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ABSTRACT

The aim of this study was to determine the impact of change dimensions in the legal environment on the quality of each stage of the decision-making process of senior managers in public institutions. The population of this study included all general managers, directors administrative, Administrative and financial and support assistants, Accountants and financial managers, executive directors, deputies and managers of Executive agencies of Zanjan province. To collect the information from all elements of society, the census method was used. The data collection tool was a researcher-made questionnaire that its reliability and validity were confirmed (Cronbach's alpha coefficient: 0.87). Data analysis was performed using descriptive statistics and inferential statistics techniques (Chi-square test and Friedman test) by SPSS software. The results show that the dimensions of changes in the legal environment factors affect on the two first and third stages of the decision making process of managers (stages of data collection, decision-making and its implementation). However, it hasn't affected on the data, and information analysis stage.





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Keywords: Change, Seven dimensions of change in the legal environment, three

stages of decision-making process, senior managers of state institutions

1. INTRODUCTION

Decision-making refers to mental (cognitive) processes that lead to selection

of an action among the alternative measures. Decision-making is the main core of

and planning, can be considered synonymous to the concept of management

(MOHAMMEDAN; HUSSEINI, 2014). Decision-making is an action that ultimately

leads to a choice within a process that can meet the organization's problem. The

decisions are taken in order to realize the objectives and according to the available

resources.

Decision-makings determine the type of objectives and how to realize them.

Thus, decision-making is a mechanism that covers all activities of the organization,

and indeed, affects all members of the organization either individually or as a

member of a group (MOORHEAD; GRIFFIN, 2008).

In recent years, in complying with the rapid and profound changes in the

environment and daily needs, the organizations have had changes, including the use

of information technology, population growth, consumerism, resource constraints,

etc. Each of these has made the managers to face with different situations. As a

result, the decision makers should deal with various problems by choosing strategies

and policies.

If these decisions are not taken with evaluation and spending sufficient time,

they could lead to loss of organizational opportunities and resources. Sometimes,

making decisions by trial and error method can make irreparable losses to the

national wealth and resources and the surrounding environment, and even makes

the organizations' survival impossible (SALEHI, 2009).

It should be however noted that decision-making is essential for the managers

to efficient use of manpower and resources of an organization. According to Koontz

(1989), having a plan, program and policy is subject to decision-making. Simon, also

considers decision-making and management synonymous (ALAGHEBAND, 2012).

Today, we can say that the decisions of a manager are somehow one of the most

important success factors in the effectiveness of the tasks and advancing

organizational goals (KARIMI, 2012).

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Change is a fact that the individuals, groups and organizations need to consider for their continuous survival and make it as a priority. Since today, the internal and external factors of the organization have much dynamics that can change the existing facts, and the organizations are forced to move from the status

In a study, Trader concluded that the acceptance of change by the employees is an important factor in successful implementation of organizational change and suggested contribution as one way to create acceptance (TRADER-LEIGH, 2002). The purpose of this study is answering to this question; how changes in the legal environment, impress the three stages of decision-making by senior governmental managers?

2. THEORETICAL FOUNDATIONS

2.1. Decision and decision-making process

quo towards the ideal situation (MOQIMI, 2014).

Decision-making is a specific process that involves choosing a way among two or more existing methods. The decision involves a self-conscious choice that allows one to evaluate a specific behavior and way of thinking based on a series of given conditions, and then, select an option to pursue and implement (KARIMI, 2012).

We can say that decision-making is a process that decision is its result. In other words, decision-making is the process of identification and selection of a specific procedure among the options under consideration to achieve a particular goal or solve a particular problem (ALAGHEBAND, 2012).

In general, decision-making means choosing a solution from several solutions (MOORHEAD; GRIFFIN, 2008). The process can be considered a detectable flow of events related together in pursuit of a goal, purpose or end point. The process is the set of activities that create value for the costumer (JIFROODI, 2010).

The six-step decision-making process includes:

- a) Detection and identification of the problem or issue
- b) Finding possible solutions to fix the problem
- c) Selection criteria for the measurement and evaluation of possible solutions



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d) Determining the results of each of the possible solutions

e) Evaluating the solutions through examining the results of them

f) Choosing a solution among the different ways and presenting the decision

statement (SAEEDKIA, 2011).

In Simon's point of view, decision-making process has three steps:

a) Finding situations that require decision-making

b) Exploration, processing and analysis of different solutions

c) Choosing one of the few recognized solutions (RAHMAN SERESHT, 2011).

According to the classical theory of decision-making, a manager is who functions in a pretty sure world, and then, selects a solution that leads to the best results (AHMADI, 2015).

Based on behavioral decision-making theory, the behavioral decision-maker is faced with limited information rather than being faced with a completely assured world, and seems to act in uncertainty conditions (AHMADI, 2015).

Based on the theory of constraints, the managers should recognize resistance in its various forms and use it to test and prepare change strategies and its mechanisms to provide full and successful implementation of the process of change (REZAEIAN; BABA AHARI, 2005).

2.2. The managers' types of decision-making

There are fifteen types of decision-making for senior executives as follows:

a) The single-stage or static decision-makings (at once decisions) that the decision-maker focuses on the results of one stage and does not consider the

next steps and their results.

b) The multi-stage and protracted decision-makings in which the aim is not only to obtain a good result in one step but to make a series of choices made for achieving an appropriate overall results of them (MOHAMMEDAN;

HUSSEINI, 2014).

c) Planned decision-makings that are made based on the existing habits, rules

and procedures.



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d) Unplanned decision-makings that are used for an issue that has not been repeated enough so that a policy can be determined for, or it is so important to require a specific approach. In general, as the individual promotes in the chain of organizational levels, the ability to take unplanned decisions becomes more important (MOHAMMEDAN; HUSSEINI, 2014).

- e) Usual decision-makings are ones based on policies, procedures and regulations that are already set to facilitate the organization activity. Using them, while facilitating the flow of things, leads the managers and staff to devote their time and energy for addressing other activities or solving new problems rather than repetitive and routine issues (ALAGHEBAND, 2012).
- f) Unusual decision-makings include decisions that are novelty, unique and not repetitive. They are risky and costly, difficult to be quantitatively assessed, involving long- term commitments, requiring foresight and therefore, the probability of error is high in their process.
- g) Institutional or organizational decision-makings are those that are made by domestic managers in relation to formal administrative tasks proportionate to their authorities.
- h) Personal decision-makings are decisions that one takes, which are based on his/her personality traits.
- i) Individual decision-makings evaluate cases in which the manager makes decisions individually and then announces the decisions to the staff groups.
- j) Advisory decision-makings (consulting individual with the people) are decisions in which the manager speaks with some of the staff about the problem, and becomes informed of their views. Then, based on consultation with persons, he will make the decisions.
- k) Advisory decision-makings (consulting with the group) are a type in which the manager introduces the issue or problem to the staff groups during a meeting. The staff views are expressed during the group consultation, and finally, the director makes the decisions by using the group comments and opinions.
- I) Facilitating decision-makings (facilitate the decision-making) are those in which the manager describes the framework of decision-making in the role of



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a facilitator in addition to defining the problem. The purpose of the director is to develop agreement on the issue and decision making, while imposing his

views on groups at the same time.

m) Delegating decision-makings are those that the staff makes with the permission of the manager and within the developed framework. In this

method, the manager does not play any direct role in decision-making until

being implicitly asked.

n) Structured decision-makings are the well-defined ones, in which the decision-

maker is aware of the extent and time of adoption and implementation of the

decision and is autonomous in selecting one of the decisions.

o) Non-structured decision-makings include decisions that are not clearly

defined. Also, the exact time of making the decision, the period of the

decision-making process and its implementation time are not clear as well

(GHOLIPOUR, 2014).

2.3. Methods and techniques of decision-making

There are eleven methods of the decision-making as follows:

a) The standard six-step method of decision-making that includes six stages of

identifying the problem, analyzing the problem, determining the criteria of

selecting the solution, proposing solutions, choosing a solution, and

implementing the solution.

b) The 1-3-6 method pf decision-making: In this method, everyone can say

anything that comes to their minds freely. However, they should avoid

destructive criticism and conflict and long and boring speeches. The method

takes its name from how the group members work. Thus, first one, then a

three-member group, and then, a group of six people are formed to make

decisions.

c) Delphi technique is designed for groups that are not able to meet in person

(MOORHEAD; GRIFFIN, 2008). The employment of this technique is useful

when the professionals are scattered far from each other, and keeping the

names of the members participating secret is desired, or when linking

between the specialists is difficult because of differences of opinions.



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d) The method of creative thinking is a skill in which an individual acquires new

ideas or relationships through combining the problem-solving and decision-

making skills and achieve the ability of detection and selection of new

solutions.

e) Decision-making methods based on influencing factors are approaches in

which the enterprise managers use different methods of decision-making due

to the various influencing factors such as individual characteristics, the

organizational structure of the workplace and the cultural contexts of the

environment. Hofstede (1980) believes that the continued use of a decision-

making procedure considerably depends on the cultural features of the

subordinates.

f) Decision-making methods based on the cognitive complexity and the task: In

this category, the methods of decision-making are divided into conduction,

conceptual, analytical and behavioral methods with regard to two factors of

cognitive complexity or ambiguity and task-orientation and people-orientation

(GHOLIPOUR, 2014).

g) Methods of decision-making by using leadership styles theory: In this class,

the researchers have classified the decision-making methods using the

theory, including the ordering, delegation, participatory and sale styles in the

range between the two areas with "full authority" (arbitrary) and with

"delegating full authority" (GHOLIPOUR, 2014). In leadership theory, the

leadership style used in the treatment of individuals or groups depends on the

readiness level of people whom the leader is trying to influence.

h) Arbitrary method: In this method, the decision-maker decides by his own way

and notifies it for implementation.

i) Advisory method: In this method, the decision-maker consult with the

subordinates and the organization members as well as experts and people

with knowledge on the subject of consultation and makes a decision based on

information and rationality.

¹ G. D. Hofstede



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j) Participation method: In this way, decision-making is done with the

participation of other members.

k) Delegation method: In this method, the organization manager delegates the

decision-making authority to his subordinate managers or a group of people in

the form of policy-making or decision-making council in the company or

organization (GHOLIPOUR, 2014).

2.4. Decision-making models and patterns

Five decision-making models are as follows:

a) Garbage Can model that specifically adapts to the conditions in which the

technology environment is not fully understood and the decision-makers are

faced with ambiguity and uncertainty.

b) Management by objective model (MBO): In this decision-making model, the

decision objectives are developed in the first place, since in decision-making

model based on objective, the focus is on goals.

c) Contingency decision-making model: The use of contingency approach in

decision-making implies that the decision-making process and implementation

of each decision depends on environmental situation and somehow to

circumstances and conditions the organization is faced with.

d) Scientific decision-making method: In the method, statistics, mathematics and

computerized simulation are used. This method is used where the problems

are analyzable, and the variables can be also identified (KARIMI, 2012).

e) Intuitive decision-making model: This approach is used in turbulent and

unstable environments where the correct information is not available or in

unknown situations. In this decision-making method, the manager has not a

clear logic in relation to its decision accuracy. However, relying on his inner

vision and acumen, he does what he thinks is right is at that moment.

2.5. Changes in the legal environment or extra-organization factors

The organization environment includes all factors that are outside the

boundaries of the organization or potentially affect all or a part of the organization.

The close external environments that cause change are as follows: Competitors,

suppliers of the requirements, increasing loss of resources, government agencies



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(and even their numerous and various regulations), and the customers (whose priorities change offhand).

Also, the distant external environment causing changes in the organization are as follows: Economic and social conditions, political parties, technology development that all should be predicted and evaluated and involved in decision-making of the senior managers (HAZER, 1995).

Environmental or extra-organizational changes either occur in public places, namely in the political, economic, social, technological, legal, cultural and religious areas or in the components of operating environment (industry), including customers, suppliers of raw materials, competitors and the government.

2.6. Types of intra-organizational changes

Changes influencing due the decision-making process occurs within the organization as well as in the environment. Different types of intra-organizational changes are as follows:

a) Passive change that is the organization's response to the clear and present need for change.

b) The predictive change that begins without present clear and external demand and may begin to benefit in a competitive advantage or to face with the events that are expected to occur in the future and disturb the stability.

c) Modifying change that occurs when the change is not caused by an urgent need. In this type of change, the organization seeks to achieve better ways for strategic vision by defending it (HAY, 2011).

d) Adaptive change, which is a reactive and gradual response done in response to the emergent necessities of change.

2.7. Research background

Decision-making refers to mental (cognitive) processes that lead to selection of an action among the alternative measures. Decision-making is the main core of and planning, can be considered synonymous to the concept of management (MOHAMMEDAN; HUSSEINI, 2014).



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Since the management method of managers is manifested in the kind of decisions made by them and as decision-making is an integral and major part in determining organizational goals and policies, organizational design, in choices

made and in all management actions, the importance of decision-making can be

realized (RAFIEE, 1996).

The success or failure of any organization in achieving its goals is subject to having reasonable and rational policies and programs, arranged organizing, accurate decision-making and having human and material resources. Taking correct decisions that represents applying the correct and optimal style of management can maximally take advantage of the available facilities and warn the managers of making ill-considered and incalculable decisions (RAFIEE, 1996).

Simon (1960) suggests that decision-making involves three basic steps: Determining the position of decision-making, recognizing the possible methods to act and choosing among the methods. Enforcing the decisions can be considered included in the decision-making process. Thus, the manager who should implement the approved policies – or the decisions made on the implementation of specific policies – will face with a series of issues and problems that need decision-making (RAHMAN SERESHT, 2011).

Griffith (1959) considers decision-making as the heart of the organization and management, and believes that all of the functions of management and organization's dimensions can be explained in terms of the decision-making process. Allocation of resources, communication network, formal and informal relationships and the realization of the organization' goals are controlled by decision-making mechanisms. Therefore, decision-making is the key to understand the complexities of the organization and management performance (RAHMAN SERESHT, 2011).

The creativity impact on improving the management decision making shows that there is a significant relationship between management's decision-making and improving the employees' performance. Most of the governorates' managers believe that they should increase creativity and innovation through research and investigation to make better decisions. The more creative and risk-taking managers



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would be able to make better, more dynamic and faster decisions (SARFARAZI; SEPEHRNIA; KAVOOSI, 2011).

In Islamic management, several factors are influencing the decision-making that attention to them can have a significant impact on decision-making process and its implementation. Three of these criteria are: Consultation, right-orientation and trusting God. Considering all these factors, the decision would benefit from a proper performance (BAHRAMI; KHEYBARI; NOORI ALAVICHEH, 2013).

Also, the results of a study on the effects of stress caused by the organizational factors on the quality of management decision making indicated that that the organizational factors of stress have been effective on the quality of decision-making of managers in the D.M.T² company in Isfahan Province (ABZARI; EBRAHIMI KANI, 2001). The quality of corporate executives decide D.M.T been effective in Isfahan province

Change is a fact that the individuals, groups and organizations need to consider for their continuous survival and make it as a priority. Since today, the internal and external factors of the organization have much dynamics that can change the existing facts, and the organizations are forced to move from the status quo towards the ideal situation (MOQIMI, 2014).

In a study, Trader concluded that the acceptance of change by the employees is an important factor in successful implementation of organizational change and suggested contribution as one way to create acceptance (TRADER-LEIGH, 2002).

3. METHODOLOGY

3.1. Type of research

This research is an applied survey based on results. According to objective, it is a descriptive – explanatory survey. Based on the relationship between the variables, it is a correlative research. Based on time, it is sectional.

² Production of Liquid and Solid Dimethyl Terephthalate (DMT)



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3.2. Research Variables and their components

In this study, independent variable is the changes in the legal environment factors, and the dependent variable is the "decision-making process of public

managers". The independent variable of "change" has seven following components:

a) Inconsistency in laws and regulations (discrepancies)

b) The plurality and multiplicity of rules and regulations on a subject

c) Diversity and newness of laws and regulations

d) The severity of changes in the financial, human and informational of the

organizational

e) The duration of laws and regulations (duration of the regulations validity)

f) The extent of change effectiveness in laws and regulations of the organization

(the affected areas)

g) The amount and capacity of changes by the organization and office

Three components of the dependent variable (decision-making) include: Data collection, data and information analysis, selecting the desired option and execution of the decision. In this study, the purpose of the data collection quality consists of methods for gathering data and information, number and validity of resources used. Also, the quality of data and information analysis refers to the methods and tools used to analyze the data, while the quality of the implementation of the decision

includes the speed of implementation and the enforcement rate of the decision.

3.3. Research Hypotheses

The three hypotheses of this survey are as follow:

a) The dimensions of changes in the legal environment affect the quality of data

and information collection.

b) The dimensions of changes in the legal environment affect the quality of data

and information analysis and selecting the desired option.

c) The dimensions of changes in the legal environment affect the quality of

selecting the optimal choice and implementation of the decision.

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4. CONCEPTUAL RESEARCH MODEL

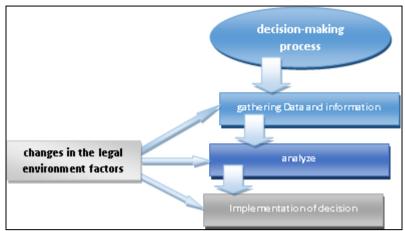


Figure 1: Conceptual Research Model

4.1. Target population

The population of this study included all general managers, directors administrative, Administrative and financial and support assistants, Accountants and financial managers, executive directors, deputies and managers of Executive agencies of Zanjan province in 2014 as decision-makers or decision-builders, having the authority and responsibility of identifying, financing, commitment, confirming, transference and payment adaptation with laws and regulations.

study population was 123 people that evaluated in the form of a census.

4.2. Data collection tool

The data collection instrument was questionnaire that contains 21 questions that each one has a five- option response in the Likert scale. Regarding the effectiveness rate, the seven indicators of legal environment change are as follows:

- a) Diversification and newness of laws and regulations
- b) The multiplicity of laws and regulations
- c) Contradiction in the laws and regulations (discrepancies)
- d) Rules and regulations duration (length of credit)
- e) The effectiveness extent of laws and regulations in the organization (affected areas)
- f) The intensity of change in the financial, human and information resources of the organization



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g) The amount and capacity of accepting changes by the organization and office on the quality of the decision-making process.

Thus, the questions 7 to 13 of the questionnaire evaluate the impact rate of change indicators of the legal environment on the quality of the data collecting process. Also, the questions 14 to 20 of the questionnaire examine the effect of legal environment change indicators on the quality of data and information analysis process, while the questions 21 to 27 of the questionnaire evaluate the impact of legal environment change measures on the quality of the decisions implementation process. In addition, through 6 questions, the demographic characteristics of the target population including gender, education level, age, work experience, organizational level and field of study, was collected.

4.3. Data collection method

The questionnaires were duplicated as Hard Copy by the number of the target population members (n= 123) and were distributed in-person among members of the target population by the researcher and his colleagues as the financial controllers. They were collected after the completion by the managers during about two months.

4.4. Questionnaire validity

The face and content validity of questionnaire were calculated by 20 decision-making experts in the statistical population, which on average was 0.74, greater than the mean value of 0.5.

4.5. Questionnaire reliability

In order to evaluate the questionnaire reliability, the Cronbach's alpha coefficient was calculated that the reliability level of the questionnaire was equal to 0.87, which is higher than the index value of 0.70. The reliability rate was calculated as 85% by re-test method. SPSS statistical package was used for the calculation and analysis of data. The Cronbach's alpha value for each search constructs is shown in table1.

Table1: cronbach's alpha of each search constructs

	Cronbach's alpha
The impact of legal environment changes on the quality of data collection	0.84
The impact of legal environment changes on the quality of data analysis	0.83
The impact of legal environment changes on the quality of implementation of the decision	0.86
Entire alpha	0.87



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4.6. Data analysis method

Data analysis was performed using descriptive statistics (frequency and percentage) and inferential statistics (chi-square test, Friedman test, Shapiro-Wilk test or Kolmogorov-Smirnov test) and by SPSS software. To examine the normal distribution of data for each of the variables, the Shapiro-Wilk test or Kolmogorov-Smirnov test was used to ensure the normality of data.

Also, using Friedman test, one can say that which change indicator of the legal environment has the maximum and which has the minimum impact on the quality of the decision-making process. As such, using the chi-square test, the impact rate of changes in the legal environment on the quality of data collection, quality of data analysis and quality the implementation of the decision were examined.

Considering α = 0.01, to judge about H0 and H1, if the sig value was smaller than the considered error rate, the H0 hypothesis would be rejected and the H1 hypothesis would be accepted; if the sig value was greater than or equal to the error rate considered, the H0 hypothesis was accepted and the H1 hypothesis was rejected.

4.7. Demographic characteristics of the target population members

The majority of the target population had master degrees and were middle-aged (70% between 36 and 45 years) with experience veteran (80% over 16 years), and the absolute majority of them had educated in the fields of Management and Accounting. 123 people in organizational posts, including general managers, directors, administrative, financial and support assistants, accounting and financial managers, other managers and deputies. The details of the target community members' characteristics are shown in Table 2.

Table2: Demographic characteristics of the target population members

Gender	Male	116
Gender	Female	7
	Bachelor	46
Education	Associate	3
level	Master	73
	Ph.D.	1
	30 - 35	5
Ago rango	36 - 40	34
Age range -	41 - 45	53
	Over 45	31



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	5 - 10	2
Work	11 - 15	22
experience	16 - 20	50
•	Over 20	49
	Management	54
Field of	Accounting	42
Study	Economy	4
	Other disciplines	23

4.8. Testing the normality of data distribution in the population

To examine the normal distribution of data, the H0 and H1 hypotheses were tested at 5% error level. H0 show the normal and H1 show the non-normal data distribution, respectively.

Table 3: The results of the normality of the data regarding each variable

	Shapiro-Wilk test		Shapiro-Wilk test Kolmogrov – Smirnov to		v test	
	Significance	Degrees of freedom	Statistic	Significance	Degrees of freedom	statistic
The impact of legal environment changes on the quality of data collection	.000	123	.936	.003	123	.102
The impact of legal environment changes on the quality of data analysis	.018	123	.974	.001	123	.111
The impact of legal environment changes on the quality of implementation of the decision	.000	123	.923	.000	123	.161

As the significance level (sig.) of the two above tests is less than 0.05, thus, the data distribution in the target population is not normal. This means in order to test the hypotheses, the non-parametric tests should be used.

Prioritization of changes in the legal environment factors based on the effectiveness on decision-making process of the government managers

The changes in legal environment factors can influence the quality of data collection, quality of data analysis and quality of implementation of the decision. Based on this test, we can say that which factor has the maximum and which has the minimum effect.

H0 means that the ranks are the same among the groups.

H1 means that the ranks are significantly different at least between the two groups.



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Table 4: The impact of legal environment change on the quality of decision-making process

Average of ratings	
2	The impact of legal environment changes on the quality of data collection
1.53	The impact of legal environment changes on the quality of data analysis
2.47	The impact of legal environment changes on the quality of implementation of the decision

The factor of legal environment change in the implementation of the decisions stage has the highest effectiveness (By 64%). The effectiveness rate of changes in the data analysis stage is significant (46%). However, it is less than their effect in the other two phases (first and third phases) of decision-making.

Table 5: The impact of legal environment change on the quality of decision-making

	process	
Chi-Square	Df	Sig
66.37	2	.000

Given the above table (Table5), and considering α = 0/01 regarding H0 and H1, and the Sig value less than the error rate (0.01), we conclude that the difference between the effects of these three different variables is significant at 99% confidence level. In other words, the effect of "legal environment change on the quality of the implementation of the decision" is in the first rank, while "the impact of legal environment change on the quality of data collection" and "the impact of the legal environment change on the quality of data analysis" are respectively ranked second and third.

Comparison of the effectiveness of legal environment change on three stages of the decision making process of public senior managers

In this analysis, H0 is equal to the lack of effectiveness of legal environment change on the three stages of the decision-making process, while H1 is defined as effectiveness of legal environment change on the three stages of the decision-making process.

Table 6: Results of chi-square test for the impact of legal environment change on the three stages of the decision-making process of public senior managers

	Sig	Df	Chi-Square
The impact of legal environment changes on the quality of data collection	.000	2	96.780a
The impact of legal environment changes on the quality of data analysis	.787	1	.073a



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The impact of legal environment changes on the	0.00	2	118.293a
quality of implementation of the decision	00.0	2	110.233a

Considering α = 0/01, the H0 hypothesis about the impact of legal environment change on the quality of data collection and implementation of decision is rejected. Then, the legal environment change affects the first and third stages (quality of data collection and quality of implementation of the decision), but it has no effect in the analysis of data stage.

5. RESULTS & FINDINGS

- a) From the perspective of all senior and mid-level managers, the impact of changes in the legal environment on the decision-making process is at high and very high levels.
- b) The senior managers more than the mid-level managers, and the mid-level managers more than the basic principals know the changes in the legal environment effective in the decision making process. This means that the higher management level, the higher effectiveness of the legal environment on the decision. Thus, the correlation between the level of management and effectiveness rate caused by legal environment changes would be positive and direct.
- c) Among the four groups of managers, only and just the financial managers and financial controllers evaluated the impact of changes in the legal environment as average. The other three groups have found the effect as high and very high levels.
- d) The differences between "the impact of legal environment change on the quality of data collection", "the impact of the legal environment change on the quality of data analysis" and "the effect of legal environment change on the quality of the implementation of the decision" are significant at 99% confidence level. In other words, the effect of "legal environment change on the quality of the implementation of the decision" is in the first rank, while "the impact of legal environment change on the quality of data collection" and "the impact of the legal environment change on the quality of data analysis" are respectively ranked second and third.



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e) The effects of seven components of the legal environment change on the three components of decision-making are prioritized as follows:

Table 7: The priority of the impact of legal environment change indicators on the quality of data collection

quanty or data concenter.	
Assessment Indicators	Rating
Inconsistency in the laws and regulations (discrepancies)	First
Plurality and multiplicity of rules and regulations on a subject	Second
Diversity and newness of laws and regulations	Third
The severity of changes in the financial, human and information resources of the organization	Forth
Duration of laws and regulations (Validity duration)	Fifth
The impact extent of the laws and regulations in the organization (affected areas)	Sixth
The rate and capacity of accepting changes by the organization and office	Seventh

Table 8: The priority of the impact of legal environment change indicators on the quality of data analysis

quanty of data arrangers	
Assessment Indicators	Rating
Inconsistency in the laws and regulations (discrepancies)	First
Plurality and multiplicity of rules and regulations on a subject	Second
The severity of changes in the financial, human and information resources of the organization	Third
Diversity and newness of laws and regulations	Forth
The impact extent of the laws and regulations in the organization (affected areas)	Fifth
Duration of laws and regulations (Validity duration)	Sixth
The rate and capacity of accepting changes by the organization and office	Seventh

Table 9: The priority of the impact of legal environment change indicators on the quality of the implementation of the decision

Assessment Indicators	Rating
Inconsistency in the laws and regulations (discrepancies)	First
Plurality and multiplicity of rules and regulations on a subject	Second
The severity of changes in the financial, human and information resources of the organization	Third
Diversity and newness of laws and regulations	Forth
The impact extent of the laws and regulations in the organization (affected areas)	Fifth
The rate and capacity of accepting changes by the organization and office	Sixth
Duration of laws and regulations (Validity duration)	Seventh

6. DISCUSSION & CONCLUSION

a) The legal environment change affects the quality of data collection. In other words, it was found in evaluating the effectiveness variation of legal environment change based on indicators such as diversity, contradictions and discrepancies in the rules and regulations, the severity of changes in the financial, human and information resources, the extent of impact that the



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variable affects the quality of data collection negatively and reversely. In other words, with greater intensity and rate of change of the legal environment, the factors of identifying available resources, methods of data collection and the

reliability of resources needed for making high quality decision is affected.

b) The legal environment change will not affect the quality of data analysis. In

other words, after collecting the required information on the issues, the factor

of legal environment change would not influence the methods and tools

required to analyze the data and information.

c) The legal environment change affects the quality of the implementation of the

decision. In other words, it was found in examining the effectiveness of legal

environment change variables that these variables have a negative and

impact on the quality of the implementation of the decision.

d) To significantly increase the quality of the decision-making process of top

public managers, in the first step, the contradiction between laws and

regulations should be resolved.

e) In the second step, by reducing the number of laws and regulations on a

subject, the quality of the decision-making process of top public managers

can be considerably increased.

f) By reducing changes in the financial, human and informational resources of

the organization, the quality of decision-making process can be increased for

all senior and mid-level managers.

g) From the perspective of all managers, the variety and newness of rules and

regulations should be reduced to enhance the quality of the decision-making

process.

h) According to governmental senior managers, the impact extent of laws and

regulations in the organization (affected areas) is another indicator to be

improved for increasing the quality of the decision-making process of the

managers.

i) In the eyes of all senior and mid-level managers, increased rate and capacity

of accepting changes by the organization and office can improve the quality of

decision-making by senior management.



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j) According to all the managers, increased longevity of the laws and regulations

(period of validity) can improve the quality of management decision making process. To gather proper data and information in the face of change, the

managers can use two methods: Participatory method (through formation of

workshops and meetings, and act according to their opinions) or consulting

method (consultation with the target group with knowledge on the changes).

Also, the delegation method may be used for implementation of the decision.

In this method, the manager delegates the decision-making authority to his

subordinate managers, and also leaves his authority to a group of people defined in

the form of policy-making or decision-making council within the company or

organization.

In this approach, the participation of subordinates in decision making leads to

their reduced resistance against the changes resulting from the implementation of

the decision. Also, their participation could accelerate the implementation of

decisions. For the participants consider themselves bound and commitment to

implement the decision and spend their ability to implementation it.

Also, participation of the subordinates in decision-making will empower them

and make them to try to gain new information and think creatively. In addition,

utilizing the voluntary commitment of people willing to work and learn through

dialogue and not through the issuance of official orders is one way that can be used

in facing with change.

7. IMPORTANT NOTE:

This article is written based on a master's thesis Mr. Mohammad Reza

Ahmadi of the Azad University of Zanjan, and doctor Mostafa Jafari (first author) was

the thesis advisor. It should be noted that Mr. Ahmadi did not have any participation

in the formulation of this article.

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