

An In-Depth Examination of Information Technology's Role in Advancing Human Resource Development

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ABSTRACT

Human resource development, or HRD, refers to the efforts an organisation does to improve the abilities of its employees and to ensure that it retains a competent workforce. The study's overarching goal is to examine how technology progress affects HR practises. In today's modern businesses, technology is essential at almost every level. Several crucial points are covered in order to learn how to grow your human resources in a way that takes use of the technology your company now uses and will use in the future.

KEYWORDS: *Information technology, Human resource management, Human resource development, competent workforce*

INTRODUCTION

Human resource development (HRD) in organisations may be greatly aided by the use of information technology (IT). The HR process has been revolutionised as a result, and many good things have come of it. Some of the most important ways in which IT aids in HRD are listed below: Recruiting and snatching up top-notch talent: Employers now have more options for publicising job opportunities to a larger audience, thanks to online job boards, social media, and corporate websites. Applicant tracking systems (ATS) enable HR managers manage and expedite the recruiting process. In order to find the best applicants, resumes may be analysed using AI and machine learning.

Change and growth: E-learning platforms and LMSs reduce overhead costs associated with providing training and development opportunities to staff. Using a mobile learning app, staff members may access instructional resources from anywhere. Systems powered by AI can tailor training to each individual's needs and interests. Managing for Performance: Human resource management software streamlines and clarifies the performance review process by automating and centralising it. Human resources may use

analytics tools to collect and examine data about employee performance in order to spot patterns and pinpoint problem areas.

Communication and Employee Involvement - Digital communication and intranet portals improve teamwork and information sharing. Online surveys and feedback mechanisms facilitate the collection and analysis of employee input and attitudes. In order to help businesses make more informed decisions, HR analytics software analyses data to reveal patterns in employee behaviour. Human resources may use predictive analytics to better plan for employee departures, zero in on stars in the making, and make informed policy decisions. Legality and Documentation: Information technology solutions provide precise documentation of regulatory requirements, including payroll, tax information, and personnel records.

With the aid of compliance software, businesses can remain in compliance with ever-evolving rules and regulations governing the workplace. Work from home and adaptability: HR departments may better accommodate shifting work environments by investing in IT infrastructure and communication solutions that facilitate remote work and alternative work schedules. Self-Service for Workers: The administrative load on HR is lightened when workers can use self-service portals to access and update their own data, submit time off requests, and check their own performance evaluations. Workforce diversity and globalisation: When it comes to human resources (HR), IT systems help with worldwide management and ensure HR practises are uniform across areas and cultures.

Automation and intelligent machines: AI-powered chatbots may handle regular HR requests and duties, enabling HR professionals to concentrate on more strategic operations. Human resources tasks like data entry and new hire paperwork are prime candidates for robotic process automation (RPA). Human resource development (HRD) has been transformed by information technology (IT) because of its ability to streamline procedures, improve data analysis and decision making, enrich the employee experience, and allow businesses to respond to shifting workforce dynamics. In order to be competitive, efficient, and responsive to the demands of their workers and the wider business environment, organisations must integrate IT in HR.

Literature Review

According to Kumar (2016), "information technology" encompasses any and all methods by which data may be processed, stored, or transmitted. It could contain computers, networks, communication tools, electronic software and fax machines, even if their usage is becoming outdated with the new alternative ways of documentation. A broad range of services and apps, particularly those that help businesses create data and information, are also often included.

Since IT is seen as an intellectual and cultural system that could be called a "information production culture" (Rezaei et al., 2014), the most crucial part of IT is the information-oriented way of thinking and people who populate it. Information technology is not a collection of computers connected by wires and a bunch of people sitting around a table thinking about how to use them. Information is created by the thoughts of intelligent individuals (Rezaei et al, 2014).

It may also be used to describe the processes involved in creating and collecting data. Information technology provides access to data feasible to anybody anywhere by making computer programmes smaller, cheaper more user pleasant, and as easy as possible (Cascio, Wayne & Montealegre, Ramiro, 2016). Instigated on the premise of information technology, databases inside organisations play a crucial role in streamlining complicated information processes within the companies and spawning organisational networks by linking the organisations together. In addition, they shift the management team's focus from the immediate and intermediate future to the far future and beyond (Rezaei et al., 2014). In general, we find that the term "information technology" encompasses a wide range of domains, including hardware and software solutions that facilitate data collection, management, and analysis for businesses. In the end, this data analysis helps businesses achieve their goals.

In addition, IT encompasses the workflow procedures that may increase the company's revenue-generating potential (Sun et al., 2015). Information technology (IT) has a high profile among foundational sectors because to the significant role it plays in boosting productivity, social services, and employment prospects across a wide range of sectors.

Business organisations nowadays place a high value on IT applications due to their widespread importance across sectors (Yang, 2014) in areas such as productivity, social service, job performance, and opportunity enhancement.

OBJECTIVES OF THE STUDY

- Analysis of how technology progress affects training and education for new workers.
- The evolution of HRM evaluation metrics in response to the impact of new technologies.
- To learn how the shifts brought on by advances in technology have affected HRD methods.

Research Methodology

Researchers chose a convenient sample of persons of Ministry workers owing to the fact that we would experience some challenges with the random sampling due to the multiple locations of the study organisation and the unavailability of all employees mentioned.

Discussion

HRD METHODS FOR FUTURE-PROOFING TECHNOLOGY

Human resource development (HRD) may be thought of as an ongoing procedure that aims to systematically and deliberately foster the growth of workers' skills, energy, motivation, and efficiency. Among the other Indian writers, T. Venkateswara Rao has researched substantially on HRD. Human resource development, as he put it in the context of an organisation, is a "continuous planned process" in which workers are assisted in doing the following: acquiring or honing the skills necessary to carry out the different functions connected with their current and/or anticipated future responsibilities. Grow their talents as whole people and learn to recognise and capitalise on their hidden strengths for the benefit of both themselves and the organisation. Foster an environment where leaders and followers work effectively together, and where each department actively supports and benefits from the efforts of others.

FUNCTIONS OF HRD:

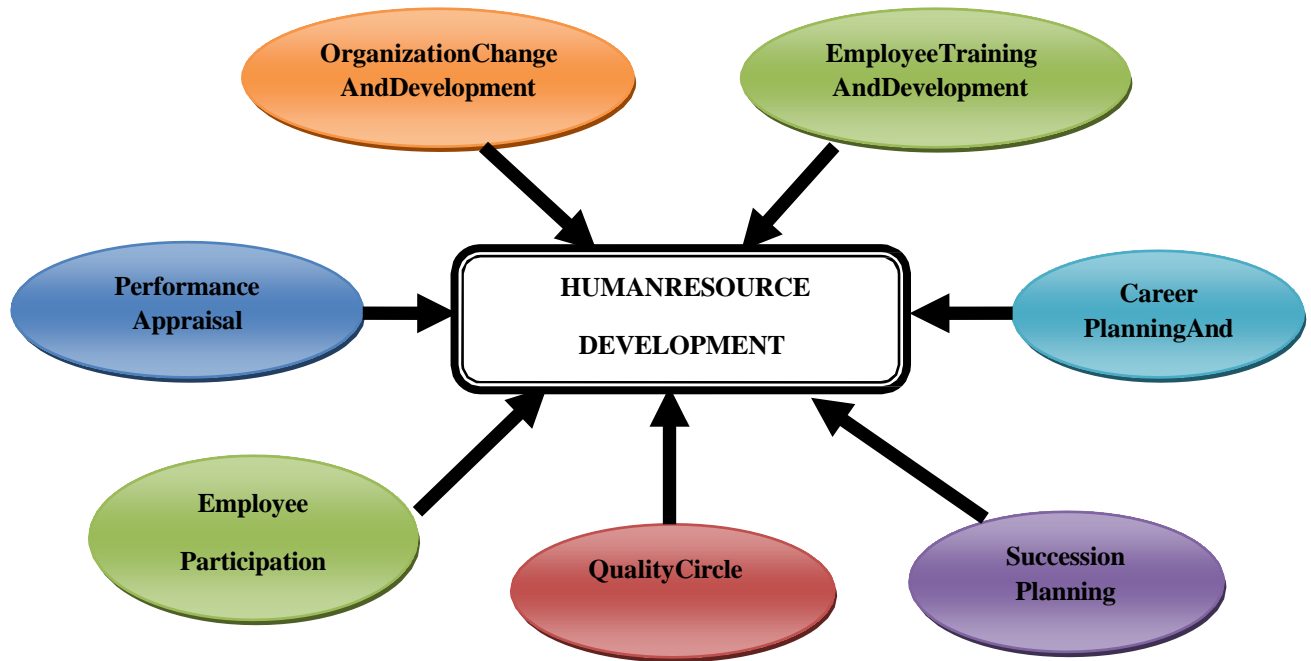


Fig 1 Functions of HRD

META-PERSPECTIVES OF HRD:

McGuire, et al. (2007) suggest four meta-perspectives for HRD research and practise in the last issue of advancements in Developing Human Resources. Human resource development (HRD) is vital to the advancement of knowledge and skill among people across communities, national borders, and economic spheres. Second, the language meta-perspective acknowledges the significance of language in the primary approach to HRD. Third, HRD is valued from a psychological meta-perspective since it improves workers' awareness of themselves and their colleagues and helps managers resolve conflicts amicably. Fourth, from a systems meta-perspective, it's clear that optimising the intersection of HRD policy, company culture, and external conditions is crucial.

MAJOR FACTORS OF HRD:

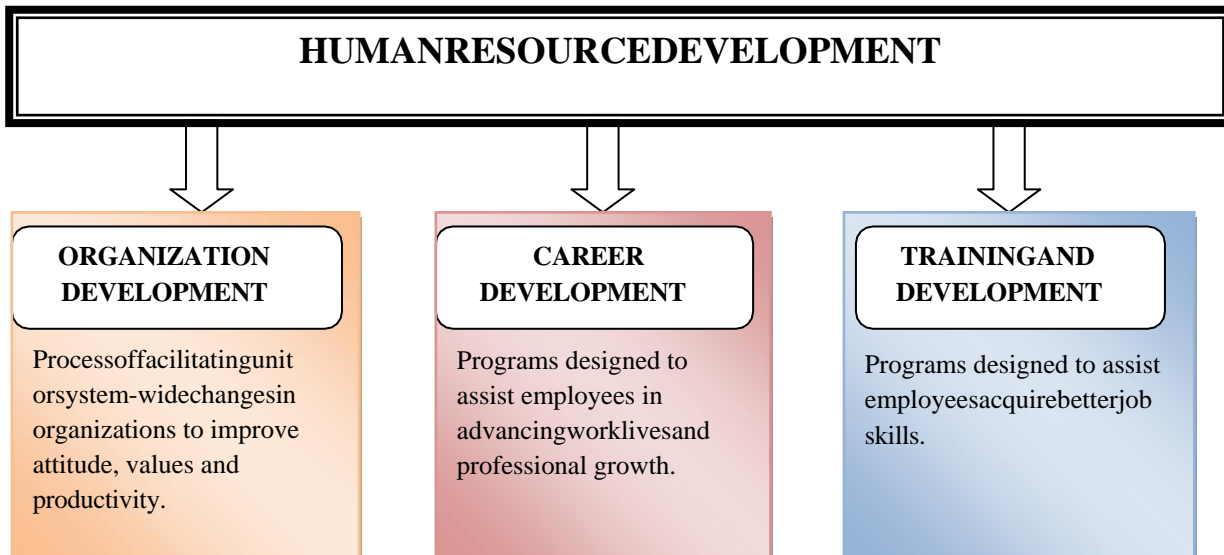


Fig 2: Major factors of HRD

What's the big deal about Organisational Development?

Both large-scale and incremental changes in the workplace are emphasised. The suggested adjustments are systemic in nature and are meant to boost the efficiency of the organisation as a whole. Micro adjustments focus on one person, one team, or one small group at a time. Enhancing organisational effectiveness via better communication is one of the primary goals of organisational development. Creating new groups and teams. Management has been replaced. Motivating others to work together. So why is it crucial to work on your career?

Investing in one's career is a certain way to help one's company succeed. Career development helps in enhancing both individual and organizational performance. Promotion is one method utilised in the process of developing one's professional standing. Transfer. Demotion or departure. What can you learn from training and development? Why is Training and Development Crucial? Worker productivity has increased. Consistency in carrying out assigned tasks. Maintaining contented employees. Saves money. Lessening of oversight. Efficiency gains. Improved quality of service and goods.

PROGRESS IN TECHNOLOGY

The basic viewpoint of HRD is to increase organisational efficiency by developing an individual knowledge, skills, and expertise technology has important significance. Human Resource has progressed greatly because of a number of important elements. Similarly, technology is an integral part of HR. Technology's effects on the nature of employment and the difficulties that workers face are substantial. Businesses need to upgrade to modern technologies if they want to thrive. Maintenance of cutting-edge technologies requires trained personnel before they can be fully used. In order to increase their value to businesses, HR departments have developed additional responsibilities as a direct result of technology progress. The HR department may now more easily share data on company rules, recent publications, and more thanks to advancements in HR IT.

Human Resource is growing into a more technology-based profession because organisations need to: Streamline HR operations and decrease administrative expenses. Save money on human resources management and regulations. Improve your ability to compete for talent throughout the world. Boost support and information availability to workers and supervisors. Allow HR to evolve into a more strategic function for the company. Deliver real-time metrics for better trend identification and management for decision-makers.

The HR department's ability to communicate with workers, maintain personnel records, and assess performance has been profoundly impacted by technological advancements. Human resources procedures may be optimised with the use of technology. When implemented incorrectly, it might impede HR operations. Effective human resource management reduces costs while increasing gains. Those that struggle to learn and adapt to new technologies should look elsewhere for employment. Because jobs have become more complex, more sophisticated minds are needed. Human interactions have progressed and been boosted thanks to technological advancements. The technology-human interface introduced collaborative efforts, such as quality assurance groups. Workers have matured into savvy, dedicated experts in their fields. Organisations have become "techno-structure" with optimal blend of scientists, technocrats and management professionals.

PROBLEM DETECTION

Some issues were discovered in the course of incorporating new technology into human resource development work, including the fact that new HR processes were needed because of the rapid pace at which technology was evolving. Needed: Experts in many technological fields. Effects on Strategy. Updated Abilities. HR tools, which include a broad variety of technical solutions, are essential for the efficient management of HR functions in modern businesses. For a more productive and content staff, organisations of any size may benefit from the following six human resources technology solutions.

HRIS:

An HRIS is an integrated system intended to increase the efficiency with which HR data is produced and to make HR records more relevant to management as a source of information. The most common applications of an HRIS in human resources are payroll, benefits management, and EEO/affirmative action reporting. The key features are: Hiring Process/Applicant Tracking System. Human Resources Fundamentals: Benefits Management & Open Enrollment. Controlling Time Missed. Administration of Payroll. Reporting Processes for Training and Development.

Small company payroll services are just one example of how HR technology is helping companies of all sizes take control of their human resources operations. Here are some of the best online payroll service providers and payroll technology businesses to think about for your small business's payroll needs.

Paychex

A website where businesses and accountants may save payroll information, generate personalised reports, and handle benefits administration. Payroll experts at Paychex provide one-on-one assistance to their clientele. For companies with less than fifty workers, it is an excellent option. They have updated their software packages to incorporate cloud-based access and mobile app functionality, making it easier for even the busiest company owners to manage payroll.

ADP stands for "automatic data processing."

ADP is well recognised as a leading supplier of HR and payroll services. Regardless of the size of your company, ADP has a solution that will work for you. It simplifies payroll processing for companies of all sizes by accounting for a wider range of factors. A self-service site accessible from any device gives workers access to their files and salary data. The scale of your company should guide your product selection. Small firms should use RUN, while mid-sized organisations should go with Workforce Now, and large businesses should go with Vantage HCM.

Intuit

By utilising QuickBooks software, it is possible to prevent financial mistakes, keep track of deadlines, avoid financial penalties and also enhances the whole experience of a small company.

Patriotic Programmes

It's not widely used, but it's a good option for companies of any size. Patriot Software stands out from the competition by providing clients with a unified platform from which they can do accounting and payroll functions. Employees also have fewer self-service alternatives since Patriot does not provide a mobile app. Solutions for Measuring and Improving Employee Performance Annual meetings between managers and their subordinates are merely the beginning of the performance appraisal and monitoring process. ADP is only one example of a human resources management system (HRMS) that offers a tailored module.

Tools for Increasing Employee Engagement: Many businesses place a premium on having a highly engaged workforce. In order to have a deeper understanding of your staff's needs, it is possible to keep tabs on the company culture with the help of today's technological resources. The range of available interaction technologies also includes: Software like Igloo, Podio, and OneWindow Workplace used internally by businesses. Workplace communication is one area where technology is helping firms grow. Tools such as virtual technology, social networking, and internet portals make employee participation boundless. Here are five examples of how your company may use technology to improve

communication among staff members:Methods for Monitoring and Enhancing Performance.The Capacity to Work Together Across Divisions.Workgroups supported by technological means.Interactions with Colleagues at Work.Worker Education and Development.

Recruiting Software: The promise of these new technologies might seem overwhelming. As the name suggests, HR software simplifies the whole hiring process. You can advertise jobs, receive and review applications, and manage applicants with ease.A few examples of popular recruiting software and the factors that go into its adoption are as follows:Taking a video interview.Evaluation and Checkups.Smart machines and AI.Tracking System for Job Applicants. CRM system for hiring.

Employee perks like paid time off, health insurance, retirement programmes, and worker's comp are all part of a company's benefits package, which is managed by a benefits administration system. In a co-employment agreement, the Professional Employer Organisation (PEO) takes on the legal responsibilities of an employer, such as paying employees and overseeing their benefits and legal compliance.

FINDINGS OF THE STUDY:

Helps to recruit more varied pool candidates.The use of such tools is likely to increase job seekers' enthusiasm and contentment with their work lives.These internet is greatly reduced the paper version cognitive ability exams.These HRD tools are less expensive, more practical, and more adaptable than its predecessors.By applying the technical instruments, workers performance may be simply observed.Human resource development (HRD) might benefit from the increased communication and performance feedback that new digital technologies in HRD could provide across geographically dispersed supervisors.Using cutting-edge innovation, a company may more quickly and easily reach its objectives.New technical tools and communication technologies have made the job of human resources experts more easier.Workers are able to devote more time to policy framework and strategy planning with the help of modern application software.

SUGGESTIONS

Individual and organisational achievement requires careful consideration when choosing and implementing development strategies. Companies that have both efficient HR management practises and efficient HR technologies in place are more likely to be successful. HRIS can provide sophisticated analytic capabilities to assist managers make challenging decisions. Data produced by workers may be managed more efficiently for big organisations with the use of HRIS and other technological solutions. The organization's strengths and weaknesses will inform our selection of new technologies that allow for periodic assessment and monitoring of environmental hazards. A group might have a study session almost wherever with a computer and Internet connection. The tasks should be arranged such that they don't interfere with other obligations.

CONCLUSION

Human resource development (HRD) practises improve an organization's internal and external capacities, making it better able to meet its current and future objectives. The consequence of HRD based on the effect of technological progress affect organisational business objectives, and results in greater productivity, reduction in cost, which produces more profits and build organisation image to a higher level. New technical tools, communication technologies, and application software have made the job of human resources professionals easier, freeing them up to focus on the policy framework, strategic planning, and other high-level concerns. Although technological advancements have improved businesses' internal processes, they have also altered HRM. The research conducted for the project shed light on the effects new technologies might have on a business. By applying important tools based on technology, organisation is able to conquer the impossible realities that it can attain the future aims in an easy approach. New HR process demand, new competences, strategic effect are highlighted as a basis for technology innovation in Human Resource.

REFERENCES:

1. Neetu Singh Yadav “**An Impact of Human Resource Development Practices on Technological Changes and Working Environment of Telecom Sector**”, Journal of General Management Research, Vol. 4, Issue 1, ISSN 2348-2869, pp. 46–52, Jan 2017.

2. Dr.Ziad Al-Zubi **“The Effect of New Technological Changes InImprovingThe Environment of Human Resource Management”**
3. Kamal and Ashish Kumar **“Impact of Technology Advancement on Human Resource Performance”**, International Journal on Arts, Management and Humanities 2(2): 43- 47(2013),ISSN No.(Online): 2319-5231,Nov 2013.
4. Dr. V. K. JAIN **“ Impact of Technology on HR Practices”**, International Journal of Informative & Futuristic Research, Volume -1 Issue -10,ISSN(Online): 2347-1697, June 2014
5. James E.Bartlett **“Instructional Technologies in Human Resource Development: Impact, Models, and Changes”**, 2011,USA
6. Ince Ahmad Zarqan **“Human Resource Development in the Era of Technology; Technology’s Implementation for Innovative HRD”**, December-2017
7. Prof. Rajesh Kumar Sharma **“Impact of Information Technology on Human Resource Development”**, Bhopal
8. M.N. Khan **“HRD in Model Technological Structure”**, XL No:150-51 (Jan-June, 1987), Indian Journal of Commerce, p. 83
9. T.VenkateswaraRao,B.Tech.,M.Tech.,AssistantProfessor