

Electronic Human Resources Management; Enabler of Innovation in Organization

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Abstract: Today, rapid and exponential progress of information and communication technologies and their applicable capabilities in different organizational domains have caused infiltration of information technology into processes and systems of the human resources generating a new approach in human resources management referred to as “electronic human resources management”. Enhancement and improvement of official efficiency and utilization of diverse dimensions of technology enables human resources managers to use fewer personnel playing a more value-creating role and contribution in the organization. Rapid evolution of systems which supply electronic human resources services has provided personnel and managers with more information in more suitable format and manner so that they can benefit from this information for organization’s resources. Electronic human resources management in fact supports and assists human resources management thanks to benefiting from advanced technologies and inclusion of abundant utilities. In an environment where competition is a key to survival and durability of organizations, efficient system of electronic human resources management and its suitable performance are considered as a competitive weapon for creating opportunities and dominance over threats against the organizations. Besides, it is presumed as a relative advantage and lantern of managers’ route to the future. With exceeded environmental complexity and viability, organizations must also move more progressively toward innovation so as to identify new opportunities and maintain their superior performance versus the rivals. Creativity and innovation are prerequisites of development, progress and aspiration in an organization and society, and, awareness of its texts and techniques is an inevitable necessity for interested managers, personnel and researchers. Enhancement of creativity in organizations could contribute to quantitative and qualitative promotion of services, reduction of costs, prevention from resource losses, decrease in bureaucracy, efficiency and productivity improvement, motivation and occupational satisfaction in the personnel. Innovation can be known as a process through which inventions turn into products, processes, services or organizational changes with added value or presentable commodities in the market. The idea emphasized by researchers with regard to human resources and innovation is that activities of human resources management can create an environment that supports collaboration and participation and leads to formation, promotion and development of human and social resources management, and consequently, encourages organizational innovation. The authors in the current paper attempt to analyze significant impact of electronic human resources management on encouraging individuals to innovate in the organization under study. Along with introducing subsystems of electronic human resources management, the following subjects will be also discussed: status and influence of main subsystems of electronic human resources such as electronic subsystems, performance management, electronic reward and payment (salary) subsystem, and its impact on encouraging individuals to innovate. By the way, the present paper is a report from a research currently being conducted.

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Introduction

It can be confidently asserted that manpower is the most important and most sensitive organizational resource that can serve as either factor of organizational success or failure. The managers cannot expect their personnel to yield excellent results unless the context of creating such results is provided in their employees. Managers are always involved in programs and strategies which directly leave their outcomes and impacts on human resources. Accordingly, development of

entrepreneurship programs in organizations will end to failure if no attention is devoted to manpower and codification of programs for empowerment of organization’s human resources [3].

In the current progressing and transforming world, affluence will be achieved for societies and organizations which establish significant relationships among rare resources and managerial and entrepreneurial capabilities of their human resources. In other words, the societies and organizations which supply their human resources

with entrepreneurial skills and knowledge will be able to move speedily forward in the development path so that other resources of society and organization can be managed and directed through using this valuable capacity [4].

Our country Iran suffering from economical problems such as occupational challenges, high inflation rate, etc requires courageous, creative and riskable entrepreneurs for getting rid of these bottlenecks either in private or public sectors. Such persons can start working and offer innovative plans for growth and development of their society and organization. In this respect, it is vitally significant and necessary to provide contexts for entrepreneurship-supportive culture and fostering of corporate entrepreneurship for developing societies like Iran [1].

With further complexity and viability of environment, organizations shall move toward entrepreneurship more than before to be capable of identifying new opportunities and maintaining their superior performance in competition with their opponents. Corporate Entrepreneurship (CE), organizational learning caused by collaboration, creativity, and individual commitment are placed in the same category [3].

Concerning corporate entrepreneurship, Mc Milan (1987) says:
“We are in circumstances which involvement of human resources has probably become inevitable because no other function in the organization indeed features the needed skills and instruction for coordinating the unofficial processes” [4].

Corporate entrepreneurship is based on capability of an organization in learning through discovering new knowledge and benefiting from the available knowledge. These learning processes rely upon intellectual capital and specifically human and social capitals [3]. During three last decades, experimental researches have been conducted on the relationship between activities of human resources management and corporate entrepreneurship. Nevertheless, multi-dimensional nature of corporate entrepreneurship has caused fundamental challenge in this scope. Actually, corporate entrepreneurship incorporates: innovation, creation of new businesses in organization and implementation of risky projects, and activities related to strategic reconstruction of an organization [5]. The important point in this regard is the fact that organizations are exceedingly bound to apply strategies based on entrepreneurship and innovation, and consequently, require recognition of major and important factors and stimuli of human resources in these strategies.

Innovation is one of the extensively studied dimensions of corporate entrepreneurship. Among all

activities of human resources management, impact of payment and compensation and services on innovation performance has attracted utmost attention [6].

Innovation can be defined as a process through which inventions are converted into products, processes, services or organizational changes having added value or presentable features for the market [5].

Organizations shall adapt their organizational culture to entrepreneurial culture for implementing and applying entrepreneurship. It means that organizations must spread among their personnel a culture which respects and strengthens creativity and innovation, righteousness, and sincerity [3].

Consequently, this notion is widely prevalent that the methods used in human resources management (HRM) could constitute major factors for success in organizational entrepreneurship. Current situation (status quo) indicates that role and intervention of human resources management will be necessary for realization of organizational entrepreneurship [3].

Nowadays, rapid and exponential progress of information and communication technologies and their applied capabilities in different organizational scopes has led to infiltration of information technology into processes and systems of human resources creating a novel approach in human resources management, referred to as “electronic Human Resources management (e-HRM)” [7].

Electronic human resources management is able to impact all domains of human resources management. Yet, the following principal domains have been mainly emphasized in the formerly conducted researches including ENSHER et al. (2002):

Human resources programming, provision of human resources (employee-detection and selection), evaluation of human resources, communications, rewarding the human resources, and development of human resources [8];

In the modern world, innovation is considered among the development means because presence of innovative persons contributes to creation of context for accomplishments. Also, innovation in organizations seems to be unavoidable taking into account the rapid increase of new opponents and lack of confidence to traditional managerial methods in companies. In this regard, duty of viable organizations is to discover and foster creative and innovative persons. An organization needs suitable structure and entrepreneurial managers for realization of self-motivated and innovative personnel. In entrepreneurial organizations, decision-making

authorities are assigned to units and individuals to enable them to design and implement appropriate measures in appropriate time. Concentration concept has faded away and decentralization has been vividly manifested considering creativity, talent, intellectual and executive power of specialists and experts in such organizations. Whereas, other content dimensions of organization specifically size and technology also remarkably affect the innovation levels [3].

2-Impact of Information Technology on Human Resources Management

Impact of information technology on human resources can be studied in three stages of its application:

- **Automation:** In this stage, information technology (IT) is applied for automating manual systems and alleviating the need to individuals for doing the routine tasks; this reduces volume of routine official works. Individuals will have more time to think and can employ their own cognitive abilities and will mainly deal with information interpretation. In this state, IT can affect operational aspects of human resources and alter its structure through automating operational affairs and alleviating official burden. For instance, IT advances have helped the organizations provide the respective services in a more efficient and effective way than intra-organizational choices via transferring some activities to IT service specialists [9].
- **Notification and Information:** When IT provides information it goes beyond the automation and automaticity so as to improve efficacy. IT notification heightens transparency level of activities, events and objectives because individuals achieve further and more profound information about essential production and official processes of organization, and, know more about what happens in their organization or unit. In this state, IT can affect communication aspects of human resources through enhancement of quality level of services and reduction of access time [9].
- **Transformation:** Information technology equips the company with commercial operations and actions. And, transformation, creativity, knowledge and information are major and substantial resources of organization. In this dimension, IT participates in invention of product, service and strategy as it does in improvement of flexibility and competitive advantage. In this case, IT enables establishment

of relationship with overseas and also makes it possible to share their information. In other words, time and place limitations are omitted. As a result, HR managers encounter a new culture and think outsidings of present framework and formulate the novel innovations [9].

Enhancement and improvement of official efficiency and usage of different dimensions of technology enables human resources managers to use fewer personnel and play more value-creating role and function in their organization. Rapid evolution of electronic service systems of human resources has helped provision of larger deal of information for personnel and managers in a more suitable form and format, and hence, they are able to benefit from this information in alignment with organization's resources. Electronic human resources management (e-HRM) in fact endorses human resources management via taking advantage of advanced technologies and inclusion of abundant utilities [7]. In alignment with automation of interactions, electronic human resources management acquires the information technology as a practical means and provides the managers with the suitable strength through designing the following subsystems:

- E-Succession Planning and Career Management
- E-Salary Review based on performance
- E-Training Management
- E-Recruitment and Selection management
- E-Performance Management
- E-Skill Management
- E-Discipline and Grievance Management

It can be actually stated that performing duties and activities by human forces including managers and employees without benefitting from information technology slows down work procedures in the current organizations, and even, leads to devastation and disintegration of organizations in the modern challenging and stressful world [10].

2-1- Electronic human resources management

Electronic human resources management is a relatively new word for endorsement of human resources management by information technology especially through application of web technology. Electronic human resources management can be defined in limited level as organizational (executive) support of human resources duties using internet technology [7].

ROEL (2004) explained objectives, policies and strategies, types and consequences of electronic human resources management by presenting the following model (Figure 1) [11].

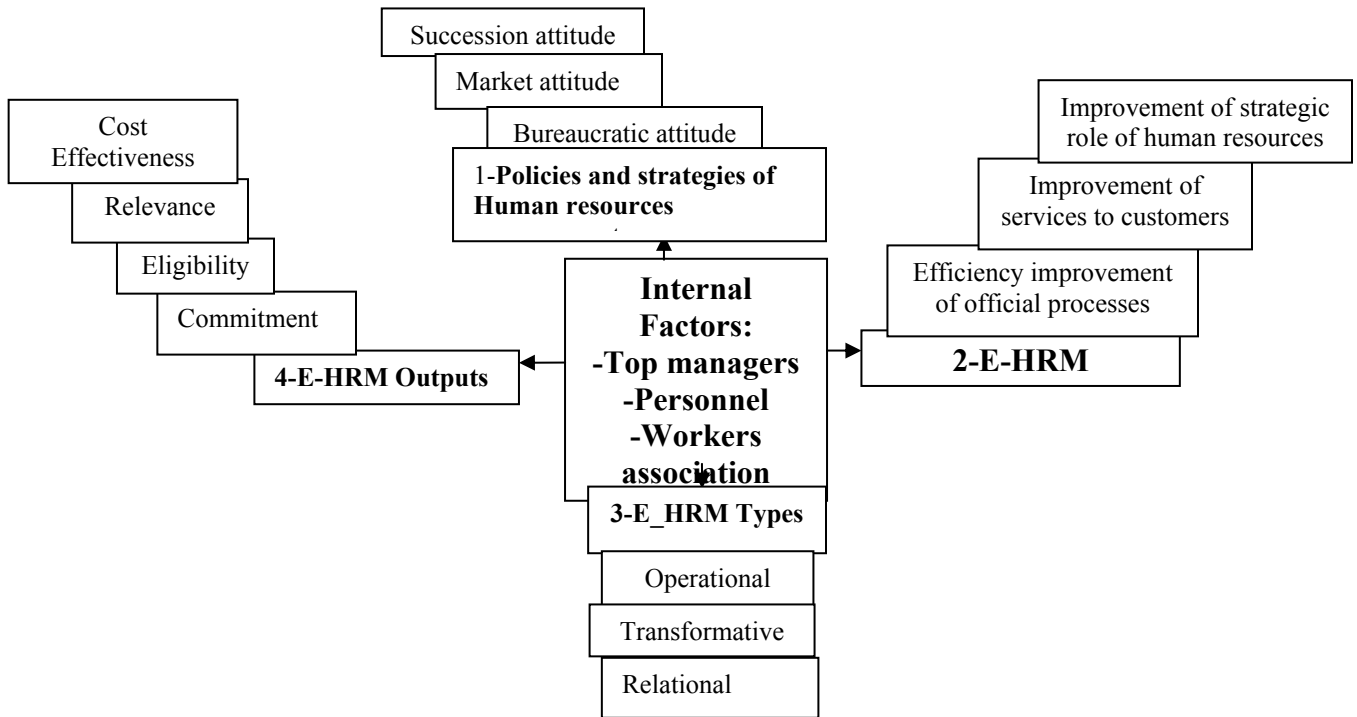


Figure 1: Electronic Human Resources Management Quoted from ROEL (2004)

The model proposed in the current research consists of 4 components including:

- 1- Policies and strategies of human resources management: The policy followed by human resource management in an organization can be divided into three categories: bureaucratic policy, market policy and succession policy. Bureaucratic policies are particularly found in organizations which operate in static environment, which encompass technological, economical and social aspects. Market policy is mainly observed in organizations which quickly respond to changes in their environment; for example, markets with intense transformations. Ultimately, succession policy is found in organizations which are completely reliant on quality and creativity and innovation. Personnel's specialties are essentially crucial in such companies for organizational success.
- 2- Objectives of electronic human resources management: Four requirements have been mentioned for electronic human resources management. First, HRM departments shall be asked for focusing on strategic questions. Second, these departments need to be flexible in their policy-makings and practical measures. Third, HRM departments shall work efficiently and be aware of expenditures. Fourth, departments of human resources shall be

service-oriented toward management and personnel, and briefly speaking, they shall be concentrated on flexible, efficient and customer-oriented strategy and assume all of these features simultaneously.

- 3- Types of electronic human resources management: e-HRM is not a specific stage in development of human resources management but a choice for attitude of human resources management. Three domains of human resources management are introduced in this model: Operational human resources management, relational human resources management, and transformational human resources management; In the first domain or operational human resources management, discussions pertain to fundamental activities of human resources in the scope of management and administration. The second domain or relational human resources management deals with advanced HRM activities. Here, emphasis is not on administrating but on tools of human resources which support basic business processes such as employee-detection and selection of new personnel, training, evaluation and management of rewards and salaries. Transformational human resources management as the third domain discusses about HRM activities having strategic features. In this

domain, the activities are discussed taking into account processes of organizational changes, repeated strategic tendency, strategic eligibility management and strategic knowledge management.

- 4- Outputs of human resources management: outputs of human resources management include: high commitment, high eligibility, effectiveness of costs and higher relevance [11].

1- Innovation

Researchers have described diverse aspects of corporate entrepreneurship. Some of these aspects reflect slight changes in activity method of an organization and some others indicate fundamental and significant alterations.

Innovation is the only common infrastructural idea in all forms of corporate entrepreneurship [12]. Although innovation is not regarded a sufficient condition in entrepreneurship but Queen and Miles contend that corporate entrepreneurship will not be existent without innovation. Having accepted this presumption that innovation is among features of corporate entrepreneurship, there is yet disagreement among researchers on whether new products shall be created inside an organization to be assumed as a manifestation of corporate entrepreneurship. They define corporate entrepreneurship as improvement of organization's capabilities and expansion of its opportunities through innovations made inside the organization [13]. The following aspects are indicative of different degrees of innovation:

- 1- A person or a group offers and supports a novel productive idea inside an organization in order to create a new revenue source from that idea [14].
- 2- An organization exploits a new product or a new market combination inside the organization and in addition to the current situation [15].
- 3- An organization receives an innovation license (patent) for presenting a new product or service [16].
- 4- Organization sells a product or a market opportunity to another organization or person.
- 5- Organization substitutes its current products and services with new ones [17].
- 6- Organization dissolves a strategic business unit and establishes a new unit or a purchased unit instead.
- 7- Organization purchases another organization or new product and service so as to step in a new industry [16].
- 8- Organization is involved in a foreign market and fundamentally increases its foreign sales [18].
- 9- Organization establishes another new organization intended to benefit from a new market or commence a new product or service [19].

- 10- Organization takes use of new information, new materials or media (internet) for making revenue [20].

- 11- Organization introduces a Schumpeter innovation which transforms competition rules in its industry. Therefore, new revenue currents are secured [21].

The abovementioned aspects are not absolutely distinctive and might coexist in the same organization [12]. There are other aspects of innovation which do not take into account the revenue making issue, including: research and development, improvement in systems, methods, processes or even products as the objective of these improvements is not to create income [20].

2- Relationship between innovation and systems of electronic human resources management

Few researches have been devoted to investigate effect of systems or ensemble of human resources activities on innovation. SUTARIS (2002) stated in his study that attention to social capital and also the granted rewards for participation in innovation are both highly significant in organizations' innovation status. This study recommends the need to strengthen riskability and innovative activities through allotting external rewards. His study is interesting from the viewpoint that services compensation and payment are the most important factor for innovation among all activities of human resources [23].

LARSON (2002) stated that modern activities of human resources management such as (team work, authority assignment, and performance-related payment) more remarkably affect innovation when applied in combination, and, this relationship varies as a function of how knowledge-based industries are. Accordingly, these studies implicitly assume an organizational learning attitude. Team works are positively correlated to innovation in moderately knowledge-based industries [3].

Performance-related payment plays crucial role in highly and moderately knowledge-based industries. In systematic level, a combination of activities of human resources management is related to innovation in highly and moderately knowledge-based industries. LARSEN & FUSS (2003) realized in another research in Sweden that duty-based coherency and internal training predict and explain the innovation. Thus, these studies support a behavioral attitude toward innovation and human resources management, in which activities of human resources contribute to directing favorable behaviors [21].

To sum, the experimental researches in the scope of human resources management on innovation dimension of corporate entrepreneurship reveal numerous topics which require further analysis. Specifically, a pivotal issue is to create motives and grant rewards for riskability when role of individuals'

informed participation in corporate entrepreneurship is focused. Another idea accentuated by researches with regard to innovation in human resources systems is the fact that activities of human resources management might create an atmosphere that supports collaboration and participation and brings about formation and promotion of development of social and human capitals, and consequently, encourages organizational learning. Although theory of organizational learning has not been explicitly referenced in these studies but activities of human resource management can evidently lead to promotion of organizational context for learning. Therefore, experimental researches in the field of human resources and innovation recommend two major routes for further investigations: promotion of riskability through economical interaction and creation of a social interactive environment which causes knowledge generation and sharing [3].

Studies in the scope of human resources management systems apply an approach prevailing in analyses of human resources management and consequences in organization level. It is generally stated that activities of electronic human resources strengthen each other when they are internally compatible. In this way, the combination of agents will have synergic impact on favorable behaviors of employees. However, scarce studies have analyzed collective influence of human resources management activities on general corporate entrepreneurship level, and in most cases, synergy issue has not been taken under consideration [3].

HORNSBY et al. (1999) identified five success factors which link activities of human resources to corporate entrepreneurship. These factors include: suitable usage of rewards, provision of manager's support for innovation, accessibility of resources for innovation, an organizational structure leading to learning and collaboration and individual riskability [25].

Maurice & Jones (1993) in a study on 112 companies of different industries identified five collections of human resources management activities which are related to corporate entrepreneurship: performance assessment, payment, training, recruitment and job succession development, and job designing.

First, assessment of performances is oriented toward objectives instead of tools; it evaluates both individual and collective performances. Their contents include innovative and riskable behaviors [26], reflect failure tolerance and consider longer time frames compared to traditional management.

Second, in innovative organizations, payment emphasizes on external equality instead of internal equality. Base payment is lower and large part of payment belongs to risk. Innovative organizations

establish balance between short-term and long-term performances and individual and collective performances.

Third, innovative organizations spend large deal of time and efforts to learning and pay more attention to collective trainings. Fourth, innovative organizations emphasize on external market and offer diverse job successions.

Eventually, job-designing is less structured and more intricate and provides more freedom of action and authorities. Nonetheless, impacts of synergy of these activities have not been much studied [2].

At the end, HEITON (2004) distinguishes a difference between activities of informed and intelligent human resources management and traditional activities. Informed and intelligent activities like motivating payments, employees' recommended plans and official programs of personnel's participation represent activities which spur commitment of personnel, collaboration, knowledge sharing and voluntary and ultra-functional behaviors.

On contrary, activities of traditional human resources are focused on definition and determination of careers, manpower-searching for jobs through an adaptation and predetermined performance monitoring process. In a study, HEITON (2004) provides evidences from small and medium-sized businesses in the United States suggesting that informed and intelligent activities lead to innovation promotion in organization and this relationship is stronger for organizations which operate in high-tech industries [3].

A common trend in the studies conducted concerning innovation and human resources management activities is the need to human resources systems for supporting unofficial activities of employees aimed at encouraging collaboration and avoidance of unnecessary and bureaucratic restrictions. Although it is conceptually logical to expect activities of human resources management to synergically affect innovation but the evidences and documents are yet very scarce. Though there are some compatible activities in this regard like provision of organizational support, precise design of payments and performance management systems; yet when details of these activities are analyzed, important requirements such as technology, strategy, environment or life cycle of organization rarely are taken into account.

Another limitation in the research scope concerning the relationship between human resources management systems and corporate entrepreneurship is general absence of relevant and commensurate theories [2].

In the next section, two major subsystems of electronic human resources will be studied; these subsystems are referred to as "electronic payment (salary) and reward subsystem" and "electronic

performance management subsystem” and their impacts on encouraging individuals to innovation will be discussed.

4-1- Electronic payment and reward subsystem

Salary and reward systems and electronic payment are regarded as the main subsystems of management system of electronic human resources in the organizations. Management of reward and payment system needs to pay attention to four subjects for creating innovative conditions:

Good rewards, long and short-term attitudes, use of diverse rewards, and attention to principle of equality [27].

BALCANE et al. (2000) asserted that to encourage riskability and innovation in the organization some portion of total salary must be based on innovation and riskability level and not on consequences and achievements of innovation like profit rise. Thus, payment level shall be related to these behaviors for encouraging riskability, innovation and entrepreneurship. In innovative organizations, reward and salary criteria are clearly and explicitly declared and riskability, innovation and pioneer behaviors are supported and encouraged [28].

The personnel will try to create ideas when they figure out that managers award novel ideas. Granting tangible and perceptible rewards is the best way to derive personnel’s confidence to managers and idea-creation. A reward system can be defined based on incentives of an organization, salary-reward criteria and reward distribution process. Reward system

determines organizations’ relationship and its members through specifying interaction type of individual and organization or in other words, by specifying type of participation and the personnel’s expected attempt as well as their expectations with respect to their performance besides other values and norms of the organization. Overall, it can be asserted that managers in innovative organizations are involved in several fundamental issues related to reward and salary system:

- A) Definition and evaluation of what shall be rewarded, which includes definition of successful criteria in an organization such as financial results (profit, return on equity) and non-financial outcomes (better utilization of production capacity, technical progress and gaining reputation in the market).
- B) Successful execution and management of reward and salary system, which includes diversity of rewards and salaries.
- C) Long-term and short-term attitude toward salaries and rewards
- D) Establishing suitable relationship for awareness of individuals’ expectation level and assurance about real function of salary and reward system
- E) Attention to justice in rewards and salaries

Altogether, it must be concluded that reward systems of innovative organizations differ in terms of philosophy of using reward, criteria, and its combination. Features of reward system in innovative organizations compared to traditional organizations are summarized in table (1) [27].

Table 1- Comparison of reward systems in innovative and traditional organizations

Features of Reward System	Traditional Organizations	Innovative Organizations
Philosophy of using reward	--- is based on win-loss condition i.e. there is not sufficient reward for supporting all individuals who qualify receiving rewards. Thus, competition philosophy is dominant	It is based on win-win condition i.e. there is sufficient reward for supporting all individuals who qualify receiving rewards
Rewarding criteria	--- are not based on riskability and innovation	It is based on riskability and innovation
Internal rewards	--- is less paid attention to, and in the case of taking into account, structure of organization’s strategies appears as obstacle	--is considered a crucial issue and cause of commitment
External rewards	--- are mainly taken into account and emphasized	--is considered important but is suitable up to a certain point
Flexibility	Rewards are inflexible (merely, organizations’ expediencies are taken under consideration)	Reward payment is made according to individuals requirements and also organization’s request)

Reference: Cornwall & PEARLMAN, 1990

4-2- Electronic performance management subsystem

Performance assessment system is another subsystem of human resources management system,

which can play a significant role in formation of entrepreneurial behaviors. Performance assessment represents a process within the whole performance management process and is defined as follows:

evaluation of working performance of each person in order to make objective personnel decisions [29].

Objectives of performance assessment must be based on duty and strategy of organization [30]. In general, performance assessment in organization is supposed to enjoy some features so as to better nurture creativity and innovation in organization. Performance assessment in innovative organizations takes into account different special short-term, long-term and mid-term criteria for creativities. Evaluation of leaps is concentrated on future and secures equilibrium between freedom of action and control [1].

Many governments at present are modifying the equilibrium of their management system toward performance-based management systems. Matson (1998) proposed 8 characteristics or indices of performance-based systems or organizations:

- 1) Clarity of role (function)
- 2) Clarity of objective
- 3) Responsive and accountable managers
- 4) Reward for good performance
- 5) Managerial and budget-allocation systems that endorse the performance
- 6) Accountability and transparency
- 7) Appropriate capabilities of personnel
- 8) Cultures and values which are aligned with organizational performance [31].

Matson's list of features can serve as a suitable starting point to analyze efforts for different countries to revise performance and activities of government for enhancing its productivity and realizing citizens' requirements.

Normally, the term "management control systems" reminds of managers' application of different techniques in hierarchical organizations with the purpose of supervising over personnel and evaluating their performance in regard to pre-determined objectives. Based on this definition, traditional control systems seek for improving operational efficacy. Yet, management control systems shall be developed in a way that they would be allowed to take advantage of business opportunities through fostering personnel's participation and creativity because operational efficacy has no longer a remarkable strength as the factor of creating competitive advantage.

Discussion and Conclusion

With further complexity and viability of organizational environments, innovation is expected to become more significant in achieving and maintaining competitive advantage. Significance of HRM in encouraging innovation has been accepted

by researchers since long time ago and many reasons have been offered for, as mentioned in the current research too.

Managers and personnel shall both play a viable role in implementation of human resources activities when an organization seeks for achieving electronic human resources management. Electronic human resources management as a collection of generated ideas is provided for individuals and organizations through hardware mechanisms, and play substantial part in development of human resources.

Currently, knowledge generation and expansion, modification and innovation in human resources are easily fulfilled via electronic human resources management leading to progress of an organization's staff. Information technology and electronic human resources management plays an effective role in professional development, institutionalization of modification and innovation, improvement of commitment, enhancement of eligibility and capacities, efficacy of costs, and improvement of concurrence and coherency. It can also contribute to human development; however, radical changes and transformations can be hardly expected as long as human resources department still continues to maintain its traditional techniques.

It must be mentioned that organizations and companies shall proceed step by step i.e. they need to follow operational and relational stages as subsets of electronic human resources procedures and shall localize and take them into account regarding type of their approach, attitude and culture. They have to employ an accurate and rigorous planning process for this purpose.

Salary system is considered as one of the most important subsystems of human resources management in any organization. As mentioned by Cornwall and Pearlman (1990), payments in salary system of an innovative organization are related to performance not physical presence. Payments are flexible and consider riskability and creativity criteria of individuals [27].

Suitable incentive and reward system is recognized among the most effective factors in organizational innovation. Thereby, payment levels must be commensurate with these behaviors for encouraging innovation and entrepreneurship. In innovative organizations, reward and incentive criteria are clearly and explicitly declared and riskability, innovation and pioneering behaviors are supported and encouraged.

Performance management is defined as a strategic and coherent approach in order to guarantee sustainable success of organization through improving individuals' performance and development

of capabilities of individuals and teams. The major criteria in the current research as indices of innovation-based performance assessment system included paying attention to individuals' creativity, emphasis on measurable objectives and focus on opportunity of learning from experiences.

Researchers must be aware that innovative processes or measures might lead to favorable outputs in one dimension and unfavorable outputs in another dimension. For instance, large-scale investment in development of a novel technology might enable the organization to achieve a competitive advantage and sales growth in the long term. However, commitment of resources requiring such investment can reduce the short-term profitability. Practical researches have revealed that advantages of innovation-based activities and processes mainly blossom in long term and during several years.

Accordingly, the researches merely focused on short-term outputs lead to inappropriate results. And for the same reason, it is recommended that other research works shall be carried out on application of non-financial criteria for better assessment of achievements of innovative activities.

The organization will have comprehensive information about all individuals by means of electronic human resources management. Organization's personnel can also have access to their records and credentials and use and even update them if necessary. Advantages of this system are:

- Comprehensive and applicable information about all personnel using themselves
- Awareness of personnel concerning the information type organizations have about them
- Determination of individual's position in the organization
- Timely and up-to-date usage of organizational structure, vocational functions of organization and the reports associated with relations
- Job progress succession and substitution chart for all staffs
- Helping the manager in decision-making process

All these factors result in more remarkable role of electronic human resources management in achieving organization's goals. And, since identification and recruitment of suitable persons is the primary and most essential duty of human resources management, as a consequence,

organization's managers with the aid of subsystems of electronic human resources management and also by making appropriate and due decisions are able to provide their organization with the best competitive advantage and this means effectiveness of electronic human resources management.

The current research attempts to determine the role of electronic human resources management in facilitation of innovation in the organization. Keep in mind that the present paper is a report of a research currently being conducted. Research results up to now are indicative of the fact that lack of innovation -facilitating features in subsystems of electronic human resources management considerably hampers evolution of innovative behaviors in the organization. Therefore, it is vital to establish a human resources management system which facilitates innovation in the organization aimed at encouraging and motivating individuals to develop organizational innovation.

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