



Human Resources Planning and Human Resources Information System of Deposit Money Banks in Bauchi State, Nigeria

¹Mohammed Faisal Abdullahi, ²Wasilu Suleiman ¹Department of Business Administration and Management, School of Management Science, The Federal Polytechnic, Bauchi, Bauchi State ²Department of Business Administration, Faculty of Management Science, Bauchi State University Gadau, Bauchi State

ABSTRACT

This study investigated the relationship between human resources planning and human resources information system of deposit money banks in Bauchi state, Nigeria. The study adopted the cross-sectional survey in its investigation of the variables. Primary source of data was generated through self- administered questionnaire. The research targeted total of 447 respondents from the 10 selected deposit money banks in Bauchi State. This total was sourced from the human resources unit of each bank. The sample size of two hundred and seven, (207) was arrived at using the Krejcie and Morgan Table (1970). Based on statistical requirements and consideration of compensating for non-responses, the final sample size was 250. Descriptive and inferential statistics was used to analyze the data collected using the SPSS software. The hypotheses were tested using the Spearman's Rank Order Correlation Statistics. The tests were carried out at a 95% confidence interval and a 0.05 level of significance. The findings revealed that human resources planning had an average significant relationship with human resources information system. The study recommends that banks should invest in the integration and continuous improvement of these systems. DMBs should adopt advanced HRIS solutions that are scalable and flexible, capable of evolving with the changing needs of the bank. This involves selecting software with robust data analytics capabilities, user-friendly interfaces, and strong security features to protect sensitive employee information.

ARTICLE INFO

Article History
Received: August, 2023
Received in revised form: December, 2023
Accepted: January, 2024
Published online: March, 2024

KEYWORDS

Human Resources Information System and Human Resources Planning

INTRODUCTION

Human Resources Planning (HRP) is a critical process for Deposit Money Banks (DMBs) as it ensures the alignment of the workforce with the strategic goals of the organization. HRP involves forecasting the future human resource needs of the bank, evaluating the current workforce, and developing strategies to meet those needs (Hani, 2021). This process helps DMBs to maintain an optimal number of employees with the necessary skills and

competencies, thus enhancing operational efficiency and competitiveness. Johnson (2024) opined in a rapidly changing financial environment, effective HRP enables banks to adapt to market demands, technological advancements, and regulatory changes, ensuring sustained growth and stability.

A Human Resources Information System (HRIS) is an integral tool for managing the vast amount of data associated with HR functions in DMBs (Asfahani, 2021). HRIS is a software





solution that facilitates the collection, storage, management, and analysis of employee information, streamlining HR processes such as recruitment, payroll, performance management, and employee development. Nkem and Oluchukwu [2022] informed by leveraging HRIS, DMBs can achieve greater accuracy and efficiency in handling HR tasks, reducing the administrative burden on HR professionals, and allowing them to focus on strategic initiatives. The integration of HRIS within the HRP framework is essential for data-driven decision-making and improving overall organizational performance.

In the context of Deposit Money Banks, the synergy between HRP and HRIS can enhance significantly human resource management. HRP provides a structured approach to predicting and planning for future workforce needs, while HRIS offers the technological backbone to manage and utilize HR data effectively (Quaosar & Rahman, 2021). This combination ensures that DMBs can not only plan for but also execute their HR strategies with precision and agility. The ability to quickly adapt to changing circumstances and emerging trends in the banking sector is crucial, and the combined use of HRP and HRIS supports this adaptability by providing timely and accurate information for strategic decision-making.

Furthermore, the implementation of HRIS in DMBs supports compliance with regulatory requirements and industry standards. Gautam (2023) said that given the highly regulated nature of the banking sector, maintaining accurate records and ensuring transparency in HR processes are paramount. HRIS helps DMBs to meet these regulatory demands by providing robust reporting capabilities and secure data management. This not only minimizes the risk of non-compliance but also builds trust with stakeholders, including customers, employees, and regulators. In essence, the effective integration of HRP and HRIS enables Deposit Money Banks to optimize their human resources, drive performance, and maintain a competitive edge in the financial industry.

Research Question

The study provided answer to the following research question:

i. What is the relationship between human resources planning and human resources information system?

Hypothesis

HO₁:

There is no significant relationship between human resources planning and human resources information system of deposit money banksin Bauchi State, Nigeria.

LITERATURE REVIEW Theoretical Framework The Resource-Based View (RBV) Theory

The Resource-Based View (RBV) theory by Lockett and Thompson (2001) emphasizes the strategic significance of organizational resources, capabilities, and knowledge in achieving sustainable competitive advantage. In the context of HRP and HRIS, RBV suggests that human capital, comprising the skills, expertise, and competencies of an organization's workforce, constitutes a valuable strategic resource. Effective HRP involves aligning human resource capabilities with organizational objectives, ensuring that the right talent is in place to drive business success (Chakraborty & Biswas, 2020). HRIS, as a technological platform for managing human resource data and processes. plays a pivotal role in enabling HRP by providing the infrastructure for collecting, analyzing, and leveraging workforce information to inform strategic decision-making.

Zvarimwa and Zimuto (2022) emphasized that RBV further posits that competitive advantage arises from resources and capabilities that are valuable, rare, inimitable, and non-substitutable (VRIN). In the context of HRP and HRIS, organizations can gain competitive advantage by leveraging HRIS functionalities to develop dynamic capabilities in workforce planning, talent management, and organizational development. By integrating HRIS functionalities with HRP processes, organizations can enhance their capacity to identify talent needs, forecast





future workforce requirements, and align human resource strategies with broader business objectives. Moreover, RBV highlights the importance of continuous adaptation and improvement in sustaining competitive advantage over time. Through the strategic integration of

HRP and HRIS, organizations can develop dynamic capabilities that enable them to respond effectively to changes in the external environment, optimize human resource management practices, and achieve long-term success in today's competitive landscape.



Figure 1: Conceptual Framework showing the Relationship of the Study Variables

Human Resource Information System

Human resource information system is nothing but an intersection of human resources and information technology through HR software, which helps HR activities to process electronically (Udekwe, Iwu, De la Harpe & Daramola, 2021). It allows an organization to plan HR costs more effectively as well as to manage them and control them without needing to allocate too many resources toward them which in turns leads to increase in efficiency. It is a process to collecting and recording the data related to human resources of an organization. This data includes information like joining date of employees, their contact details and residential address, monthly packages, leave records, etc. Therefore, it carries information an employee from entry till exit (Saffady, 2021). The first employee information system appeared in the 1940s. It had a smaller role than today, and it was used mainly for payroll activities and employee supervision (Mahapatro, 2021) According to some experts Taher (2021) the importance and advantages of this type of technology weren't visible till the 1990s. Still, in the last two decades, Human resource information system has become a key tool for every organization.

Human resource information system (HRIS) is a term used to refer to integrated systems that are used to collect, store, and analyze information about the human resources of an organization (Al-Mahairah, Lourens,

Mokshagundam& Kumar, 2022). The concept of Human resource information system was first introduced over five decades ago and has evolved beyond its initial purpose of changing paper records into computerized databases. The contemporary Human resource information system tools can be used by human resource professionals to carry out various activities on a daily basis. Through these tools, organizations implement more complex computerized systems to help ensure their records are accurate and upto-date. Human resource information system tools are considered critical in today's HRM as they help enhance efficiency with regards to HR decision-making.

Human resource information system (HRIS) is a computerized system which is used to collect, store and analyze records of organization's Human resources consisting data related to employees, recruitment, facility, payroll, pharmacy, health management information system (Mohammed, 2021). The main advantage of this Human resource information system is that it provides guidelines for administration for decision making. Human resource information system is the integration of all HR systems and processes with use of technology to benefit the overall management of HR in an organization. It is used to Automate all routine and transactional activities relating to employees, potential emplovees from among job-applicants, maintaining records of existing employees,





analyze attrition records, keep track workforce deployment and staffing effectiveness, keep track of compensation programmes to make salary forecasts and pay budget (Malik, Budhwar, Patel &Srikanth, 2022).

Human Resource Planning

Human Resource Planning is planning the workforce to suit company needs and is effective and efficient in the realization of goals (Sharma, 2023). Human resource planning is the process of determining a strategy for obtaining, utilizing, developing, and maintaining human resources according to the current needs of the company and developing them in the future (Greer, 2021).

Human resources within organizations is a very important factor for the effectiveness of internal activities (Anwar & Abdullah, 2021; Mahapatro, 2021). To achieve this, the organization is required to improve the quality of people being recruited who will improve their performance and contribute to improving organizational performance (Charlwood &Guenole, 2022). Quality human resources are more important than the wealth of natural resources because the wealth of natural resources cannot guarantee the welfare and success of a nation (Sinha & Sengupta, 2022). Some of the HR planning functions automated by Human resource information system include identification of potential employees, maintaining complete employee records, and developing programs for employee talent development (Li, 2021).

The process of ensuring that a company's resources are used effectively in order to achieve its objectives is known as organizational efficiency (Ali & Anwar, 2021). Kryscynski (2021) define organizational success as a firm's ability to achieve its goals through employee retention, a diverse management style, internal work motivation, greater commitment, job satisfaction, and career opportunities. Financial stability and productivity may be used to assess organizational performance, but when it comes to human resource planning, other factors such as quality and effectiveness, employee engagement,

work satisfaction, and employee trust are taken into consideration (Sara, Saputra & Utama, 2021). For this study, subjective measure of organizational performance is used the perception of employees on organization performance is used for the analysis.

Human Resources Planning (HRP) and Human Resources Information Systems (HRIS)

The nexus between human resources planning (HRP) and human resources information systems (HRIS) is fundamental to effective workforce management and organizational performance (Murithii, 2023). HRP involves forecasting future human resource needs, identifying potential gaps between demand and supply of talent, and developing strategies to address these gaps. HRIS, on the other hand, refers to the technology systems and software used to manage human resource data, automate HR processes, and support decision-making, Bal. Bozkurt and Ertemsir (2022) opined the integration of HRP and HRIS enables organizations to align their human resource capabilities with strategic goals, optimize workforce efficiency, and enhance overall organizational performance.

Tian, Cooper, Deng and Zhang (2024) suggested HRP relies heavily on accurate and timely data to inform decision-making processes. HRIS plays a critical role in providing the necessary data infrastructure for HRP by capturing, storing, and analyzing information related to workforce demographics, skills inventory. performance evaluations. succession planning (Mahapatro, 2021). By leveraging HRIS capabilities, organizations can access real-time data on employee demographics, turnover rates, recruitment pipelines, and training needs, enabling HR professionals to make informed decisions about talent acquisition, retention, and development strategies. Moreover, HRIS facilitates scenario planning and predictive analytics, allowing organizations to forecast future workforce requirements, anticipate skill gaps, proactively develop strategies to address evolving business needs (Yoon, Han & Chae, 2024).





Furthermore, the integration of HRP and HRIS fosters greater strategic alignment between human resource management practices and organizational objectives. Mahapatro (2021) opined that by linking workforce planning initiatives with HRIS functionalities, organizations can ensure that their human resource strategies are grounded in data-driven insights and aligned with broader business goals. For example, HRIS can enable organizations to identify high-potential employees for leadership development programs, track the effectiveness of recruitment efforts, and monitor employee engagement levels-all of which are essential components of strategic workforce planning. Additionally, HRIS enables HR professionals to evaluate the impact of human resource initiatives on key performance indicators (KPIs) such as productivity, employee satisfaction, and financial performance, facilitating continuous improvement and optimization of human resource management practices.

METHODOLOGY

The study was carried out using the cross sectional research design. The research targeted total of 447 respondents from the 10 selected deposit money bank in Bauchi State. This total was sourced from the human resources unit of each bank. The sample size of two hundred and

seven, (207) was arrived at using the Krejcie and Morgan Table (1970). However, McNamara, Zisser, Beevers and Shumake, (2022) argued that to obtain adequate data, researchers should increase the sample size to compensate for likely non-response. Therefore, based on statistical requirements and consideration of compensating for non-responses, the final sample size was 250. The study made use of primary data collection (questionnaire). The research instrument was validated through expert's vetting and approval while the reliability of the instrument was achieved by the use of the Cronbach Alpha coefficient with all the items scoring above 0.70(Taber, 2018). Descriptive and inferential statistics was used to analyze the data collected using the SPSS software to analyze the questionnaire statements and test the hypotheses.

DATA ANALYSIS AND RESULTS

The Spearman rank order correlation tool was used to analyze the primary data with a 95 percent confidence level. The tests specifically address the null forms of hypothesis H01, which was bivariate. The probability of accepting the null hypothesis at (p>0.05) or rejecting the null hypothesis at (p0.05) is determined by the use of the 0.05 significance level as the criterion.

Table 1: Correlations Matrix for Human Resources Planning and Human Resources Information System

			Human Resources Information System	Human Resources Planning
arman's rho	Human Resources Information System	Correlation Coefficient Sig. (2-tailed) N	1.000 234	.684** .000 234
	Human Resources Planning	Correlation Coefficient Sig. (2-tailed) N	.684** .000 234	.950** .000 234

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Output, 2024





Table 1 shows a Spearman Rank Order Correlation Coefficient (rho) of 0.684 on the relationship between human resources planning and human resources information system. This value implies that an average relationship exists between the variables. The direction of the relationship indicates that the correlation is positive; implying that an increase in human resources information system may be a result of the adoption of human resources planning. Therefore, there is an average positive correlation between human resources planning and human resources information system of deposit money banks in Bauchi State, Nigeria.

DISCUSSION OF FINDINGS

The findings as presented in table 1 revealed that there is an average positive significant relationship between human resources planning and human resources information system of deposit money banksin Bauchi State, Nigeria. This finding agrees with the study of Vecchi, Della Piana, Feola & Crudele, (2021) who explained in their study that Human resource information system (HRIS) is not new concept but it is recuperating day by day with changing environment. Its major role is in human resource planning (HRP) which itself a crucial activity in any organization. Ineffective HRP can lead to extra or fewer numbers of employees than needed. Both over and under number of employees can create crappy situations.

Likewise, Sadiq, Khan, Ikhlaq and Mujtaba (2022) also found out that the greatest uses of Human resource information system were its contribution to the efficiency and effectiveness of HR planning through Human resource information system skills' inventory, Human resource information system training needs analysis, Human resource information system succession planning and Human resource information system labour demand and supply analysis. According to Vecchi, Della Piana, Feola and Crudele, (2021), human resource information system manages the raw data and the information of the extensive employees, their current job position, shortfall of personnel, supports in administering the skill inventory of the

organization which ultimately helps to design an impeccable recruitment plan

CONCLUSION AND RECOMMENDATION

The integration of Human Resources (HRP) and Human Resources Planning Information Systems (HRIS) is fundamental for the success of Deposit Money Banks (DMBs). HRP ensures that banks are proactive in anticipating and meeting their workforce needs, aligning human capital with organizational goals and adapting to changes in the financial landscape. HRIS complements this by providing a robust platform for managing employee data, enhancing the efficiency and accuracy of HR processes, and enabling data-driven decision-making. Together, these tools empower DMBs to optimize their human resource management, ensuring that they have the right people with the right skills in the right positions at the right time.

Moreover, the synergy between HRP and HRIS facilitates regulatory compliance, a critical aspect for DMBs operating in a highly regulated industry. By maintaining accurate records and ensuring transparency, HRIS helps banks meet regulatory requirements and build trust with stakeholders. This not only minimizes the risk of penalties and reputational damage but also supports the overall strategic objectives of the bank. In a competitive and dynamic banking sector, the effective use of HRP and HRIS enables DMBs to enhance operational efficiency, drive performance, and maintain a competitive advantage, ultimately contributing to their long-term success and stability.

The study recommends that banks should invest in the integration and continuous improvement of these systems. DMBs should adopt advanced HRIS solutions that are scalable and flexible, capable of evolving with the changing needs of the bank. This involves selecting software with robust data analytics capabilities, user-friendly interfaces, and strong security features to protect sensitive employee information.

It is also crucial for DMBs to align their HRP processes with strategic business goals through regular reviews and updates. This





includes conducting thorough workforce analyses, identifying future skill requirements, and developing targeted recruitment, training, and retention strategies. By leveraging the data and insights provided by HRIS, banks can make informed decisions to address workforce gaps and enhance employee development programs. Continuous training for HR professionals on the latest HRIS functionalities and best practices is also essential to maximize the system's potential. By prioritizing the integration and optimization of HRP and HRIS, DMBs can achieve greater operational efficiency, adaptability, and strategic alignment, ultimately driving sustainable growth and competitive advantage.

REFERENCE

- Ali, B. J., & Anwar, G. (2021). Strategic leadership effectiveness and its influence on organizational effectiveness. *International Journal of Electrical, Electronics and Computers*, 6(2).
- Al-Mahairah, M. S., Lourens, M., Mokshagundam, S. S., & Kumar, K. S. (2022). *Human Resource Information System.* Book Rivers.
- Anwar, G., & Abdullah, N. N. (2021). The impact of Human resource management practice on Organizational performance. *International journal of Engineering, Business and Management (IJEBM)*, 5.
- Asfahani, A. M. (2021). The complementary relationship between human resources accounting and human resources information system. *Open Journal of Accounting*, 10(2), 30-41.
- Bal, Y., Bozkurt, S., &Ertemsir, E. (2022). The importance of using human resources information systems (HRIS) and a research on determining the success of HRIS. In *Strategic Human Resource Management at Tertiary Level* (pp. 197-209). River Publishers.
- Chakraborty, D., & Biswas, W. (2020).

 Articulating the value of human resource planning (HRP) activities in

- augmenting organizational performance toward a sustained competitive firm. *Journal of Asia Business Studies*, 14(1), 62-90.
- Charlwood, A., &Guenole, N. (2022). Can HR adapt to the paradoxes of artificial intelligence?. *Human Resource Management Journal*, 32(4), 729-742.
- Gautam, A. (2023). The evaluating the impact of artificial intelligence on risk management and fraud detection in the banking sector. *Al, IoT and the Fourth Industrial Revolution Review, 13*(11), 9-18.
- Greer, C. R. (2021). Strategic human resource management. Pearson Custom Publishing.
- Hani, J. B. (2021). The impact of human resource planning (HRP) in achieving the strategic goal of the firm with the moderating role of organizational innovation. *International Journal of System Dynamics Applications* (IJSDA), 10(4), 1-22.
- Johnson, O. J. (2024). Human Resource Planning And Organizational Performance Deposit Money Banks In Awka.
- Krejcie, R. V., & Morgan, D. W. (1970). Sample size determination table. *Educational and psychological Measurement*, 30, 607-610.
- Kryscynski, D. (2021). Firm-specific worker incentives, employee retention, and wage-tenure slopes. *Organization Science*, 32(2), 352-375.
- Li, H. (2021). Optimization of the enterprise human resource management information system based on the internet of things. *Complexity*, 2021, 1-12.
- Lockett, A., & Thompson, S. (2001). The resource-based view and economics. *Journal of management*, 27(6), 723-754.
- Mahapatro, B. (2021). *Human resource management*. New Age International
 (P) Limited.





- Malik, A., Budhwar, P., Patel, C., & Srikanth, N. R. (2022). May the bots be with you! Delivering HR cost-effectiveness and individualised employee experiences in an MNE. The International Journal of Human Resource Management, 33(6), 1148-1178.
- McNamara, M. E., Zisser, M., Beevers, C. G., & Shumake, J. (2022). Not just "big" data: Importance of sample size, measurement error, and uninformative predictors for developing prognostic models for digital interventions. Behaviour research and therapy, 153, 104086.
- Mohammed, B. I. (2021). The role of human resource information system in achieving organizational excellence. The Scientific Journal of Cihan University—Sulaimaniya, 5(1), 90-113.
- Murithii, J. G. (2023). Human Resource Planning Subsystem and Firm Performance of Listed Companies at the Nairobi Securities Exchange in Kenya. International Journal of Social Science and Humanities Research (IJSSHR) ISSN 2959-7056 (o); 2959-7048 (p), 1(1), 108-124.
- Nkem, E. P., & Oluchukwu, O. D. 2022 Human Resources Information System Practice and Organizational Effectiveness of Deposit Money Banking in Port Harcourt.
- Quaosar, G. A. A., & Rahman, M. S. (2021). Human Resource Information Systems (HRIS) of Developing Countries in 21st Century Review and Prospects.
- Sadiq, U., Khan, A. F., Ikhlaq, K., & Mujtaba, B. G. (2022). The impact of information systems on the performance of human resources department. In *Strategic Human Resource Management at Tertiary Level* (pp. 31-47). River Publishers.
- Saffady, W. (2021). Records and information management: fundamentals of

- professional practice. Rowman & Littlefield.
- Sara, I., Saputra, K. A. K., & Utama, I. W. K. J. (2021). The effects of strategic planning, human resource and asset management on economic productivity: A case study in Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(4), 381-389.
- Sharma, F. C. (2023). *Human resource management*. SBPD Publications.
- Sinha, M., & Sengupta, P. P. (2022). FDI inflow, ICT expansion and economic growth:

 An empirical study on Asia-pacific developing countries. *Global Business Review*, 23(3), 804-821.
- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in science education*, 48, 1273-1296.
- Taher, G. (2021). E-commerce: advantages and limitations. International Journal of Academic Research in Accounting Finance and Management Sciences, 11(1), 153-165.
- Tian, T., Cooper, R., Deng, J., & Zhang, Q. (2024). Transforming Investment Strategies and Strategic Decision-Making: Unveiling a Novel Methodology for Enhanced Performance and Risk Management in Financial Markets. arXiv preprint arXiv:2405.01892.
- Udekwe, E., Iwu, C. G., De la Harpe, A. C., & Daramola, J. O. (2021). A systematic literature review of Human Resource Information System (HRIS) usage in the health system of South Africa. International Journal of Research in Business and Social Science (2147-4478), 10(7), 87-115.
- Vecchi, A., Della Piana, B., Feola, R., & Crudele, C. (2021). Talent management processes and outcomes in a virtual organization. *Business Process Management Journal*, 27(7), 1937-1965.



JOURNAL OF SCIENCE TECHNOLOGY AND EDUCATION 12(1), MARCH, 2024 ISSN: 2277-0011; Journal homepage: www.atbuftejoste.com.ng



Yoon, S. W., Han, S. H., & Chae, C. (2024). People Analytics and Human Resource Development-Research Landscape and Future Needs Based on **Bibliometrics and Scoping** Review. Human Resource Development Review, 23(1), 30-57.

Zvarimwa, C., & Zimuto, J. (2022). Valuable, rare, inimitable, non-substitutable and exploitable (VRINE) resources on competitive advantage. International Journal of Business & Management Sciences, 8(1), 9-22.