

## **IMPACT OF ELECTRONIC HUMAN RESOURCE MANAGEMENT ON INFORMATION TECHNOLOGY**

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### **Abstract**

The study's goal is to find out whether evidence is crucial to improving strategic human resource management. Participants in this study were employed in management capacities across the public and commercial sectors of the Indian economy. One hundred and fifty participants contributed to the study, and the results were analysed using SPSS-22, a statistical programme. The research found that strategic human resource management is significantly impacted by the use of evidence-based electronic human resource management. This conclusion stems from the research results. From a strategic perspective an organisation may gain an edge via the use of E-HRM due to its effects on decision-making quality, human capital growth, employee learning and development, and performance evaluation. The regression analysis shows that electronic human resource management significantly affects strategic HRM in a positive way. These findings were arrived at by the researchers.

**Keywords:** Human Capital, Strategic Human Resource Management, HR Managers E-Employees.

### **Introduction**

It has been noted that IT has progressed to the point where roles and tasks that were previously handled manually are being easily substituted by various other electronic forms and even automated with the various data flows that actually could fundamentally and easily transform the actual way when the organisations actually function. Human Resources is not an outlier. The convergence of IT and HR has led to the development of electronic human resources (E-HR), which agrees to really coordinate the different HRM transactions using IT tools and the internet (Lengnick-Hail and Moritz, 2003, according to Stanton and Coover, 2004). Human resources (HR) intranets have emerged as the de facto standard for providing HR services to large American corporations (Dr Naveen Prasadula (2022), and the numerous companies that provide both stand-alone HR software and HR intranets, as well as the integrated applications they facilitate, are reaping the financial benefits. Not only are major software companies (e.g., PeopleSoft, SAP, Oracle) active in this sector, but so are a number of smaller organisations providing software solutions that automate various HR tasks. When comparing the different types of these advancements, Indian companies are not really that much more sheltered. This indicates that academic research into the elements affecting the purchase and deployment of e-HR in firms is required to better comprehend the motivations behind the usage of IT in the HR function. Since the 1960s, computers have served a very specific and legitimate function in HRM development: monitoring personnel information and payroll processes. In the United States alone, several companies have hired a few thousand people since the 1970s to work on the personnel data system (DeSanctis, 1986). The declining price of computers has also served to spur their implementation. The 1980s were aThe Human Resource Information Systems, used by 40% of US businesses, were likewise only getting off the ground (Richards-Carpenter, 1982). More and more often, HRIS is cited as a means of bolstering decision-making for the sake of maintaining and expanding competitive advantages (Broderick and Boudreau, 1992). As this data is stored electronically, it goes by the names "e-HR" (for "electronic") and "virtual HR" (for "virtual"), and it is all included inside the HRIS software (VHR). According to Pfeffer (1995), even the top five performing companies in the United States from 1972 to 1992 did not achieve this status by chance. It depends and is not founded on technology, the many uses of patents, or even the best strategic position, but which is supported with various sets of advantages created in the growth of marketplace, and is not carried on by the management on their place of work force. It has been noticed that corporations understand that knowledge is their second most valuable asset, just after

their employees (Jenkins and Lloyd, 1985). Since the turn of the century, it has been evident that even information technology has had a significant effect on corporate administration. There is a plethora of literature describing how IT aids businesses in gaining and maintaining competitive advantage (e.g., Broderick and Boudreau, 1991; Kossek et al., 1994). Increasing economic and competitive challenges are primarily driving many businesses to use Technology in HR. There is a widespread effort to find economies of scale wherever possible, and human resource management is no exception. Many have held the view that HR can provide higher-quality services at a lesser price by incorporating IT into their operations. Organizations may improve their efficiency via IT without having to raise their budget, speed up their processes through increased processing power, boost their performance (in terms of things like accuracy, precision, and completeness), and streamline their operations (Lengnick-Hall & Moritz, 2003). Many businesses are on the lookout for a more effective method of staying ahead of the competition, and this is for reasons beyond the expense of implementing and maintaining high-quality HR services. HR departments are under pressure to become more strategic as businesses want to gain a competitive edge via their personnel. At the same time, they need to remain a reliable resource for managers and workers by continuing to provide adaptable policies, procedures, and services (Dr Naveen Prasadula 2021). Despite the fact that Human Resource Management (HRM) has a long history made by the information technology which it also experiences in organisations and also tries to continue to grow as a result of the quantitative complexity organised and made by the use of the profession and coupled with its actual set of responsibilities with the enormous record-keeping, it still faces challenges in the modern era. relatively few sets of research have also looked at the diversity of IT tools available, the motivations for adoption of these tools, and the effects of using these technologies in the HR area (Townsend & Bennett, 2003). (e.g. Ball, 2001; Hendrickson, 2003). New and little-discussed methods have emerged for gauging the success of HRM's many technological instruments for personnel assessment. It is rather surprising that not much has been done by academics to advance the field of information technology in India, given that IT tools have been in use in Indian enterprises ever since the genuine opening opened up in the Indian market with economic reforms starting in 1991. Concrete picture of how the management and its workforce in the industrial and service sectors interact with and are affected by electronic human resource management (e-HRM) systems, including their functions, efficacy, and impact. De Cenzo and Robbins (1996), who are widely regarded as the fathers of modern human resource management, define HRM as "the most important part of the company, and that is totally concerned with people in a variety of dimensions," and they also note that HR is often referred to as "the staff," or "the support function" within an organisation.

### **Review of Literature**

Human Resources Information Systems used to be the umbrella term for all of the IT tools used to support human resource management (HRIS). The HR department workers may rely on these technologies to help them carry out their duties more effectively. Human resource information systems (HRIS) are founded on computerised databases, which enable them to carry out a wide range of management and analytical duties that have an effect on many areas of a company's operations. Because of the ever-changing landscape of businesses, it is crucial that HRM systems be versatile and that HR experts continually expand their expertise. Human resource professionals, therefore, need to combine their understanding of HR fundamentals with that of the economic and commercial climate in which they operate, as well as the latest technology innovations. Human resource experts may have a more strategic influence on their companies by taking this course of action (Dr Naveen Prasadula, 2021). Human resource information systems (HRIS) have also primarily targeted the HR department's internal systems for automation; as a result, the HR department's workers have not been the primary "client" of HRIS. The HR domain may benefit from ERP systems, as stated by Tasmanians and Kogetsidis (2006), since they help to standardise HR data. HR departments may save a lot of headaches if they had a streamlined, easy system for tracking employees' real time worked and for relaying information to them regarding services and perks. When chosen and implemented properly, ERP systems may save a tonne of money. The capacity to monitor and manage suppliers,

and the alliances together with customers, as a unified whole are among the other prospective and real set of advantages, along with the substantial reductions in inventory and working capital (Chen, 2001). An integrated system utilises a central data hub that is updated with new information from a single point of input. Information is integrated in real-time and is readily accessible after it has been recorded in the system (Lozinsky, cited in Hirt & Swanson, 1999). The convergence of HR-related applications is a key factor propelling corporate resource planning (Keebler, 2001). The following technologies have been deemed appropriate extensions of E-HRM because of the strategic benefit they are providing to the business via automation and information. Strategic interventions, such as organisational change, are at the heart of the most sophisticated style of human resource management, known as transformational HRM.

### **Study of Objectives**

The purpose of this research was to analyse the HR systems of a sample of manufacturing and service companies in terms of how well they implemented and utilised e-HRM solutions. The research examined:

- The role and application of e-HRM tools in recruitment, selection, manpower planning, communication, rewards and recognition, and other HR-related areas.

### **RESEARCH AND METHODOLOGY**

There has been a significant influx of capital in recent years from businesses into information technology to support various corporate operations. Human resources departments are no different. Yet, scientific study on the effects of these technologies on e-HRM came after their usage in the field. As a result, it is labelled as something for which the effects and efficacy of some of these technologies remain unclear. The same holds true for HR's real usage of e-HRM as a supporting function. The HR system's efficiency and the HR department's organisational makeup and traits are likely to change as a result of real e-HRM technology implementation and usage.

#### **The study of Hypothesis**

H1: Employees in manufacturing and service businesses who use E-HRM tools report higher levels of job satisfaction, job security, professional dedication, organisational commitment, stress, and organisational cohesion.

H2: The usage of E-HRM applications has a very positive effect on the productivity of HRM operations.

#### **Collection of Data**

As an alternative to handing out paper surveys, our firm also posted an online survey on the intranet, which consisted of a series of linked HTML pages that could be used to compile responses. A time estimate and a promise that your answers would remain private were also given on the entrance page. In regards to data collection, this research used the key informant technique (Phillips, 1981). We used the comments from the organization's top executives. The results from this research were supplemented by personal interviews with line managers and line staff as well to have comprehensive awareness of the e-HRM processes, despite the fact that there are top executives who are crucial in influencing all choices about the HRM process. The vast majority of respondents (58.3%) have only been using their present e-HRM system for the previous four years, while just 21.9% have been using it for the past eight years. Most companies started using the software in the early 2000s, while smaller businesses with less than 500 workers use Windows-based e-HRM applications. In addition, research shows that 36.2 percent of businesses are already using e-basic HRM's features to replace paper records. Data from the survey was entered into a Microsoft Excel spreadsheet, then exported as an SPSS datasheet after being coded. After double-checking and cleaning the data, a total scale and six subscales were developed by averaging the components that make up each scale. As a first step, we looked at the respondents' demographic profile to learn more about the educational and employment backgrounds of our sample.

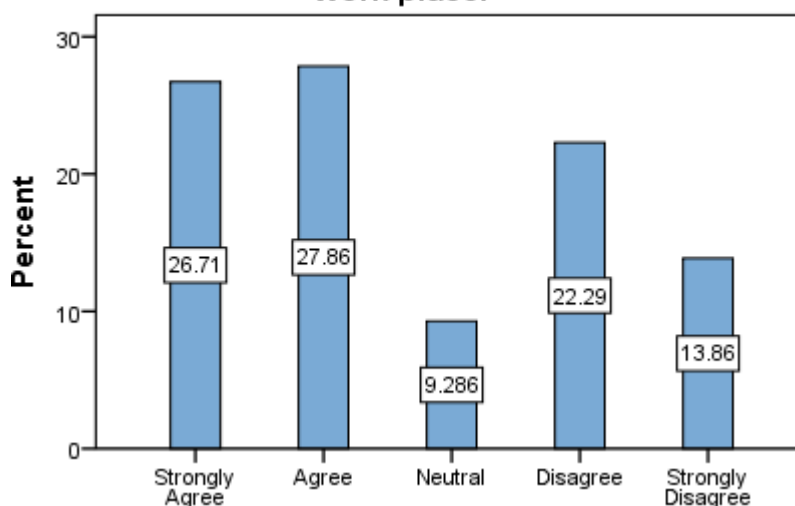
Electronic human resource management is being evaluated as a potential workplace decision-making aid.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Agree	187	26.7	26.7	26.7
Agree	195	27.9	27.9	54.6
Neutral	65	9.3	9.3	63.9
Disagree	156	22.3	22.3	86.1
Strongly Disagree	97	13.9	13.9	100.0
Total	700	100.0	100.0	

**Interpretation:**

Taking into account the above, we may conclude that e-HRM values it at 26.71

**e-HRM is considered as a decision making tool in a work place.**

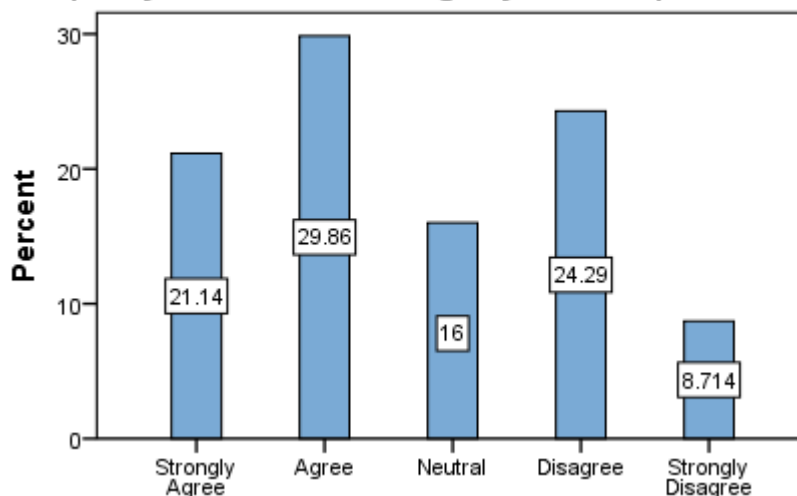


27.86% it Very Agrees, 9.286% it Agrees, 22.29% it Disagrees, and 13.86% it Strongly Disagrees with the use of the technology to make decisions at work.

In the workplace, the quality of decisions is affected by the decision-support tools supplied by your e-HRM system.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Agree	148	21.1	21.1	21.1
Agree	209	29.9	29.9	51.0
Neutral	112	16.0	16.0	67.0
Disagree	170	24.3	24.3	91.3
Strongly Disagree	61	8.7	8.7	100.0
Total	700	100.0	100.0	

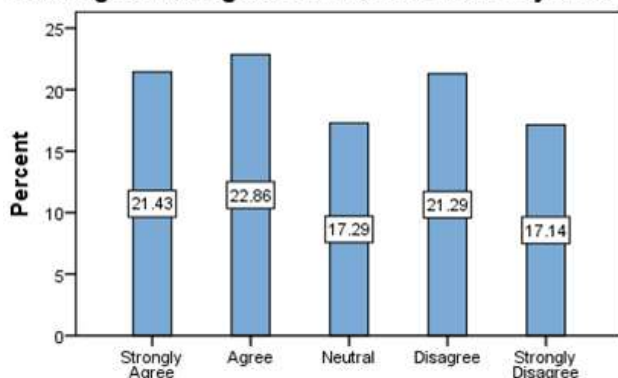
**Decision-support tools provided by e-HRM affect the quality of decision making in your workplace.**



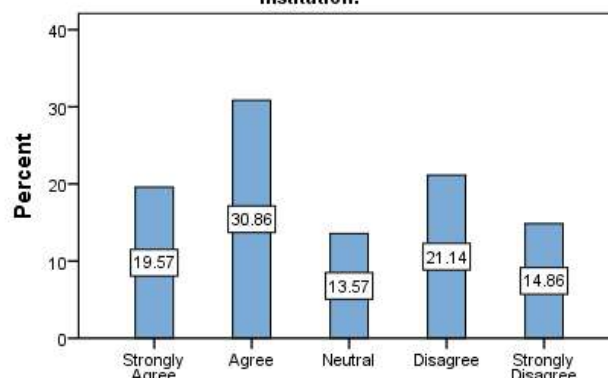
**Interpretation:**

Based on what has been said, it is safe to conclude that decision-making promotes

**HRM staff members in this institution were faced challenges with regard to the use of E-HRM system.**



**The mediators that affect the relationships between e-HRM information tools and decision-making quality in your institution.**



with 21.14 percent strongly agreeing that e-HRM is helpful in making good decisions at work, 20.9 percent agreeing, 16.1 percent being neutral, 24.7 percent strongly disagreeing, and 8.71 percent strongly disagreeing.

The intermediaries in your organization's interactions between e-HRM data tools and the quality of its decisions.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Agree	137	19.6	19.6	19.6
Agree	216	30.9	30.9	50.4
Neutral	95	13.6	13.6	64.0
Disagree	148	21.1	21.1	85.1
Strongly Disagree	104	14.9	14.9	100.0
Total	700	100.0	100.0	

According to the data presented above, we may infer that mediators have an impact on relationships, with a majority (19.57%) agreeing that information tools and the quality of decision making tools in

the workplace are important, while 30.86 percent disagreeing and 13.57 percent being neutral.

At this organisation, HRM workers encountered difficulties while attempting to utilise an electronic human resource management system.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Agree	150	21.4	21.4	21.4
Agree	160	22.9	22.9	44.3
Neutral	121	17.3	17.3	61.6
Disagree	149	21.3	21.3	82.9
Strongly Disagree	120	17.1	17.1	100.0
Total	700	100.0	100.0	

According to the data presented, HRM workers have a net opinion of 21.43% Strongly Agree, 22.86% Agree, 17.29% Neutral, 21.29% Disagree, and 17.14% Strongly Disagree with the institution that had the difficulties with the E-HRM system.

Efficient human resource management enabled more accurate staffing projections.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Agree	159	22.7	22.7	22.7
Agree	136	19.4	19.4	42.1
Neutral	154	22.0	22.0	64.1
Disagree	182	26.0	26.0	90.1
Strongly Disagree	69	9.9	9.9	100.0
Total	700	100.0	100.0	”

A model summary reveals an R-Squared value of 0.454, indicating that there is a moderate relationship between the number of times an organisation uses an e-HRM programme and the quality of service it provides shows these two factors account for 45.4% of the variance in e-HRM adoption, whereas the remaining 54.6% arises from the interaction of other factors. The model is fairly significant, and there is a moderately positive correlation between the variables, according to the results.

#### ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	320.797	2	160.398	289.479	.000 <sup>b</sup>
Residual	386.203	697	.554		
Total	707.000	699			

Workers' positive adoption of an e-HRM system is the dependant variable. the following factors are the predictors: (Constant), The business has integrated the new e-HRM technology into its everyday HR procedures after adopting it. The company's efficiency increased over time as it implemented new e-HRM systems.

#### CONCLUSION

The ability to show how the organization's value is produced via HR's technology efforts, leadership programmes, development planning, and compensation strategy is perhaps one of the major issues confronting contemporary HR departments. The vast majority of respondents just started using E-HRM solutions during the last few years, with 56.20 percent using their present systems for less than four years and 20.6% using them for less than eight years. Most of the people in the survey said they bought their software in 2022. In particular, companies with less than 500 workers bought their software over the previous four years. This was verified further by looking at the programmes the businesses were using. More than a third (35.6%) of the companies in the survey were completely new to computers before adopting E-HRM (in an ERP package) and replacing their manual files with beginner's modules. The size of the HR team is correlated with the likelihood of its adoption of electronic human resource management. It would seem that organisations who have only partially adopted E-HRM have a larger HR department. Although the strategic advantages may be more intangible, these apps prioritise speed and efficiency in completing administrative duties, saving time and money. According to the data, most companies that have implemented an E-HRM system are still using it in its conventional capacity. Only 7.9% of businesses consider E-HRM crucial to their operations. The results show that while E-HRM is supposed to help businesses in strategic ways, most companies aren't really making use of e-HRM in this way. 31.4% said they don't utilise E-HRM products to their full potential because they don't see the value in doing so, while 28.6% said they don't use e-HR now but have plans to start utilising it soon. Of those polled, 22.9% said that although they do use technology to connect with customers and other stakeholders, they do not see the value in utilising technology for human resource management. Just 8% of non-users cite security concerns as a reason for their behaviour, while the remaining 12% cite issues with usability or consistency in their reasoning. Whether an E-HRM system should be implemented on an administrative or strategic level Electronic human resource management solutions are most widely used in the realm of internal communication. Human resource management comprises around 30% of an organization's budget, with 30% going into employee development and training and 10% for recruitment, retention, and compensation. The section of performance evaluation has the lowest reported use. The use of the internet, intranets, and web-based tools to disseminate HR procedures and information to line managers and workers is one area where HR may provide value. While several software programmes exist to assist "value-added" HR operations including talent management, succession planning, and career development, HR departments have had varying degrees of success in expanding E-HRM systems beyond basic administrative procedures. Rather of using technology to assist strategic "human capital management" procedures, many companies just used it to facilitate the delivery of transactional services. According to the findings of this research, whereas over 90% of firms employ process-based administrative tools, only 30% to 40% of organisations make use of strategic HR technology solutions. Research into how different E-HRM solutions are used in organisations has shown that HR departments can do much more than just manage paperwork. Line managers and HR professionals in both manufacturing and service firms were interviewed to get insight into the potential value creation possibilities and challenges associated with implementing an enterprise human resource management system.

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