Identifying Decision-Making Styles and Components of Succession Planning Capabilities and Examine their Relationship

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ABSTRACT

This research identifies decision-making styles and components of succession planning and examines their relationship.The statistical population (190 people) in the present survey research consists of Pars Special Economic Energy Zone (PSEEZ) Organization managers who were assessed using the Census Method. Scott and Bruce's general decision-making questionnaire and Kim's succession planning questionnaire were used with a response rate of 90%. Data was analyzed with the SPSS and Smart Planning softwares. In analyzing the obtained results, the dominant decision-making style is rational, followed respectively by the intuitive, dependent, avoidant, and spontaneous decision-making styles. By investigating succession planning capabilities, the results of the research showed that among items in the succession planning system, candidate evaluation ranked first, followed by policy setting, system evaluation, and candidate development respectively as the priorities of the statistical population. The research hypothesis based on a significant relationship between the decision-making styles and organizational succession planning capabilities was confirmed. In order to improve its human resources and bridge the gap with global standards, it is therefore proposed that the senior management of the organization take serious steps to implement the succession planning program. It is also recommended that other esteemed researchers carry out the present research again after the implementation of the succession planning program in the studied organization and compare the results before and after the implementation of the program

1. Introduction

Pars Special Economic Energy Zone (PSEEZ) Organization was inaugurated in 1996 in order to exploit the common gas field between the IR of Iran and Qatar.

With the passing of twenty something years, the average age of employees has significantly increased in the past decade and it is forecast that large numbers of employees will retire in the next decade, while no clear plans have been put in place for a succession program to record management practices and identify their value system as

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a top priority in order to train the required human resources. Managers' decision-making in this very sensitive area, which is affected by other variables besides technical issues, including regional social and political issues, and even a drawer, is one of the constant concerns of managers. Decisions that may or may not be made and challenge the organization. The main reason for proving this is the study of the statistics of the issues for which the managers could have made decisions but were referred to the board and highlights the need for research in the field of decision-making methodology of managers.

In this regard, a review of statistics and interviews with elites showed that at least half of the issues raised on the board were of this type. On the other hand, so far no study has been done on the capabilities of succession breeding in the organization under study. Especially in a situation where the recruitment of new manpower is prohibited and the average age of employees is increasing.Interviews with elites and related managers also showed that no succession planning has been implemented in the organization so far, and this study can be a reliable source for recording information in the current situation.

This study endeavors to identify the decision-making styles of PSEEZ directors, deputies, managers, advisors, and supervisors as the leading industrial complex in Iran and present solutions to improve management practices. It also deals with the issue of identifying succession planning capabilities in the said statistical population.

2. Research Literature

Decision-making as the main variable in the present study is one of the basic skills of every person in a management position. In order to carry out all their duties, managers must make decisions. This decision-making leads to the execution of other managerial tasks.

Curio (2015) defines decision-making as a mental process based on a cognitive process in terms of choosing a course of activity from several options as a main responsibility. In his research titled "5 Key Decision-Making Techniques for Managers" Matt Gavin (2020) proposes that managers go through the five steps of framing the decision, engaging with the process, establishing a strong team approach, and creating a psychologically safe environment. Duma et al (2020) studied decision-making styles in screening cancer patients and argues that in their study, people who had to decide on screening scored highly in rational and intuitive decision-making styles. In a study, Mihaela, Pizzi, and Lazarescu (2015) concluded that cognitive factors and a series of non-cognitive factors (extraversion/introversion), leadership, professional experience, special educational centers, etc, impact the decisions made by school principals. In their study conducted in the South Pars oil and gas region, Razavi and Mohammadi-Tajrishi (2018) found that for every organizational and project activity, decisions must be made to find alternative resources. They announced that in making a decision for alternative resources, goals can be achieved by aligning strategic performance levels and creating synergies that increase organizational performance. Different people have different decision-making styles indicating their perception and response to their decision-making task (Denholm, 2004). Thus, it can be concluded that in addition to organizational and environmental factors affecting the decision-making styles of managers, their personal traits and differences prompts them to behave differently in different situations with different decision-making styles (Amirshahi, 2000). Decision-making styles represent a set of learned (established) patterns and habits of decision-making that arise from the fundamental differences between individuals in gathering information and their desire to use information. Various examples and models are provided to introduce and categorize decision-making styles or methods.The classification of decision-making styles or methods provided by experts in the field is presented in Table 1.

Using the definition of content validity, the mentioned decision-making styles were discussed with academic elites and specialists within the organization. In fact, without knowing the validity of the measuring instrument, the accuracy of the data obtained can not be guaranteed. The content validity of a measuring instrument depends on the questions that make it up. It was concluded that Scott and Bruce decision-making styles are most closely similar to the decision-making methods in the organization. Scott and Bruce (1995) presented five general decision-making styles. Their classification is considered in this study due to its comprehensive nature. The five styles are explained as follows.

The rational decision-making style: in this style, the decision-maker is willing to consider and assess all possible approaches prior to selecting the best option when placed in a position of decision-making (Oliveira, 2007). People endowed with the rational decision-making style do so based on a comprehensive search and analysis of all available information, including all

external and internal resources (Singh, 2004). The rational style is the best and most logical method based on a complete dissection of the problem before selecting the best available option.

The avoidant decision-making style: in this style, the decision-maker is inclined to avoid being in a decision-making position as much as possible (Parker, 2007). Therefore, it can be concluded that those who use this method are in fact trying not to be in decision-making situations.

The spontaneous decision-making style: this style expresses the decision-maker's concerns and efforts to make a decision in the shortest possible time (Denholm, 2004). It is mainly used in crisis management situations where there is very little time and a prolonged decision can create a disaster and inflict damages.

The intuitive decision-making style: in this style, the decision-maker lacks a clear logic for expressing the accuracy of his decision. He leans on his insight and inner awareness in doing what seems right (Robbins, 2006). David and Smith (2005) have identified intrinsic, innate responses, general experiences, and focused training as the three main sources of intuition.

The dependent decision-making style: this style expresses the lack of independent thinking on the part of the decision-maker. He follows the guidance and support of others in the decision-making process (Robbins, 2006). It can be said that these decision-makers are not independent.

Succession planning capability is the dependent variable in the present research. Succession planning means creating a mechanism to identify, hire, train, and retain people for key positions in an organization. Although this is a necessary skill for an organization, it is not always addressed. Succession planning is important for a number of reasons, including: 1) the perpetuation of the organization with the right people in the right place at the right time, 2) the need to encourage diversity and multiculturalism in organizations and avoid social regeneration by managers, 3) providing the basis for communicating career paths, creating training and development plans, creating new opportunities and careers, upward and lateral communication, and ensuring a comprehensive planning structure in human resources. Nielsen et al (2019) studied succession planning for staff replacement based on competency to cope with unexpected absenteeism. They argued that to meet unexpected events such as absenteeism or personnel demands higher or lower than expected, organizations must have preventative and reactive strategies in place.

Rajagani et al (2019) studied the history of a successful succession planning program, talent management, and workforce planning in order to investigate challenges facing the implementation of succession planning programs. In a research by Alizadeh (2018), it was argued that leaders who meet the demands of their followers recognize their requirements and help them develop the skills necessary to achieve goals.

Ghiasi-Nadushan (2016) explains the importance of succession planning by citing the need to investigate impending shortages and management crises. He cites another reason for the importance of succession planning to be the retirement of senior personnel and the erosion of technical and cultural knowledge in the organization as a result.

The main categories related to succession planning were examined by the research group and it was concluded that different models have been proposed for succession planning in organizations, the most important of which are presented in Table 2.

3. Kim's Succession Planning Model (2006)

The most widely used succession planning models include the Rothwell's Seven-Pointed Star Model for Systematic Succession Planning and Management, Charan Leadership Pipeline Model (2000), and the Baiham Team Acceleration Model. Kim's (2006) succession planning model is presented with four general stages by comparing and combining the three main models mentioned. The stages are as follows. And as it has been said, since Kim's model is a combination of comparison and combination of three other models, so it was considered as a comprehensive and complete model and became the scientific basis of this research in this section.

3.1. Stage 1 Policy Setting

In this stage, organizations review existing models and previous trends in the succession planning system available in research background or similar organizations and set policies for the implementation of a system. These policies set the outline for future decision-makings.

3.2. Stage 2 Candidate Assessment

Once the key positions have been identified, a job description is provided for each one, setting out the responsibilities. Based on this description, two steps including the identification of competencies for key

positions and talented individuals are suggested for candidate assessment.

3.3. Stage 3 Candidate Development

Once the organization has identified the competencies required for its future needs, it must also assess its present situation. Once talented people have been identified, they are placed in the talent pool. The relevant training programs are then set out to prepare them for the key positions.

3.4. Stage 4 Evaluating the Effectiveness of the Succession Management System

The reason for a drop-in succession planning in organizations is that human resources fail to show the values of succession management for the organization. These values are determined through evaluation. There are two evaluations groups in the succession planning program: 1) evaluation during the implementation process, and 2) final evaluation.

4. Research Models and Variables

Decision-making styles and succession planning capability are variables. The model will study the cognition of decision-making styles and succession planning and their relationship between these two variables in the statistical population.

The operational framework of the research for identifying decision-making methods, which is the main variable, is based on Scott and Bruce's (1995) General Decision-Making Style comprising five styles or methods of decision-making. The operational framework of the research for succession planning, which is the dependent variable, is based on the Kim (2006) model which presents four general steps through interviews with seven Asian multinational companies in the United States. The conceptual model of this research is presented in schematic view number one.

5. Research Questions and Hypotheses

Q1: Which is the dominant decision-making style in the target statistical population?

Q2: What is the status of succession planning in the target statistical population?

Research hypothesis: There is a significant relationship between the decision-makings of the target statistical population and their organizational succession planning capabilities.

6. Methodology

The purpose of this study is to identify decision-making styles and components of substitution capacity and to examine their relationship. It is a survey and qualitative research in which a questionnaire was used as a data collection instrument aiming to clarify the relationship between the two variables. The statistical sample was drawn from a pool of directors, deputies, managers, advisors, and supervisors of Pars Special Economic Energy Zone (PSEEZ) Organization and included 190 participants and Questionnaires were collected at a rate of 90%

To achieve comprehensive, reliable results, the questionnaire was distributed by Census Method and the entire statistical population was assessed The present research is a descriptive study based on recognizing the behavior of people from their personal perspective. The questionnaire has two parts. The first part is associated with the questionnaire for the 5 decision-making styles designed by Scott and Bruce (1995) with 25 questions in which respondents have been asked to state their views on their own decision-makings. In effect, five questions have been designed for each of the 5 decision-making styles, distributed randomly in the questionnaire. The second part is associated with the Kim (2006) succession planning model. The questionnaire sets out the decision-making styles of the statistical population from the own viewpoint. It has 32 questions identifying the four areas of policy setting, candidate evaluation, candidate development, and succession management.

The statistical sample was drawn from a pool of directors, deputies, managers, advisors, and supervisors of Pars Special Economic Energy Zone (PSEEZ) Organization and included 190 participants. To achieve comprehensive, reliable results, the questionnaire was distributed by Census Method and the entire statistical population was assessed.

One of the most basic and significant statistical assessments in the questionnaire is to obtain the validity and reliability of the test, and a method for assessing reliability is to calculate Cronbach's alpha coefficient.

Obtained Cronbach's alpha coefficients for the variables have been shown in the following table. Considering that the values are greater than 0.70, the questionnaire has an acceptable reliability. The obtained coefficients are shown in Table 3.

Regarding the validity of the measurement tool, as mentioned, the questionnaires used by well-known experts in the relevant fields have been designed and

have been used many times internationally for different statistical communities, and in this regard, in addition to a complete study of the literature. And previous researches, considering the workplace of the statistical community, questionnaires and implementation methods, were repeatedly discussed and consulted with experts, specialists and academic and regional elites. The validity of the value system questionnaire has already been confirmed by Amirshahi (1994) and Jacob et al. (2003) have also calculated and confirmed the validity of the successor questionnaire. Scott and Bruce have already calculated and validated their own questionnaire (decision styles) internationally.

The collected data were prepared through a questionnaire before any kind of analysis. After collecting the data, they were processed and analyzed using statistical methods to determine the results of the data. The reliability index, convergent validity, divergent validity, Cronbach's alpha, combined reliability and factor loading coefficients, combined reliability (CR), inferential statistics methods, and the Friedman nonparametric test were the statistical methods used. Data was analyzed with the SPSS and Smart Planning softwares.

7. Findings

As models measure the relationship between the indicators (observed variables) of a structure (hidden variable) and that structure, the research model was studied in three stages. The external model of the research was examined in the first stage. The internal model was examined in the second stage, and the general research model was examined in the third stage. Model fit was measured with three indicators: reliability index, convergent validity, and divergent validity. The reliability index was measured with three indicators: Cronbach's alpha, combined reliability, and factor loading coefficients. Each variable was examined to analyze factor loading related to the measured indices. The values must be greater than 0.7, but values within the 0.4-0.7 range are also acceptable. A cut-off value of 0.4 is used (Hataminasab, 2017). Factor loadings over 0.4 are desirable and anything below this cut-off must be eliminated. The following diagram shows the factor loading of each index before and after eliminating coefficients < 0.4. These are respectively Model 1 (Model 1 after eliminating factor loadings < 0.4), Model 2 (Model 2 after eliminating factor loadings < 0.4), Model 3 (Model 3 after eliminating factor loadings < 0.4), Model 4 (Model 4 after eliminating factor loadings < 0.4).

To measure the reliability of the external model, two indicators were used: combined reliability (CR) and Cronbach's alpha coefficient. The combined reliability (CR) indicator was introduced by Werts et al (1974). Its advantage as compared to Cronbach's alpha is that the construct validity is not calculated in absolute terms but according to the correlation of their structures with each other. A value of over 0.7 for each CR indicates an appropriate internal reliability for the measurement model. A value less than 0.6 indicates a lack of reliability (Nunnally, 1987). It must be noted that combined reliability in structural modeling is considered a better criterion than Cronbach's alpha, because in calculating Cronbach's alpha coefficient for each structure, all indices are calculated with equal importance. But in calculating the CR, indices with higher factor loading are more important (Davari & Rezazadeh, 2013). CR values for each model structure are shown in Table 5.

Also, Cronbach's alpha coefficient reliability ranges from 0 to 1. Coefficients higher than 0.7 show acceptable reliability (Cronbach, 1951). However, for variables with a small number of questions, Moss et al (1998) introduced the value of 0.6 as an acceptable cut-off for Cronbach's alpha coefficient. The estimated coefficient values for each variable are shown in Table 6.

According to the table above, Cronbach's alpha coefficient for all intended structures is greater than 0.6, indicating an acceptable model reliability according to Moss et al (1988).

The second criterion for measuring model fit is convergent validity which examines the degree of correlation of each structure with its questions (indicators). The greater the correlation, the greater the fit. Fornell and Larker (1981) introduced the Average Variance Extracted (AVE) to assess convergent reliability with a cut-off value of 0.5. Magner et al (1996) considered a cut-off of 0.4 and above to be sufficient for the AVE. The coefficient value for each structure is shown in Table 7. The indicator value ranges from 0 to 1, with values higher than 0.4 being acceptable (Giffen, 2005).

To test the hypotheses, data was analyzed using the method of inferential statistics. The path coefficient has been given in the following tables, indicating the relationship between two variables. According to the given p-value and comparison with the significance level $\alpha = 0.05$, it is determined that if the p-value is less than $\alpha = 0.05$, this relationship is significant and it can be said that the hypothesis is acceptable.

The Friedman nonparametric test was used to rank the variable blocks. The results are shown in tables 9 and 10. The test showed that the importance and rank of items in the decision-making variables are different from each other. Comparison of average rankings shows that the rational style is the most important item for the respondents and the spontaneous style is the least important item. The test also showed that the importance and rank of the said items in the succession planning capability variable are different from each other. Comparison of average rankings shows that candidate evaluation is the most important item for the respondents and candidate development is the least important item.

8. Discussion, Conclusions and Suggestions

In analyzing the results obtained and to answer the first question of the research, it was observed that the dominant decision-making style in the statistical population is the rational style, followed respectively by the intuitive, dependent, avoidant, and spontaneous styles. In a research by Hadizadeh-Moghaddam and Tehrani (2008) on the statistical population of managers in the National Iranian Oil Products Distribution Company (NIOPDC) – whose jobs were closely related to the statistical population of this study - the rational, spontaneous, avoidant, intuitive, and dependent decision-making styles ranked from highest to lowest respectively among the statistical population, while the rational, intuitive, dependent, avoidant, and spontaneous decision-making styles ranked from highest to lowest respectively. The sequence of decision-making styles in the statistical population of this research compared to results obtained by Akram Hadizadeh-Moghadam and Maryam Tehrani (2008) and their order of importance are important from the standpoint that the index of correctness of decisions is observed in this sequence and it can be hoped that the decisions made in the organization have a regular structure. In answering the second question of the research, results showed that among the items of the succession planning capability, candidate evaluation ranked first, followed respectively by policy setting, system evaluation, and candidate development in the statistical population. In other words, the statistical population has stated that, in their organization, candidate evaluation takes priority over policy setting when investigating the succession planning capability. This practice is far from the principles of Kim's succession planning model.

To investigate the research hypothesis based on the assumption that there is a relationship between decision-making styles and succession planning capability, it was concluded that the only significant relationship is between succession planning and the spontaneous decision-making style. Similarly, there was a direct relationship between candidate development and the avoidant decision-making style. On the other hand, candidate evaluation was directly associated with the spontaneous decision-making style and inversely associated with the dependent decision-making style. But policy setting had no significant relationship with any of the decision-making styles.

Also, the dependent decision-making style was inversely associated with candidate evaluation. Namely, the more this style is evaluated in the organization, the less the evaluation component of candidates. There is a direct relationship between the spontaneous decision-making style and the components of succession management and candidate evaluation. It means that this style strengthens the two components. Finally, the avoidant decision-making style has a direct effect on candidate development. With these interpretations, it cannot be said that rational decision-making style as the dominant style has had an effect on the succession planning capability of the statistical population. But other styles have shown their impact on the succession planning capability. The research hypothesis is confirmed by the mentioned topics. It must also be noted that the decision-making method or style of the statistical population in this study is acceptable. But, the succession planning capability is far from the principles of Kim's succession planning model. Following a field study, it was found that no concrete succession planning program has been implemented in the Pars Special Economic Energy Zone (PSEEZ) Organization so far.

This is one of the main reasons for the apparent gap between the succession planning capability of the organization under study and Kim's succession planning stages. In order to improve its human resources and bridge the gap with global standards, it is therefore proposed that the senior management of the organization take serious steps to implement the succession planning program. It is also recommended that other esteemed researchers carry out the present research again after the implementation of the succession planning program in the studied organization and compare the results before and after the implementation of the program.

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