilities of Retail Market Managers: A Field Research in Karabuk. *Procedia - Social and Behavioral Sciences*, 235, 93-100.
- Kazmi, S. A. Z., & Naaranoja, M. (2015). Cultivating strategic thinking in organizational leaders by designing supportive work environment. *Procedia - Social and Behavioral Sciences*, 181, 43-52.
- Kazmi, S. A. Z., Naaranoja, M., & Wartsila, J. K. (2016). Integrating strategic thinking and transformational leadership for NPD idea support process. *Procedia - Social and Behavioral Sciences*, 229, 387-397.
- Kiaei, M. Z., Hatam, N., Moraveji, M., Moradi, R., Ahmadzadeh, M. S., & Ghanavati, Sh. (2016). The Relationship between Strategic Thinking and Hospital Managers' Productivity in Teaching Hospitals of Shiraz. *Biotech Health Sci.* 3(1), 1-6.
- Liedtka, J. (1998). Strategic thinking: can it be taught?. *Long range planning*, 31(3), 481 - 487.
- Mainardes, E. W., Ferreira, J., & Raposo, M. (2014). STRATEGY AND STRATEGIC MANAGEMENT CONCEPTS: ARE THEY RECOGNISED BY MANAGEMENT STUDENTS? *Business Administration and Management*, 17(1), 43-61.
- Mintzberg, H. (1994). The rise and fall of strategic planning. *Harvard business review*, January/February, 107-114.
- Moon, B-J. (2013). Antecedents and outcomes of strategic thinking. *Journal of Business Research*, 66(10), 1698-1708.
- Moore, M. (2000). Managing for value: Organizational strategy in for-profit, nonprofit, and governmental organizations. *Nonprofit and Voluntary Sector Quarterly*. 29(1), 183-204.
- Nathan, M. L. (2015). Strategic Teaching of Strategic Thinking. *Universal Journal of Management*, 3(9), 364-371.
- Pan, Z. (2016). Guanxi, Weiqi and Chinese Strategic Thinking. *Chinese Political Science Review*, 1(2), 303-321.
- Pfeffer, J., & Veiga, J. F. (1999). Putting people first for organizational success. *Academy of Management Perspectives*, 13(2), 37-48.
- Nuntamanop, P., Kauranen, I., & Igel, B. (2013). A new model of strategic thinking competency. *Journal of Strategy and Management*, 6(3), 242-246.
- Salamzadeh, Y., Nejati, M., & Heidaripourafshar, Y. (2015). An investigation into the impact of E-Customs on stretching strategic thinking (case study: Islamic Republic of Iran Customs Administration (IRICA)). *Journal of Entrepreneurship, Business and Economics*, 3(1), 105-139.
- Shadford, S., Nazari, R., & Gholizadeh, Z. (2013). Evaluating strategic thinking in managers of executive organizations, Guilan. *Singaporean Journal of Business Economics, and Management Studies*, 2(4), 83-91.
- Sharifi, E. (2012). Strategic Thinking; a Practical View. *Ideal Type of Management*, 1(1), 71-84.
- Switzer, M. (2008). Strategic Thinking in Fast Growing Organizations. *Journal of Strategic Leadership*, 1(1), 38-31.
- Taboli, H., & Baghdadam, G. (2016). Evaluation of the Role of Political and Communication Skills in Social Responsibility of Managers by the Mediating Role of Strategic Thinking. *Mediterranean Journal of Social Sciences, MCSER Publishing, Rome-Italy*, 7(4), 323-331.
- Wafa, S. A., Hassan, R. A., Noor, S. H. M., & Ayub, M. S. (2013). Comparing Strategic Thinking among the Bajaus, Dusun, and Bugis Entrepreneurs in Sabah. *Proceedings of*

the 6th International Conference of the Asian Academy of Applied Business (AAAB), pp. 1 – 7.

Wiley, J. (2010). Strategic employee surveys: Evidence-based guidelines for driving organizational success. John Wiley & Sons.

Young, M. L. (2015). Developing Strategic Thinking. Australian Army Journal, 13(2), 5-22.

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.