

Problems and dilemmas in decision-making in industry, mine & trade organization of West Azerbaijan Province

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Abstract

The decision-making is so important in administration of organization affairs that some authors defined the organization as “decision network” and management as “decision-making action”. In this study that with respect to the objective is an applied and with respect to the method is a survey study, considers the dilemmas and problems of decision-making in Industry, Mine and Trade Organization of West Azerbaijan Province. In order to identify the problems and dilemmas of decision-making, in addition to theoretical studies, the opinions of professors particularly advisors and counseling professors were used, and after identification thereof, a questionnaire including 10 main factors and 39 subfactors were designed as paired comparisons. After approval of questionnaire validity of questionnaire, upon obtaining the comments of professors and experts, 21 questionnaires distributed among skilled deputies and experts of organization. The collected data were analyzed by means of hierarchic analysis technique and prioritized. According to the research results, the elements including applying the personal opinion in decision-making and excessive rely on individual experiences, unwillingness to the future and tendency to early results and unwillingness to making decision are more significant and in fact there factors form the major problems of decision makers in the organization.

Keywords: Decision-making, Hierarchic Analysis Process, Dilemmas and Problems

Introduction

The change makes the life beautiful, and the thought necessary and in fact, it is the basis of life.

Therefore, the change challenges us and teaches us how to administrate our world. But what does the change do with organizations? The change obliges the organizations to dynamism and neglecting the change, provides the grounds for organizations’ destruction. The modern world is the world of changes and the change makes the decision-making difficult. As much as the change creates problems for organizations, also creates opportunities for them. Quality of facing changes has direct relationship with quality of decision-making.

The decision may integrate the peoples’ actions and convert their efforts to the group and organizational effectiveness. This stage as the starting point is very crucial for identification of organizational processes. Decision-making means choosing a course of action from among several courses of action. The decision maker chooses a course of action based on his evaluation of information and it may be classified based on the replication times and information conditions.

Decision-making topic has been ever raised as integral part of management in management writings. Doubtless, the decision-making is one of the most important duties of managers and never may we assume it equal to the other manager duties. A lot of researches and studies have been applied on decision-making. Perhaps the life of decision-making literature is equal to management literature life, because we may not find a book in management organization books therein no decision-making has been discussed.

Importance and necessity of study

The decision-making has an effective role in coordinating the organization activities. Therefore, the managers commonly assume the decision-

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making as their main duty, because it is clear to them that for progressing the organization goals, they must know that which way to choose, what to do, engage whom as officer and responsible for a job, and how, where and when the works to be performed.

One of issues that show the importance of decision-making discussion is that the decisions may change the organization in appropriate direction and make it more rational. In other word, the decision may lead the organizational performance to the direction that has more conformity and coordination with organization goals, because the decisions explain the organization goals and reflect them, and making decision with adequate information and providence aids the organization to achieve its long-term goals.

Whereas decision-making in organizations is very important and the main factor for determination of organization goals and policies, organizational design, elections and appointments and in all organizational interactions that has a direct effect on the administrative system. The organizations ever face barriers in this relation. In the extant study we intend to identify these problems from the viewpoints of administrations' heads that have a close relationship with this topic, and prioritize them and offer suggestions and strategies for obviating these barriers.

In consideration of the foregoing, and our country's administrative system, it is necessary to investigate the barriers and problems of decision-making in organization and presentation of required suggestions.

Objectives

- Considering the problems and determining dilemma for making decision in Industry, Mine & Trade Organization of West Azerbaijan Province;
- Determining the order of effectiveness of foregoing problems and dilemma on the said organization's decision-making ;
- Presenting the required suggestions.

Theoretical concepts and fundamentals

Definition of decision-making

Considering this fact that decision-making and management may be deemed synonym or assume as the main factor of management, the significance of decision-making is revealed. It is notable that in the related writings and trainings, decision-making is

formed based on the decision moment not the whole long and complex decision-making process and detection and adjustment of variables that lead us finally to the decision-making .

The decision-making includes the process of choosing the best probable solution among the available solutions for solving a problem.

Decision-making is a process including identification, definition, and diagnosis of problems, finding the various solutions for solving the problems, evaluation of offered solutions and selection of the best solution or alternatives.

Nature of decision-making

Decision-making is a combined process that includes a complex network of previous decisions. Its complex and combined nature caused the study on decision-making to be deemed as a difficult and decisivework. However superficially it is assumed that only the strategic managers share therein, but in practice the decision-making is the main responsibility of all managers. As Hall mentioned, there are various types of decisions. Therefore, varied and extensive decision are hidden in any essential decision that the middle and operational managers aiding human capabilities of their subordinate groups have considerable role in making and adopting that decision.

The decision-making as defined by the Daft means is assumed as organization's brain and nervous system. This brain and nervous system under conditions may cause the growth and success of organization, and inversely under other conditions result its failure. The decisions are made in different organization levels in various forms. Some decisions may be strategic, in such event it is necessary to make decision about them immediately. Some decisions are very insignificant and mostly in relation to the routine working activities. Some other may be made after collection of information and consideration thereof for months, or within a short time without consideration. The decisions may be made solely by the managers or upon consulting to the employees or in collaborative groups, hence the decisions are different in terms of their significance.

A serious difference is that the organization's strategic decisions may be deemed majorly based on the valuing qualities and calculations based on the culture and beliefs system of each society with an extensive effectiveness. But the operational decisions may be assumed majorly based on the quan-

titative, nonhuman and technical frameworks and information and its effect is revealed mostly in individual and micro level.

Decision-making types

Organizational decisions are different in complexity and may be divided as planned and unplanned decisions.

Planned decisions

The frequencies of a decision-making indicate that if the decision is planned or not. A planned decision is repeated to the extent that establishes a decision-making rule. A decision-making rule shows the appropriate solution when the decision maker has the adequate information about decision-making situation. At any situation, the decision-making rule fitted for that situation is used.

Commonly, the planned decisions are very coherent, with clear goal, known, predetermined decision-making method, and information resources and channels therein have been determined appropriately.

The planned decisions include the decisions that are made based on habit, rule or procedure and used for simple and complex problems. Whatever the decisions are more irregular, newer and with major results or in other word, are more complex and include major obligations, proportionally converting them to the planned form is more difficult. If the problem is repeated and its constituent factors may be analyzed, predicted and defined, such problem may be planned.

The planned decisions limit the manager's freedom somewhat, because the organization instead of the person makes decision to what to do. However, the planned decisions frees the manager's time for dealing with more major problems, for instance making decision on the quality of dealing with each one of clients' complaints is costly and time consuming, but applying the policy of "The objections are authorized only for two weeks after performing services or purchasing goods) simplifies dealing with the complaints considerably (Ibid).

Unplanned decisions

Unplanned decisions include the decisions dealing with uncommon and unique issues. If a problem is not repeated adequately so that can determine a policy for it, or is so important that requires a specific encounter, it must be solved by a proper and unplanned decision; for instance problems such as quality of improving the public relations are subject to the time requirements etc (ibid).

In fact, the manager has no option but to make an unplanned decision for the most major problems face them. The written and unwritten policies of organization facilitate the decision-making, because eliminate or limit some alternatives. Whatever the person obtains a higher level in organizational hierarchy, the capability of making unplanned decisions is signified more, because the decisions he must make are unplanned (ibid).

However, when a problem or situation is created at a moment, the decision maker may not rely on the previous decision-making rule. Such a decision is referred to as unplanned decision and its necessity is solving problem. The problem solving is a specific type of decision-making therein the subject is unique and its necessity is establishing and evaluating the different strategies without aid of planned decision-making rule. The integration of unplanned decisions is weak and due to information ambiguity, there is no specific method for making decision and most times it is unknown.

Decision-making process

To conduct any activity, some stages are required to be completed. Decision-making as well as other activities is not exempted therefrom. In general there are 5 stages for making a decision, as follows:

Identification of problem or opportunity

The first step in decision-making process begins by determining and specifying the problems. In order to determine a problem (opportunity), it is important that not only to consider the problem, but also take its implicit causes into consideration. In principle, the important step in decision-making process stages is to seek for decision-making opportunities and not the problems obviation, because the problems finally reveal themselves.

Determination and extension of options

There are different ways for solving a problem. At this stage of decision-making process, all practical solutions through which may remove the problems, must be considered. Since the beginning, the solutions must be considered that are related to each other and executable according to conditions, as well.

Evaluation of options

Each one of solutions has advantages and disadvantages, commonly. An option may be clearly the best, but the same option may also have weaknesses. In general, there are various ways for evaluation of options; one way is to index the weaknesses and

strengths of each one that often specifies an option as the best. The other way for evaluation of options is to determine the expected return for each one.

Selection and execution of the best option

The capability of selecting the best way for performing work among several options often causes distinguishing the successful managers among the managers of lower success. The option promising the goal achievement and investigating all aspects of a status in general, must be selected. This stage may seem to be very simple but is the most difficult stage for the managers. However, despite of using the complex styles for selection of options, a manager never may be sure that the results of a decision are appropriate.

In general, the said four stages of decision-making process as above may help us for adopting the most appropriate decision. Certainly, no decision may be found that has not been passed these stages. Attention to each one of these stages may facilitate the next stage and intimately lead to the most appropriate decision. Negligence and inconsideration to each one of these stages may reduce the quality of decision and finally causes failing to achieve the appropriate result.

Evaluation of decision-making

Decision-making process is not perfect until encountering the realities of real world. Generally, execution of made decisions doesn't cause completion of decision-making process, but stage evaluation of decision and feedback are indications of re-continuation of decision-making evaluation. So, a series of information is obtained that can help for making the future decisions intensively.

Fundamentals and techniques of selecting options in decision-making

The managers take three principles as basis to select the appropriate option among the options for making decision including experience, test, research and analysis.

Experience

In the decision-making based on the experience, the past is emphasized and who has more experience is more qualified for obtaining the more sensitive position. Emphasize means it may have inappropriate consequences.

- a. The person may not learn from his mistakes.
- b. The person may not know the real causes of his mistakes.
- c. The experience may be completely inappropriate for new problems and related to the past.

Therefore, the criterion for superior decision-making s includes the work experience and experience of the person, although it is important but may not be effective in all conditions.

Test

In this method, the selected solution is assessed in practice that is a costly and time consuming manner, because eventually the results of test sample may not be extendible in the main population.

In other word, in this manner, some solutions are selected among the available solutions, and tested in limited situations, and then the results of these tests are examined with the purpose of specifying the superior solutions for implementation in the main population. Whereas in some cases, these solutions may not respond in the main and larger population and not include the former useful results, this method seem not to be affordable, because has a lot of time and cost waste, particularly despite of all these efforts may not respond in the main population.

Research and analysis

The most common and effective technique for choosing the options and solutions is research and analysis. Research and analysis is performed based on the feasibility, quality of acceptance, cost, flexibility, and observance of moral concepts of solution. Therefore, applying this approach including researching on the relationship between variables, limitations and important hypotheses that affect the objective, moreover solving a problem requires breaking it to the tangible elements and variables. Applying this technique seems to be cheaper than test, therefore one of reasons for superiority of this method to the test method is that therein the time to be spent for testing the solutions and other affairs is spent for more analysis. Also, in the previous methods, the analysis is somehow required.

Decision-making model

Robins (1995) has raised a model in relation to manager's decision-making manners in organization based on decision-making model of Ravi et al (1984) that include the most organizational decisions approximately; means that the decision made by the manager includes one or some of these styles.

Robins believes that in decision-making , the people are different from two aspects; first aspect is thinking style of these people. Some decision makers are logical and rational and process the infor-

mation successively. In return, there are some people that think creatively and have their own point of view. The second aspect focuses on tolerating the ambiguity; some people require a lot of stability and order in their decision-making s (minimum ambiguity), but some other are able to tolerate the uncertainty in high level and process most of their thoughts simultaneously. Out of these two aspects, four decision-making styles including analytical, perceptual, behavioral and imperative decision-making styles are extracted.

Analytical decision-making style

Who use analytical style in decision-making have more patience and tolerance in the face of difficulties. They are seeking for more information and want to think about it more. The managers that decide in analytical style, take care intensively and can adapt themselves to the new conditions.

Perceptual decision-making style

Who make the principles systematically have an open viewpoint and consider plenty of solutions. They pay attention to long-term periods and have a high capability in finding the innovative and creative solutions.

Behavioral decision-making style

This group adopts a behavioral style in decision-making and cooperates with the others. They ever consider the achievements of colleagues and subordinates. Accept the suggestions, and take notice of the results of councils and congresses. Such manager attempts to avoid the conflict between beliefs and accept the others' ideas.

Imperative decision-making style

The persons using this style have no patience and tolerance to the ambiguous information and ever are seeking for rational and reasonable decisions. These people mostly pay attention to the efficiency and act quickly in decision-making and commonly take the notice of short-term periods.

Limitations and problems of decision-making

Simon believes that there are limitations for rationality of decisions. As he explains, from one side, the person is limited by skills, habits, and involuntary actions beyond conscience and awareness. For instance, his action may be limited through his skill, reaction time or physical ability. His decision-

making processes may be limited by his mental processes, skill in basic mathematics and such factors. In this context, administration principles must pay attention to the duties of human body organs, skill training rules and habit. On the other side, the person gets involved in dilemma due to his assumptions and values of objective and is effected by them while decision-making . If his loyalty to the organization is deep, his decisions may affirm his honestly acceptance of goals considered for the organization, on the other side the person may be involved in dilemma through his knowledge of work. Decision-making problems and dilemma include as follows:

Unwillingness to providence and tendency to early results

One of the major problems in decision-making is short-sight and inattention to far futures. Some of decision adopters mostly pay attention to meeting the routine needs and current expectations, and assume responding thereto as their main goal. They lay away the far futures from their scope of work and express lower sensitivity to the long-term programs. The complexity and difficulty of farsighted decisions is another factor that tends the decision makers to early futures and avoid from attention to far futures.

Partialism and one-dimensioning in decision-making

Lack of a holistic viewpoint is another problem that creates barriers on effective decision-making process. Where the decision makers pay attention to one dimension of problem, and neglect from other dimensions, an incomplete result is obtained as the decision that probability of its success will be very insignificant. In the decision-making s, inattention to the different environments affecting the subject such as cultural and social environments, political and legal environment, technical, climatic and geographical environment causes the resulted decisions to be vulnerable from the viewpoint of any environment that has not been paid attention, and face difficulties in execution.

Information insufficiencies in decision-making

Often, the decision makers face deficiency in information and statistics for making decision and whereas the value and validity of decisions is equal to the value and validity of information collected for them, easily it is concluded that lack of correct information how much can obstruct the process of making policy.

The most important problem in this relation is lack of a centralized and valid database that helps the decision makers for adopting the correct deci-

sions. The available data are often incomplete and related to the past and we may not ensure from their accuracy. Excessive hierarchy is also often one of the other problems of great governmental organizations for informing the decision makers, because the information must pass a long hierarchy and in this current are exposed to a lot of changes and their accuracy may be impaired.

Tendency to naiveté and seeking for a simple solution

The other problem observed in some decisions is naiveté for facing problem and dealing with superficial dimensions of issues and problem complications instead of the principal problem. In such cases, when the problem is stabled in the population, the decision makers focus on its simplest aspect that may be a superficial lesion and adopt rule and provision for its elimination. This is the naiveté that instead of facing the principal problem to deal with superficial and incidental problems, and seek for simple and quick solutions for them.

Applying the personal opinion in decision-making

In some cases, the decision makers before making decision, have made their choice in the mind, and to approve and justify their idea approach to the information towards acceptance of that decision and ignore other realities and witnesses against their tendency. In such cases, the decision-making has a formal aspect and different stages of decision-making process are not observed correctly. Data collection is limited to agree data and assessment factors are affected by applying the personal opinions and tastes. The decision maker takes effort to realize his personal opinion and show it as the decision-making result.

Unwillingness to experimental implementation of decisions

Unwillingness to experimental implementation of adopted decisions and their absolute and final implementation in organization sometimes incurs non-compensable losses, whilst if the decisions are implemented experimentally for a period, perhaps we could avoid the said losses timely. Decision-making is applied based on a series of predictions and information, although the aforesaid predictions and estimations are not realized in practice and the decisions are not applied as predicted.

Unwillingness to decision-making

Unwillingness to decision-making and assign-

ing this duty to the higher authorities is one of problems that causes the decision is made at the top of organizational pyramid and its richness is reduced saliently. Non-acceptance of a rational risk in decisions and intemperate cautionary results in loss and cessation of decision-making in sensitive stages and occur problems.

Inflexibility of decisions

Lack of required flexibility in decisions is a problem that makes its implementation in the current varied and developed conditions so difficult. Flexibility of decisions is borne by the thought of decision makers to the environment and its executors. They assume that the environment for execution of adopted policies and decisions is a fixed and without change environment, therefore for such environment we may decide fixedly and without flexibility.

Inflexibility of decisions and policies reduce their effectiveness and if the environment conditions are altered, the possibility of their execution is reduced intensively, and faded gradually. Here, it is notable that use of fixed and inflexible processes of decision-making by the most decision makers is not ineffective on creation of this problem, because in such cases, it is attempted to consider all problems and issues by a united and uniform style that the decision maker is familiar and intimate thereto.

Enacting formal and superficial decisions

In some cases, some decisions are enacted that are only advertising and superficially and designed for attraction and protection of employees. As it is clear the aforesaid decisions are not to be executed and the employees already have been informed of this decision and lose their trust to the decision makers and negatively encounter to the other decisions. Also, the decisions that have been exaggerated and not evaluated realistically intensify the mistrust problem.

Unawareness of employees and their feeling of ineffectiveness

We may claim bravely that employees' unawareness and lack of their presence in decision-making context is one of decision-making dilemmas. If all foregoing problems are removed and the competent decision makers aiding the appropriate methods and providing with adequate information and consultation of relative experts make decision, no sufficient appropriateness will be achieved without

presence of employees in decision-making . Decision-makings are reflex the demands, needs and expectations of employees and offer solutions for their problems. The decisions must be derived from employees' ideas and demands and respond their needs. In the event, the people are not aware of their right and don't assume their participation and commenting in public decisions as necessary, the decision-making lose one of its main resources due to their unawareness.

Methodology

This research with respect to the objective is an applied study and a survey paper as respect to the method. In this study, firstly we identify the problems by means of previous papers and researches, theoretical fundamental, library studies and professors' viewpoints, and later formulate the paired comparison questionnaire of decision-making problems and dilemmas in Industry, Mine and Trade Organization of West Azerbaijan Province. Then, the data are analyzed by means of hierarchy analysis method and aiding AHP Master software and factors and subfactors are prioritized.

Variables

The problems and dilemmas are assumed as independent variable and decision-making as the dependent variable of this study. As per analytical mode, these problems and dilemmas are as follows:

Factor: Unwillingness to the future and tendency to early results

Subfactors:

- Tendency to early results;
- Tendency to routine needs meeting;
- Abstaining from long-term decisions;
- Abstaining from ambiguous probabilities and doubts

Factor: Partialism and one-dimensioning in decision-making

Subfactor:

- Inattention to all dimensions of problem;
- Inattention to decision makers to different effective environments (cultural, economical, political etc.)
- Inattention to the factors affecting the decisions

Factor: Information insufficiencies in decision-making

Subfactor:

- Lack of correct information and statistics;

- Lack of valid and centralized database;
- Lack of timely informing;
- Excessive hierarchy in organization;
- Uncertainty of information accuracy and inaccuracy;
- Merely relying on official information and reports;
- Merely relying on past information and statistics.

Factor: Applying personal opinion in decision-making

Subfactor:

- Non-observance of decision-making process stages;
- Tendency to decision-making based on agree data;
- Ignoring other decision-making styles;
- Relying on personal and individual judgments;

Factor: Enacting formal and superficial decisions:

Subfactor:

- Tendency to adopting advertising and superficial decisions;
- Lack of realistic evaluation of facilities and implementation of decision;
- Non-fulfillment of promises given to the employees;
- Tendency to making decisions merely for attraction and protection;

Factor: Tendency to naiveté and seeking for simple solutions

Subfactor:

- Ignoring the problem basis and origin;
- Approaching the lesions (not origins) and simple aspects of problems;
- Tendency to offering provisional solutions;
- Non-access to essential solutions;
- Tendency to finding simple and quick solutions;

Factor: Unwillingness to experimental implementation of decisions

Subfactor:

- Decision-making based on a series of predictions and information;
- Lack of adequate time for making decision;
- Unwillingness to identifying weaknesses and strengths of decisions;
- Lack of practical information of decision made by the decision makers

Factor: unwillingness to decision-making

Subfactor:

- Lack of protective environment for organization's decision makers;
 - Lack of balance between power and responsibility of decision makers;
 - Lack of specialized support staffs for decision makers;
 - Technical and specialized insufficiency;
 - Lack of cooperation between academic and technical authorities and decision makers;
 - Conservatism atmosphere;
- Factor: Inflexibility of decisions
Subfactor:
- The assumption of decision makers on environment and time fixing;
 - Mistrust to the decision executors in organization;
 - Tendency to use of fixed and inflexible processes;
 - Use of a united and uniform style in decisions making;
- Factor: Unawareness of employees and feeling of their ineffectiveness in decision-making
Subfactor:
- Employees' unawareness of adopted decisions;
 - Lack of adequate information and consultation of experts;
 - Inattention to demands, needs and expectations of employees;
 - Lack of employees' awareness and participation in decision-making

Results

One of the most integrated design systems is hierarchical analysis for decision-making by multiple factors, because this technique provides the requirements of problem formulation hierarchically and also may consider different qualitative and quantitative factors in the problem. Furthermore, it has been formed based on paired comparison that facilitates the judgment and computations and shows the decision compatibility and incompatibility. One of the preferred advantages of this technique is multiple factor decision-making. This method has been invented and used based on human brain analysis in 1980 for the first time by Prof. Thomas L. Saaty.

Substantial stages of hierarchical analysis process include as follows: 1- Making hierarchy, 2- Providing the paired comparisons and computation of weights, 3- Matrix compatibility

Table 1. Incompatibility coefficients of factors.

Row	Factor	Code	Incompatibility coefficient
1	Unwillingness to the future and tendency to early results	P0	0.0793
2	Unwillingness to decision-making	P1	0.0542
3	Partialism and one-dimensioning in decision-making	P2	0.0418
4	Information insufficiencies in decision-making	P3	0.0185
5	Tendency to naiveté and seeking for simple solutions	P4	0.0118
6	Applying personal opinion in decision-making	P5	0.054
7	Unwillingness to experimental implementation of decisions	P6	0.0567
8	Inflexibility of decisions	P7	0.0305
9	Enacting formal and superficial decisions	P8	0.0373
10	Unawareness of employees and feeling of ineffectiveness in decision-making	P9	0.0553

After making the initial analytical model, total factors and subfactors were analyzed aiding AHP Master software, based on the data collected from responders and weight of each of factors and subfactors was determined.

Paired comparison matrix and computation of relative weight of main factors

Based on the analyzed data, paired comparison matrix of decision-making problem's main factors was formulated as follows: In this matrix, relation $\alpha_{ij} * \alpha_{ji} = 1$ is running. After formation of this matrix aiding software, each one of main factors was specified. Main factors' paired comparison matrix has been provided in table 4-6, upon analysis aiding AHP Master software. Incompatibility coefficient of this matrix is 0.0898, therefore this matrix obtained an acceptable incompatibility coefficient (lower than 0.1)

Table 2. Main factors’ paired comparison matrix.

Main factors		P0	P1	P2	P3	P4	P5	P6	P7	P8	P9
Unwillingness to the future and tendency to early results	P0	1	0	0	0	0	0	0	0	0	0
Unwillingness to decision-making	P1	0.33333	1	0	0	0	0	0	0	0	0
Partialism and one-dimensioning in decision	P2	0.37661	0.37661	1	0	0	0	0	0	0	0
Information insufficiencies in decision-making	P3	1	1	3	1	0	0	0	0	0	0
Tendency to naiveté and seeking for simple solutions	P4	1.129831	0.333333	1	0.37661	1	0	0	0	0	0
Applying personal opinion in decision-making and excessive relying on individual experiences	P5	3	1	3	1	2.655264	1	0	0	0	0
Unwillingness to experimental implementation of decisions and lack of decision-making feedback	P6	0.333333	0.333333	3	1	3	0.333333	1	0	0	0
Inflexibility of decisions	P7	0.333333	0.333333	3	0.333333	1	0.333333	0.333333	1	0	0
Enacting formal and superficial decisions	P8	0.836251	1	3.1752	3	3	0.2	1	2.350143	1	0
Unawareness of employees and feeling of ineffectiveness in decision-making	P9	0.333333	0.333333	1	1	3	0.2	1	2.655264	1.129831	1

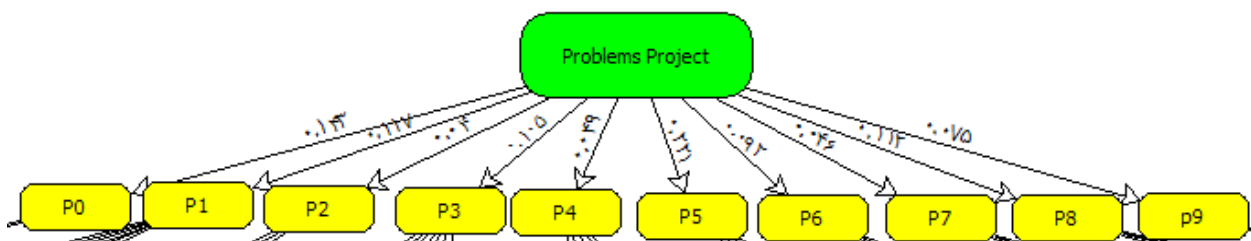


Figure 1. Relative weight of main factors.

Comparison of relative weight of each one of problem main factors

Compatibility of decision matrix

The procedure of weights computation by deci-

sion matrix is dependent to matrix compatibility or incompatibility. If term $a_{ij} \times a_{jk} = a_{ik} \forall i, j$ is satisfied in decision matrix, the decision matrix is compatible. The decision matrices that are obtained upon

comparing the options to a quantitative factor have this virtue. But it is otherwise in qualitative factors. If this virtue is not applicable, the matrix is incompatible. Matrices generated by qualitative factors and oral ideas are commonly incompatible. To extract the weights from incompatible matrix, least square, least logarithm

square, Eigen vector and approximation methods are used. According to the applied analyses by AHP master, the obtained incompatibility coefficient for each one of matrices that are extracted from written answers was below 0.1 and approved. Also, the questionnaires with incompatibility coefficient over 0.1, were omitted.

Table 3. Prioritization of problem main factors.

Priority	Factor	Code	Weight
1	Applying personal opinion in decision-making and excessive relying on individual experiences	P5	0.221
2	Unwillingness to the future and tendency to early results	P0	0.143
3	Unwillingness to decision-making	P1	0.117
4	Enacting formal and superficial decisions	P8	0.112
5	Information insufficiencies in decision-making	P3	0.105
6	Unwillingness to experimental implementation of decisions and lack of decision-making feedback	P6	0.092
7	Unawareness of employees and feeling of ineffectiveness in decision-making	P9	0.075
8	Tendency to naiveté and seeking for simple solutions	P4	0.049
9	Inflexibility of decisions	P7	0.046
10	Partialism and one-dimensioning in decision	P2	0.040

Conclusion and suggestions

The summary of results indicates that the most significant factor occurring the decision-making problems and dilemma in Industry, Mine and Trade Organization of West Azerbaijan Province is applying the personal opinion in decision-making and excessive relying on individual experiences obtaining the weight of 0.221, and thereafter unwillingness to the future and tendency to early results obtaining the weight of 0.143 and unwillingness to decision-making obtaining the weight of 0.117, that altogether allocated 48% of decision-making problems and other problematic factors are placed in next priorities of organizational decision-making.

According to the output of AHP in previous chapter, the priorities are as follows:

First priority: Decision-making problems and dilemmas in the said organization that are arising out of applying personal opinion in decision-making and excessive relying on individual experiences. In consideration of the foregoing it is recommended to:

- Using the others' ideas for achieving further information and making decision based on the integrated and perfect information;

- Observing the decision-making process in organization and using its different styles and models;

- Establishment of specialized executive committees and using the results of committees' approvals for final decision-makings;

Second priority: Unwillingness to foresightedness and tendency to early results in decision-making. In consideration of the foregoing, the following recommendation is offered:

- In addition to attention to early and immediate results facilitation and meeting the routine needs, the organization must pay attention to the medium-term and long-term decision-makings certainly;

- Exactly and timely awareness and informing of the decision makers about organizational problems and issues in order to adopt the decisions in an environment excluding ambiguity and doubt;

- Providing and formulating short-term and medium-term strategic plans and providing the executive performance perspective.

Third priority: Unwillingness to decision-making. In this relation, we suggest as below:

- In addition to providing a protective and supporting environment for decision makers in the organization, the required and proportional pow-

ers and responsibilities to be provided and, paying attention to the technical and specialized insufficiencies; rendering the required specialized services to the decision makers by the consultants and academic and technical authorities in order to make decision extensively;

- - Establishing a team of experts and consultants in organization in order to supervise over decision makers, and managers and protect and support them. One of duties of this expert team is supervising over organization's acquisition to goals and prevention of any periodic deliberation of manager that result in organization's distancing from predetermined goals and plans.

Fourth priority: enacting formal and superficial decisions. In consideration of the foregoing it is suggested to:

- Make decision based on the precise assessment of facilities and realities available in the organization and abstaining from advertising, formal and superficial decisions;

- Make decision regardless of organization's internal and external margins;

- The decision makers to promise the employees based on the status quo and all aspects of problem, in order to avoid creation of out of reach expectations and mental imaginations of employees.

- The managers by holding meetings, to inform the employees of organization facilities and current status, in order to make the decisions in a protective environment.

Fifth priority: information insufficiencies in decision-making. Therefore we suggest as follows:

- Establishing the valid and centralized database in organization by means of correct information, statistics and data, and using official and unofficial reports and information for making decision;

- Benefitting from previous and current information and data and predicting the future for making decision;

- Providing information from relative valid and reliable channels;

- Reducing the organizational hierarchy and renewing the organizational structure horizontally to accelerate the information transmission and prevention of its falsification.

Sixth priority: Unwillingness to experimental implementation of decisions and lack of decision-making feedback. Accordingly, the following suggestion is recommended:

- Considering the significance and impor-

tant results extracted from experimental implementation of decisions, it is recommended that the organization decision makers and managers to allocated the adequate time for this process and through experimental implementation of decisions to reveal the strengths and weaknesses of decision firstly in the pilot and then make decision for its implementation in the whole organization.

- Attendance of managers in training courses of crisis management and threatening forbravely and creative decision-makings at the required times.

Seventh priority: Unawareness of employees and their feeling of ineffectiveness in decision-making. In consideration of the foregoing, we recommend the following items:

- Providing the requirements for actively participation of employees in organization decision-makings through different systems such as collaborative management, and in addition to sharing them in the organization decisions, providing required information at their disposal. Moreover, taking the demands, expectations and needs of employees in addition to organizational goals, into consideration;

- Establishing the cyberspace for exchanging the ideas, informing of employees' demands and needs, and taking their suggestions, considering and analyzing these suggestions and using them for promotion of qualitative level of organization performance;

- Using the presence and ideas of specialists in higher meetings of provincial macro decision-making with the objective of assigning the executive responsibility to the specialists.

Eighth priority: Tendency to naivet and seeking for simple solutions. In consideration of the foregoing, we recommend the following items:

- In addition to take notice of lesion and problem, the managers and decision makers must take the problems origins into consideration seriously and peruse and analyze the issues and problems deeply;

- To solve the problem, different solutions to be identified and considered in order to choose the best solution and not to suffice to simple and quick solutions.

- Isolating the available problems and dilemmas in organization to the smaller parts, for quick, easy, correct and timely decision-making.

Ninth priority: inflexibility of decisions. Our recommendations are as follows:

- Considering the environmental changes and lack of peace and quiet in the environments, the foregoing to be transferred to the decision makers via processes such as training, in order to consider the grounds for using different and flexible processes and various styles for making decision.

Tenth priority: Partialism and one-dimensioning in decision-making. According to the foregoing, it is suggested as follows:

- The organization managers to pay attention to different dimensions of problem and effective environments, and identify the factors affecting the decisions and peruse them;

- Holding continuous meetings towards benefiting from decision-making consultants and experts may be useful for identification of factors affecting the decisions.

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