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## Technological Trends in Human Resource Management

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### ABSTRACT

The idea of a "conventional workstation" has become obsolete in the age of technology and mobile computing. Employees may now work from any location at any time. Human resources have been fundamentally redefined over the world as a result of technological advancements. Recent developments from sourcing to performance, technology has changed practically every element of HR. Technology, according to several industry analysts, is one aspect that is influencing the market. To a large extent, the HR department is responsible.

Keywords: Human Resource, Technology, Trends, Industry, Technological advancements

### 1. INTRODUCTION

HR technology companies are increasingly crafting apps with employees in mind, allowing employees to learn and grow, engage, give feedback, realize their potential, and even manage others more productively. The trend constitutes a substantial transition from a decade ago, when HR technologies were largely aimed to expedite HR administration, increase record-keeping, and assist in the redesign of HR procedures. From sourcing and hiring to talent and performance management, digital technology has revolutionized virtually every facet of HR today. Any HR technology used to seek, employ, retain, and manage human resources, while also support HR administration and streamline HR management.

HR managers have depended on technology to bridge any gaps generated by distance and new hurdles to employee engagement as a result of the current change. And they look to be doing well so far. According to a Flex Jobs poll from 2020, 51% of remote workers claim they are much more efficient when they work from home. This overriding tendency appears to be set to continue even after the outbreak, with 61 percent of employees embracing remote work and 56 percent having occupations that enable for it.

### 2. RECENT TECHNOLOGICAL TRENDS IN HR

#### 1) Artificial intelligence (AI) in HR Tech -

AI-enabled systems are becoming increasingly significant in the recruitment and hiring procedures of businesses. They can shorten the time it takes for recruiters to evaluate and sort through a large quantity of resumes. AI can help with labour market analysis, matching talents and identifying competences, and maybe detecting and mimicking prejudice in job descriptions. Chatbots may also connect with prospective prospects prior to in-person job interviews, which helps speed up an otherwise lengthy recruiting process.

#### 2) Employee self-service systems (ESS) -

Employee self-service systems have enabled the employees to have access, revise and update their personal information on their own. Implementation of ESS has enabled faster delivery of HR related information in an efficient way to the employees. These tools have also helped in improving the communication of various important matters such as company holidays, change in health care plans, and other time sensitive information between the management and the employees. These self-service tools are being used extensively in learning and development programs, thereby assisting the employees to upgrade their skills and expand their knowledge base.

#### 3) Wellness Apps -

With an increase in awareness and understanding of the importance of the need to maintain a healthy work-life balance to ensure that the employees are physically and mentally well to perform at their best and maximum levels, wellness and health apps are being introduced to the employees by the HR department. Usage of these wellness apps can allow the employees to set realistic goals with respect to performance and increase the chances of achieving these performance goals thereby improving physical and mental health and wellbeing.

#### 4) Cloud based HR tools -

Cloud based HR tools and systems have enabled connect various data in one piece software. Adoption of cloud based HR systems has given the organizations a computing power and chance to potentially survive and prosper in this technological era. Cloud based HR tools have enabled to carry out real time performance assessment accurately and efficiently. In terms of cost, these tools are economical compared to proprietary HR management softwares, thus proving to be more cost effective option.

Adoption and implantation of these technological trends have certainly proved to a boon to the Human Resource domain. It is easy to access to the information related to employees and has helped in simplifying the decision making process as all the employee essential information is instantly available to access. The automation of these tools has helped to carry out time consuming manual processes with ease, thus, allowing managing time effectively. The security of employee essential information is guaranteed as one can control who gets to access this information.

### 3. REVIEW OF LITERATURE

Dr. Alok Mishra and Dr. Ibrahim Akman (2010) through their research study aimed to study the application of Information Technology (IT) in Human Resource Management (HRM). The key focus of their research was learning about different trends of IT used in HRM in organizations in various sectors in Turkey. The primary data collection was done using survey method, using 106 responses as the sample size for this research study. The data collected showed that IT is widely used to perform various HRM functions in the organizations of different sectors in Turkey. The results indicated that IT has significant impact on HRM of the organization of different sectors and the IT tools varied significantly within recruitment, maintenance and developmental tasks. However, it was also revealed that organizations failed to maturely and systematically apply these technologies in the performance of the HRM functions.

Sanchita C. Banerji (2013) in her research study explained the wide range of application of IT have greatly impacted operations of the organizations. Integration and acceptance of new technologies is a challenge face by the organizations. Implementation of these technologies requires radical change in the way HR professionals perceive their roles and responsibilities. Proficient knowledge of the traditional HR practices and skills and applying the same via technology will ensure in successful implementation and acceptance of these technologies.

Dr. N. Muthu, K.R. Kishore Kumar, S. MuthuKumar (2015) conducted research study on the trends that are emerging in changing HR technology. Through their study, they have emphasized on the effects and impact of the technology used to enhance the HR thereby helping the business to prosper. They say that technology will provide required platform to develop terminologies, metrics and data models that are in accordance of and support the global HR standards. Application of HR – IT in HRM as employee assessment tool (application server model –ASM), computerized performance monitoring (CPM), E- recruitment tool, workflow technology and others have been given as examples to carry out various HR functions with ease. The researchers while concluding say that HR professional should implement programmes, strategies and system that encourage experience, collaboration and decision making practices.

Ghanshyam Mhatre and Dr. Vijay Dhole (2018) in their research study based on the secondary data collected believe that due to implementation of technology in HRM, smart digital context of HR practices with better quality of data is accessible now which allow management of huge and complex data and better decision making practices. They believe that the HR domain is shifting from transaction to interaction field which emphasizes on the interaction between the employer and the employees.

Dr. S Yuvaraj and M. S. Sunganthiya (2021) have explained the impacts of technology on Human Resource Management and various functions of HR. Due to adoption of technology, recruitment & selection processes, training and development programs, appraisal systems are now using internet as their prime source to carry out these functions. These methods have now become more cost and time effective. Computer software programs are used to help to improve employees' performance. They believe technological tools have helped to improve communication, encourage creativity and innovation and save time and manage time effectively. On the other hand, it has also lead to distraction during work, high maintenance cost and is affecting workplace relationships. The researchers believe that organizations that adopt technology to perform HR functions will prosper more than those who do not invest in these technologies.

### 4. OBJECTIVES OF THE STUDY

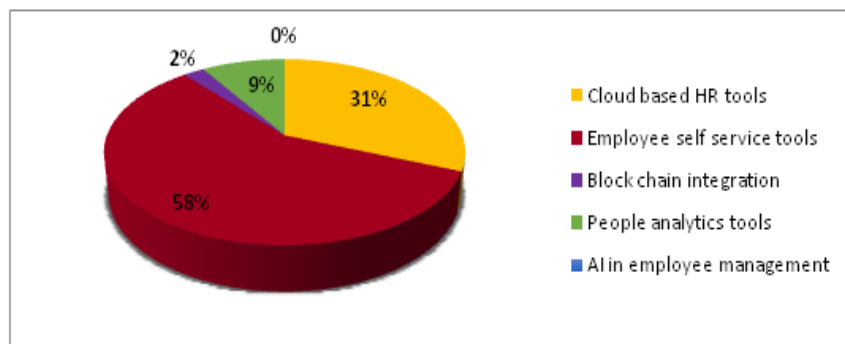
1. To learn about different technological tools used in HRM by organizations.
2. To find out benefits and disadvantages of the technological tools.
3. To find effectiveness of the use of technology on various HR functions.
4. To find effectiveness of the technological tools with respect to cost, productivity and stress levels of the employees and communication and transparency level between the employees and the employer.

## 5. RESEARCH METHODOLOGY

**Research design:** The type of the research study is descriptive in nature.

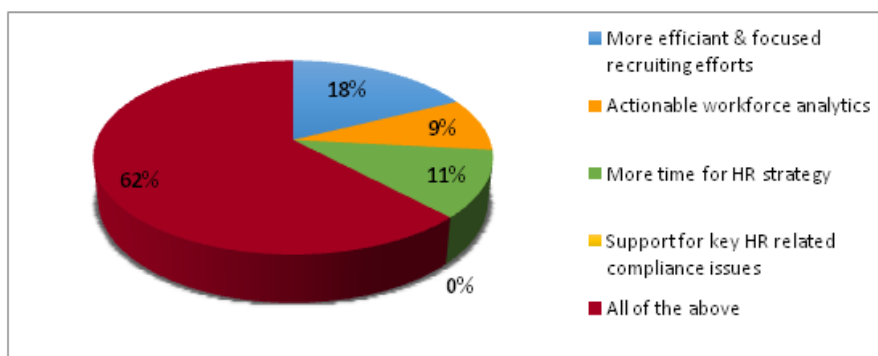
**Research tool:** Both primary and secondary data collection method is used to collect information needed to do this research. Primary data is collected using questionnaire. The questionnaire was circulated among HR professionals for response. Sample size of 45 is used for the study. Secondary data is collected from research papers, research articles and websites.

## 6. DATA ANALYSIS AND INTERPRETATION



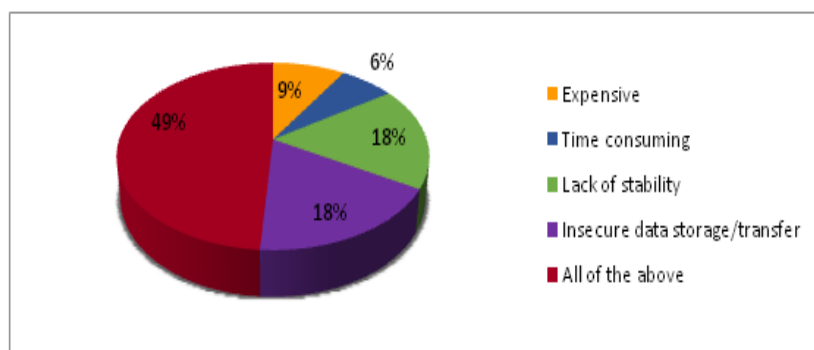
**Fig. 1:** Technological trends used by company for HR functions

From Fig.1, it can be inferred that the most widely used technological tool used by the organization for human resource management is Employee Self Service (ESS) tools that allows the employees have access and update necessary information on their own, thus facilitating in faster delivery of information. Cloud based HR tools are second widely used tools by the organizations. People analytics tools which enables faster collection of talent data and its application to boost talent and business outcomes followed by block chain integration tools.



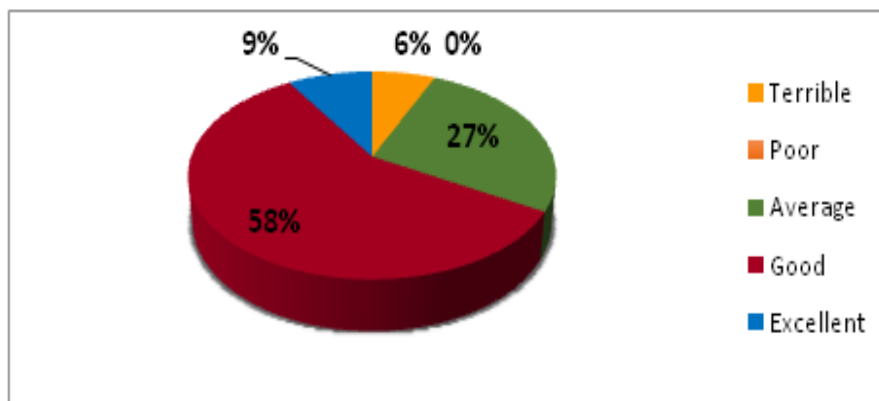
**Fig.2:** Benefits of using technology in HR functions

From Fig.2, it can be inferred that 62% believe that implementation of technology in various HR functions have multiple benefits such as the recruitment process becoming more focused and effective by using application tacking software supervise the hiring process, managing workforce analytics to track different costs, competencies and characteristics of Goal and result oriented employees, thereby helping in effective planning and decision making process, supporting with compliance issues, and leaving more time for strategizing HR. 18% believe that technology has greatly helped them with the recruitment process followed by 11% thinking that the only advantage of use of technology would ensure more time to work on strategies.



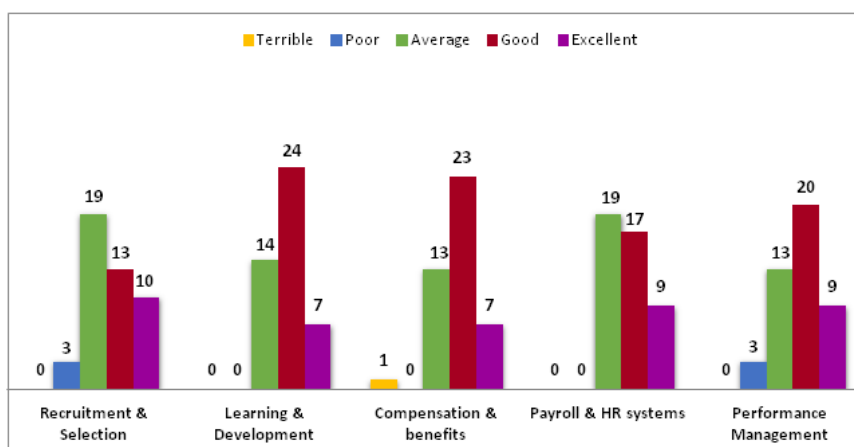
**Fig.3:** Challenges faced while using technology in HR functions

From Fig.3, it can be inferred that 49% of respondents believe that high cost, more time consumption, lack of stability, threat to data because of insecure data storage tools are the disadvantages or challenges faced while using technology to carry out HR functions. 18% respondents face challenge of insecure data storage/transfer and stability issues respectively. 9% respondents think that the technology used by their company in HRM is not cost effective and 9% think it is time consuming.



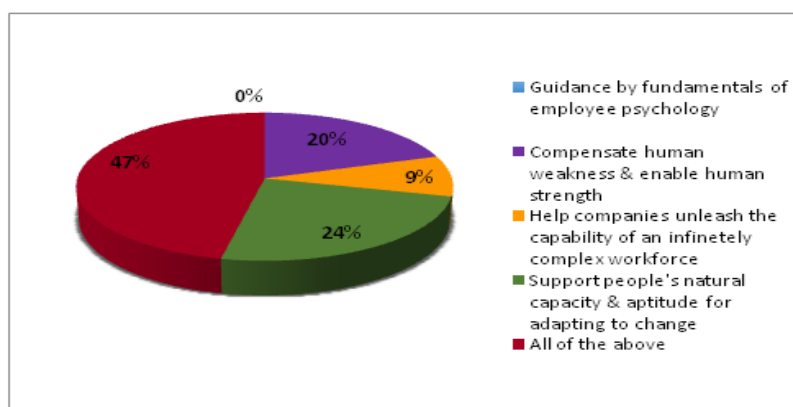
**Fig.4:**Technological assistance in HR funtions within your company

From Fig.4, it can be inferred that majority of the respondents (58%) think that the technology used in their organization for HR functions is good whereas 27% think it is neither good nor poor. 9% respondents are extremely happy with the given technological assistance whereas 6% respondents think that the technology used is poor and needs to upgrade.



**Fig.5:**Effectiveness of technology used to perform following HR function

From Fig.5, it can be inferred that majority people working in HR(19 out of 45) think that impact technology on recruitment and selection process is neither good nor poor. Same is the case with payroll and HR systems function. 24 out of 45 respondents think the technology used for learning & development programmes is good, 23 out of 45 respondents think the impact of technology on compensation & benefits is good. For performance management as well the impact is good.



**Fig.6** Trends that have the most impact on in future

From Fig.6, it can be inferred that Technology is definitely going to impact the way HR department functions. Majority of respondents (47%) think technology is going to help in understanding employees' psychology, encouraging to focus more on the strengths and the weaknesses will be taken over by the technology, helping the organizations to make use of the talents of the workforce to its highest potential and allowing and supporting the natural attitude of people towards adapting change.

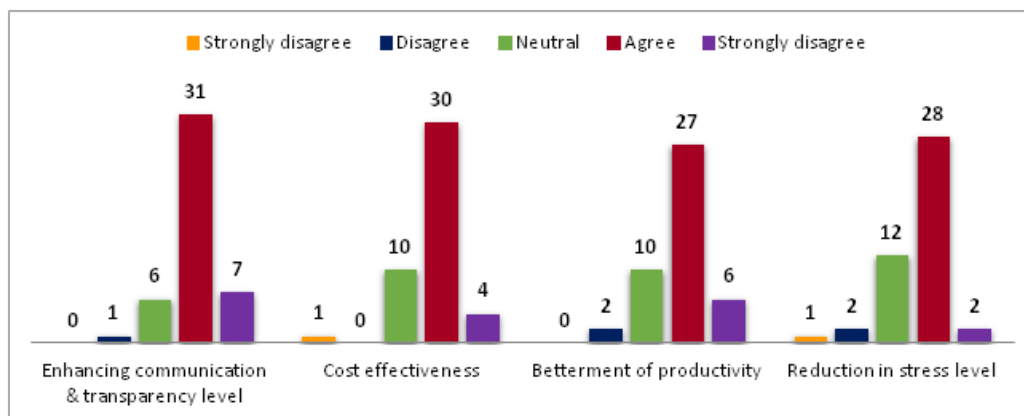


Fig.7 Effect of technological trends on HRM

Fig.7 represents the effect of technological trends on HRM on various factors like enhancement of communication and transparency levels between employees and employer, reduction in cost incurred by the company to carry out various HR functions smoothly, improving the productivity of the employees and reducing the stress levels. In all the cases majority of the respondents agree that implementation of technological trends in major HR functions has really good impact on all the factors mentioned above. (31 out of 45 responses for communication & transparency level, 30 out of 45 responses for cost effectiveness, 27 out of 45 responses for improvement in productivity level and 28 out of 45 responses for reduction in stress levels).

## 7. LIMITATIONS OF THE STUDY

- All the employees were busy with their schedules, thus the data received may not be accurate.
- The scope of the research is very vast. All the current technological trends and their impacts on various HR functions could not be discussed in depth due to time.

## 8. SUGGESTIONS

- Technology is changing and upgrading rapidly. Thus, the management needs to ensure that proper training and access is provided to the employees so that they can work with the new technological change with ease and accuracy which in turn will help in betterment of the organization.
- All HR tech solutions first need to focus on resolving basic HR problems like quick and easy onboarding, easy leave/regularization generation, employee friendly tax declaration, etc. and then can move on complex issues like complex workforce and psychology.
- There has to be an awareness drive so that transparency is maintained at all levels. Management needs to invest in HR training and orientation on a sustained basis.

## 9. CONCLUSION

Technology is surely bringing some reforms in Human Resource Management. The processes have become more convenient, reliable, user friendly, time and cost effective due to implementations of various technological tools. HR managers have real time access to all the data and performance of the employees, thus, giving them an upper edge to face a challenge or a problem and come back with solution faster. Various HR functions are also carried on with ease. The communication and transparency level between employees and employer has improved also the productivity of the employees has enhanced. HR professionals are relatively less stressed than before due to implementation of technology.

However, as the technology of today has become more complex, qualified and proficient tech professionals are needed to educate the employees and enhance the existing technology as per requirements.

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