

## **PEST Analysis in strategic Human Resources Planning**

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### **Abstract:**

The present complex world require as far as is feasible, it consider impact of important factors related to organizations in strategic planning. The strategic planning of business includes all functional subdivisions and forwards them in a united direction. One of these subsystems is human resource management.

Strategic human resource management comes after the strategic planning, and followed by strategic human resource planning as a major activity in SHRM.

In strategic human resource planning, it can use different analytical methods and techniques that one of them is PEST analysis.

This paper introduces how to apply it in a new manner. This manner is result of practical case of application of SHRP in an organization.

### **Key words:**

PEST Analysis/ Strategic Human Resource Planning/ Strategic Human resource Management.

### **1. Introduction:**

Planning is about change and change management is a difficult. Rise and fall of strategic planning indicates organizations find tools to help to navigate organization's ship into the uncertain water of change. Success of a program is difficult to assess, as changing objectives and goals and the results are not simply measurable (Martinez: 1999).

The organizations always are attempting to coordinate their resources, feasibilities, tools and capital in certain framework for to achieve organizational goals. In this attempt should be identify the role of each component. The most important component of the organization is human resource and appropriate use of its capabilities and competencies, a certain strategic planning is required that called "strategic human resources planning", and is one of the key discusses of human resource management. Strategic human resource planning, as a matter of fact, is interpretation of goals and future plans of the organization in form of needed type and number of human resource.

In this paper is introducing how to use PEST method that is result of a research, in strategic human resource planning.

## 2. Strategic human resource management (SHRM):

HR is the most important component of organizations. Without right people in right positions, is not making any strategy in other areas of organizational section. This cognition led to develop context of strategic human resource management. SHRM is strategic view to HR so that can be reflecting organization strategies in HR activities.

SHRM attempts to direct HR in path of achieving organization goals and strategies, and embeds these in different activities and operations of HR. SHRM can conduct the organization HRM activities, with a systematic approach, toward achieving strategic management.

SHRM has different objectives but the most basic one is to determine HR strategies in different areas such as job analysis, job design, HRP, recruitment, compensation, training, job evaluation, performance evaluation, and termination. If we assume HRM as a system, the elements of this system can be as figure (1).

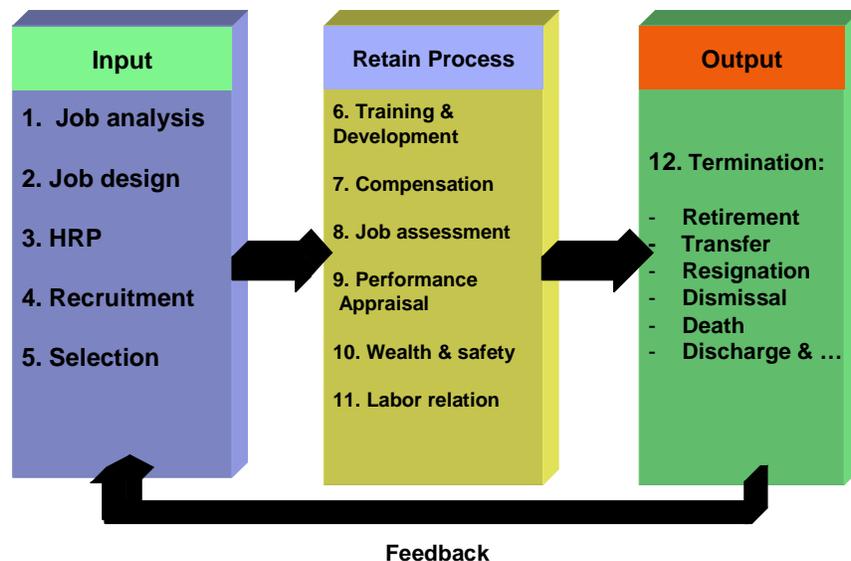


Figure (1): HRM System

As shown in figure (1), HRM includes twelve basic elements. If it can be make some strategies for these elements by strategic management techniques and based on internal and external analysis of organizational environment, this action is called SHRM. SHRM stages can be design in figure (2).

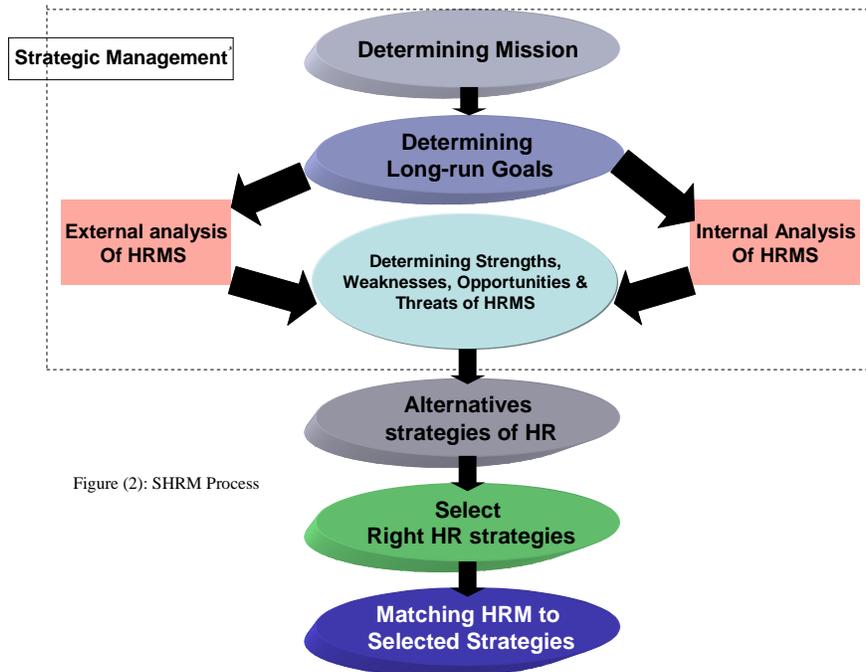


Figure (2): SHRM Process

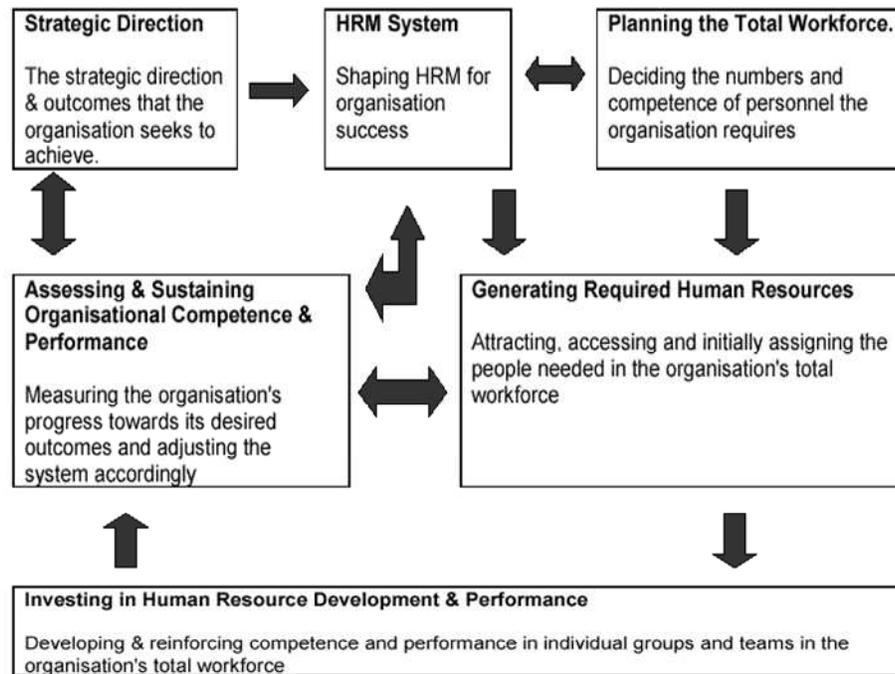
### 3. Strategic human resource planning (SHRP):

One of the most important of SHRM goals is SHRP that includes matching people to strategic requirements of organization in both, short-term and long-term. SHRP is seeking a long-term remedy through which organizations able to predict future of their HR. the basic elements of SHRP are predicting HR based on estimated needs of organization future, HR inventory whether match current HR to future needs, supply and demand analysis of HR, developing different approach for making balance between organization HR. The developed plans by HRM to use environmental opportunities and threats, and organizational strengths and weaknesses for to provide competitive advantage, called SHRP. In fact, HRP is strategic when help to predict managing the organization in a varied environment. Thus, the strategy of desirable goal- attaining will be determine by analyzing strategic objectives of organization, studding its internal and external environment, and based on limitations, feasibilities and strategic objectives of HR.

There is no a similar and total approach for SHRP because it differs from an organization to another. The following model introduces five stages in developing a HR strategy.

- a. strategic direction
- b. HRM system
- c. Planning the total workforce
- d. Generating required HR
- e. Investing in human resource development and performance
- f. Assessing and sustaining organizational competence and performance

Figure (3): SHRP Model (Naval: 2000)



#### 4. PEST Analysis:

PEST analysis is one of environmental study tools that focused on important factors of external environment that impact on present and future of the organization. It stands on Political, Economical, Socio-cultural, and technological.

A PEST analysis (in some cases called STEP, PESTLE, STEEP) studies important factors of these four aspects. To study political factors, it should be attend every political change that impact on the organization such as legislation, global changes forthcoming, laws relating to the industry, maternity rights, data protection, health and safety, environmental policy, taxes, Regulation of transfer for capital and labour, etc. Political factors can lead to economical factors for example; tax decisions are made by politicians. Rent rates, exchange rates, inflation level, income growth, debts and savings level, business cycles, unemployment, availability of relevant resources, the key industries and industrial clusters, industry structures, customer confidence and organization, are important factors that affect(Thompson: 2002). All of these factors affect on social factors too and affected by them. Social factors establish elements of a society and the most important of them are: population and demographics (Distribution of income, mobility, level of education, growth rates, and age distribution, lifestyle changes, living conditions, work/career and leisure attitude, entrepreneurial spirit, customer behavior (savings rates, preferences for branded / unbranded products), fashion, hypes, pollution, harmful factors, the role of women in society, etc (Recklies: 2006). Moreover above, technological advances affect on success of the organization. Internet, nanotechnology, mobile phone, and increasing advances in computer have been leaded to decrease cost, time, travel and nearer distance (Pearce & Robinson: 2005).

## **5. Methodology:**

The objective of the paper is to determine impact of basic political, economical, social and technological factors on the organization SHRP. For this purpose, at first, were identified important PEST factors and variables. Then, was designed a questionnaire based on them that includes the main variables. These identified factors are as table (1).

Table (1): The main factors & variables of PEST

Dimensions	Main Factors
<i>Political</i>	<ol style="list-style-type: none"> <li>1. Change trend of governmental laws</li> <li>2. Development rate of parties during early ten years</li> <li>3. Development rate regional and international political crisis</li> <li>4. Power-shift rate between major parties of the country</li> <li>5. Political-shift rate in the relevant industry</li> </ol>
<i>Economical</i>	<ol style="list-style-type: none"> <li>1. Inflation rate</li> <li>2. Investment rate (internal &amp; foreign)</li> <li>3. Savings rate</li> <li>4. Employment rate</li> <li>5. GDP</li> <li>6. Economical growth rate</li> <li>7. Status of industrial, agricultural, and service sectors in the economy</li> <li>8. Development trend of import and export</li> </ol>
<i>Social</i>	<ol style="list-style-type: none"> <li>1. Social security situation</li> <li>2. Health service situation</li> <li>3. Work culture (governmental work, private work, self-employer)</li> <li>5. Workforce immigration</li> <li>6. False-jobs but high paid</li> <li>7. Social affairs structures in the country (Labor Ministry, Social Security Organization, Well-being Organization, Interior Ministry, Education Ministry)</li> </ol>
<i>Technol- ogical</i>	<ol style="list-style-type: none"> <li>1. Set up trend of technological organization</li> <li>2. Inventions &amp; innovations rate</li> <li>3. Legislation on technology</li> <li>4. Mechanization trend in the country</li> <li>5. Mechanization trend of the relevant industry: <ul style="list-style-type: none"> <li>- IT</li> <li>- Nanotechnology</li> <li>- Biotechnology</li> <li>- Quantum</li> </ul> </li> </ol>

The questions are designed in form of the spectrum and accept amounts (-%100) through (+%100).

Statistical society of the research includes experts and managers of an Iranian governmental organization that is selected 100 people randomly and based on personnel codes as research sample. There are common characteristics of sample in table (2).

Table (2): Sample Number

<b>Organizational Level</b>	<b>Experience Years Mean</b>	<b>N</b>
1. Deputy	22	4
2. Manager	21	15
3. Office Head	17	36
4. Senior Expert	16	20
5. Superior Expert	16	25
<b>Total</b>		<b>100</b>

Gathered data could be analysis descriptive and interpretive statistics, and provide a multiple regression model for describing PEST factors effects on the organization SHRP:

$$SHRP = a + b_1 P + b_2 E + b_3 S + b_4 T$$

$$R^2 = x$$

a= constant coefficient

b<sub>1=1...4</sub> = variable coefficient

R<sup>2</sup> = diagnose coefficient

## 6. Discussion:

After gathering questionnaires, information was analysed and based on it, are calculated mean, for each main factors in table (1) as shown in table (3).

Table (3): The Mean of PEST Main Factors

Main Factors	Mean
<p style="text-align: center;"><b>Political Factors:</b></p> <ol style="list-style-type: none"> <li>1. Change trend of governmental laws</li> <li>2. Development rate of parties during early ten years</li> <li>3. Development rate regional and international political crisis</li> <li>4. Power-shift rate between major parties of the country</li> <li>5. Political-shift rate in the relevant industry</li> </ol>	<p style="text-align: center;"><b>+ .15</b></p> <p style="text-align: right;">+.37</p> <p style="text-align: right;">-.11</p> <p style="text-align: right;">-.14</p> <p style="text-align: right;">-.25</p> <p style="text-align: right;">+.28</p>
<p style="text-align: center;"><b>Economical Factors:</b></p> <ol style="list-style-type: none"> <li>1. Inflation rate</li> <li>2. Investment rate (internal &amp; foreign)</li> <li>3. Savings rate</li> <li>4. Employment rate</li> <li>5. GDP</li> <li>6. Economical growth rate</li> <li>7. Status of industrial, agricultural, and service sectors in the economy</li> <li>8. Development trend of import and export</li> </ol>	<p style="text-align: center;"><b>-.25</b></p> <p style="text-align: right;">-.31</p> <p style="text-align: right;">+.24</p> <p style="text-align: right;">+.12</p> <p style="text-align: right;">-.13</p> <p style="text-align: right;">+.14</p> <p style="text-align: right;">+.17</p> <p style="text-align: right;">+.10</p> <p style="text-align: right;">-.06</p>
<p style="text-align: center;"><b>Social Factors:</b></p> <ol style="list-style-type: none"> <li>1. Social security situation</li> <li>2. Health service situation</li> <li>3. Work culture (governmental work, private work, self-employer)</li> <li>4. Workforce immigration</li> <li>5. False-jobs but high paid</li> <li>6. Social affairs structures in the country (Labor Ministry, Social Security Organization, Well-being Organization, Interior Ministry, Education Ministry)</li> </ol>	<p style="text-align: center;"><b>+.13</b></p> <p style="text-align: right;">+.12</p> <p style="text-align: right;">-.19</p> <p style="text-align: right;">+.21</p> <p style="text-align: right;">-.14</p> <p style="text-align: right;">-.18</p> <p style="text-align: right;">+.17</p> <p style="text-align: right;">+.05</p>

<b>Technological Factors:</b>	<b>+.23</b>
1. Set up trend of technological organization	+.32
2. Inventions & innovations rate	+.26
3. Legislation on technology	-.23
4. Mechanization trend in the country	-.16
5. Mechanization trend of the relevant industry: - IT, Nanotechnology, Biotechnology, Quantum	-.16

As above table shown, the effects mean of PEST factors on the organization SHRP is +.06:

$$+.06 = \frac{+.15 + .13 + .23 - .25}{4}$$

This number indicates political, economical, social, and technological factors impact, in stage of estimating needed human resource for future, and stage of forecasting needed human resource supply, on SHRP. Thus, in two stages of SHRP, estimating demand and forecasting supply, at the first we can do these calculations, then multiple the resulted numbers in .065. If the gained number of PEST be positive, the impact coefficient will be increasingly, and if the gained number of PEST be negative, the impact coefficient will be decreasingly.

We can determine the regression model of PEST by attention to gained coefficient:

$$\text{SHRP} = 29 + .15P - .25E + .23S + .15T$$

$$R^2 = .78$$

Equation ( $R^2 = .78$ ) indicates that reliable of the regression model is high. As shown in the model, the greatest positive impact is related to technological variables, the least positive impact is related to social variable, and the greatest negative impact comes from economical variables. This result is matched to Thompson work (2002). Thompson found that the most important factors are economical variables.

## **7. Results:**

PEST analysis generally are based on secondary data sources such as newspapers, periodicals, current books, trade organizations, government agencies, industry, analysts, financial analysts, while the unique characteristic of this research in proportion of other research is that needed data are gathered from primary sources, and for this reason its reliability is high.

By this method, we can imagine a more real picture of future of the organization and based on it, the organization better use of environmental opportunities and avoid threats.

This method allows organization see a longer-run horizon, and SHRP process, beyond current span, will be develop in future horizon.

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