Human Resource Information System (HRIS)

Efficacy in the Coming Decades

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Abstract

Businesses have been able to move away from HR tasks that are more manual and transactional and toward ones that are more complex and transformative, because of the proliferation of HRMS (human resource management systems) and other specialised HRIS (human resource information systems). This is due to the fact that HR information systems have become increasingly sophisticated (human resource management systems). The long-term viability of HRIS will be investigated via the lens of qualitative research throughout the course of this project (Human Resource Information System). This research looks at Human Resource Information Systems (HRS) to determine how they can be utilised in the workplace, how they can be utilised in Human Resource Planning (HRP), and how they can be utilised in internal communications. The purpose of this research is to determine how HRS can be utilised. This study focuses on the significance of Information Systems (IS) in an organisation, particularly in relation to the process of developing systems that are human-centred. In this study, themes related to ICT will be examined. The use of HRIS may be of significant assistance to both the management and development of human resources. The use of human resource information systems (HRIS) has many advantages, including the reduction of administrative burden, the improvement of a company's financial condition, the provision of access to timely and accurate data, the enhancement of operational efficiency, the identification of weaknesses in the system as a whole, and the development of strategies that are effective. In the event that even a single component of an organization's structure is deficient, the whole of the system will be rendered ineffective.

Keywords: HRIS, ICT, Human Resource, Efficiency, Information System.
1. Introduction

"It is not technology, but the art of human and compassionate management that is a continuous challenge for CEOs in the 21st century," leading management theorists have said. The companies that can best attract and retain a diverse workforce of the finest and most talented people in the marketplace are expected to gain an economic and strategic edge in the future. Human resources executives and managers are sometimes so occupied with their daily activities, which are mostly administrative, that they fail to take a long-term view of their company's future. A department may fall prey to this trap, but HR is particularly vulnerable because of the department's decades-long preconceptions about its capacity to contribute to corporate strategy (Singh, 2014). As a result, HR is increasingly seen with the purpose of gaining a strategic edge, especially in light of the rise in the number of organisations. To maintain a competitive advantage, companies must have highly trained human resources. An organisation's ability to compete in the market depends on having timely and reliable information on its existing workforce as well as its pool of future workers. In today's ever-evolving world, it's critical to satisfying this informational demand. In addition to improving the quality of employee data, HR professionals must be mindful that technological advancements can make a big difference in the organisation's overall effectiveness (Naidu, 2017). Using a qualitative method, this research will examine the long-term viability of HRIS (Human Resource Information System).

The introduction of HRMS (human resource management systems) and other specialised HRIS (human resource information systems) has allowed organisations to move away from manual, transactional HR tasks and toward sophisticated, transformational ones (human resource management system). HRM (human resources management) and IT (information technology) come together in HRIS, a set of systems and procedures known as Human Resource Information Systems. An organisation's human resource data is stored in this system, which may be retrieved, analysed, and disseminated as needed. Having a single database for all of HR's many tasks is known as an integrated HRIS (Shiri, 2012). People's skills and job requirements are stored in a database that may be accessed by anybody, by every department in HR.

1.1 Background

Organisations' HRM functions have evolved dramatically throughout the years. They are no longer insulated from the rest of the company, and they are now in the driver's seat. This is the first-time stakeholders have fully grasped the power of HRM as a strategic partnership when linked with the business. Every business unit, not only HR, is committed to supporting the organisation's strategic goals. Ashraf at Hewitt-Aon argues that "HR has been playing increasingly direct roles in fulfilling organisational objectives, its strategic collaboration with business is crucial to any corporate success". All HR functions in the 21st century must be connected to strategic HRM practice as a result of this viewpoint (Qadir, & Agrawal, 2017). In other words, what makes HRM a strategic function? According to Drucker and colleagues (1997), management professionals and HR experts alike face the problem of embracing technology and the difficulty of managing the importance
of human capital in today's corporate world. In the long run, IT technologies will have little impact if you don't manage to stay human and manage to stay human, even if you have the best technology available. At General Electric in the 1950s, the introduction of Human Resource Information Systems (HRIS) was necessitated by a strategic imperative. The scope of HRM has expanded in tandem with the evolution of corporate technology.

The strategic role of HRM necessitated a reorganisation in order to ensure that every HR function was tailored to the company's overall strategic plan. Human resources management grew more difficult to manage as companies expanded their workforces. The amount of HR data has grown exponentially (Khrais et al., 2021). The complementary nature of HR data management and HR management necessitated the development of a comprehensive system capable of handling the whole professional life cycle of personnel inside an organisation. It was thought necessary to examine how these standard HRM procedures may be transformed into transformational HR practices from the point of HR acquisition to the point of HR departure.

2. Literature Review

“The Role of Human Resource Information System in the Process of Manpower Activities”

A study by Karikari, Ocansey, and Boateng (2015) found that technological advancements have prompted organisations to incorporate HRIS. Human resources planning (HRP) is thought to be improved by the use of HRIS in organisations. Two hospitality sector HRIS managers in the Greater Region (Ghana) were interviewed for this paper's research on the advantages, contributions, and problems of HRIS in the Greater Region hospitality business. In the end, it was found that HRIS uncovered unoccupied jobs, precisely assessed each professional position and job description in the organisation, provided perspective into organisational learning needs, picked the right people to get timely instruction, assessed the efficiency of teaching programmes, and made quicker and smarter judgements concerning the position of successors (Karikari, Boateng and Ocansey, 2015). As a result, it might be said that HRIS contributed many parts to HRM. In an attempt to speed up information exchange and decision-making, organisations should link their HR systems with other business systems.

“Usage, benefits and barriers of human resource information system in universities”

An investigation of the perceptions of university faculty members of the HR information system's functions, advantages, and limitations is what Bamel et al. (2014) set out to do in their study (HRIS). In this research, we'll look at how attitudes and demographics differ. A 26-item survey was developed predicated on similar studies. 90 faculty members from seven Indian state institutions responded by email. The research questions were answered by a t-test, as well as an analysis of variance, which was used to gather data. In the study, it was shown that the Human Resource Information System is primarily used for operational purposes and is not considered a corporate strategy need. There are no noticeable variations across groups in the context of how the Human Resource Information System is viewed in terms of its functions, advantages, and challenges (Bamel et al., 2014). In developing and implementing Human Resource Information System, the research's
findings may be valuable in other organisations of a similar kind. For-profit organisations dominate the previous HRIS literature, which mostly originates from industrialised nations. Only a few studies, including this one from a developing country's universities and other non-profit organisations, have taken up this subject in such a comprehensive way.

“Critical Factors Influencing Decision to Adopt Human Resource Information System (HRIS) in Hospitals”

A rising developing nation, Bangladesh, is the focus of this study by Alam et al., 2016, which examines the variables that influence management choices to incorporate an HRIS. This research combines the HOT-fit model with the TOE framework in an attempt to comprehend the problem of technology incorporation more clearly in the workplace. Hospitals' HRIS adoption choices were examined using a four-dimensional approach that included 13 criteria. All 550 questionnaires were given to HR executives of 92 private Bangladeshi hospitals using a non-probability sampling approach. There were 383 legitimate questionnaires among the respondents, indicating a valid response percentage of 69.53%. Based on the first HRIS installation, we divide the sample into three main categories: adopters, prospectors, and laggards. IT systems, managerial backing, staff IT competencies, anticipated costs and the pressures of competition are identified as the five most essential elements. In addition, of the four aspects presented, the technology dimension is the most important, and then corporate, human, and ecological aspects come into play (Alam et al., 2016). A final conclusion was that all variables differed significantly across groups of adopters. HRIS adoption is more likely to be successful if researchers, hospitals, and the government take these recommendations into consideration. Understanding HRIS deployment in underdeveloped nations is a critical goal of this research.

“Impact of Human Resource Information Systems on Firms’ Financial Performance”

This study was undertaken by Bhuiyan, Rahman, and Gani (2015), and it investigated the impact that Human Resource Information Systems implementations have on the total economic effectiveness of businesses. Systems for estimating productivity were created using five years' worth of performance statistics gathered from 41 different companies' financial statements (89 per cent) of Bangladeshi banks. At the same time, a multidimensional assessment of covariance was employed to investigate the different financial results of corporations based on their management structure. This was done in order to determine whether or not there was a correlation between ownership patterns and the performance of the company's finances. As per the findings of the study, there is a positive and direct connection between the usage of Human Resource Information Systems applications as well as the monetary results of the company. Despite this, there is not much of an influence that ownership patterns have on the success of corporations (Bhuiyan, Rahman and Gani, 2015). This study may also assist People who work in human resources, as well as other related fields, might improve their economic knowledge, which might lead to them becoming crucial business associates in a worldwide economy that is undergoing fast change.
“The impact of Human Resources Information Systems on individual innovation capability in Tunisian companies: The moderating role of affective commitment”

The research that was conducted in 2020 by Moussa and El Arbi looked at the influence that HRIS have on an individual's capacity for innovation. Participation in the research by 42 individuals from the human resources departments of Tunisian organisations allowed for the testing of the hypotheses that were developed by the research model. The adoption of HRIS, as stated by the SmartPLS software, has shown to increase the creative potential of Tunisian professionals working in HR. One further thing that we discovered was that the emotional commitment of employees was a moderating factor in the connection between using HRIS and workers' ability to innovate. In point of fact, the degree to which employees are active in their firm determines the degree to which the HRIS has a positive and noticeable impact on the creativity of HR personnel (Moussa and El Arbi, 2020). The results of this study provide insight into the aspects that contribute to an individual's improved potential for creative thinking, and they do so in a number of different ways.

2.1 Research Gap

The goal of this investigation is to assess the efficiency of the system for tracking human resources (HRIS). Organisational performance may be impacted in several ways, and It's essential to comprehend how the HRIS contributes to that performance. Based on the replies of the working population, the study will aim to determine the findings.

2.2 Research Question

- As a recruitment tool, how well does the Human Resource Information Planning HRIS application perform?
- What does HRIS signify for the executives?
- What part does HRIS play in the leadership efforts of the leaders?

2.3 Research Objective

- To examine the benefits of HRIS in the workplace.
- To determine the role played by HR Information Systems in Human Resource Planning.
- investigate how HR Information Systems (HRS) are used in internal communications.

2.4 Importance of study

HRIS implementation is now at a standstill, according to the conclusions of this research A review of the TRA's HRIS difficulties and weaknesses was conducted, and suggestions were formulated to help guide the organisation. For policymakers, this research provides empirical evidence in relation to the result of human resource information systems (HRI systems) based on the results of HR functions and practices, as well as an
analysis of the issues considered critical in improving information systems and improving organisational performance. Furthermore, new information may be gained by the study on the evaluation of HRIS on the performance of HR functions as well as practices. In this way, it helps us get a deeper theoretical grasp of the myriad of HRIS-related events (Methuku & Ramadan, 2013). A theoretical framework is also provided for further investigation.

2.5 Scope and limitation

Specifically, the research is focused on gathering data from workers who utilise the company's software for Human Resources reasons. The data collected for this research spans the period beginning with the first day that the two firms began using the software to streamline their operations and ending up to the current day. It's also important to keep in mind that this research has a few flaws.

- The HR department's experiences are more heavily weighted in the research than those of other HRIS users.
- Since both firms have procedures that prevent them from disclosing their identities, researchers are unable to reveal their subjects' names.

3. Research Methodology

The thread that runs through this study is the human and context-oriented research conducted within the information systems (IS) sector. The HRIS as a whole is not the subject of this research; rather, the research investigates how different aspects of technology contribute to certain human leadership tasks. As a direct consequence of this, the behaviour of the leaders serves as the basis for the investigation. This study places a strong focus on the significance of the role that Information Systems (IS) play inside an organisation, particularly in the context of the establishment of human resource information systems. In the context of this project, research on the conceptual aspects of information and communication technology (ICT) is carried out. The admirable actions of leaders are brought to the forefront. The environment in which a business's different activities are carried out is significantly impacted by the information system that the organisation maintains. An information system does not constitute labour in and of itself; instead, it serves as a resource for the consumer with a helpful instrument that may be used in the performance of their duties (Wang, Zhou & Zheng, 2022).

4. Analysis of data

For a business to reap the advantages of administrative and operational activities, Human Resource Management (HRM) must be in place. It is expected that all HR managers would be able to execute both jobs. Human resource management (HRM) encompasses all aspects of how a business interacts with its employees, including offering opportunities for learning and development and conducting assessments to determine each employee's specific education and instruction requirements.
Since the 1980s, the notion of HRM has emerged in the public sector. One of the most essential resources in a company is its human capital, which is supported by HRM. Human resources have long been considered essentially an administrative responsibility by management. Nevertheless, the emphasis on human resources has now broadened to a larger, more strategic function (Al-Harazneh & Sila, 2021). When it comes to HRM, it's now widely accepted that there are two types: operational and strategic.

**Strategic Information Needs**

It is critical for management at all levels of an organisation to have access to the relevant information, including human resource information, to make educated choices in order to fulfil the firm's goals. Government goals are ideal for guiding the strategic direction of organisations, including the adoption of human resource initiatives. As a result, the data on human resources should be gathered, evaluated, and reported accordingly. As part of a unified bundle of management information, firms should disclose regularly, quarterly, or six-monthly to their top executive councils on human resources (Bakker, 2010). In most cases, however, updates on human resources on a frequent basis are confined to information relevant to operations, like new hires and departures, employee counts broken down by divisions or regions, and remaining vacation time. In certain cases, additional information, such as the sort of leave taken, may be included.

**Operational Information Needs**

It is critical that both senior management and line managers be able to get essential human resource statistics to their respective spheres of responsibility. This system's reporting features are sophisticated and difficult to supply the necessary information, it has been reported. For the most basic monthly reports, such as payroll expenses, it should be clear what information is needed to generate them.

**Documentation and Communication of Human Resource Policies**

All departments should have access to the organisation's human resources policies and procedures, which should be housed on the organisation's intranets. Hard copy circulars, forms, checklists, templates, and instruction materials are often included with intranet displays to aid users in inputting data and to ensure the correctness, completeness, and administration of that data (Chakraborty & Mansor, 2013). Intranets are used by corporations to disseminate rules and procedures. Organisations must also make sure that intranet material is current since papers are only evaluated when they are deemed significant.

**Managerial Functions**

Different human resource-related tasks are included in the core management functions of planning, organisation, direction, and control. A human resources information system must be in place in order for these activities to be properly coordinated in a company.
Operative Functions

The Human Resources Department is tasked with the following operational responsibilities, which it will carry out to the best of its ability by using the HRIS to make informed choices.

- Employment and Personnel
- Secondly, education and training
- Administration of Wages and Salary
- Workplace Climate and Atmosphere
- Activities that Ensure Safety and Well-Being
- The relationship between the employer and the employee
- Records and Statistical Information
- Transfer and Promotion
- Retirement & Retrenchment
- Legal responsibilities and reporting to the government

Internet

Human resource management has been transformed by the Internet. The organisation's website may be used as a recruiting tool by the HRM system. Commercial recruitment services and databases are also being used by companies to publish messages in chosen Web-based news organisations as well as communicate with those looking for work through Email (Otieno, 2016). Employers and job seekers alike may benefit from the amount of information available on the Internet.

Intranet

By using intranet technology, HR departments are able to process HRM applications while also providing information services to their workers. For a broad client base, the HR department in question may offer 24-hour assistance. Information may be more quickly disseminated so that prompt action can be taken via suitable choices. Employees' personal files may benefit from data collected through intranets. In order to receive the information they need; employees may simply download the instructions they need.

The people that make up an organisation's human resources are the focus of human resource management, which seeks to optimise the way in which these employees are handled. Aside from the fact that people are distinct from other resources, the word (HRM) has grown to signify more than this (Moussa, 2014). People are made up of ideas, emotions, and desires. As a result, the word HRM has evolved to refer to a strategy that considers both the employee and the employer:
1. The organisation's requirements
2. The requirements of workers
The wants and desires of each person are unique. Individual employee needs and goals may be discovered via an evaluation process, for example, and then chances are created for workers to grow both within and outside of the workplace through HRM.

**Information Needs in HRM**

The planning and administration of human resources need a solid database. For the following functions, HR management requires a wide range of information.

- The purchasing department
- Function of Development
- Compensatory Mechanism
- Maintenance is a vital part of the job.
- Function of integration

The computerised system of HRIS necessitates the following data in order to effectively manage personnel from various businesses.

- Insights into the hiring process
- Identifying information about an individual
- Details on workforce planning
- Data on education and training information on health
- Details about the evaluation
- Salary records
- Details about the location

**Analysis of Training & Development**

An assessment of the prospects for professional growth and expansion and experiences necessary for people to accomplish corporate and personal goals should be conducted. In order to satisfy these demands in practical terms, an education and skills development plan might be developed. In order to assist a business reach its goals, HRM must provide options and programmes for training employees to improve their abilities, information, and viewpoints. There should be changes and courses for people to learn new skills, information, and attitudes in order to meet their developmental requirements.
5. Result and discussion

An essential part of the management and development of human resources activities may be helped by the utilisation of HRIS. Because of this, it has a wide range of applications:

- Subsystems of the HRIS for recruiting, in general, are being used. An organisation’s response to a general inquiry concerning the application of HRIS in strategy and selection was positive. Participants generally agreed that human resource planning is facilitated by their firm's usage of an HRIS, at an acceptable level.

- Managers' Views on HRIS Employment Analysis: Managers' views on whether their HRIS effectively detects vacant job opportunities were overwhelmingly favourable. HR information systems are well-known for their ability to manage and manipulate large amounts of raw data and even information. In addition, the HRIS itself is used by the majority of organisations to examine present job roles and the people working in each of them. In this way, an HRIS may help in the formulation of a recruiting strategy by identifying workforce deficits.

- In an Organization, Human Resources Information Systems (HRIS) are used to manage the inventory of skills. Another facet of this is that a productive framework should handle the organisation's whole stockpile of abilities. Most managers believe that this is being done properly, however, there are a lesser number of managers who believe that complete monitoring is taking place.

- Many organisations do not utilise their HRIS's e-recruitment module/subsystem at all, according to a survey of HR professionals. When it comes to maximising an employee's potential, this is particularly true. HRIS developers, according to the study, aren't paying enough attention to this particular issue.

- Managers’ perceptions of their HRIS's contribution to training and development are mixed, with many stating that it does not provide them with an accurate picture of their organisation's training requirements and assessment. In addition, the results of a training needs analysis (TNA) conducted by the HRIS of an organisation are not as accurate as they would be if done by a person. The accuracy of an HRIS may be enhanced by 50% of managers, according to a survey.

6. Conclusion

The use of HRIS systems can be beneficial to HR departments as well as business operations because they lessen the administrative burden, improve a company's condition of finances, provide access to timely and accurate data, enhance operations, develop employees' individual competencies, identify weaknesses in the overall system, and build tactics that work and improve the organisation. An HRIS system comprises several subsystems (for example, employee relations, payroll, planning, performance assessment, environmental reporting subsystem, and recruitment), and it is essential for organisations to concentrate on them in order to get the most out of their entire system. To put it another way, if there is a deficiency in even one component of an organisation's structure, the whole system will be ineffective. Overall, the function of human resources (HR)
in a corporation is quite important; some HR professionals operate as strategic and commercial partners, while others are exclusively concerned with people and act as advocates for the workforce.

7. Suggestion or recommendation

It is widely accepted that HRIS have a significant influence on HR operations. In the decision-making process, HRIS plays a significant role. To put it another way, HRIS applications demand a lot of time and effort. HRM in the 21st century is clearly dependent on the successful and efficient use of HRIS. An HRIS may address a wide range of HR management issues. As a result, management should make an effort to identify issue areas where HRIS technologies are required to turn uncertain and partial data into valuable information. For many scholars, the greatest strategy for supporting decision-making, particularly in thinking and learning, is via hybrid systems. Hybrid methods such as Knowledge-based systems and machine learning methodologies should be used in HRIS. There is also a necessity to keep up with the latest developments in HRIS technology. Web-enabled tools, wireless protocols, and a group decision support system may all be used to improve this. According to the findings of this research, any company, large or little, should make an effort to integrate HRIS into its human resources management system. In the long run, the advantages of starting from scratch exceed the drawbacks. However, every company must pay special attention to the security features of the HRIS they choose to deploy.

8. Future Scope

The research concludes that the transition from HRM to strategic HRM has been a positive one. Human resource management practices from three decades ago have clearly changed due to sea-level rise, as documented in a variety of sources. HR managers' workstations have undoubtedly been made more comfortable as a result of the anticipated advantages of using HR machinery and software. But the fundamental paradigm of SHRM will not be recognised until it is fully realised and unfolded. Literature and primary data are urgently needed to support the strategic benefits of HRIS in enterprises. There are a number of case studies that may be used to support the transition from HRM to SHRM. Technology may greatly enhance and assist HR operations, especially for transactional initiatives and ordinary HR duties; nonetheless, strategic HRM remains focused on transformative tasks and activities. Human Resources (HR) is a crucial corporate partner because of its transformative quest for competitive advantage. It is common in the literature to see social architecture that supports the idea that technology is only a facilitator for HR, and that it might have unexpected consequences. We have to remember that technology is just a tool; it is our job as HR professionals to use it effectively in order to manage both transactional and transformational HR activities. When it comes to integrating IT and HR, it is important to be cautious, according to a conceptual model suggested during the conversation. When it comes to HR operations, one must rely on technology to a certain degree, but the wit and expertise that one may apply throughout the process is regrettably not supported by technology. In order to enjoy the advantages of strategic HRIS, HRIS users must guarantee that their operational and transactional demands are addressed by
HRIS. This research provides a framework for this purpose. The theoretical model put out in the discussion will be subjected to empirical investigation to determine the extent to which this HRIS model may be used to support strategic human resource management.

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