Presenting the Way of Implementing Succession with the Approach of Organizational Knowledge Transfer (A Case Study of Aerospace Industry)

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ABSTRACT

Nowadays, knowledge is regarded as the major competitive advantage of organizations such that its importance is increasing day by day. Therefore, employees with vital organizational knowledge are of high importance for organizations. On the other hand, given to the instability of work environment, various displacements of employees as well as ageing of leaders and managers, organizations face the phenomenon of their valuable employees’ displacement soon or late. Meanwhile, those organizations that have trained appropriate successor for their key posts and have been able to transfer their employees and managers’ experience to the next generations by implementing succession plans will prevent the damages due to mangers and employees’ displacement as much as possible. In the present study, with respect to certain features of the investigated organization related to aerospace industry, the way of implementing a knowledge transfer approach-based succession has been formulated. To evaluate the proposed technique, the opinions of 25 managers of the organization and university experts have been used in the form of a questionnaire. To analyze the results obtained from the questionnaire, binominal test has been used and based on the obtained findings, most of the respondents agree with the components of the proposed technique of the organization.

INTRODUCTION

From industrial ages to the age of knowledge, wonderful evolutions in various work areas have caused that organizations inevitably consider knowledge as the most important strategic resource to survive and maintain competitive power (Spender, 1996). Nowadays, human resources management emphasizes on employees’ knowledge. The integration of education management and human resources development with organizational knowledge management, undoubtedly, derives from the wide knowledge application which attracts organizations’ attention to complexities and responsibility of educational system. Formulating succession plan at different organizational levels is one of the appropriate strategies to maintain and transfer the experiences of knowledge employees in an organization.

On the other hand, with respect to rapid growth of global market and competitive scope and lack of expert and experienced human resources, the need of organizations to succession plan is undeniable. To achieve future goals and success, organizations require human resources with certain characteristics. To this end, organizations should be able to identify, develop and expand talents at all organizational levels to predict future needs and cope with unpredicted problems (Parise& Davenport, 2006). Also, due to ageing organizations’ managers and approaching to their retirement age, it is possible that they bring out the knowledge and experiences obtained in the organization, leading to uncompensatable damages to the organization. Therefore, implementing succession strategies and knowledge management seems necessary more than before (Reeves, 2010). In the present paper, with respect to the characteristics of the considered organization and the importance of knowledge transfer in succession systems, the way of implementing succession in the organization is proposed. Before presenting the proposed technique, some concepts such as succession, knowledge management and the relation between succession and knowledge management have been presented to ensure that there is a common understanding about each of these concepts.

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**Succession:**

Although succession planning is primarily defined as determining future leaders, such a planning derives from human capital strategy as voluntary process to ensure the persistence of leadership in key posts, maintain and develop spiritual capital and knowledge capital for future and encourage individuals for development. Succession planning is a complex process through which what exists and what does not exist can be perceived by definition.

Most of organizations have non-official process for their managers’ replacement which may have a list of talented individuals as well. Succession is not having a list of employees with management potential but it includes a system for job development activities which is consistent with organizational objectives and accordingly, employees can acquire their required skills (Fulmer & Gonger, 2004).

Due to studies investigated the subject from different aspects, subjective personal understanding about succession has been disappeared to a great extent. Succession related researches include three types of perspectives: sociological perspective, organizational development perspective and strategic perspectives (Kesner & Sebora, 1994). Sociology researchers focus on the process of change and power transfer from organizational perspective. Researchers of organizational development or human resources scope focus on executive steps of the process and the process management from personal perspective and unlike strategists, they emphasize on the outputs of the organization and competitive environment. Given to these different perspectives, various definitions of succession are presented.

According to Carroll (2004), succession planning is a systematic process through which personal training and professional training are combined with strategic plan to ensure that an organization is ready to fill any vacant post with appropriate individuals with appropriate skills and attitudes at appropriate time. Such a definition entails skills, knowledge, attitudes, and behaviors necessary to fulfill various roles (Christie, 2005).

Furthermore, succession planning can be considered as an effort done to plan a program for a number of appropriate and competent managers and employees with key skills in such a way that they can be appropriate successors at the time of retirement, death, illness, and promotion of other employees and even new posts created in organizational programs (Sambrook, 2005).

According to Kimball (2005), succession is a dynamic and continuous process which systematically identifies, evaluates and develops leadership and management talents as well as evaluates, develops and indentifies key factors to meet strategic and operational needs of future (Govender, 2010).

Succession is also the process of training future leaders for an organization through purposeful efforts and using employees’ development to achieve strategic objectives of the organization (Barnett & Davis, 2008; Jarrell & Pewitt, 2007; Reeves, 2010).

Collins (2009) defined succession as a process which can facilitate leadership transfer in an organization. As he asserted, it is a strategic and systematic approach and an informed effort to develop competencies in potential leaders through purposeful trainings to replace key posts of the organization without personal favorites.

**Knowledge Management and Knowledge Transfer:**

The concept of knowledge has been considered by scholars for a long time. Another basic question is that how knowledge can be learnt from others and shared with others (Holton & Yamkovenko, 2008; Bogdanwicz & Bailey, 2002; Nonala, 1994). Nowadays, knowledge is classified into explicit and implicit categories. Each category has unique features and changing these two types of knowledge into each other in a usable form and among individuals is considered by the experts of knowledge and innovation management. The complexity and expansion of this concept has prevented the formation of an identical attitude regarding knowledge management. Therefore, various scholars have viewed and defined this concept from different aspects. With respect to such a fact, some instances of the most common definitions of knowledge management are presented. According to Merwick (2003), knowledge management refers to a set of regular and systematic organizational activities performed to achieve a superior value through knowledge. Accessible knowledge includes all experiences and information of individuals in an organization and all documents and reports within an organization.

Knowledge management is a measured, implicit and methodical baseto renew and use knowledge to increase the effect and return of knowledge related to knowledge capital (Wiig, 2002).

Today, organizational knowledge has been recognized as a highly valuable intangible resource to acquire competitive superiority. To obtain and maintain organizational competitive advantage, organizations have highly considered managing such an intangible asset. The ability of organizations to transfer and share knowledge has been recognized as a key factor in knowledge management (Zhang, 2004; Faerman & Zhang, 2006). Bhirud et al. (2005) believed that when knowledge gathered by an individual, group or office is shared with other employees, it is changed into organizational knowledge. They consider sharing knowledge as the association between knowledge management, creativity and innovation. Therefore, sharing knowledge in an organization leads to producing new knowledge and improving the effectiveness of organizational performance (Yamin Firouz, 2003).
Most of researchers found that sharing and transferring knowledge is of high importance particularly in the present age in which organizations should continuously learn and create to survive in competitive space (Joshi & Nissen, 2005). Sundaresan & Zhang (2004) claimed that the activities of sharing knowledge and learning among employees of an organization facilitate the implementation of knowledge management process in that organization. Without transferring knowledge, knowledge management will not be effective and the organization will gradually lose its competitive power. The results obtained from filed study also revealed that 94% of employees working at multi-national organizations in Europe believe that employees share what they know with others in their organization (Davarpanah, 2003).

**Succession and Knowledge Management:**

Here, the relation between succession and knowledge management is investigated. In an article entitled as “knowledge management and succession in small and medium enterprises”, Durst and Wilhelm (2012) investigated the importance of knowledge management implementation and succession in small and medium organizations. They believed that although organizations are informed about the necessity of implementing knowledge management and succession, serious attention has not been given to these two categories due to less financial resources and accordingly, they feel the danger of organizational key knowledge with leaving the organization y employees more than big organizations. They consider knowledge transfer as one of the important aspects of succession (Cabrera & Pérez, 2001). The researchers believed that organizations will undergo direct and indirect heavy costs if the relation between succession and knowledge management. In the present paper, there are three types of knowledge required by successors:

1. Technical knowledge and minimal competency: this type of knowledge is easily encoded and taught to others;
2. Knowledge related to organization and organizational processes: this knowledge is relatively written easily and can be transferred to the potential successors;
3. Implicit knowledge: It is related to leadership, decision making, risk management, etc. this is a type of knowledge which can be hardly documented and its transferring is related to the capacity and talent as well as the motivation of potential successors to receive this type of knowledge (Malinen, 2004).

In a study entitled “succession management as knowledge management strategy”, Becker (2009) referred to the concepts of knowledge management and succession simultaneously. Conducting the study on railway industry of Australia, he referred that success in the modern competitive environment is based on an innovation to provide services and apply the modern knowledge; accordingly, maintaining knowledge employees is of important points of success in railway companies. Moreover, with respect to the fact that knowledge required by organizations is changing, competencies required for the success of key posts undergo some changes. As defined in this study, succession management, as a combination of succession and leadership development, is the process of knowledge absorption and strategic skills of employees to prepare them for key posts of organizations in the future. This study states that an effective succession plan can cause the maintenance of key employees of organizations since job promotion and personal development is of the most important demands of senior managers and lack of attention to such a demand leads to lose employees (Taylor, 2004). Additionally, it is referred that if succession is effectively implemented, it can be considered as a tool to obtain and maintain knowledge and accordingly, the increase of innovation of the organization.

In another study, Coleman (2013) investigated the experiences of knowledge transfer and succession of senior leaders from California University. They concluded that due to ageing and retirement of faculty’s employees, effective transfer of experienced individuals find a high importance. His goal was to acquire senior leaders’ experiences approaching to the age of retirement and prevent their key knowledge. Therefore, this study has introduced knowledge management and knowledge transfer as the tools of succession. The obtained result has been presented in Figure 1.
In the book of “valuable knowledge”, Rothwell (2011) also indirectly referred to the relation between succession and knowledge management. In the chapter 7 of his book, namely valuable knowledge transfer: theory and models*, technical succession is introduced. Technical succession is a term that was introduced by Rothwell (2004) against managerial succession and its goal is to identify and transfer technical and vital knowledge of organization to other individuals. According to Rothwell, succession is considered as a strategy to transfer important and key knowledge of the organization. In this book, he has presented a model for technical succession (see Figure 2).

As observed, researchers have directly and indirectly referred to the relation between successions and knowledge management. With respect to the reported studies, the following points can be concluded.

Firstly, the first article and research directly referred to knowledge management and succession conducted in 2009. That is, the investigated subject is of newly propounded subjects and has not been evolved yet. Secondly, knowledge transfer has been also considered as the common point of succession and knowledge management in most of existing studies. Another point considered in the relation between succession and knowledge management is that researchers have not agreed on the kind of the relation between succession and knowledge management. Some consider knowledge management as a more general concept of succession and
succession is considered as a part of knowledge management; some others consider knowledge management as a part of succession, and some others consider succession and knowledge management as two different scopes which have common points.

**Methodology:**

The present research is an applied-developmental study. The objective of developmental research is to develop theories, patterns and theoretical frameworks based on different approach, tool and methods. Applied research is also a research that its findings can be practically used. The objective of applied research is to develop applied knowledge in a specific context (Sarmade et al., 2004). Given that the present paper attempts to design a new implementation framework for succession of an organization using the existing frameworks, so, it is an applied-developmental research.

Investigating the relation between succession and knowledge management, this study is also a qualitative study since it deals with various human concepts. It is a descriptive and survey study as well since the required data have been gathered using interview and questionnaire.

To gather the required data, library (studying related books, articles and theses) and filed (interview and questionnaire) methods have been used. After library studies and documentary investigations, during various sessions held with organizational officials of the project, the considered needs of the organization have considered in designing the proposed technique. After designing, questionnaire has been used to validate the presented technique.

**Statistical Population:**

In this study, the considered population included university experts of knowledge management and human resources as well as middle and senior managers of human resources of the considered population. Firstly, to formulate the implementation technique, some meetings were held with three managers of the organization’s human resources and organizational needs were identified regarding succession. After formulating the proposed technique, a questionnaire containing 9 Likert scale-based items and 3 descriptive items was designed. After distributing the questionnaire among the respondents, 15 questionnaires were gathered. Also, the opinions of 10 university experts were also gathered regarding the implementation technique. To evaluate the validity of the questionnaire, firstly, the opinions of 4 experts were used. The reliability of the questionnaire was also evaluated using Cronbach’s alpha through SPSS software (0.81), indicating a good level of reliability for the questionnaire.

**Findings:**

Here, the technique of implementing succession in the organization is presented in details. As shown in Figure 3, the proposed technique has been consisted of three general phases and each phase includes some specific executive efforts which are as follow:

**Zero-phase:**

This phase has been considered as the preparation phase. In this phase, it is supposed that the necessity of implementing succession plan is explained for managers and employees involved in the project. The major objective of this phase is to gain the support and commitment of senior managers of the organization to participate and follow up succession plans of the organization. The efforts considered in this phase are as follow:

- Showing the advantages of succession for the organization:
  - Showing the advantages of implementing succession plan in the organization is one of the strategies which can encourage managers to participate and follow up the succession plan.

- Determining damages due to vacant key positions:
  - Another way of attracting managers is to show the probable damages due to a vacant key post in the organization.

**Phase 1:**

After making the organization familiar with the importance of implementing succession plan, it is the time of providing an appropriate planning to implement succession. Maybe, the most important phase led to the success or failure of succession plans of the organization is the phase of planning since desirable results will not be achieved in spite of proper efforts if succession planning is not performed with respect to the organizational needs. The efforts considered in this phase are as follow:

- Determining considered objectives of implementing the plan and consistency with the strategic plan of the organization:
  - It is of high importance that the objectives of succession plan implementation is in accordance with senior managers of the organization. Some researchers believe that after determining main and secondary objectives of
succession in the organization, the determined objectives should be considered in strategic plan of the organization.

To create the relation between objective and strategies of human resources and succession planning, decision makers should investigate the way that human resources efforts’ policies help or prevent the permanence of leadership, promotion of individuals, and training internal talents. Therefore, to achieve the integration between the mentioned items, human resources plans such as selection, education, compensating services and advantages against the needs of succession should be investigated and the efforts which can encourage succession planning or currently prevent it should be identified. Then, appropriate strategies should be used to ensure that human resources efforts are facilitated or short term actions to prepare leadership talent within the organization is not prevented.

- Determining responsible team of succession project:

Although succession plan requires the participation and responsibility taking of a wide range of employees, a group should follow up the implementation of the programs in aspecialized manner.

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**Fig. 3:** The Technique of Succession Implementation with the Approach of Knowledge Transfer in the Organization

- Determining the priorities of succession planning implementation and selecting some posts for trial implementation:

Today, researchers believe that succession plans should be expanded into all organizational levels but due to lack financial and time resources, the plan cannot be simultaneously implemented for all organizational levels.
from the beginning. Accordingly, appropriate prioritization is needed to implement succession of various posts. Also, some limited posts are needed to be selected for trial implementation of succession plans to remove the problems of the plan.

- Determining key positions:
  One of the important steps in the phase of planning is to determine key posts which are of high importance for the organization. Determining key posts can specify the preferences of the organization in implementing succession plans. After attracting the attention and commitment of all individuals related to the succession process, the next step for managers and experts resident at human resources unit of the organization is to identify main jobs of the organization since key jobs highlight and present the importance of the occupational processes which should be performed and the importance of work results which should be continuously put into reality by the organization. Key posts are those posts that significantly influence the activities of the organization in an operational, strategic or both ways and enable the organization to meet customers’ expectations, conquering competitors and fulfilling crucial works.

- Determining key technical and managerial posts of the organization:
  After determining key posts of the organization, it is needed to determine key knowledge of the organization; the knowledge which can lead to the survival and success of the organization. In this stage, it is important to specify technical knowledge of the organization as well. After determining such key knowledge, it can be perform planning to educate and transfer these knowledge.

- Estimating time and cost of implementing the plan:
  Succession is propounded as an integrated system which should be always implemented in the organization; however, to make the results tangible, some short term and long term objectives should be considered for the organization. Definitely, to start implementing and achieving the expectable results, the time and cost of achieving the results should be estimated to use it as a base to measure the progress of the program.

- Predicting progress measuring tool and evaluating the plan implementation:
  One of the important efforts of the phase of planning is to determine strategies of assessing the progress of succession programs. If after specifying short term and long term objectives, there are not appropriate tools to evaluate the results, the success or failure of the programs cannot be clearly specified. To this end, qualitative and quantitative criteria are identified to assess the program’s progress and then, the way of these criteria’s evaluation is judged.

**Phase 2:**

After preparing and identifying the necessity of succession plan implementation, it is started to specify the primary objectives and planning and executive efforts regarding the succession plan. These efforts are as follow:

- Formulating competency model:
  Most of researchers and companies proposed succession model have referred to formulating competency model. In addition to its important application in other scopes of human resources such as employment and performance evaluation, competency model is regarded a base of other efforts in succession as well. Competent and gifted individuals can be selected based on the competencies determined to achieve the success in a post. Succession plans use a set of criteria emphasizing on capabilities and competencies to perform evaluation related to talents.

- Evaluation based on the criteria determined in competency model and forming talents treasury:
  After formulating competency model for the considered posts, there should be an evaluation system through which employees can be evaluated based on the competencies required by the organization. Then, with respect to the results obtained from evaluations as well as the limited resources of the organization, a number of employee obtained high scores are selected and talents treasury is formed. Talents treasury includes gifted employees prepared for participating in higher organizational places. Importantly, the evaluations required by the organization should be consistent with the evaluation system of the organization’s current performance to prevent wasting resources. The final goals of succession plans is to find appropriation and correspondence between each of employees and vacant jobs but the successful and pioneer organizations implementing these programs are finding a new shape of talents treasury which are more realistic, practical and effective. Such an approach is particularly appropriate for cases that there are management posts in the middle and operational layers and levels. Talents treasury is called to those employees who are preparing for vertical or horizontal promotion. Vertical promotion is to promote to a higher place of organizational hierarchy and horizontal promotion refers to the increase of individual competencies such that a wider understanding is created about knowledge, skill and capability according to the organizational path or the profession. Notably, in case of forming talents treasury, no one should be determined as the successor of key posts; in return, all the individuals of talents treasury should be prepared with respect to the future and current individual and organizational needs.

  To identify gifted individuals, individual talent evaluation is used. Individual talent evaluation is the systematic process of investigating individuals’ capabilities to change job or displacement. This evaluation should be associated with education and training activities which totally present a tool to help qualify
employees’ promotion. Notably, talent evaluation should not be mixed up with performance evaluation: performance evaluation is related to the current job and talent evaluation is related to the potential facilities of future promotion.

- Determining educational needs and gap analysis:
  By specifying probable successors, growth and educational programs should be designed for employees. It is of high importance that what experiences and knowledge are transferred to these employees. In zero-phase, key organizational knowledge is determined; in this phase, with respect to the knowledge of employees and the knowledge required by them for their future promotion, educational gaps of employees can be obtained.

Identifying experienced individuals and the skill of organization:
Since one of the objectives of the proposed technique is to avoid exiting the knowledge of experienced individuals from the organization, it is necessary to identify and list those individuals with valuable organizational knowledge and experience regarding various subjects. When the valuable sources of knowledge in the organization are specified, their knowledge can be transferred using predetermined strategies.

- Identifying the mechanisms of transferring experienced employees’ knowledge:
  In the earlier sections, some strategies of transferring implicit and explicit knowledge in the organization have been presented and with respect to the conditions and facilities of each organization, the considered strategies can be selected and used. One of the most important strategies is to use highly experienced individuals along with less experienced individuals in order that less experienced individuals can use the experiences and guidance of experienced ones.

- Implementing educational programs:
  After identifying educational needs of the organization, appropriate mechanisms of knowledge transfer, key organizational and individual knowledge, and individuals have these kinds of knowledge should be match with the organizational needs and educational programs should be implemented and followed up. Superior succession management systems are closely related with teaching and learning methods. These systems should discern that accessible gifted individuals should pass which educational courses to undertake the considered managerial responsibilities and using which method, they should improve and complete their capability.

APQS researches (2001) performed on the best and most successful companies with succession plans of managers, revealed that identifying individuals with managerial capabilities and talents is not enough. Each of the studied companies allocates a considerable amount of educational programs and activities to their talented employees and spends abundant resources to train them. Additionally, all of these companies use specific and defined educational programs as well as a person for each of employees identified as future leaders and managers.

In the best global trade, various methods are used to train managerial capabilities and skills of individuals and scientific learning is the most important and effective one. In such a trade, occupational responsibilities are the main activity and most effective method in management development. Further, new coaching methods are used besides official educational programs and courses of management.

- Selecting and transferring probable successors to new posts:
  When employees are well prepared for playing role in future posts, there are several appropriate alternatives within the organization for an important vacant post in the organization. Finally, based on the agreement of managers and competencies of trained employees, an appropriate person is selected to transfer to a new post.

- Expanding the program to all organizational levels:
  After prioritizing the implementation of succession plan and implementing the plan for a certain group and its defects are clarified, with respect to the organizational resources, more organizational levels should be gradually embedded in the succession plan such that less important posts can make use of the advantages of the succession plan.

- Checking and improving the succession system continuously:
  Checking and improving the ideal systems means continuous supervision on the way of progressing talents treasury members as well as the amount and way of exiting the members from the treasury. Two kinds of information are gathered; firstly, numerical information about individuals, i.e. a number of people who are included or excluded from the talents treasury for various reasons and a number of them who achieve management posts; secondly, qualitative information that analyze the reasons of entering or leaving the organization and investigate individuals’ problems in the stage of educating their capabilities.

The above presented information contributes the managers to evaluate the amount of the system’s success in comparison to the predicted objectives.

Data Analysis:
To investigate acceptance or rejection of the proposed technique’s validity, non-parametric test of binominal is used in which the success and failure is studied based on a value or characteristic. By the success or failure, it means the existence of lack of a variable in the population. In the present study, this test has been used
to confirm or reject the components of the implementation technique. Non-parametric test has been used since according to Tables 1 and 2, data normality hypothesis is rejected for each of the criteria because the significance level of SK test for each of the criteria is less than the test error (P < 0.05). The following tales present the results related to the normality test.

**Table 1: Kolmogorov–Smirnov Test to Measure Data Normality**

<table>
<thead>
<tr>
<th>Kolmogorov–Smirnov Test</th>
<th>To what extent is zero-phase necessary and appropriate?</th>
<th>To what extent is phase 1 necessary and appropriate?</th>
<th>To what extent do you agree with the efforts of the phase of planning?</th>
<th>To what extent is the Phase 2 necessary?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Normal Parameters^{ab}</td>
<td>Mean 4.32</td>
<td>4.6</td>
<td>4.2</td>
<td>4.36</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation 0.627</td>
<td>0.5</td>
<td>0.707</td>
<td>0.638</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>Absolute 0.295</td>
<td>0.388</td>
<td>0.251</td>
<td>0.282</td>
</tr>
<tr>
<td></td>
<td>Positive 0.295</td>
<td>0.285</td>
<td>0.251</td>
<td>0.274</td>
</tr>
<tr>
<td></td>
<td>Negative -0.261</td>
<td>-0.388</td>
<td>-0.231</td>
<td>-0.285</td>
</tr>
<tr>
<td>Kolmogorov–Smirnov Z</td>
<td>1.475</td>
<td>1.941</td>
<td>1.257</td>
<td>1.411</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>0.026</td>
<td>0.01</td>
<td>.05</td>
<td>0.037</td>
</tr>
<tr>
<td>a. Test distribution is Normal.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Calculated from data.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 2: Kolmogorov–Smirnov Test to Measure Data Normality (continued)**

<table>
<thead>
<tr>
<th>Kolmogorov–Smirnov Test</th>
<th>To what extent do you consider the efforts of zero-phase appropriate?</th>
<th>To what extent do you agree with the efforts of the executive phase of the proposed technique?</th>
<th>To what extent the proposed technique can be put into practice?</th>
<th>To what extent the efforts introduced in the proposed technique are comprehensive?</th>
<th>To what extent the division of the efforts mentioned in the three phases is appropriate?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Normal Parameters^{ab}</td>
<td>Mean 4.16</td>
<td>4.2</td>
<td>3.72</td>
<td>4.04</td>
<td>4.28</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation 0.624</td>
<td>0.707</td>
<td>0.936</td>
<td>0.735</td>
<td>0.614</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>Absolute 0.321</td>
<td>0.251</td>
<td>0.258</td>
<td>0.242</td>
<td>0.316</td>
</tr>
<tr>
<td></td>
<td>Positive 0.321</td>
<td>0.251</td>
<td>0.182</td>
<td>0.242</td>
<td>0.316</td>
</tr>
<tr>
<td></td>
<td>Negative -0.0279</td>
<td>-0.231</td>
<td>-0.258</td>
<td>-0.238</td>
<td>-0.244</td>
</tr>
<tr>
<td>Kolmogorov–Smirnov Z</td>
<td>1.606</td>
<td>1.257</td>
<td>1.288</td>
<td>1.209</td>
<td>1.579</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>0.012</td>
<td>0.005</td>
<td>0.003</td>
<td>0.008</td>
<td>0.014</td>
</tr>
<tr>
<td>a. Test distribution is Normal.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>b. Calculated from data.</td>
<td></td>
<td></td>
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</tbody>
</table>

**Binominal Test:**

In binominal test, individuals are divided into two classes. The first class includes individuals given average to low score to each of the questionnaire items. The second class entails individuals given average to high score to the questionnaire items. Now, using this test, the hypothesis of individuals’ homogeneity in these two groups is measured. It should be considered that the hypothesis (indicating the model confirmation) is not rejected if the significance level is less than 0.05. Table 3 shows the results of binominal test to validate the proposed implementation technique.

**Table 3: The Results of Binominal Test to Validate the Implementation Technique in the Organization**

<table>
<thead>
<tr>
<th>Binominal Test</th>
<th>Category</th>
<th>N</th>
<th>Observed Prop.</th>
<th>Test Prop.</th>
<th>Exact Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent is zero-phase necessary and appropriate?</td>
<td>Group 1 &lt;= 3</td>
<td>2</td>
<td>0.08</td>
<td>0.50</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Group 2 &gt;3</td>
<td>23</td>
<td>0.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>25</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To what extent do you agree with the efforts of zero-phase?</td>
<td>Group 1 &lt;= 3</td>
<td>3</td>
<td>0.12</td>
<td>0.50</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Group 2 &gt;3</td>
<td>22</td>
<td>0.88</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
To what extent is phase 1 necessary and appropriate?

<table>
<thead>
<tr>
<th>Group</th>
<th>&lt;= 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>Group 2</td>
<td>25</td>
<td>1.00</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>1.00</td>
</tr>
</tbody>
</table>

To what extent do you agree with the efforts of phase 1?

<table>
<thead>
<tr>
<th>Group</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>4</td>
<td>0.16</td>
</tr>
<tr>
<td>Group 2</td>
<td>21</td>
<td>0.84</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>1.00</td>
</tr>
</tbody>
</table>

To what extent is phase 2 necessary and appropriate?

<table>
<thead>
<tr>
<th>Group</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>2</td>
<td>0.08</td>
</tr>
<tr>
<td>Group 2</td>
<td>23</td>
<td>0.92</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>1.00</td>
</tr>
</tbody>
</table>

To what extent do you agree with the efforts of phase 2?

<table>
<thead>
<tr>
<th>Group</th>
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</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>1.00</td>
</tr>
</tbody>
</table>

To what extent the proposed technique can be put into practice?

<table>
<thead>
<tr>
<th>Group</th>
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<tbody>
<tr>
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<td>0.28</td>
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<td>16</td>
<td>0.72</td>
</tr>
<tr>
<td>Total</td>
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</tr>
</tbody>
</table>

To what extent the efforts introduced in the proposed technique are comprehensive?

<table>
<thead>
<tr>
<th>Group</th>
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<tbody>
<tr>
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<td>0.24</td>
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<tr>
<td>Group 2</td>
<td>19</td>
<td>0.76</td>
</tr>
<tr>
<td>Total</td>
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<td>1.00</td>
</tr>
</tbody>
</table>

To what extent the division of the efforts mentioned in the three phases is appropriate?

<table>
<thead>
<tr>
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<tbody>
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</tr>
<tr>
<td>Group 2</td>
<td>23</td>
<td>0.92</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Shown in Table 3, the experts agree with the efforts existing in the technique of implementation other than two items. The respondents have selected high and very high alternatives in the rest 80%. The obtained results can be presented as follow:

- 92% of the respondents consider zero-phase (preparation) necessary and appropriate;
- 88% of the respondents agree with the efforts of zero-phase;
- 100% of the respondents consider phase 1 (the phase of planning) necessary;
- 84% of the experts agree with the efforts of phase of planning;
- 92% of the experts agree with the existence of phase two (executive phase);
- 84% of the experts with the efforts of executive phase;
- 72% of the experts believe that the proposed technique can be put into practice;
- 76% of the respondents agree with the comprehensiveness of the proposed technique.

 Discussion And Conclusion:

The main objective of the present study was to investigate the relation between succession and knowledge management and indicate that considering this relation and the integrated approach of succession and knowledge management can lead to more effective exploitation of both managerial tool. In this regard, the experts’ opinions regarding the relation between succession and knowledge management were gathered. It was referred that researchers have not achieved to unanimity regarding the relation between succession and knowledge management. Some researchers consider a more general concept for knowledge management that includes succession as well and some others regard knowledge management as a contributory tool for succession. In the present research, succession was introduced as a tool to maintain and transfer key knowledge of employees and with respect to this approach, succession implementation technique was formulated for the considered organization in which the strategies of transferring key organizational knowledge were referred. In fact, it can be stated that by implementing the proposed implementation technique in the considered organization, this organization can outperform in identifying and transferring key knowledge.

Given to time limitation of the present study, it was not possible to fully implement the proposed technique. It is recommended that the trend of implementation is detected and its weaknesses and strengths are investigated by future studies.
The present study investigated the common points of succession and knowledge management; other researchers are recommended to investigate the advantages of the integrated system of knowledge management and succession and mention direct and indirect costs underwent by organizations in case of lack of attention to the relation between succession and knowledge management.

With respect to the fact that the studied organization activates in aerospace industry scope, it is recommended to consider other knowledge-oriented organizations as the case of study.

REFERENCES


