The Role of Human Resource Development Strategies on Capabilities of Strategic Innovation (An Empirical Study at Akre Technical Institute/Kurdistan Region- Iraq)

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Abstract

This study aims to examine the Role of Human Resource Development Strategies its dimensions encompasses of (Training Strategy, Development Strategy, and Empowerment Strategy) on Capabilities of Strategic Innovation its dimensions encompasses of (Organizational Learning, and Teamwork) at Akre Technical Institute in Kurdistan Region/Iraq. A survey questionnaire has been used to collect data, and the questionnaire distributed directly to 38 of academic staffs at Akre Technical Institute. The questionnaire comprised three sections with 36 questions. Data collected analyzed quantitatively by using SPSS program version 23. The results of study concluded that there is a strong positive correlation as well as a significant impact of human resource development strategies on capabilities of strategic innovation.

Keywords: Training, Development, Empowerment, Organizational Learning, Teamwork.
Introduction
Organizations have to manage a number of skills that refer to competent supervision of resources and they are money, people, information, and equipment (Cooper, et al, 1994). Information is necessary to every business as it is details about customers, prices, and products. Investments in better equipment may possibly lead to reduce waste or speed up production. Investments in human resource will guide employees to directly contributing to the bottom line, as well as more effective and productive in their jobs (York, 2009). These resources have need of skilled planning, organizing, achievement and control to facilitate offering a continued competitive strategy (Frese et al, 2007). Chen et al. (2003) pointed out that Organizations make every effort to have an effective and well organized program of human resource development as human resource is one of the most essential assets of Organization, directly influencing its effectiveness and long term viability. The level of ability, capability, and skills of the human resource of an organization impacts its aptitude to protect its achieved positions gain competitive advantage (Armstrong, 2010). The aim that organizations' adopting human resource development programs is to enhance organizational capabilities through improving the efficiency of employee capabilities, this programs which might focused on team performance or individual performance (Watad & Ospina, 1999).

Research Problem
The roles of employees are worthy for performance and systematically supportive of the business allocated responsibilities through training and development oriented human resource operations. Human resources in Akre technical institute is consider to be one of the most important resources, as well as the most important asset that it owns. Akre technical institute cannot achieve strategic innovation in its field of work without the human resources. Akre technical institute must seeks strive for consideration, investment, development of employees’ skills and abilities and competencies to be able to achieve the organizational goals effectively, and assist them in the face of changes in the internal and external environment. Therefore, the problem statement of study addresses that the employees’ abilities deficiencies are non-progressive for differential solid and innovative resultant. Consequently, this study is focused to examine the role of human resource development in Iraqi Kurdistan Region governmental organizations to follow the traditional strategies and therefore its impact on the effectiveness and goal of performance of these organizations to achieving the strategic innovation in the field of services provided to beneficiaries, and reduce the cost of those services to achieve satisfaction of beneficiaries, consequently research problem can be formulated to questions following:
1. What are the most important human resource development strategies adopted at Akre technical institute?
2. Is the capabilities of strategic innovation obtainable at Akre institute?
3. What is the nature of the correlations and impact between human resources development strategies and capabilities of strategic innovation at Akre technical institute?
Significance of the Study
In theoretical side:
1. To recognize the active roles of the skills transfer and development through training, development, and empowerment. Human resource development supports employees’ ability to work as well as to perform effectively and resultantly to achieve the goals of the organization.
2. To enhancing the employees’ abilities to work will be through the impact of employees training, development, and empowerment.
3. Many researchers in Kurdistan Region compel to rely mainly on foreign literature because the literature on the link between the role of human resources development strategies on capabilities of strategic innovation is rare. Therefore, the results of present study might serve as an additional source of reference for future studies.

In practical side:
1. To determine the nature as well as the strength of correlation between human resource development and capabilities of strategic innovation.
2. To examine the extent impact of human resource development on capabilities of strategic innovation.

Objectives of Study
The present study addressed the following objectives;
1. To give an explanation of study variables, human resources development strategies and its dimensions (training strategy, development strategy, empowerment strategy), and capabilities of strategic innovation dimensions (organizational learning, and teamwork).
2. To build a theoretical framework to the variables concepts based on the sources related to study.
3. To examine the correlation between human resources development strategies and capabilities of strategic innovation dimensions (organizational learning, and teamwork).
4. To investigate the impact of human resources development strategies on capabilities of strategic innovation.
5. To find out the strongest correlation and strongest impact of human resources development strategies on capabilities of strategic innovation dimensions.

Theoretical Framework of the Study

Figure (1) illustrates the theoretical framework of the study. The model assumed a correlation and an impact of human resources development strategies "Independent Variable" represent by three variables (training strategy, development strategy, empowerment strategy) on capabilities of strategic innovation "Dependent Variable" represent by two variables (organizational learning, and teamwork).
Study Hypotheses

This study attempts to examine two main hypotheses and a number of sub-hypothesis based on it's theoretical framework as well as its objectives:

1. There is a significant positive correlation between human resources development strategies and capabilities of strategic innovation.

   The first sub-hypothesis:
   - There is a significant positive correlation between human resources development strategies and organizational learning.
   - There is a significant positive correlation between human resources development strategies and teamwork.

2. There is a statistically significant impact of human resources development strategies capabilities of strategic innovation.

   The second sub-hypothesis:
   - There is a statistically significant impact of human resources development strategies on organizational learning.
   - There is a statistically significant impact of human resources development strategies on teamwork.

Univariate Analysis

Five Likert scale from strongly agree (5) to strongly disagree (1) have been used for measuring attitudes. Furthermore, the values of mean of variables were measured according to Univariate analysis (Table 1) for the purpose of evaluating the attributes of variables individually based on the responses.
Table (1) Univariate Analysis

<table>
<thead>
<tr>
<th>Range</th>
<th>Decision rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 2.49</td>
<td>Low Level</td>
</tr>
<tr>
<td>2.5 - 3.49</td>
<td>Moderate Level</td>
</tr>
<tr>
<td>3.5 - 5</td>
<td>High Level</td>
</tr>
</tbody>
</table>

Literature Review:
Human Resource Management

The mission of human resource management is not limited to the selection and evaluation business process, it efforts to raise the productivity of employees through the development of policies, and training practices and preparation of individual programs for the tasks of their business and to achieve the greatest possible work with minimal effort (Armstrong, 2006). Therefore, human resource development occupies as a significant position through organizations activities that effort to raise the efficiency of productive and improve the methods of work, by adoption of a change in the capacity of individuals and their skills, and develops a variety of behavior patterns that they belong in the performance of their business (Zuelv, 2003). Hashmi (2014) states that the aim of human resource management development is to utilization of people to achieve organizational objectives, improve effectiveness and enhances productivity of the Organization.

The program of human resource development is an essential strategic tool for influential performance of individuals and Organizations, therefore, Organizations are spending money on it with confidence that it will earn them in the world of business a competitive advantage (Lynton and Pareek, 2000). Swanson (1995, 207) defined Human resource development as “a process of developing and unleashing human expertise through organization development and personal training and development for the purpose of improving performance”. Jacobs (2014) defines human resource development as enhancing capacities of individual, and the process of improving performance of organization through the activities that result from programs of human resource development, development of organization, and career development. Lee (2003) pointed out that practicing of human resource development is about dealing with the fundamental assumptions of human conditions along with influencing human conditions. Sandanshiv, et al. (2009) states that human resource development is considered as a vital factor in national development process.

Mondy (2009) argues that organizations should develop and work through an integrated system human resource management development including functions for instance, recruitment and selection, human resource development, reward and safety, as well as employee labor relations. According to Hale (1991) human resource development professionals have to support organizational learning in order to set up performance prospects, deal with problem solving, and description for societal results. therefore, human resource development is mainly responsible for
creating strategies of human resource development within a learning culture that advances continuous worker learning. Sadler-Smith, et al (2001) concluded that organizational learning as the achievement or development of new abilities or knowledge in response to external or internal motive that guides to a new or fewer constant change in combined behavior, enhancing organizational results. Human resource development within the Organization according to Gilley and Eggland (1989) is an organized learning activity used to enhance performance and employee development in order to improving the individuals, jobs, and Organization.

**Training Strategy:**

Training Strategy is an important element of human resources management strategies which associated closely to affect people and influenced them. For instance, it aids the employees planning process to identify deficits in skills, and this deficit is filled through employment, or by trying to provide employees with the skills necessary to fill the deficit. As well as the main objective to evaluate the job performance is to identify gaps between the actual and expected performance, which can be narrowed through training. Similarly, training policies are linked to the upgrade polices, motivate employees to develop their skills constantly, and to have the opportunity to upgrade to senior positions (Rashid, 2001). A variety of intellectual and philosophical concepts on the identification of a clear and precise concept can be agreed upon by various researchers and specialists in this scientific and applied field, which occupies a special position in the development of various humanitarian organizations, but this variation and diversity in concepts do not extend to the real content of the concept of training, but this limited in variation the formal aspects of the concept of training. A number of researchers has been emphasized the significance of involving human resources in planning, improvement and implementation of competency based strategies. Ivancevich (1995) proposed that training is a systematic process to modify the behavior of the trainees towards achieving the goals of the organization which it is related to the current and future skilled labor. Besides, Lewis & Forrest (1990) concluded that training strategy is planned effort by organizations attempts to modify the behavior of individuals using a mixture of different techniques and methods in the performance of their work that lead to perform more productively and aim to increase individual skills after training differently than were following them before training. According to Barber (2004) training on job directs to better innovation and implicit skills. implicit skills are behaviors' obtained during informal learning that are valuable for effective performance. As a result, effective practices of development and training supports the workforce’s motivation for training in human resource development strategies can make impacts of the Organization performance. Ukandu and Ukpere (2013) identified different types of training strategies that might use organizations and they are included on-the-job training, coaching, understudy, job rotation, and off –the- job training. They further indicate that training strategy can be a failure if the program lacks a means of transferring learning to the job; if it lacks specific direction and focus and if management views it as a cost, and not an investment. Consequently, human resource motivation and training enhancing their performance with influences on the Organization performance formed the main core threads of this study.
Skills Development Strategy:

Human resource skills development is a vital practice of human resource management and development. It enhances motivation of employees as well as helps to improve Organizations productivity (Mccleland 2002, 7). Skills development strategy enhances human resource capacity to understand new technologies and techniques, along with increase their innovation, efficiencies, and invention (Falola, et al. 2014). Organizations have to able to recognize the requirements for skills development strategies and programs as well as selecting appropriate techniques for these requirements, planning how to apply them and afterwards evaluate results(McCourt, and Derek, 2003). Furthermore, skills development increases employees job satisfaction and will help them to have a better understanding of their work (Ukandu and Ukpere, 2013). According to Buyens et al. (2001) Human Resources if they are adequately nurtured, developed and educated, are becoming the most important positive feature of an Organization. Armstrong and Baron (2002) suggested that the development of human resources is concerned with the provision opportunities of development and learning in order to support improvement of Organization and achievement its strategies of business, and the performance of team and individual.

The development strategy according to (Niazi, 2011, 44) reduces absenteeism and employees’ turnover. Furthermore, assists in improving employees’ motivation. With the aim of stay in front of world’s competition, development strategy should incorporate reinvention in addition to innovation and this is only achievable when development includes a wide range of learning actions. Consequently, a perfect development shall become part of a Organization strategy and it have to be connected to goals of business and performance of Organization.

Empowerment Strategy:

Employee empowerment is one of the valuable methods for increasing human resources innovation and their productivity as well as most favorable use of individual and teams’ abilities so as to achieve objectives of Organization (Ganjinia, 2013, 38). Empowerment is an attitude which considers in enriching employee’s jobs and giving power to implement control over as well as take responsibility for efforts outcomes (Sahoo and Das, 2011, 47). Empowerment according to Del Val and Lloyd (2003, 102) is “the involvement of employee in decision making process”. Further, Gilbert and Nelson (1991) stated that accountability and trust is termed as empowerment. Kennedy and Schleifer (2006) states that innovation can increase when cooperation takes place and cooperation can occur best when teams are empowered. However, Ahmad and Oranye (2010, 583) argues that empowerment is stimulating followers through leadership, enhancing self-efficacy by increasing intrinsic task motivation and reducing powerlessness. Employee Empowerment is the process of achieving continuous improvement in an Organization’s performance by extending and developing the capable affect of human resources and teams over the functions and areas that influence their performance (Kinlaw, 1996).
Herrenkohl et al (1999) pointed out that employee empowerment refers to employees being self-sufficient and more proactive in supporting an Organization to achieve its goals and objectives. While, Dewettinck (2012, 41) for example argued that empowerment is not only having the autonomy to take actions but also having higher degree of accountability and responsibility. In other words, Organization have to empower their human resources. Thus they can be satisfied, committed, motivated, and support in achieving the objectives and goals of Organization (Dewettinck and Ameijde, 2011). Moreover, Looy, et al (2003) states that empowerment means providing service employees with adequate freedom to allow them to handle unexpected problems situations like complaints. Hamborstad and Perry (2011) indicates that empowerment have to be directed toward enriching frontline human resources with the skills and abilities to accomplish organizations goals. Elnaga and Imran (2014, 17) identified some advantages results for employee empowerment strategy, such as: communication and teamwork, increasing job satisfaction, effective Team work, reducing conflict with management, human resources participate in creating their own goals, better productivity and profitability, reduces turnover rates.

Capabilities of Strategic Innovation:

In English, the word (Innovate) comes from Latin word (Innovare) which means renewed (Al-Masoudi, 2007, 42). Awareness to the concept of innovation and its related activities have begun at the end of the thirties of the twentieth century, the first author in this area is the US economist (Joseph Schumpeter), who published his book in 1939 and defined innovation from an economic perspective as a "turning manufactured by leaping from the old to the new, the curve of old cost disappears and placed a new one"(Musser, 1988, 160). Al-Saffar (2001, 2) indicates that the concept of innovation means ideas that characterized as new, valuable, and connected to the optimal solution for specific problems, or the development of methods, goals, or deepen the vision, re-installation of the identified patterns in managerial behaviors in a distinctive and sophisticated forms of jump and its holders forward. While, strategy according to Macmillan &Tampoe (2000, 14) represents the ideas and actions to perceive as well as making sure from future.

The concept of strategic innovation refers to the cases of re-understanding and assimilation substantial for the objective of business organization, that leads to a different and exciting manner to competition implement in business organizations (Markides, 2000, 19). Strategic innovation is the abilities that allow the organization create value for customers and for the community in line with contemporary competitive environment (Muhammad, 2015). Furthermore, the capabilities express the possibility of the organization towards the implementation of specific activity or group of activities, the source of this possibility is the skills, knowledge, and functional expertise of employees in those organizations (Al-Masoudi, 2007, 41). Capabilities of strategic innovation are a refurbishment and change in the environment as well as trans deviation from the rules of the competition in business organizations (Fuller, 1995, 10). Berghman (2006, 33) states that the capabilities of strategic innovation are the ability of the organization to creating an initiatives
strategic of innovation in a regular basis. Wang & Ahmed (2007, 38) pointed out that the capabilities of strategic innovation is the organization's ability to develop new products or markets, through appropriate strategic orientations of innovation with the creative processes and practices.

Classification of capabilities of strategic innovation:

Capabilities of strategic innovation can be classified into two classes: organizational learning, and teamwork (Charles, 1995), (Pitt & Clarke, 1999), (Govinduajan , 2004), (Al-Masoudi, 2007), and (Muhammad, 2015). Present study relying on Organizational learning and teamwork as dependent variables because of their importance in the development of the organization intangible resources which reflect development in comparison to competitors' new ideas to enable the organization to discrimination and carry on to deliver the best actions, which depends on learning framework building of teamwork basis with the possibility of their application in the area of education in the Iraqi Kurdistan Region -Akre city.

Organizational Learning

The contributions of scholars varied significantly in giving a clear comprehension of Organizational learning due to different theoretical frameworks that dealt with this concept. Organizational learning is the organization that individuals can learn in it, and educational process is loved and woven in the life of human system (Al-Abady, et al, 2014, 132). Organizational learning according to López et al (2006) is a method to improve the development of the Organization by earnings of new actions (commercial, technological or productive). Dodgson (1993,89) assumed that Organizational learning is the manner, or the technique to build organizations along with promote and organize the knowledge, reducing routine activities, adapt organizational culture, and develop organizational efficiency by improving and expanding the skills of the force labor. Moreover, Schermerhorn, et al (2000: 252) pointed that Organizational learning is the acquisition of knowledge, distribution of information, information interpretation, and memory of the organizational process to regulate continuously with the circumstances changes. Al-Kubaisy and Al-Azawy (2014, 34) indicates that organizational learning is the organization's perfect vision, since the structure, procedures, and work practices are open to familiarize, continuous, and improvement, as well as that individuals and teams be involved continuous learning and are taking strategic actions by responding to relevant data and feedback. (Kubaisi and al-Azzawi 2014,34). While Sabr (2013,427) defined organizational learning as an organization that has a new vision for the future, able to find and acquire knowledge, transfer, exchange among all organization's individuals to enable them to increase their ability to grow as well as outstanding performance. Tippins and Sohi (2003) identified four dimensions to organizational learning:

1. Information acquisition.
2. Information dissemination.
3. shared interpretation.
4. Development of organizational memory. The innovation depends on learning, and they are organizational capabilities, however learning comes first than innovation. It enhances the organization's energy to create and provide new ideas as well as is the primary means for innovation if it dealing with new problems. Managing learning towards the achievement of innovation strategy should focus on the following key points (Al-Masoudi, 2007, 44):

- Focusing on the unknown critical issues.
- Building hypotheses defies the reality of predicts.
- Predicting unlimited trends instead of numbers and dates.
- Periodic review of the basic assumptions of work.
- General overview of the history of valuable experience study.

Teamwork

Teamwork is considered to be one of the main topics in the management contemporary literature, therefore devoted to it many researchers, writers, and specialists a large part of their interests, and cited several definitions of the concept of teamwork. Thompson (2000, 2) defined teamwork as a group of individuals who rely on each other in terms of information, resources, and expertise and who are trying to unite their efforts to achieve a common goal. Muhammad (2015) states that teamwork is activist group of workers committed to achieve common goals and together perform high-quality job and together they reach to high-quality results. Al-Sayrafy (2003, 127) postulated that teamwork is a small group of individuals between three to twelve individuals, these groups have a high degree of Independently and joining them is optional, they responsible for scheduling, training, solving work problems, and trained to provide innovative solutions for the management and they responsible for the implementation of those solutions. Teamwork according to Hafz& Hussain (2012, 63) is a group of individuals with skills and knowledge, and known for their loyalty to a particular purpose, and specific performance targets in a manner which makes them bear a shared responsibility. On his part, Hellerigel, et al. (2001, 222) states that teamwork is a number of workers who have a variety of qualifications, competencies, and knowledge who are committed to the performance of the general objectives of the organization. Ibrahim (2014, 157) concluded that teamwork is a number of individuals creating positive synergy by coordinating efforts among themselves to achieve outstanding performance greater than the sum of the individual inputs.

Teamwork contributes to achievements of strategic innovation in business organizations through the development of the non-tangible resources, especially if it was marked the following characteristics (Al-Masoudi, 2007: 44):

- Team guided task for a specific purpose.
- Training team encourages curiosity.
- The heroic behavior of the team.
- Implicit Knowledge resulting from heterogeneous backgrounds added to the diversity which is the basis of thinking.
If the above characteristics merged into the main topics can achieve group educated contribution to the strengthening of the organization intangible resources and achieving innovations that will break the competition rules of the game and this leads to continued excellence on others.

**Methodology:**

This study is based on secondary data and primary data. In secondary data, information has been collected depending on studies and books close to the present study. In primary data, a survey questionnaire has been conducted, and distributed to the respondents are all teaching staff at Akre technical institute. Collected data has been analysed through SPSS program version 23. The reliability of the questionnaires was measured depending on Cronbach’s Alpha (table 3) and the values of study's variables have a high reliability values.

**Sample Size:**

Academic staffs from Akre technical institute has been selected as participants for the study sample. There are approximately 70 academic staffs teaching at Akre technical institute and all of them were approached to data collecting. 50 questionnaires distributed directly to academic staffs and only 38 were returned back (response rate= 76%) which have been used to analyse as well as draw interpretations.

**Questionnaire instruments:**

For the purpose of collecting data, a survey questionnaire has been administrated, most of its items designed based on prefab standards of research and studies close to the subject of present study, and adjusted to suit the requirements of the study field, table (2) illustrates that.
Table (2) Questionnaire instruments

<table>
<thead>
<tr>
<th>The main variables</th>
<th>The subsidiary variables</th>
<th>No. of Items</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Data</td>
<td>Gender, age, years of experience, qualification level, scientific title</td>
<td></td>
<td>Prepared by researchers</td>
</tr>
<tr>
<td>Human Resources Development Strategies</td>
<td>Training Strategy, Development Strategy, Empowering Strategy</td>
<td>6</td>
<td>(Abu-Salmiya, 2007), (Aghili, 2009), (Hassan, 2010), (Kasasbeh et al., 2010)</td>
</tr>
</tbody>
</table>

Source: Prepared by researchers

Results and Discussion
1. Reliability Analysis

Table (3) illustrates the Cronbach’s alpha test for the independent variables, dependent variables, and for the whole questionnaire. Sekaran (2005) pointed out that the coefficient alpha ranges in values is from 0 (no reliability) to 1 (perfect reliability). Consequently, the table explains that the Cronbach’s alpha for all the whole questionnaire and is equal to (.973) which is considered to be high reliability.

Table (3) Reliability Statistics

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>.880</td>
<td>6</td>
</tr>
<tr>
<td>Development</td>
<td>.854</td>
<td>6</td>
</tr>
<tr>
<td>Empowerment</td>
<td>.899</td>
<td>6</td>
</tr>
<tr>
<td>Organizational learning</td>
<td>.895</td>
<td>9</td>
</tr>
<tr>
<td>Team work</td>
<td>.945</td>
<td>9</td>
</tr>
<tr>
<td>Whole Questionnaire</td>
<td>.973</td>
<td>36</td>
</tr>
</tbody>
</table>
2. Participants Demographics Data Analysis

**Gender:** the table below (4) shows the distribution of selected participants according to gender. The majority of the participants N=37 with (97.4%) were male and N=1 (2.6%) were female.

**Age:** the table below (4) illustrates the age of the participants. N=8 (21%) their age is between 18-30 years. The respondents N=19 (50%) are between 31-40, this indicates that the majority of the participants in the current study are young in nature.

**Scientific Title:** table (4) explains that the majority of respondents are assistant lecture N=25 (65.8%).

**Years of experience:** table below (4) shows the years of experience of the participants. N= 13 with (34.2%) their years of experience are between 1-5 years. N= 16 (42.1%) their years of experience are between 6-10 years.

**Level of education:** the table below (4) illustrates the level of education of the respondents. The majority of respondents are holding MSc. degree N=27 (71.1%). High Diploma degree holder coming after them with N=7 (18.4%).

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>37</td>
<td>97.4</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-30 Years</td>
<td>8</td>
<td>21</td>
</tr>
<tr>
<td>31-40 Years</td>
<td>19</td>
<td>50</td>
</tr>
<tr>
<td>41-50 Years</td>
<td>5</td>
<td>13.2</td>
</tr>
<tr>
<td>51 Years and above</td>
<td>6</td>
<td>15.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scientific Title</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Professor</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td>Lecture</td>
<td>5</td>
<td>13.2</td>
</tr>
<tr>
<td>Assistant Lecture</td>
<td>25</td>
<td>65.8</td>
</tr>
<tr>
<td>High Diploma</td>
<td>7</td>
<td>18.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>13</td>
<td>34.2</td>
</tr>
<tr>
<td>6-10</td>
<td>16</td>
<td>42.1</td>
</tr>
<tr>
<td>11-15</td>
<td>8</td>
<td>21.1</td>
</tr>
<tr>
<td>16-20</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Qualification level</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>4</td>
<td>10.5</td>
</tr>
<tr>
<td>MSc.</td>
<td>27</td>
<td>71.1</td>
</tr>
<tr>
<td>High Diploma</td>
<td>7</td>
<td>18.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

3. Descriptive Statistics

3.1. Human Resources Development Strategies

Human resources development strategies of Akre technical institute was evaluated under three internal strategic variables: Training strategy, Skills Development strategy, and employee Empowerment strategy. The overall human resources development strategies have a high level of attribute (mean = 3.3904) as well as (67.808%) Rate of agreement. The three strategic factors have higher level of attributes as values of mean of Training strategy, Skills Development strategy, and employee Empowerment strategy are 3.2544, 3.4956, and 3.4211 respectively.
Furthermore, the calculated Rate of agreement of the three strategic factors are 65.088%, 69.912%, and 68.422% respectively. The lower level of attribute among these three strategic variables is Training Strategy. However, Skills Development Strategy has a higher level of attribute.

Table (5) Descriptive Statistics of Independent Variables

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Rate Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training Strategy</td>
<td>3.2544</td>
<td>.78818</td>
<td>65.088</td>
</tr>
<tr>
<td>Development Strategy</td>
<td>3.4956</td>
<td>.80584</td>
<td>69.912</td>
</tr>
<tr>
<td>Empowerment Strategy</td>
<td>3.4211</td>
<td>.86363</td>
<td>68.422</td>
</tr>
<tr>
<td>Human Resources</td>
<td>3.3904</td>
<td>.75608</td>
<td>67.808</td>
</tr>
</tbody>
</table>

(Source: Survey Data)

3.2. Capabilities of Strategic Innovation:

Capabilities of strategic innovation were evaluated under two internal strategic variables: organizational learning, and teamwork. The overall innovation capabilities strategies have a high level of attribute (mean = 3.4563) as well as (69.126%) rate of agreement. The two capabilities of strategic innovation have higher level of attributes as values of mean of organizational learning, and teamwork are 3.4678, and 3.4448 respectively. In addition, the calculated rate of agreement of the two innovation capabilities strategies are 69.356%, and 68.896% respectively. Among the two capabilities of strategic innovation, Organizational Learning strategy has a higher level of attribute. While, Teamwork has the lower level of attribute.

Table (6) Descriptive Statistics of Dependent Variables

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>St. Deviation</th>
<th>Rate Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Learning</td>
<td>3.4678</td>
<td>.73846</td>
<td>69.356</td>
</tr>
<tr>
<td>Teamwork</td>
<td>3.4448</td>
<td>.87360</td>
<td>68.896</td>
</tr>
<tr>
<td>Capabilities of Strategic Innovation</td>
<td>3.4563</td>
<td>.77260</td>
<td>69.126</td>
</tr>
</tbody>
</table>

(Source: Survey Data)

4. Testing Study Hypotheses

4.1. Correlation analysis

To testing first hypotheses and its sub-hypotheses, Pearson correlation analysis has been used. From table (7) It was observed that all the values of correlation were positive and these values
were highly significant at level of (0.01). The table shows a strongest positive relationship between human resources development strategies and capabilities of strategic innovation (895**). It can be explained if there is an increase and interest in human resources development strategies then innovation capabilities of employees will also increase extremely. Therefore, the first main hypotheses are accepted which states "There is a significant positive correlation between human resources development strategies and capabilities of strategic innovation".

In addition, the same table (7) shows a strongest positive relationship between Human Resources Development Strategies and Organizational Learning, and teamwork (.813**), (.887**) respectively. Comparatively, among these two variables teamwork was highly correlated with human resources development strategies. Consequently, the both sub-hypotheses are accepted.

Table (7) Pearson Correlation analysis

<table>
<thead>
<tr>
<th></th>
<th>Capabilities of Strategic Innovation</th>
<th>Organizational Learning</th>
<th>Teamwork</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resources</td>
<td>895**</td>
<td>813**</td>
<td>887**</td>
</tr>
<tr>
<td>Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>38</td>
<td>38</td>
<td>38</td>
</tr>
</tbody>
</table>

**Correlation significant at the 0.01 level (2-tailed)

4.2. Regression Analysis

The regression analysis as it shown in table (8) illustrates that human resources development strategies significantly contributed to capabilities of strategic innovation. The constant value reveals that if human resources development strategies are at zero level, the capabilities of strategic innovation have to be in 38.2%. These predictions were significant at p-value of (0.05). Moreover, 78.7% of capabilities of strategic innovation can be explained by human resources development strategies as represented by R square value. Therefore, the main second hypotheses state "There is a statistically significant impact of human resources development strategies on capabilities of strategic innovation".

Further, table (8) shows that the calculated R Square is .801, meaning that 80.1% of the variance in Organizational Learning can be predicted by human resources development strategies. Furthermore, table illustrates that F=145.199 and is statistically significant. This argues that the predictor calculated organizational learning and human resources development strategies considerably. Regression coefficient of human resources development strategies with organizational learning is .874 with the significant value of .000 which illustrates positive impact
of human resources development strategies on organizational learning. Therefore, the first sub-hypotheses are accepted.

In addition, table (8) shows that the calculated R Square is .660, meaning that 66% of the variance in teamwork can be predicted by human resources development strategies. Furthermore, table illustrates that \( F=70.023 \) and is statistically significant. This argues that the predictor calculated teamwork and human resources development strategies considerably. Regression coefficient of human resources development strategies with teamwork is .939 with the significant value of .000 which illustrates positive impact of human resources development strategies on teamwork. As a result, the second sub-hypotheses is accepted. Comparatively, among these two variables organizational learning was highly positive impacted on human resources development strategies.

**Table (8) Regression Analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>F Change</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>B: .382</td>
<td>Std. Error: .273</td>
<td>Beta</td>
<td>1.402</td>
<td>.787</td>
<td>.781</td>
<td>.000</td>
</tr>
<tr>
<td>Organizational Learning</td>
<td>.874</td>
<td>.073</td>
<td>.895</td>
<td>12.050</td>
<td>.801</td>
<td>.796</td>
<td>.000</td>
</tr>
<tr>
<td>Teamwork</td>
<td>.939</td>
<td>.112</td>
<td>.813</td>
<td>8.268</td>
<td>.660</td>
<td>.651</td>
<td>.000</td>
</tr>
<tr>
<td>Innovation Capabilities</td>
<td>.907</td>
<td>.079</td>
<td>.887</td>
<td>11.541</td>
<td>.787</td>
<td>.781</td>
<td>.000</td>
</tr>
<tr>
<td>Strategies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Conclusion:**

Human resource development is an important Organizational investment receiving an acceptable return on investment earnings involving the functions of training, development and empowerment to the organization's general business activity. For the future, investing in human resource is essential element of the business's strategy. Investment in human resource development similar to any investment must create a measurable and effective payback. Organizations should evaluate results and methods in order to complete program of human resource development. The main element to achieving reliable success with programs of human resource development is to encompass a systematic method to assessment and measurement. The results of study indicate that human resource development has a significant positive correlation
with capabilities of strategic innovation. Among variables of capabilities of strategic innovation, teamwork has strongest correlation with human resources development strategies. Further, the outcome of study indicates that human resource development has a significant impact on capabilities of strategic innovation. Approximately 79% of capabilities of strategic innovation can be explained by human resources development strategies. Among variables of capabilities of strategic innovation, organizational learning has strongest positive impacted on human resources development strategies.

**Recommendations:**
1. Increasing interest in capabilities of strategic innovation along with investing and directing it towards achieving the strategic success of the organization.
2. Efforts should be performed to include the strategic innovation within the organization's mission and vision along with convert them into basic goals of the organization.
3. Increasing the attention to human resource development strategies due to the significance role that performs in the formation of capabilities of strategic innovation.
4. Activating the formation of teamwork, by including encouraging the creation of innovation among individuals of the organizers of these teams.
5. Encourage human resources that have capabilities of innovation by presenting them monetary or non-monetary incentives.
6. Interest in consolidating the concept of Organizational learning as well as continuous learning among individuals to achieve creative performance.
References

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• Fuller, B. C., (1995), Strategic Innovation, Corporate Entrepreneurship and Matching Outside-In to Inside-Out Approaches to Strategy Research, British Journal of Management, Vol. 6, No. 4.
