

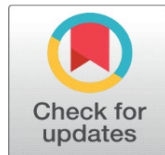
A REVIEW ON HUMAN RESOURCE INFORMATION SYSTEM (HRIS) IN CONSONANCE WITH POTENTIALITIES OF BIG DATA FOR CORPORATE COMMUNICATION AND ITS EFFECTIVENESS IN STEEL INDUSTRIES OF INDIA

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ABSTRACT

Human resource is a prime variable without which the entire equation of profit and productivity becomes imbalanced. It can appreciate in value. Entrusted with the successful operation of a business, human resource management is an extremely complex and demanding duty.

According to Farndale et al. (2010) and Troshani et al. (2011), HRIS systems that support decision-making about essential HR functions can be used to create strategic value." Strategic planners could not have predicted future labor supply and demand without the data provided by HRIS. Planning for human resources is the process by which problems with them are connected to the business requirements of the company.

The results of this study will help future HRIS users utilize the system's functionalities for HR planning to the fullest instead of just using it for administrative tasks. The two HRD subsystems that make up the study framework are HRIS Corporate Communication and HRIS Human Resource Planning.

Better plans have a big impact on a company's survival and performance, which is why businesses have started concentrating on tactfully use of its Human Resource and other resources with a concern for its customers satisfactions.

Organizations were better equipped to handle the intense competition brought on by globalization when they applied strategic management with information systems. There are several examples of businesses that have failed and others that have flourished.

With the advent of big data, businesses now handle, analyze, and derive conclusions from massive amounts of data in a fundamentally different way. An extensive overview of big data is provided, along with information on its applications, challenges, and strategies for handling its complexities. The study looks at all the industries that depend on big data, including government, healthcare, industry, and education. It also examines the challenges that big data presents, such as data storage, scalability, privacy, and security. These problems are addressed by a wide range of technologies and techniques, including cloud computing, machine learning, and data mining.

Keywords: Strategic Management, Employment Programme, Human Resource Management and Information System

1. INTRODUCTION

India's largest industry is iron and steel, and Steel Authority of India Limited (SAIL), one of the top manufacturers of steel globally, has annual sales of over Rs. 16,500 crores.

- 1) The degree to which the HRIS application is efficient and effective in organizational planning.
- 2) How well and effectively is the application of HRIS in organizational strategic planning ?

- 3) To what extent is the HRIS Corporate Communication application used effectively and efficiently inside the organization ?

Bhilai Steel Plant (BSP), a flagship unit of SAIL, established with the help of USSR. was one of the dreams of Late Pt. Jawaharlal Nehru. When India got its independence many public sector enterprises were established by Indian Government. One of them was SAIL & Bhilai Steel Plant.

The building of Strategy and its application on Human Resource on rolls of the Organisation by use of Information database.

However, implementation of strategy on appropriate time-frame and on need shall be the sole discretion and decision of the management to reap the best for the employee and organization as a whole.

The amount, velocity, and diversity of data being created globally have increased at an unprecedented rate due to the fast development of digital technology and the internet. For businesses in a variety of sectors, this massive amount of data, often known as big data, offers enormous potential as well as serious obstacles. Big data (BD) is the term used to describe large and complex datasets that are too large and difficult to handle and analyze using traditional data processing techniques.

2. METHODOLOGY

The present paper focuses on reviewing of various papers related HRIS System & Bigdata.

2.1. RESEARCH DESIGN

Primary Data Collection

The primary source of the data was gained through in-person interviews.

Secondary Data Collection

Literatures Review

Circulars, Manuals and Brochures issued from Government/PSUs

Personnel Policies and Program reports, Magazines and Gazettes.

Library books from Government/PSUs

2.2. OBJECTIVES OF THE PROPOSED RESEARCH

- 1) To investigate the role that HR Information Systems play in HR Planning in line with the Big Data along with use of HRMIS to business communication.
- 2) To evaluate the HRIS & Big Data application's efficacy in Steel Industry.
- 3) To determine the disparity in how the organization and employees see the operation of the HRIS in consonance with Big Data.

3. ASSESSMENT OF HUMAN RESOURCE INFORMATION SYSTEM (HRIS) VS BIG DATA :

To nurture a customer-centric Team HR which will continuously endeavour to enhance employee productivity for achieving business goals.

To foster a work culture conducive to team-building, creativity, innovation, quality, equal opportunity and empowerment through Strategic Management using Human Resource Management & Information System.

To endeavor to use strategic decision-making to significantly improve employees' quality of life both within and outside of the workplace.

To attune employees to work in a changing business environment by Strategic Management of Human Resource

Big data is known for its heterogeneity and diversity, which can cause problems with data integration and quality. Errors, inconsistencies, or inadequate data might compromise the dependability and precision of analytical results. To tackle these issues, strategies for data cleaning, data profiling, and data quality evaluation are crucial. Additionally, methods for integrating data, include data transformation and wrangling, are needed to integrate data from many sources with various formats and structures in order to guarantee data compatibility and interoperability.

4. LITERATURE REVIEW IN BRIEF

Scientific research is systematic research consisting of various tools and building of database. Human Resource Management & Information System being the vital tool in making Strategic Decision through catering customize MIS.

All the 13 Research Papers stress on

Strategic planning necessitates a high degree of strategic thought and alignment with the organization's goals and mission. An organization's strategic strategy serves as a roadmap for managing the business.

The use of Human Resource Information System would facilitate better information for decision making. Human Resource Information System will develop security assurance for the employees.

However, there are few Research Gaps like :

Review the approach for determining the distinctiveness and standards of E-HRM in addition to the cost of developing the system.

The adoption of MIS strategies have to align with the needs and strive towards accomplishing the objectives of the organization.

This study investigates the deficiency in web and system integration and determines the managers' need for training in order to utilize the system's decision assistance features.

Despite its status as a critical business partner, human resources (HR) departments are still viewed as cost centers in many organizations.

This study also seeks to identify the areas, systems and procedures where changes can be made more effectively.

This data is largely unstructured, which makes it challenging to store in conventional databases.

A review on Human Resource Information System (HRIS) in consonance with Potentialities of Big Data for Corporate Communication and its effectiveness in Steel Industries of India.

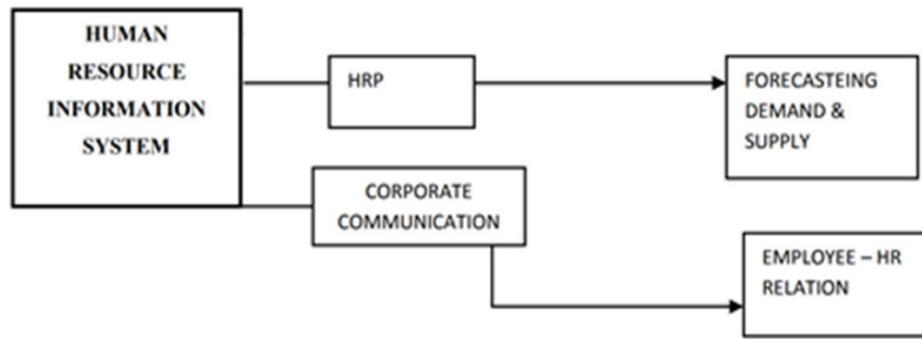
Sl. No.	Year, Author's Name, Title, Source	Content	Finding
1	Dr. Aswini Kumar Dash, 2013, <i>International Journal of Application or Innovation in Engineering & Management (IJAIEEM)</i> . <i>Competitive Advantage : Its Importance & Impact on Design of Strategy.</i>	✓ This article defines the various aspects of competitive advantage and brings out its importance in order to achieve a better performance that is sustainable over a period of time. ✓ Globalization brings forth new opportunities but also puts forward new challenges to be countered in order to be successful.	✓ Competitive advantage thus refers to the condition where the product or service of a firm is perceived to be better than that of its competitors. ✓ Quickly responding to changes in the business environment and modifying the operating strategy helps in maintaining its competitive advantage. ✓ A firm possessing critical manufacturing capabilities like human talent for technical and execution skills, state-of-the-art manufacturing facilities, specific technical know-how etcetera can leverage on the same and convert them into competitive advantages. The effort that goes into building a successful brand also has a positive impact on the competitive advantage of the firm.
2	Supriyadi, 2014, <i>International Journal of Scientific & Technology</i>	✓ The purpose of this study was to examine the impact of strategic partnerships on innovation	✓ The results of this study support the hypothesis.

	<i>RatnaEkawati, 2014, International Journal of Scientific & Technology .</i> <i>The Effect of Strategic Partnership On Innovation Capability and Business Performance Of Garment Industry In West Java - Indonesia</i>	capabilities and performance of the business of garment enterprises in the province of West Java - Indonesia. ✓ Data were collected by questionnaires, where the respondent is head of the company with manager-level positions. ✓ Data were analyzed with multiple regression. ✓ The results showed that the strategic partnership provides a positive and significant impact on innovation capabilities.	✓ First, strategic partnerships significantly positive impact on the company's innovation capability Garment industry in Indonesia, particularly in the province of West Java. ✓ Second, innovation capabilities significantly positive effect on business performance. ✓ Third, Directly strategic partnership also significantly positive effect on business performance. ✓ Thus, it can be concluded that the strategic partnership is a variable that is very vital, because it can improve business performance, both directly and through the ability of innovation.
3	<i>Zafar Iqbal, 2013, International Journal of Business and Social Science</i> <i>AasimMunir Dad, 2013, The School of Business & Management University of Gloucestershire Cheltenham, GL50 2RH.</i> <i>Outsourcing: A Review of Trends, Winners & Losers and Future Directions</i>	✓ The primary objective of this paper is to analyse the outsourcing trends in last one decade and to forecast the future on the basis of past studies. ✓ Outsourcing has become inevitable and virtually many of the multinationals are outsourcing to utilise scarce in-house resources. ✓ In this research it is being observed that owners of the companies are the prime winners in outsourcing and off shoring situation.	✓ The report also suggests that 60 percent of the companies are willing to expand their current outsourcing activities in future. ✓ The key findings of the report also identify that the smaller companies are adept to looking at outside service providers, and they prefer a specialized sects of the vendors. ✓ The firms have an increased pressure in the high competitive environment to keep the cost down. ✓ Outsourcing has become inevitable and virtually many of the multinationals are outsourcing to utilise scarce inhouse resources. ✓ The literature describes that outsourcing both in manufacturing and service industries have been adopted largely by industrialised nations.
4	<i>Muhammad Rafiq, 2020. XingPing Zhang, 2020, Jiahai Yuan, 2020 ShumailaNaz, 2020, SaifMaqbool : 2020, MDPI, Basel, Switzerland</i> <i>Impact of a Balanced Scorecard as a Strategic Management System Tool to Improve Sustainable Development</i>	✓ Keeping in view the significance of the strategic management system and its linkage to sustainable development, the study aims to explore the level of their inter-linkage and its contribution to sustainable development. ✓ Therefore, the study is significant because it links the strategic management system with sustainable development within the context of ecological concerns. The BSC is studied in health, banking and educational sectors.	✓ The study was carried out to investigate the empirical effect of a strategic management system on sustainable development by using a balanced scorecard (BSC), as a theoretical lens, and organizational performance, as an intervening variable. ✓ The study incorporated a positivism research paradigm in order to address the objective nature of research. ✓ The study used questionnaires as a data collection instrument. ✓ A stratified-random sampling approach was adopted to reach relevant respondents. ✓ BSC indicated a positive influence on sustainable development. ✓ The findings suggest that non-financial measures have better consequences for employees' performance.
5	<i>Dr. Archana Dadhe, 2018, PARIPEX – Indian Journal of Research</i> <i>Impact of Creating Blue Ocean</i>	✓ Blue Ocean Strategy is the most influential new concept in management strategy	✓ Creating Blue Oceans is not a static achievement but a dynamic process. ✓ The creators of blue oceans, surprisingly, didn't use the competition as their benchmark. Instead, they followed a

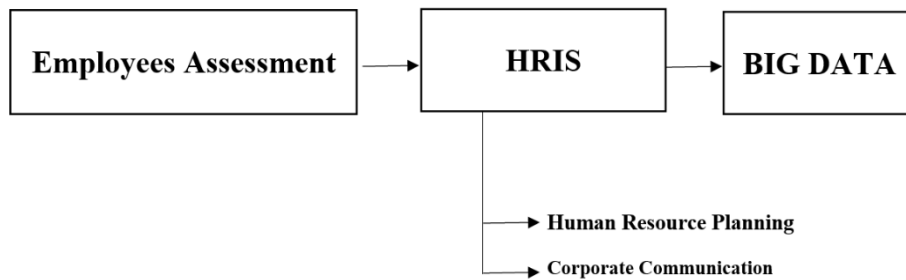
		✓ In the process, companies make their competition irrelevant and discover unoccupied market space. ✓ Blue Ocean is defined by untapped market space, demand creation and the opportunity for highly profitable growth.	different strategic logic that we call value innovation. ✓ Blue Ocean Strategy put forward a new approach which talks about an environment with absolutely zero competition. ✓ Rather than competing in an existing market with your product, create a space where you enjoy hundred per cent monopoly.
6	<i>Ivan Alexander, Rico Wijaya, 2020, International Journal of Scientific & Technology Research.</i> <i>e-Human Resource Management (eHRM) Project.</i>	✓ One of the most popular technology for HRM is Electronic Human Resource Management (E-HRM). E-HRM is an application of information technology that allows managers, applicants and employees access to human resource related information and services through the Internet. ✓ The E-HRM system supports the HR function to satisfy with the HR needs of the organization through web or application technology based channels.	✓ In this study, focus was mainly to discuss the success factor of E-HRM project implementation and the challenge of implementing E-HRM project. ✓ The successful EHRM implementation can be achieved if there are a support from top management, a good communication between team, a good technological factor, organizational factor and people factor.
7	<i>Barkha Gupta, 2013, IOSR Journal of Business and Management</i> <i>Human Resource Information System (HRIS): Important Element of Current Scenario</i>	✓ HRIS is basically an intersection of human resources and information technology through a HR software solution. ✓ HRIS is a software or online solution for the data entry, data tracking, and data information needs of the Human Resources, payroll, management, and accounting functions within a business ✓ HRIS should provide the capability to more effectively plan, control and manage HR costs; achieve improved efficiency and quality in HR decision making effectiveness.	✓ HRIS can play an important part in a company's HR function. ✓ Implementing an effective HRIS can be sure-fire for HR to stay on the cutting edge in its bid to deliver more effective and streamlined service. ✓ The main conclusion of this paper is the realization that the use of computerized HRIS is most effective then manual because its help to maintain data with more accuracy in less time. And that it also trues that HRIS functions improve HRM in terms of administrative purposes and analytical purposes. ✓ HRIS will assist the management team in establishing the organizational mission and setting goals and objectives in motion.
8	<i>Azis Hakim, 2020, Journal of Critical Reviews</i> <i>Effect of compensation, career development, work environment on job satisfaction and its impact on organizational commitments.</i>	✓ This study aims to determine the effect of compensation, career development, work environment and job satisfaction on organizational commitment. ✓ The study was conducted at PT Jakarta Tourisindo. Study sample 86 people. ✓ The sampling technique uses random sampling and data analysis techniques to use path analysis. ✓ The results showed that compensation, career development, work environment and job satisfaction had a positive and significant effect on organizational commitment	✓ The results of this study find that compensation has a direct positive effect on organizational commitment. ✓ The implication is that if an increase in the appropriateness of compensation is improved, it will result in increased organizational commitment. ✓ Compensation given to employees in the form of salaries, incentives, benefits, and rewards. ✓ The results of this study find that career development has a direct positive effect on job satisfaction.
9	<i>Lahar Mishra, RatnaKendhe&JanhaviBhalerao, 2015, International Journal of Scientific & Research Publication.</i> <i>Review on Management Information Systems (MIS) and its Role in Decision Making</i>	✓ This paper focuses on understanding the concept of MIS, the need for MIS, the advantages of MIS in an organization & role of MIS in decision making. ✓ Finally, what challenges are faced by the organization in this process and a few recommendations to curb these challenges.	✓ Management Information Systems provides accurate, timely, relevant and complete information necessary to facilitate decision making in an organization. ✓ It helps in planning, control and operational functions to be carried out effectively and efficiently. ✓ It provides a wide range of decision alternatives for the decision makers,

		✓ It provides a brief understanding of why MIS improves decision making.	- enabling them to make their choice depending on the system and the situation. ✓ MIS with all of its advantages has a few challenges that needs to be overcome.
10	<i>Mehdi Babaei, JafarBeikzad, European Online Journal of Natural and Social Sciences 2013</i> <i>Management Information System, challenges & solutions.</i>	✓ The present study explained the position, aim, role, definition, concept, dimensions, benefits and classification of management information systems and reviewed the problems and barriers of the organizations ✓ Finally, some solutions and propositions were presented to cope with the challenges of management information systems. ✓ To fulfill the planning and control process in each organization, various data should be collected from inside and outside of the organization.	✓ The review of the problems of design process, establishment, operation and development of management information systems in a country can be of great importance in the decision making of the public and private sector organizations. ✓ Providing a comprehensive plan is necessary for using information systems in the organizations before using MIS. ✓ Forming MIS council or MIS directing committee from the initial stages of MIS project in the organization.
11	<i>Akram Jalal Karim, Journal of Information Systems and Technology Management, 2011</i> <i>The Significance of Management Information Systems for enhancing Strategies and Tactical Planning.</i>	✓ Organization that use MIS to enhance its decision making processes should develop effective communication channels between management and information professionals. ✓ MIS is deemed to be a system which provides organizations top management and, even lower level management, with appropriate information based on data from both internal & external sources, to allow them to make effective & timely decisions that best achieve torganization goals.	✓ The results of the research showed that MIS was primarily used to enhance strategic planning in both financial institutions. ✓ The regression analysis revealed that Tactical planning is found to have no effect on Decision Making, while Strategic planning has a clear effect on the Decision Making ✓ Effectiveness in both organizations. MIS was not very adequately implemented for decision making on Strategic planning and Tactical Planning.
12	<i>GauthamNayak, AH Sequeira& Sanjay Senapati, SSRN electronic journal, 2019</i> <i>Management Information System for Effective and Efficient Decision Making : A Case Study</i>	✓ Decision making is an integral part of the functioning of any organization. ✓ To facilitate decision making in this ever-competitive world it is imperative that managers have the right information at the right time to bridge the gap between need and expectation. ✓ To facilitate better flow of information adequate MIS is the need of the hour. ✓ Understanding of the MIS in an organization by all levels of management in order to take effective decisions.	✓ The MIS has greatly facilitated and synchronized the information. ✓ flow in the organization and the management feels that is has played a role in the growth and increased performance of the company.
13	<i>Mohammad NazmulAlam, VakilSingh, Ms. Ripendeeep Kaur, Md. ShahinKabir .</i> <i>Big Data: An Overview with Legal Aspects and Future Prospects Journal of Emerging Technologies and Innovative Research (JETIR), 2014</i>	✓ Focusing on its applications, challenges, and the tools and techniques employed to tackle its complexities. By understanding the applications of big data in diverse domains, organizations can gain insights into how it can be effectively utilized to derive value.	✓ Significant portion of Big Data is unstructured, making it difficult to store in traditional databases.

Theoretical Model



Proposed Model



Type of Research

Essentially, my review is of a descriptive nature. The primary goals are to provide an overview of the current situation and develop an information system-based strategy for human resource management.

5. SCOPE OF THE STUDY

The building of Strategy and its application on Human Resource on rolls of the Organisation by use of Information database.

However, implementation of strategy on appropriate time-frame and on need shall be the sole discretion and decision of the management to reap the best for the employee and organization as a whole.

This review article discusses big data and its applications, challenges, resources, and techniques. "Big data" refers to large, complex datasets that are challenging to manage and analyze with traditional methods. The four V's of big data—volume, variety, velocity, and veracity—highlight its characteristics and the need for specific techniques.

Examined the numerous applications of big data across a range of industries, including healthcare, public services, government, banking, logistics, and transportation, as well as research and education, business, and marketing. These examples demonstrate the tremendous improvements in decision-making, enhanced customer experiences, and innovation that big data analytics can bring about.

Nonetheless, there are a number of issues with big data that businesses must deal with. Data privacy and security, scalability and processing speed, data integration and quality, data management and storage, and ethical and legal concerns are some of these obstacles. A multidisciplinary strategy as well as the adoption of the right tools, technology, and practices are needed to overcome these obstacles.

Additionally, we outlined potential future developments and trends in big data analytics, such as blockchain technology, edge computing and IoT, AI and deep learning, privacy-preserving methods, data visualization, and explainable AI. These developments give businesses more opportunities for creativity, better data handling, and more effective decision-making.

5.1. OUTCOME OF THE PROPOSED WORK

Resource allocation and energy efficiency optimization: Research can look at ways to better allocate resources, use less energy, and make big data infrastructure more sustainable as a result of the expanding scope of big data analytics.

Based on all the observations and gap, the proposed topic to which the objectives has to be fulfilled from Organisations etc. are as follows:

- Effective utilization of Human Resources in consonance with Big Data and its effectiveness in Steel Industries of India.
- Strategic planning necessitates a high degree of strategic thought and alignment with the organization's mission and objectives.
- Identity the areas, systems and procedures where changes can be made more effectively.
- Scientific research is systematic research consisting of various tools and building of database. Human Resource Management & Information System being the vital tool in making Strategic Decision through catering customize MIS.
- Strategic planning serves as an organization's road map and aids in business management.

6. CONCLUSION

The study paper's conclusions have several implications for the organization have a number of organizational ramifications.. Businesses must first recognize the strategic importance of big data analytics and allocate the necessary funds for infrastructure, hiring, and technology in order to fully leverage big data.

They ought to emphasize data security and privacy, create frameworks for data governance, and cultivate cultures that are driven by data.

It is recommended that organizations investigate the particular uses of big data analytics within their respective sectors. They may discover new company prospects, enhance operations, obtain insights into consumer behavior, and raise overall performance and competitiveness by utilizing big data.

Proactive steps are needed to address big data's issues, include putting in place scalable processing and storage systems, guaranteeing establishing robust data integration and quality processes, as well as data protection, privacy and security.

To ensure ethical and conscientious handling of information, organizations should also abide by legal obligations and ethical principles.

List of Abbreviations/ Symbols :

HRM	–	Human Resource Management
HRIS	-	Human Resource Information System
SM-		Strategic Management
EP -		Employment programme
MIS	-	Management Information System
HR-		Human Resource
CC -		Corporate Communication

CONFLICT OF INTERESTS

None.

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None.

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