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# Effect of the Knowledge Acquisition on the Strategic Decision-Making of Industrial Units' Managers

Mona Kheradmand<sup>1</sup>, Mostafa Jafari <sup>2</sup>

- 1. Department of Management, Islamic Azad University, Zanjan Branch, Zanjan, Iran
  - 2. Department of Management, University of Zanjan, Zanjan, Iran

#### **Abstract**

Is the knowledge acquisition related to the strategic and non-strategic decision-making of companies' managers? The explanation of answer for this question is the aim of this research.

Research Methodology

This research is based on the practical result, "explanatory" aim, "sectional" time, relationship among the variables of "correlation" and the method of survey. Population members of the research sample are 350 managers of companies established in the industrial towns of two Mazandaran and Golestan provinces. Instrument of the data collection is a questionnaire containing 54 questions in Likert range. The data analysis has been conducted by the techniques of descriptive and inferential statistics and Amos 22 and LISREL statistical software SPSS.

Results and Findings

Results of testing hypotheses and analyzing answer of the research questions shows that the knowledge acquisition has a positive and significant effect on the strategic decision-making (decision-making by the rational and intuitive styles), but hasn't a significant effect on the non-strategic decision-making (decision-making by the dependent, instantaneous and avoidant styles).

### **Theoretical Framework**

The most important purpose of using the knowledge management in types of the institutions is the quick adaptation with the surrounding environment changes in order to enhance efficiency and more profitability. Thus, the knowledge management points to the process of how creation, dissemination and application of knowledge in the organization. In other words, the ultimate goal of knowledge management includes the knowledge sharing among employees to enhance the addedvalue of existing knowledge in organization (Becerra-Fernandez & Sabherwal, 2010, P.75).

### History and Definition of the Knowledge Acquisition:

Subject of the knowledge acquisition began since the AD mid-90s with the knowledge engineering of expert systems and vocabulary of the knowledge acquisition has been created by researchers of the expert systems field. The knowledge acquisition is process of interpreting the domain-specific knowledge that the individual conducts the activities of that domain by helping it (Cook, 2005). Milton (2007) believes that the knowledge acquisition includes extraction, collection, analysis, modeling, and validation of the knowledge (Nezafati, Rashidi, 92, pp. 63-86 Davenport & Lurance, 2000).

### The Process of Knowledge Acquisition

Dalkir (2005) states that the knowledge acquisition is process of the extracting, transforming, and transferring expertise from a source of the knowledge. Furthermore, the knowledge acquisition is process of the interaction with experts during which the expert's expertise and experience are described and her/his tacit is transformed to knowledge. She/he knows the tacit knowledge management, process of receiving the experience of organization individuals and making available it for individuals who need it (Dalkir, 2005).

Expert's character is one of the issues that is in the serious conflict with the knowledge engineer's character can affect the output of the knowledge acquisition process (Adeli, 1990). The varied techniques have been developed in order to overcome these challenges and the desirable extraction of expert individual knowledge, which have strengths and weaknesses and the advantages and disadvantages (Nezafati and Rashidi, 2013, pp. 63-83).

# The Knowledge Acquisition Strategy:

This strategy Specifies that how the knowledge can be acquired by help of interview with expert individuals, reading the documentation, data set networks and ....

The process of knowledge acquisition strategy is as a tool in the hands of knowledge management group for planning activities. The knowledge acquisition strategy creates a framework for the knowledge management showing its why and importance in the current state and future of the organization. Generally, how to actualize the organizational knowledge management is specified by determining the knowledge acquisition strategy. The knowledge acquisition strategy makes achievable the knowledge management results by clarifying the goals and



expectations and measuring improvement in the organization will be evaluated. The knowledge management strategy is a dynamic and alive element, which means that the knowledge acquisition strategy is reinvestigated along with the change of strategies, the organizational environment, and the needs and changes in accordance with the current issues and future of the organization (Prost et al., 47, 2006).

# Stages of knowledge acquisition include:

From Raading's viewpoint, four stages of the knowledge acquisition include the identification, extraction, preparation, and development knowledge. Identifying the knowledge means describing and analyzing the environment and map of project knowledge. The extraction of knowledge includes the sciences extraction and implicit and mental experiences of project employees, sciences extraction and explicit and apparent experiences of the project. Preparation of the knowledge means that the projects can provide an important part of their needed sciences from the external sources. Projects can the knowledge that they are not able to develop it, provide from the external experts or other organizations. The knowledge development is an element that completes the knowledge acquisition. The knowledge development includes all efforts that develop the existing knowledge in projects. The knowledge development even focuses on the production of sciences that still don't exist within or outside the project (Raading, 2007, p. 80).

# The Knowledge Acquisition Techniques

We must know that obtain what the knowledge for the organization in any specific professional field. Care should be taken that an effective combination of knowledge acquisition techniques is that causes to transform the expert tacit knowledge to apparent knowledge to the best possible way (Dalkir, 2005). From the experts' viewpoint, some knowledge acquisition techniques include: the case analysis, analysis of key events, discussions with users, prototyping, Johnson hierarchical classification, interim meetings, map of way, e-learning, learning history record, decision tree, the classification of knowledge and simulation (Nezafati and Rashidi, 2013, pp. 63-83).

The designed technique should be compared in a systematic manner with other discussed techniques in the field of knowledge acquisition and its reliability and utilization should be evaluated (Nezafati and Rashidi, 2013, pp. 63-83).

The Characteristics of Knowledge Acquisition Technique:

A knowledge acquisition technique should:

- 1– Separate the expert for a certain time from her/his job and duties;
- 2- Non-expert individuals also can understand the extracted knowledge;
- 3- Focus on the individual key knowledge;
- 4- Obtain individual profound tacit knowledge;
- 5- Can adjust the extracted knowledge from a few experts in a specific field;
- 6- Can validate and maintain the extracted knowledge (Cooke, 1994).

# Location and Procedure of the Knowledge Acquisition

Some believe that the knowledge acquisition includes a set of activities that is conducted for the new knowledge from outside organization. Activities such as participation of the members in the scientific societies and participating in training courses, collaborating the organization with universities and other scientific centers, buying the new knowledge for the organization shows the rate of quest for the new knowledge acquisition and its entry to the organization (Taghizadeh, 2010, p. 33). The most direct and sometimes the most effective way for the knowledge acquisition is buying it. However, growing rate of the companies buy by other organizations generally has been with aim of their knowledge acquisition like buying "NCR" by "AT&T". Some also believe that the knowledge acquisition includes the extraction of sciences and the implicit and mental experiences of project employees, extracting sciences, and explicit and apparent experiences of the organization, developing the existing sciences and experience in organization and obtaining the new sciences from resources outside the organization. In fact, it is the knowledge acquisition both from inside and outside of the organization.

### The Benefits of Knowledge Acquisition

The discussion vote society is used as a useful tool for finding the ideas and opinions of different individuals. The knowledge acquisition enables a company leads its industry and competitors and significantly differentiates itself from its competitors (Bhatt, 2001). The knowledge acquisition is obtained from the experiences of one individual and is a type of skill or competence that can create the strategic advantage (Zack, 1999).

# Validness of the Knowledge Acquisition

The new knowledge acquisition is valuable when is recognized and displayed in a suitable form and or the



processes during which the considered knowledge is provided for organizations. For example, an organization that applies a few professional and skilled individuals in a certain work field, in fact, gains knowledge of these individuals and will take the full advantage of these individuals (Davenport, Prosak, Rahman Seresht, 2000).

The purchase of new knowledge for the organization represents rate of the effort for the new knowledge acquisition and its entry into the organization. The knowledge must be acquired in the domestic and foreign market of knowledge and the related knowledge to customer, production, collaborators, competitors etc must be acquired from the identified sources as well as what capabilities can be bought from outside. For example, in the marketing and sale sector, the related knowledge acquisition to customers, in the engineering and research and development sector, the related knowledge acquisition to products and in the services sector, the related knowledge acquisition to expected services of clients assist (Davenport, Davenport, Prosak, Rahman Seresht, 2000).

Very essential and considerable point that leads to being discussed the strategic approach in the knowledge management and its acquisition is that the knowledge management should be in the service of organization strategic move and its strategic interaction with the turbulent and variable environment of business. In this way, strategic concept of the knowledge acquisition (the knowledge acquisition with strategic approach) can be defined in the form of knowledge acquisition, consistent and aligned with the organization's strategic direction (Milton, 2007).

# The Knowledge Acquisition and Exit from the Organization

One of Iranian organizations key weaknesses is exit of the knowledge and experiences of the organization experts with considering the retirement and losing experts who have worked for years in these organizations. The managers of Iranian organizations often face with lacking the knowledge and experience because of entering the young and apprentice workforce to these organizations. Therefore, the knowledge acquisition from organization experts can while preventing repeat of the experiences in the organization also help the new knowledge development. In this regard, an important and the key section in all activities of the knowledge management has formed with title of the knowledge acquisition from experts (Afrazeh, 2005).

The knowledge acquisition means to employ the authoritative and outstanding employees and assistance to them for learning and the professional and individual growth and participation in the professional networks and the professional and specialized evaluations beyond organization. In this regard, an important and key part in all activities of the knowledge management has formed with title of the knowledge acquisition from experts. We explain the scientific principles of research dependent variable, i.e., "the strategic decision-making".

The strategic decision is a decision that has following six dimensions:1- The strategic issues need to the decisions of high-level managers;2- The strategic issues allocate the many resources to them;3- The strategic issues are prospective;4- The strategic issues are effective in the long-term prosperity of organization; 5- The strategic issues usually have multitasking or multi-business major consequences;6- The strategic issues necessitate considering the external environment factors of institute for example the competitors, customers, suppliers, creditors, government, and employees) (Pierce and Robinson, 1997). A strategic decision has 12 features. (Rezayian, Lashkar Blocky, 2010, p.43). In this research, the strategic decisions are the decisions that are made by the rational and intuitive style. Separation of the strategic and non-strategic decisions based on Scott & Bruce General Decision-making Styles (GDMS) (1995)

The General Decision-Making Style test is a psychological instrument developed by Scott and Bruce. (Scott & Bruce, 1995). In their conception, decision-making style is a learned habitual response, resulting in "a habit-based propensity to react a certain way in a specific decision context." It has been found that people use more than one decision-making style, but one is dominant. The GDMS underwent a cycle or validation and revision, resulting in the following four decision-making styles:

P-Spontaneous: Sense of immediacy and persistent always desire to finalize decisions as quickly as possible. A-Rational: comprehensive info search, explicit inventory of alternatives and logical evaluation of options. E-Intuitive: Alerted by salient details in the flow of information rather than following systematic procedures, more reliance on implicit learning and tacit awareness ("hunches" or "feelings") as a basis for decisions. I-Dependent: Resolves uncertainty through consultation, more interested in advice and guidance from others than other styles are.

# Strategic decision-making styles

Two Strategic decision-making styles are: The rational decision-making style and *The intuitive decision-making style* 

The rational decision-making style: This style states the tendency of decision maker to identify all the possible strategies, assess the results of any strategy from all different aspects, and finally select the optimal and desirable strategy by the decision maker when facing with the decision-making conditions (Oliveira, Arnaldo, 2007). Individuals that enjoy the rational style place their decisions based on the thorough and comprehensive search



and analysis and all available information from both the internal and external sources (Singh, Romila & Jeffry, 2004).

The intuitive decision-making style: The intuitive decision-making is an unconscious process that is gained in the shade of inferred experiences. The decision maker hasn't a clear logic in relation to the correctness of her/his decision, but by relying on her/his own internal insight and acumen conducts what thinks is correct in this decision-making style (Patton, John, 2003). Individual who enjoy the intuitive decision-making style completely do not deny the insightful analysis of issue, but believe in some circumstances such as when facing with a crisis in the uncertainty conditions and when they encounter a great deal of non-processed information and in the conditions that because of the issue complex nature and being critical conditions, there isn't the possibility of collecting existing all data about the decision-making issue and careful and systematic investigation of this data, the inner intuition and insight helps to individuals and can play an important role in the selection of appropriate decision.

Accordingly, it can be said that the intuitive decision-making enjoy higher universality and flexibility in the turbulent and unknown environments.

### Non-strategic decision-making styles

Three Non-strategic decision-making styles are: The instantaneous decision-making style, The dependent decision-making style, The avoidant decision-making style

The dependent decision-making style: This style states the lack of the intellectual and practical independent of decision maker and relying on the supports and instructions of others when making a decision (Parker & Baruch Fichhoff, 2007).

The instantaneous decision-making style: The instantaneous decision-making style states the sense of decision maker anxiety and her/his tendency to obtain a final decision in the shortest and fastest possible time (Thunholm, Peter, 2004)..

The avoidant decision-making style: Individuals that enjoy the avoidant decision-making style when facing with the issue (problem or opportunity) as far as possible postpone the decision-making and evade any response towards the occurred question (Parker & Baruch Fichhoff, 2007). Thus, the avoidant decision-making style can be defined the individual quest and tendency to avoid making any decision and as far as possible avoiding the decision-making situations (Thunholm, Peter, 2004).

### The Research Background

The first research: Haadi Zade Moghaddam (2008) has investigated in a research, the relationship among the general styles of managers' decision-making in the governmental organizations.

The main objective of this research is to investigate the relationship among the general styles of Oil Products Distribution National Company managers' decision-making in line with investigating construct validity of the decision-making general styles question.

Accordingly, the number of 55 mangers of the company has been selected as individuals of the statistical sample and 5 styles of rational, intuitive, dependent, spontaneous and avoidant decision-making have been investigated among them.

The results show that there is a significant negative relationship between the styles of rational and avoidant decision-making and a significant positive relationship exists between the styles of intuitive and instantaneous decision-making. Furthermore, a significant negative relationship was obtained between the style of avoidant decision-making and each styles of dependant and instantaneous decision-making in this investigation.

The second research: Moghaddam and Tehrani (2010) have investigated in a research, the decision-making styles among Tehran University administrators. The research method was descriptive from the survey type and all Tehran University administrators have formed the statistical population.

The number of managers was studied as sample by the simple randomized sampling method and helping Cochran formula. Results showed that there isn't a significant negative relationship between the styles of rational and intuitive decision-making as well as the styles of rational and avoidant decision-making and a positive significant relationship doesn't exist between the styles of intuitive and instantaneous decision-making. Furthermore, a significant relationship was obtained between the style of avoidant decision-making and each styles of dependant decision-making. A significant relationship wasn't obtained between each decision-making styles and two demographic characteristics of administrators work experience and education in this investigation. The third research: Karimi (2013) compared in a research, the styles of managers decision-making in the governmental and non-governmental organizations.

The main objective of this research is comparing the styles of managers' decision-making in the governmental and non-governmental organizations.

Accordingly, the number of 55 and 75 governmental and non-governmental companies' managers, respectively, has been selected as the statistical sample individuals. The results show that there is a significant negative



relationship between the styles of rational and intuitive decision-making as well as the styles of rational and avoidant decision-making and a significant positive relationship exists between the styles of intuitive and instantaneous decision- among the governmental organizations managers.

The fourth research: Krocli and Hachognis (2005) come to this conclusion in a research in investigating the decision-making styles that there is a significant relationship between the styles of rational and intuitive decision-making with job satisfaction. While this relationship wasn't observed with instantaneous, emotional and dependent styles.

### The Research Methodology

# Type and Method of Research

This research is based on explanatory purpose, the practical conclusion, relationships between causal variables, conditions for doing non-experimental study, the time period, and based on the methodology of the type of survey research.

### Research variables and their components

Independent variable of research is "knowledge acquisition", dependent variable is "strategic decision making" and their components are rational decision-making style, intuitive decision making style as well as three non-strategic decision making styles: Immediate, dependency and avoidance.

# Research hypotheses

The two main hypotheses and three sub-hypotheses are:

The first main hypothesis: the acquisition of knowledge has significant influence on strategic decision making by managers of industrial companies.

The first sub hypothesis: The knowledge acquisition has a significant effect on the decision making to the rational style in the industrial companies.

The second sub hypothesis: The knowledge acquisition has a significant effect on the decision making to the intuitive style in the industrial companies.

The second main hypothesis: The knowledge acquisition has a significant effect on the adoption of non-strategic decisions in the industrial companies.

The third subhypothesis: The knowledge acquisition has a significant effect on the decision making to the dependant style in the industrial companies.

The fourth subhypothesis: The knowledge acquisition has a significant effect on the decision making to the instantaneous style in the industrial companies.

The fifth subhypothesis: The knowledge acquisition has a significant effect on the decision making to the avoidant style in the industrial companies.

# **Target Community and Sample**

Members of the target community of this research are managers and professionals (decision-makers) of companies based in the industrial towns of the province of Mazandaran and Golestan. Sample size of 183 was calculated by the Cochran formula, and a questionnaire was distributed among 24 managers and 159 experts.

# Sampling method

Sampling was conducted using random classification. Members of two categories were managers and experts who were randomly selected from each category.

#### The data collection tool

Data needed for the study were collected through a questionnaire containing 40 questions with likert spectrum. Of the 183 questionnaires distributed, 160 were completed and returned (43/87 percent). The numbers of questions for each variable are as follows.

Table 1: The total number of questions and questions No. of variables in the questionnaire.

question No.	Number of questions Components		Variable name		
1 to 15	15	Knowledge acquisition	Knowledge management		
33, 36, 40, 42 and 54	5	Rational style	Stratagia desision making		
30, 32, 41, 45 and 46	5	Intuitive style	Strategic decision making		
31, 34, 39, 47 and 51	5	Dependency style			
37, 38, 44, 49 and 53	5	Immediate style	Non-strategic decision making		
35, 43, 48, 50 and 52	5	Avoidance style	1		

Validity and reliability of the questionnaire Determining the validity of the questionnaire



After the compilation of the initial framework, to determine the validity of the questionnaire, two ostensible methods with the approval of experts and professors and a structural method using structured equation model (confirmatory factor analysis and construct validity) was used.

# **Determining ostensible validity**

The ostensible validity of the researcher-made questionnaire was approved from the viewpoint of 6 experts (Including 2 members of the faculty of Science and Research Branch of Zanjan and 4 of the directors and independent company experts in the industrial towns of Mazandaran province.)

### **Content validity**

To assess the validity of indicators of each of these variables "knowledge management", "Knowledge acquisition", "application of knowledge" and " strategic and non-strategic style of decision making" after studying the theoretical foundations and selection an appropriate model for each of these variables, a number of indicators (items) for each of the components described in the model of those variables, was set.

# Determining the structural validity (CFA)

To determine the structural validity of the items in the questionnaire, after determining ostensible validity by using experts and professors' opinion and specifying a number of indicators (items) for each component of the variables in accordance with Table (2-3), determining the structural validity (CFA) by structured equation model and with the use of Amos 22 software was done.

#### Reliability

Reliability was confirmed through Test- retest.

# Testing the normality of data distribution

Significant level of Kolmogorov-Smirnov test for variables of knowledge acquisition and strategic decision (the first hypothesis) were calculated 0/092 and 0/061 respectively and for variables of knowledge acquisition and non-strategic decision (second hypothesis) were calculated 0/092 and 0/099 respectively so distribution of data for variables in both the hypothesis is normal. Therefore, to examine both hypotheses we use the maximum likelihood method in structural equation modeling and to assess variables in the statistical community we use parametric tests like one-sample t-test, and ANOVA.

# Demographic profile of the target community

Table 2: The demographic questions details

	T - 1			
Demographic indicators	Operational definitions			
Gender <sup>1</sup>	Male / Female			
Marital status <sup>2</sup>	The single / married / divorced / deceased spouses			
Age (year) <sup>3</sup>	20 to 30 / 31 to 40 / 41 to 50 / 51 and higher			
Work experience <sup>4</sup>	Less than 5 years / between 5 and 10 / between 11			
	and 15 / between 16 and 20 / 21 and higher			
Educational level <sup>5</sup>	Diploma / Associate Degree / Bachelor / MA / Ph.D.			
The title of organizational post <sup>6</sup>	Senior manager / Middle manager (supervisor) /			
	Senior expert / Expert / Employee			

# **Testing hypotheses**

**The first main hypothesis**: The acquisition of knowledge has significant influence on strategic decision making by managers of industrial companies.

**The first main hypothesis**: The knowledge acquisition has a significant effect on the decision making to the rational style in the industrial companies.

The second main hypothesis: The knowledge acquisition has a significant effect on the decision making to the intuitive style in the industrial companies.

To investigate the first hypothesis we used structured equation modeling. The final structured equation model of the first hypothesis and the factor loadings for each component of under test variable are shown in the following figure that indicates high operating factor in the relationship between "Knowledge acquisition" and "strategic decision".

<sup>&</sup>lt;sup>1</sup> - Gender

<sup>&</sup>lt;sup>2</sup>- Marital status

<sup>&</sup>lt;sup>3</sup> - Age

<sup>&</sup>lt;sup>4</sup> - Work Experience

<sup>&</sup>lt;sup>5</sup> - Educational level

<sup>&</sup>lt;sup>6</sup> - The title of organizational post



- H<sub>0</sub>: The knowledge acquisition has no effect on the adoption of strategic decisions.
- H<sub>1</sub>: The knowledge acquisition has the effect on the adoption of strategic decisions.

To investigate the first hypothesis we used structured equation modeling. The final structured equation model of the first hypothesis and the factor loadings for each component of under test variable are shown in the following figure that indicates high operating factor in the relationship between "Knowledge acquisition" and "strategic decision".

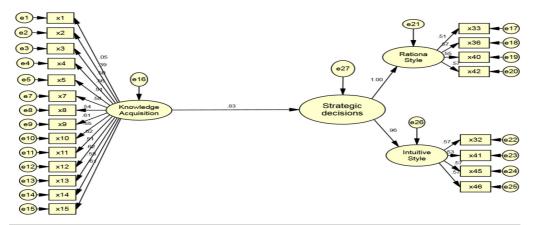


Figure 1: Structural equation coefficients obtained from the first hypothesis

The fitting general indicators of related measurement model to the first hypothesis have been represented in Table (3) which states the measurement model enjoys a good fitting and i.e., the indicators confirm it that the data well support the model.

Table 3: The model fitting indicators of structural equations in the first hypothesis

Construct / Indicator	GFI	RMR	CMIN	CFI	RMSEA	P	X2/df
The acceptable level	>0.9	< 0.05		>0.9	< 0.07	< 0.05	<3
Hypothesis 3	0.909	0.036	488.523	0.906	0.050	0.000	2.349

Then, with considering it that the structural equations model of the first hypothesis has been confirmed, the first hypothesis is investigated by using the standard coefficients, critical values and level of significance. Results show in Table(4) about the first hypothesis in the relationship of "knowledge acquisition" and "strategic decision-making" variables that according to the factorial loading coefficient 0.831 in this relationship and the level of significance 0.000 that is less than 0.05 and also the critical value that has been obtained to amount 10.016 and is more than 1.96, thus, the null hypothesis has been rejected in this relationship and one hypothesis is accepted with confidence 95%. Thus, it can be stated that "knowledge acquisition" has a direct significant and positive effect on adoption of "strategic decision-making" in the studied industrial companies.

Table 4: The related coefficients, critical ratios, and level of significance to the first hypothesis

Hypotheses	Standard error	Critical value	Level of significance	Standard coefficient
Knowledge acquisition The strategic decision making (the direct effect)	0.149	10.016	0.000	0.831
Knowledge acquisition The decision making to rational style (the indirect effect)	0.744	9.397	0.000	0.997
Knowledge acquisition The decision making to intuitive style (the indirect effect)	0.737	2.508	0.012	0.958

Furthermore, the findings show in Table (4) about the relationship between the knowledge acquisition and styles of strategic decision-making (with considering the calculated standard coefficients for the indirect effect of knowledge acquisition on the rational and intuitive styles) that "knowledge acquisition" has had an indirect significant and positive effect on the styles of "rational" and "intuitive" decision-making in the studied companies among which has had the greatest effect on the style of "rational" decision-making with factorial loading 0.997 (indirect effect) and the lowest effect on the style of "intuitive" decision-making with factorial loading 0.958 (indirect effect).

# The second hypothesis testing



**The second hypothesis**: The knowledge acquisition has a significant effect on adoption of the non-strategic decisions in the industrial companies.

- 2-1 The knowledge acquisition has a significant effect on the decision making to the dependent style in the industrial companies.
- 2-2 The knowledge acquisition has a significant effect on the decision making to the instantaneous style in the industrial companies.
- 2-3 The knowledge acquisition has a significant effect on the decision making to the avoidant style in the industrial companies.

The structural equations modeling approach was used to investigate the second hypothesis. For this purpose, firstly, the related model to the relationship between "knowledge acquisition" and "non-strategic decision-making" was codified and then, the designed model was tested by using Amos 22 software. The statistical hypothesis of test is as follows:

- H<sub>0</sub>: The knowledge acquisition has no effect on the adoption of non-strategic decisions.
- H<sub>1</sub>: The knowledge acquisition has the effect on the adoption of non-strategic decisions.

The final model of structural equations related to the second hypothesis has been shown in Figure (2) that states the low factorial coefficient in the relationship between "knowledge acquisition" and "non-strategic decision-making" variables. Furthermore, the related factorial loadings to each components of the tested variables have been shown in Figure (2).

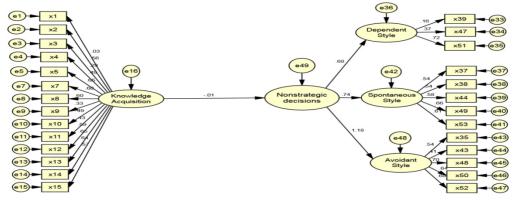


Figure 2: Diagram of the obtained coefficients from computation of the structural equations in the second hypothesis

The fitting general indicators of related measurement model to the second hypothesis have been represented in Table (5) which states the measurement model enjoys a good fitting and i.e., the indicators confirm it that the data well support the model.

Table 5: The model fitting indicators of structural equations in the second hypothesis

Construct / Indicator	GFI	RMR	CMIN	CFI	RMSEA	P	X2/df
Acceptable level	>0.9	< 0.05		>0.9	< 0.07	< 0.05	<3
Hypothesis 4	0.939	0.011	717.124	0.982	0.058	0.000	2.234

Then, with considering it that the structural equations model of the second hypothesis has been confirmed, the second hypothesis is investigated by using the standard coefficients, critical values and level of significance. Results show in Table (6) about the second hypothesis in the relationship of "knowledge acquisition" and "non-strategic decision-making" variables that according to the factorial loading coefficient -0.009 in this relationship and the level of significance 0.913 that is less than 0.05 and also the critical value that has been obtained to amount -0.109 and is more than 1.96, thus, the null hypothesis has been confirmed in this relationship and one hypothesis is rejected with confidence 95%. Thus, it can be stated that "knowledge acquisition" hasn't a direct significant and positive effect on adoption of "non-strategic decision-making" in the studied industrial companies.



Table 6: The related coefficients, critical ratios, and level of significance to the second hypothesis

Hypotheses	Standard error	Critical value	Level of significance	Standard coefficient
Knowledge acquisition The non-strategic decision making (the direct effect)	0.084	-0.109	0.913	-0.009
Knowledge acquisition The decision making to dependent style (the indirect effect)	0.088	-0.076	0.866	-0.004
Knowledge acquisition The decision making to instantaneous style (the indirect effect)	0.092	-0.022	0.534	-0.008
Knowledge acquisition The decision making to avoidant style (the indirect effect)	0.111	-0.113	0.339	-0.0012

Furthermore, the findings show in Table (6) about the relationship between the knowledge acquisition and styles of non-strategic decision-making (with considering the calculated standard coefficients for the indirect effect of knowledge acquisition on the dependent, instantaneous and avoidant styles and level of significance and the obtained critical value for paths) that "knowledge acquisition" hasn't an indirect significant and positive effect on the styles of "dependent", "instantaneous" and "avoidant" in the studied companies.

### **Results and Findings**

### The results of testing the first hypothesis

**First result**: Knowledge acquisition is an effective factor in making strategic decision by managers in studied companies.

Investigating the findings related to the first hypothesis about reviewing the effect of knowledge acquisition on the adoption of strategic decisions shows in the studied industrial companies that according to the factorial loading coefficient 0.831 in this relationship and the level of significance 0.000 that is less than 0.05 and also the critical value that has been obtained to amount 10.016 and is more than 1.96, thus, the null hypothesis has been rejected in this relationship and one hypothesis is accepted with confidence 95%. Thus, it can be stated that "knowledge acquisition" has a direct significant and positive effect on adoption of "strategic decision-making" in the studied industrial companies.

### Second result

Furthermore, the findings show in about the relationship between the knowledge acquisition and styles of strategic decision-making (with considering the calculated standard coefficients for the indirect effect of knowledge acquisition on the rational and intuitive styles) that "knowledge acquisition" has had an indirect significant and positive effect on the styles of "rational" and "intuitive" decision-making in the studied companies among which has had the greatest effect on the style of "rational" decision-making with factorial loading 0.997 (indirect effect) and the lowest effect on the style of "intuitive" decision-making with factorial loading 0.958 (indirect effect).

The findings of this section has consistency with the obtained results in Blastin and Philip (2010), Thompson (2010), Park (2009), Arfin (2008), Krocli and Hachognis (2005), Karimi (2013) and Danayi and Gharib (2012) researches.

### third result

Generally, the results of this researches shows in field of investigating the relationship between "knowledge acquisition" and "strategic decision-makings" that the knowledge acquisition has been as a facilitator in making the strategic decisions in the investigated companies by their managers.

### **Fourth Results**

Based on the obtained results and the existing histories, it can be concluded that the knowledge acquisition and its storage in the studied companies have a high effect on making the strategic decisions by their managers and also will make more rational their decision-making style. Since the decision-making requisite is based on the reason and intuition of proper access to full information and knowledge of the environmental conditions, thus, step can be taken in line with the knowledge acquisition in the studied companies by documenting employees skills and its storage in the appropriate files, increasing employees' access to information, prioritizing the required information, using the modern technology to store information, etc. until the action should be taken towards decision-making based on the existing rationality and intuitions by the high access to updated and timely data.

### Fifth Result

Acquisition of knowledge affects "intuitive decision making". As acquisition of knowledge increases so does the intuitive style of decision-making.

# The results of testing the second hypothesis

### Sixth Result

Knowledge acquisition has no effect on non-strategic decision making.



#### **Seventh Result**

Investigating the findings of about reviewing the effect of knowledge acquisition on the adoption of non-strategic decisions shows in the studied industrial companies that according to the factorial loading coefficient - 0.009 in this relationship and the level of significance 0.913 that is more than 0.05 and also the critical value that has been obtained to amount -0.109 and is less than 1.96, thus, the null hypothesis has been confirmed in this relationship and one hypothesis is rejected with confidence 95%. Thus, it can be stated that "knowledge acquisition" hasn't a direct significant and positive effect on adoption of "non-strategic decision-making" in the studied industrial companies.

#### **Seventh Result**

Knowledge acquisition according to calculated standard coefficient for the indirect effect and the significant level and critical values obtained for paths, has no effect on immediate decision making style.

#### Eighth Result

Knowledge acquisition according to calculated standard coefficient for the indirect effect and the significant level and critical values obtained for paths, has no effect on dependency decision making style.

### **Ninth Result**

Knowledge acquisition according to calculated standard coefficient for the indirect effect and the significant level and critical values obtained for paths, has no effect on avoidance decision making style.

The findings of this section with the obtained results in Karin (2012), Shoemaker (2010), Reza Zadeh (2012) and Danayi and Gharib (2012) researches. Generally, the results of this researches shows in field of investigating the relationship between "knowledge acquisition" and "non-strategic decision-makings" that the knowledge acquisition and storage hasn't been as a facilitator in making the non-strategic decisions in the investigated companies by their managers.

# Results based on the demographic characteristics of individuals

### **Tenth Result**

Thus, the obtained results show that the average amount of adopting styles of rational, intuitive, dependent and instantaneous decision-making in the studied companies has been identical from respondents' viewpoint with the different education level and there is no significant difference between their viewpoints, but, the average amount of avoidant decision-making style from respondents' viewpoint with the different education level has a significant difference.

# Investigating one-sample side t-test results

### **Eleventh Result**

The results of the related findings to one-sample t-test for determining the average amount of "knowledge acquisition" variables in the studied industrial companies shows with considering the obtained average in the descriptive statistics for this test and also the level of significance and sign of the bottom and top limit in the inferential test of that the amount of "knowledge acquisition" is more than average in the studied companies but isn't much.

### **Twelfth Result**

The amount of using "rational and intuitive decision-making style" is in the average limit and the amount of using "dependence, instantaneous and avoidant decision-making style" is below average in the studied companies.

#### **Discussion and Conclusion**

Twelve results of the research shows that as companies gain more knowledge, they become more interested in making strategic decisions that is rational and intuitive decisions and become more capable of making these types of decisions. Also, due to the lack of a significant relationship between knowledge acquisition and non-strategic decision-making (immediate, dependency and avoidance), you can found that becoming more knowledge-oriented and increasing the level of knowledge, makes corporate executives away from making dysfunctional decision such as immediate and dependency decisions and enables them so that instead of avoiding making decisions, they become able to make decisions, especially making efficient and effective decision that are rational and intuitive decisions.

#### **Bibliography**

- 1. Afrazeh, A., KM (concepts, models, measurement and implementation), Tehran, Amirkabir University of Technology, 1384(2005)
- 2. Bhatt,G.D(2001), Knowledge Management in organizations: examining the interaction between technologies, techniques, and people ,Journal of Knowledge Management, Vol.5, No.1, pp. 68-75.
- 3. Cooke, J.N.(1994) Varieties of knowledge elicitation techniques. International Journal of Management information systems, 20(1), 179-228
- 4. Davenport, T.H. and Lurance, p. (2000). Working Knowledge how organization manage what they know, Harvard Business School, USA.



- 5. Davenport, Thomas H., Prvsak, Lawrence, KM, translator, Rahmanseresht, Hussein, Publication SAPCO, 1379(2000).
- 6. Nezafati,N.,&Rashidi,M.,&Taghavifard,M., This article compares and knowledge extraction techniques provide a structured methodology to document the knowledge, public management perspective, No. 14, Summer 1392(2013), Ss63-86
- 7. Oliveira, Arnaldo, (2007), A Discussion Of Rational And Psychological Decision Making Theories And Models: The Search for a Cultural Ethical Decision Making Model , Electronic Journal of Business Ethics and Organization Studies, Vol 12, No2, PP 12-13.
- 8. Parker, Andrew M., & Baruch Fichhoff, (2007), Maximizers versus Satisficers: Decision Making Styles, Competence and Outcomes, Judgment and Decision Making, Vol. 2, no. 6, December 2007, pp 342-344.
- 9. Patton, John, R., (2003), Intuition in Decisions, Journal of Management Decision, p989.
- 10. Probst, Gilbert, Rob, Stephen, Rvmhardt, mining, knowledge management, translated by Ali Hosseini whether Tehran, Nshrystrvn, 1385(2006), p. 47
- 11. Radyng, Allen KM, success in the information-based global economy. Translated by Mohammad Hossein Latifi, Tehran: the, 1386(2007), p. 80
- 12. Rezayian, Ali, Lshkrblvky, M., competitive intelligence and strategic decision-making, the summer of 1389(2010), No. 35 (Scientific-Research), pp. 43-68
- 13. Scott, S. G., & Bruce, R. A. (1995). "Decision-making style: the development and assessment of a new measure." *Educational and Psychological Measurement*, 55(5), 818-831.
- 14. Singh, Romila & Greenhous, Jeffry, H., (2004), The Relation Between Career Decision Making Strategies and Person Job Fit: A Study of Job Changers, Journal of Vocational Behavior (64), p202.
- 15. Thunholm,Peter,(2004),Decision–MakingStyles,habit, Style or both, Journal of Personality and Individual Differences,pp932-933.

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