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Innovative Technology Impact on Human Resource Management

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Abstract:

"What is the calculus of innovation? The calculus of innovation is really quite simple: Knowledge drives innovation, innovation drives productivity, productivity drives economic growth".

- William Brody (born 1944), Scientist

Human Resource Management Innovation is the implementation of new ideas, methods, and technologies to better meet the ever-evolving requirements of the organization and its workforce. It's about anticipating future needs and circumstances rather than simply finding a response to a changing present situation. Human resource management (HRM) and development, learning, knowledge management and innovation represent complex and dynamic fields that draw upon multiple disciplines and emphasis the need for multilevel consideration. The present study aims to provide clarity about innovative HRM, measurements, determinants of innovative HRM, impact of Innovations on HRM and how innovative HRM relates to organizational innovation.

KeyWords: HRM Innovation, new ideas, new methods, New technologies, Knowledge management, Organizational Innovation.

INTRODUCTION

Innovation is the implementation of new ideas, methods, and technologies to better meet the ever-growing requirements of the organization and its workforce. It's about anticipating future needs and circumstances rather than simply finding a response to a changing present scenario. Human resource management (HRM) and development, learning, knowledge management and innovation represent complex and dynamic fields that draw upon multiple disciplines and emphasize the need for multilevel consideration. Such dynamic complexities present opportunities and challenges in an attempt to develop holistic theoretical approaches of how people management implications might contribute to sustainable innovation and performance. The various contributions to this book raise awareness and contribute to a shared understanding of innovation and HRM from multiple perspectives. They highlight the implications for people management through different lenses, including strategic and systems approaches at the level of the organization, leadership, learning and the contribution of the broader national context to skill development.

Skill development is a vital tool to empower people, to safeguard their future and for the overall development of an individual. It is an important aspect that enhances employability in today's globalization. Skills are as essential as one's academic status. Education and skills should now go hand in hand. Nowadays, entrepreneurs with business acumen have acknowledged the power of information technology (IT) tools for reaching business targets. It not only helps achieve the business goals but also optimizes the work processes.

Human Resource Management (HRM) includes activities such as recruiting, training, developing and rewarding people in the organization. HRM must aim at achieving competitiveness in the field of HR by providing constant educational and training programs for the personal and professional development of the employees of the organization. Human Resource must mainly be focused on the strategic objectives of the organization. These strategies must be led to incorporate an IT strategic plan for the organization. These are activities related to any development in the technological systems of the entity, such as product design (research and development) and IT systems. Technology development is an important activity for the innovation process within the business, and may include acquired knowledge. In the context, all activities may have some technical content, and results in greater technological advancement.

Innovative Technology impacts on Human Resource Management.

Innovative Technology can make the following major impacts in Human Resource Management.

1. Better services to line managers

Strategic planning between HR and line managers is important for reviewing projections concerning future business demands to determine whether to train current employees, to prepare them for promotion or to recruit candidates with the



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higher level of skills to supplement the current employee knowledge database. Training and developing the line managers in IT tools will, therefore, prepare the line managers for a number of leadership tasks.

2. Enhancing management

Human Resource IT tools that can supplement management and enhance efficiency and effectiveness, which can lead to the success of the organization as a whole. For example, currently, Success Factors Solution has developed an HR IT tool of talent management for Hilton Worldwide, which had a worldwide operational capacity. Organizations across the world are driving to improve organizational performance regardless of the size of the organization or the industry.

3. Effective recruiting

Nowadays, organizations have realized that effective recruiting cannot be done without the use of IT. Organizations now use job portals on the internet to search for the best candidates for the position. The process has been made effective with the use of the internet as many people come to know of the offer and hence increases the probability of hiring efficient employees.

Employers can present all necessary information related to job, careers and personal development of each employee on portals online. This is a great promotional tool for the organization. Currently, Envoy has developed <u>Asana</u>, an IT tool for recruiting that analyzes details down to where a potential candidate's high priority values are. The HR IT tools not only help hire the best potential but also retain it.

4. Data management and critical analysis

Data management becomes easier when IT is used and it becomes paper-free. Many of the monotonous work is no longer manual. This increases the efficiency of the work and the effectiveness of it. Organizational performance can lead to the timely success of the business whether in a stable or an unstable environment.

Employee's performance data can be critically analyzed by the HR IT tools more often if it's online and becomes readily accessible to everyone.

5. Inventory management tools and human resource management

Entrepreneurs with business acumen describe that the performance of an organization can be made more effective and efficient by customer intimacy, operational efficiency, and leading edge. Customer needs must be met by customization and by providing outstanding customer instances. For this purpose, organizations use HR IT tools to provide a universal set of products and diversify the business by providing improved products and services.

6. Cost-reduction and efficiency

Organizational performance can be increased by implementing management by objectives and using a participative style of management through Human Resource Information Technology tools. The management of an organization is accountable to the owners of the business for the performance and the achievements of the organization. Managers can perform well and justify their authority only if they produce the desired economic results, for instance, the profits they have desired to achieve in a period of time. Management often uses the Operation's Research to maximize the profit, yield, utilization and the performance. The management of an organization usually creates a measurement system to set targets for change and measure organizational performance.

7. Customer service and human resource management

Organization performance can also be described by evaluating the reliability of service and by understanding the quality of customers of the organization. Value can come from providing a reliable service, so that the customers know that they will receive the service on time, at the promised time, to a good standard of performance. As organizational change is inevitable, critical success factors and key performance indicators should be revised, and relevant Human Resource IT tool must be devised for the better quality of work. Doing good quality work and providing quality results will increase organizational performance.

8. Career development and human capital management

The career planning tool is a learning and knowledge-based system that helps successful businessman around the world to manage their personal development and career paths along with those of their employees. Performance evaluation and career progression can be a key motivating factor for the employees to work effectively and efficiently. Performance measurement and reward systems in an organization establish views of priority i.e. what is important and what is not so important. Thus sound performance evaluation systems HR IT tool is crucial for the organization.

Human Resource IT tools have great organizational effects; provide better services to line managers, serve as a pipeline connecting a personal policy and personal processes in all organization, facilitate personnel management in the company, provide important data for a strategic personal decision-making and enable a quick acquiring and analysis of information for HR assistants and reduce cost labors at performance of personal activities.

9. Automation of HR processes

Human resource management is an incredibly complex domain that involves many processes. And it often happens that HR specialists spend too much of their precious time on mundane, monotonous activities instead of focusing on more serious issues.



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The implementation of technology into the HR workflow frees the professionals from a great amount of routine work. The automation of processes eliminates paperwork, speeds up the execution of many tasks, and contributes to more efficient HR performance.

The advancement of technology means companies can use the latest innovations, such as machine learning to screen resumes and augmented reality to onboard new employees.

It is important to remember though that the whole HRM domain is impossible without people. A lot depends on the empathy and experience of an HR specialist, but the deployment of technology can significantly improve the quality of work of a single specialist.

10. Availability of HR tools

Some time ago, HR specialists struggled with endless phone calls, emails, and paperwork. They had to keep dozens of processes and tasks in mind. Now, there are hundreds of available HR tools that are designed specifically to facilitate and optimize the work of HR specialists.

The features of the HR software include:

- Streamlining workflows
- Organization and management of employee data
- Creation of detailed employee records
- Social collaboration
- Management of payroll, vacation, and bonuses

The transition to a digital working environment enables modern HR specialists to perform certain tasks in a faster way and thus, pay more attention to such issues as the satisfaction of the employees, optimization of the recruiting and on boarding processes, employee motivation, etc.

11. Advanced candidate search

One of the main responsibilities of an HR specialist is finding and recruiting the specialists that a company needs at the moment. IT significantly changed the way these processes are approached.

- The Internet granted HR specialists an opportunity to search for candidates worldwide.
- HR specialists can use advanced tools (i.e. Artificial Intelligence) to screen the resumes and pay attention only to those profiles that strictly match the requirements.
- HR specialists now have access to various online platforms where they can find candidates: Stack Overflow for developers, Quota for managerial positions, etc.

12. A new way to brand a company

Company branding is an important factor in attracting and retaining employees. Thanks to IT, companies now have an option to build strong online presence and reach numerous potential candidates with minimal effort.

13. Analytics grants access to more data

Finally, Information Technology granted HR specialists access to sophisticated analytics, taking their work to a new level. **Measurement of Human Resource Management**

The following criteria to measure the efficiency of the Human Resource Management

- 1. Recruitment cost report.
- 2. Labor productivity report.
- 3. Labor turnover report.
- Discipline.
- 5. Employee morale.
- Welfare provisions.
- 7. Employee satisfaction.
- 8. Cost-effectiveness

MEASUREMENT OF HUMAN RESOURCE MANAGEMENT

Human resource management is concerned with staffing, motivating, maintaining good employer-employee relationships, and running welfare services. The performance achieved in all these spheres will have to be assessed by the general management to ascertain the efficiency and quality of personnel man. Many criteria can be used to measure the effectiveness or ineffectiveness of the HR department.

Experts used the following criteria to measure the efficiency of the HR department:

- 1. Recruitment cost report.
- 2. Labor productivity report.
- 3. Labor turnover report.
- 4. Discipline.
- Employee morale.



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- 6. Welfare provisions.
- 7. Employee satisfaction.
- 8. Cost-effectiveness.
- 9. Timeliness.
- 10. Adherence to Policy.
- 11. Industrial relations.
- 12. Profitability.

1. Recruitment Cost Report

This report indicates the recruitment cost for different categories of employees and compares such costs with results over time.

If the recruitment cost has increased over the year, it reflects the inefficiency of the HR department. If it has reduced, it is an index of successful HR policy.

2. Labor productivity report

Although labor productivity depends not only on the efficiency of labor but also on many other factors that lie outside the personnel department's jurisdiction, yet the personnel department is mainly responsible for maintaining an efficient workforce.

Comparing labor productivity and efficiency of different departments and between different periods is a good index of labor productivity.

If the total productivity falls, the personnel department is inefficient; if it rises, the personnel department will be considered efficient.

3. Labor Turnover Report

Labor turnover may be used as an index to judge the efficiency of the personnel department. One of the most important tasks in the management of employees is to make sure that labor turnover is minimized and that all vacancies that exist are filled. Labor turnover measures the number of people who leave a business in a given period as a percentage of the average number of people employed during that period. Excessive labor turnover indicates a failure of personnel policy, while lower turnover reflects the success of such a policy.

4. Discipline

Discipline is an indication of the success or failure of the personnel policy concern. Discipline is good when employees follow the company's rules willingly, and discipline is said to be bad when employees disobey them.

5. Employee Morale

The effectiveness of the personnel policy determines the morale of the employees. Morale is the state of mental health. An individual's morale is high when he is happy with his work, surroundings, and fellow-beings. High morale indicates the efficiency of personnel administration, while poor morale reflects its failure. Poor morale is reflected in high absenteeism, turnover, accident records, grievances, and lower levels of output.

6. Welfare Provisions

The HR department looks after welfare activities within the organization. When workers feel that the company has an adequate labor welfare policy, their tendency to complain and protest will disappear.

Welfare activities will reduce labor turnover and absenteeism and will increase the efficiency of the workforce.

7. Employee Satisfaction

When employees are satisfied, they work hard, and their commitment to the organization will be increased.

8. Cost-Effectiveness

The cost of work performed should be used to measure performance only if the employee has some degree of control over costs.

9. Timeliness

How fast work is performed is another performance indicator that should be used with caution. In many cases, projects are not completed on time.

10. Adherence to Policy

Deviations from policy indicate an employee whose performance goals are not well aligned with those of the company.

11. Industrial Relations

The management of human resources may also improve industrial relations.

A business may consider that a reduction in industrial disputes, days lost through industrial action, and grievance against the business by employees might indicate effective management.

12. Profitability

The main aim of most private sector businesses is to make a profit.

Modern approaches to HRM suggest that the management of human resources should be geared towards improving workers' productivity, reducing costs, raising revenue, and increasing profit. Increasing profit may be a result of improvements in HRM.



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EXAMPLES OF SUCCESSFUL HR INNOVATION

The following are examples of successful HR innovation.

- 1. Recruitment innovation: Good recruitment is essential to the success of every organization.
- 2. On boarding: Strictly speaking, on boarding could be considered as a part of recruitment.
- 3. Learning and development (L&D): Another area where we see a lot of HR innovation is that of employee learning and development (L&D).
- **4. Talent management:** Talent management and HR innovation, one of the first things that come to mind is the talent management dashboard (TMD).

A Talent Management Dashboard has 5 main functions: Reporting, Performance management, Engagement with talent, L&D and Talent pipeline

5. Performance management

Although there is a lot of innovation going on in performance management-land, today we focus on the feedback part. For example. Today's performance management technology enables organizations to let their employees – and managers – give and receive continuous feedback.

The present study generates some insights that can be of use to (HR) managers of organizations. First, given that the innovations of the HR functions are interrelated, the study suggests that it makes sense to introduce different HR innovations similarly. Organizations doing that can achieve an internal fit between the practices. Innovation only one of the HR functions may actually undermine the existing fit. Then, the results show that innovative HRM is strongly related to the expectation that the organization faces issues in the near future. This may underscore that organizations that are likely to experience these issues try to be prepared for the future. For practitioners, this implies that they should consider if their organization has to deal with similar issues (in other words: enhancing their capability to look forward) and, in addition to that, if innovative HRM is required to deal with the issues.

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