The Impact of HRIS on HR Management functions and organization performance In the Private Sector Companies in Egypt

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Abstract:

- **Purpose:** This research aims to explore more the functions of HRIS and its impact on the organization Performance. In addition, this research suggests a conclusion on the effectiveness of HRIS on HR Management functions and company's performance.
- **Design/ Methodology/ Approach:** The elements and variables and their relationship will be researched and examined from the positive or negative side by using quantitative methods
- **Findings:** There is a positive relationship between HRIS and HRM functions and Organization performance.

• **Research Limitation:** The research limitations are the effect of this new technology on the employees' numbers and turnover in the companies.

Keywords:

- HR Digitalization
- HR Management
- Systems
- Company's Performance
- Future
- Managers Perceptive

الملخص:

الغرض: تهدف هذه البحث إلى استكشاف المزيد من وظائف نظم معلومات الموارد البشرية وتأثيرها على أداء المنظمة. بالإضافة إلى ذلك، تقترح هذه البحث استنتاجًا حول فعالية نظم معلومات الموارد البشرية في وظائف إدارة الموارد البشرية وأداء الشركة

التصميم / المنهج / النهج: ستتم دراسة العناصر والمتغيرات وعلاقتها من الجانب الإيجابي أو السلبي باستخدام الأساليب الكمية

النتائج: هناك علاقة إيجابية بين نظم معلومات الموارد البشرية ووظائف إدارة الموارد البشرية وأداء المنظمة

قيود البحث: تأثير هذه التكنولوجيا الجديدة على عدد الموظفين ومعدل الانتقال في الشركات هي القيود على البحث

الكلمات الرئيسية:

-الرقمنة في الموارد البشرية
-إدارة الموارد البشرية
-النظم
-أداء الشركة
-المستقبل
-وجهة نظر المديرين

1. Introduction:

An organization is a structured entity where individuals work together towards common goals, encompassing businesses, nonprofits, government agencies, and other groups with defined structures, hierarchies, and functions. Organizational development aims to improve effectiveness, efficiency, and adaptability through several key steps:

1. **Assessment**: Conducting a SWOT analysis to identify areas for improvement.
2. **Setting Clear Objectives**: Defining SMART goals aligned with the organization's mission.
3. **Leadership Development**: Investing in strong leadership.
4. **Employee Engagement**: Fostering a culture of involvement and empowerment.
5. **Training and Development**: Enhancing employee skills through ongoing programs.
6. **Process Improvement**: Streamlining operations and reducing inefficiencies.
7. **Change Management**: Implementing strategies for smooth transitions during changes.
8. **Performance Management**: Establishing systems to set expectations and reward performance.
9. **Adaptability and Innovation**: Encouraging creativity and responsiveness to external changes.

10. **Monitoring and Review**: Regularly evaluating and adjusting development strategies.

Human Resources (HR) plays a crucial role in managing personnel, involving functions like recruitment, onboarding, training, performance management, employee relations, benefits administration, policy development, and offboarding. The evolution of HR has been influenced by shifts in workplace dynamics, legal mandates, and societal expectations, evolving from administrative tasks to strategic human resource management (SHRM), focusing on aligning HR strategies with organizational goals.

Human Resource Information Systems (HRIS) have evolved alongside technological advancements, starting with basic systems for managing employee data and progressing to sophisticated platforms integrating organizational systems and advanced analytics. HRIS enhances HR effectiveness and efficiency, supporting data-driven decisions and improving various HR functions.

Research Goals:

1. Study the impact of HRIS on HR management and employee well-being.
2. Explore HRIS functions and their impact on organizational performance.

3. Investigate the positive and negative effects of technology on normal processes.
4. Determine HRIS functions.
5. Evaluate the effectiveness of HRIS on HR management and company performance.

Research Importance: HRIS is vital for managing human resources effectively, particularly in service-based businesses. It enhances HR operations' efficiency, reduces costs, minimizes human errors, and supports strategic decision-making. Effective HRIS implementation is crucial for maintaining competitive advantage.

Research Problem: Organizations must keep up with technological advancements like HRIS to avoid inefficiencies, disorganized data, and reduced competitiveness. Implementing HRIS can streamline processes, reduce errors, and enhance HR functions, ensuring the organization remains competitive.

Previous Studies:

- **HRIS and HRM Practices**: HRIS has significantly impacted HR functions, improving efficiency, automating routine tasks, and allowing HR professionals to focus on strategic goals. (Quaosar and Rahman, 2021)
- **HRIS and Organizational Performance**: HRIS enhances organizational effectiveness by providing strategic planning

tools, reducing administrative activities, and improving HR service delivery. (Qaisar, Shahzad and Arif,2018)

- **HRM and Organizational Performance**: HRM practices directly correlate with organizational performance, particularly through employee performance (Katou and Budhwar,2007). Training, promotions, compensation, and benefits are crucial in enhancing employee performance, ultimately improving organizational performance (Kadir, AlHosani and Sehan, 2019).

2. HR Management:

2.1. Introduction and Concept of HRM:

Human Resource Management (HRM) is the strategic approach to managing work and people towards achieving desired organizational goals (Mear and Werner,2020). It involves policies and practices that regulate the human resource aspect of businesses, aligning with the organization's overall strategy (Obeidat, 2012). The Harvard model emphasizes employee engagement not just for productivity and profitability but for fulfilling employee needs. The strategic approach in HRM includes selection, reward, development, and appraisal processes that align with the organization’s objectives (Edgar and Geare,2005).

HR professionals act as business partners, fostering trustworthy HR functions and developing strategies for evolving business environments (Ishaq etc,2022). HRM practices have evolved to meet the needs of the Industrial Revolution, making

organizations more digital and innovative (Jotaba etc, 2022). Effective HRM leads to competitive advantages through superior HR practices, influencing employee commitment, performance, and engagement (Vincent et al, 2022).

2.2. Importance of HRM:

HRM practices significantly impact business outcomes like productivity, performance, and innovation. Effective HRM involves integrating HR practices with the organization's strategy, which leads to better staff development, retention, and overall organizational performance (Cooke,1994). HRM's strategic role involves creating business value, enhancing customer satisfaction through employee engagement, and fostering economic sustainability (Zhao etc, 2018).

HRM also plays a crucial role in entrepreneurship and innovation success (Jotaba etc, 2021). Efficient HRM practices in job design, recruitment, performance management, and training are essential for achieving organizational goals and maintaining a competitive edge (Dar,2014).

2.3. Components of HRM:

2.3.1. HR Planning:

Initially focused on optimizing existing workforce operations, contemporary HR planning now predicts future workforce needs, collects data, and crafts detailed plans for achieving goals (Albaz, 2019). In addition to this, HR Planning is critical for recruitment

processes and overall organizational success. Lastly, it involves assessing present and future HR needs to fulfill organizational objectives (Sarwary, Faizi and Banayee,2022)..

2.3.2. Staff Development:

Encompasses all training aspects, including preparatory activities, practice, coaching, and follow-up support. (Guskey and Sparks,1991). Moreover, It includes professional and institutional development, helping employees determine their career goals and contributing to retention management (Geel, 2005). Last but not least, Training and development enhance employee skills and performance, promoting self-reliance and effective functioning under pressure (Okechukwu,2017).

2.3.3. Recruitment and Selection:

Recruitment aims to attract a suitable pool of candidates to meet strategic business objectives at minimal cost. Also, Effective recruitment involves job analysis, advertising, shortlisting, and utilizing various selection tools to find the best candidates (Ashraf, 2017). Recruitment sources include internal (transfers, promotions) and external (advertisements, agencies, referrals) (Stephen et al, 2019)

2.3.4. Total Rewards:

Total rewards include both compensation and relational returns, such as recognition, job security, and learning opportunities (Gulyani and Sharma, 2018). Moreover, A holistic rewards system boosts employee engagement and retention,

linking employees' contributions to their rewards (Alhmoud and Rjoub, 2019). Lastly, Effective total rewards strategies enhance employee motivation, performance, and organizational loyalty.

HRM is thus integral to an organization's success, encompassing strategic alignment of HR practices, fostering innovation and digital transformation, and creating a motivated and capable workforce.

3. Human Resources Information System (HRIS):

3.1. Concept of HRIS:

Human Resource Information Systems (HRIS) have evolved significantly since their inception over 50 years ago, moving from simple digital storage of paper records to comprehensive systems that manage various HR functions (Gupta, 2013). HRIS is a crucial Management Information System (MIS) that helps organizations handle HR activities by collecting, storing, modifying, evaluating, retrieving, and disseminating human resource data. It integrates technology, processes, policies, and data to improve HR management and efficiency (Nagendra and Deshpande,2014). HRIS facilitates tasks such as recruitment, selection, assessment, and development, making it a vital tool for modern HR departments. By automating routine tasks, HRIS enables HR professionals to focus on strategic activities like leadership development and talent management. (Mauro and Andrade,2019)

3.2. Importance of HRIS:

HRIS is essential for managing human resources effectively in today's dynamic environment. It simplifies HR tasks, improves efficiency, and enhances decision-making by providing comprehensive data and reports (Arora,2013). An integrated HRIS connects with other organizational systems, such as payroll and accounting, to streamline communication and operations (Nagendra and Deshpande, 2013). By automating basic HR tasks, HRIS allows HR professionals to contribute more strategically to the organization (Aggarwal and Kapoor, 2012). It also empowers employees to manage their own benefits and personal information, freeing up HR staff for higher-level tasks . HRIS supports strategic decision-making, program evaluation, and operational issues, ultimately strengthening the HR department's role as a business partner (Bilgic,2021).

3.3. Reasons behind Shifting to HRIS:

The shift to HRIS is driven by the need for increased efficiency, better decision-making, and enhanced strategic planning. HRIS helps organizations adapt to competitive environments by providing data for future workforce planning and strategy development (Maamari and Osta,2020). It supports various HR functions, from training and development to performance management and corporate communication (Al-Dmour etc,2015). The adoption of HRIS is not limited to large companies; small and mid-sized businesses also benefit from

these systems due to advancements in technology and reduced costs (Menant, Gilibert and Sauvezon,2021). HRIS aids in long-term planning, staffing, training, compensation, labor relations, and risk management by offering comprehensive data and analytical tools. This shift towards HRIS is essential for improving organizational performance and competitiveness (Maditheti and Gomes, 2017).

4. Organizational Performance

4.1. Definition:

Organizational performance can be viewed narrowly or broadly. In a narrow sense, it relates to financial results, market performance, and shareholder returns (Jaleha and Machuki, 2018). More broadly, it includes non-financial indicators such as customer satisfaction, operational efficiency, and corporate social responsibility. It is influenced significantly by external factors like the economy, technology, and politics, often more so than internal variables like size and management style (Alam and Islam, 2017).

4.2. Concept in HRM:

Firm performance is often defined as operational performance in HRM studies, with metrics including cost, quality, delivery, and flexibility (Hui Lee, Zang Leeb and Yih Wu,2010). HRM's impact on organizational results is acknowledged, yet researchers frequently examine its effect on

individual outcomes, which can lead to omitted variables bias. HRM involves training and developing employees, which enhances knowledge, skills, and overall firm performance, despite concerns about training costs (Katou,2016) .

4.3. Measuring Organizational Performance:

Performance measurement frameworks typically lack detailed guidance on implementing performance indicators (Looy and Shafagatova,2016). A comprehensive assessment involves both quantitative metrics (e.g., profitability, ROI, market share) and qualitative indicators (e.g., job satisfaction, employee turnover) (Alam and Islam, 2017). Numerous models exist, but practical application often lacks empirical evidence, focusing mainly on the design phase of Performance Management Systems (PMS) (Naslund and Norrman,2019) .

4.4. Measuring Organizational Performance through Employee Performance:

4.4.1. Employee Performance:

Companies value employees with diverse skill sets, linking performance to job satisfaction and compensation (Diamantidis and Chatzoglou,2019). Effective performance management systems start during recruitment, clarifying job roles and expectations (Pradhan and Jena, 2017). Employee performance includes various metrics such as productivity, reliability, and cooperation, and is influenced by capability, motivation, and work environment (Kareem and Hussein, 2019).

4.4.2. Ways to Enhance Employee Performance:

A) Training & Development: Investing in training is crucial for developing skilled employees, which in turn enhances organizational performance (Tetteh etc, 2017). Effective training aligns with job roles and promotes career advancement (Kumar and Siddika, 2017).

B) Compensation and Benefits: Compensation motivates employees to perform better (Rajendran, Mosisa and Nedelea, 2017). Both direct (salary) and indirect (benefits) compensation significantly impact productivity and employee retention (Ahmed and Ahmed, 2014).

C) Promotions: Career advancement opportunities, including promotions, motivate employees and enhance job performance (Yamin, Sakawati and Putri, 2019). Promotion reflects trust in an employee's abilities and encourages further skill development.

D) HRIS: The adoption of HRIS improves efficiency in administrative tasks, allowing HR managers to focus on strategic roles. HRIS also contributes to employee performance by providing accurate information for decision-making and fostering a secure, ethical workplace (Setyawati, Woelandari and Rianto, 2022).

5. Field Study

5.1. Introduction: Field Study

A field study is a research method that involves collecting observations and data in natural settings. This qualitative

approach includes observing, interviewing, and interacting with participants in their environments, such as workplaces or communities. It's utilized across various disciplines like anthropology, sociology, ecology, education, and business, each with tailored objectives and methods. Planning a field study involves defining research questions, identifying research sites, and determining data collection methods (e.g., surveys, interviews, observations).

5.2. Importance of Field Study

Field research enhances the quality and validity of research findings, providing authentic and accurate data. It offers flexibility to adapt strategies to specific research questions and participant needs, leading to detailed insights that other methods might not capture. Field studies are crucial for understanding behavior and social phenomena, fostering community engagement, cultural awareness, and the development of skills like observation, critical thinking, and communication.

5.3. Types of Field Study

1. **Ethnography**: Researchers immerse themselves in a culture or group to understand social phenomena through in-depth interviews, participant observation, and interactions.

2. **Participant Observation**: Researchers observe and document behaviors and social conditions while participating in activities, gaining a comprehensive understanding of the group's culture.
3. **Case Studies**: In-depth analyses of specific individuals, groups, or communities using observations, interviews, and document analysis to explore occurrences in real-world settings.
4. **Action Research**: A collaborative approach where researchers work with partners to identify and solve real-world problems through planning, action, observation, and reflection cycles.
5. **Surveys and Interviews**: Collecting data on attitudes, beliefs, opinions, and behaviors through surveys, interviews, or focus groups in natural settings.

5.4. Research Methodology

The study is descriptive, cross-sectional, and quantitative, aiming to understand the impact of HRIS on HRM functions and organizational performance. Data were collected from a diverse sample of 347 respondents through an online survey, focusing on variables like gender, age, employment status, and education level.

5.5. Research Approach

5.5.1 Research Hypotheses

- H1: HRIS positively relates to HR Planning.
- H2: HRIS positively relates to HR Operations.

- H3: HRIS negatively relates to Staff Development.
- H4: HRIS positively relates to Recruitment and Selection.
- H5: HRIS positively relates to Organizational Performance.
- H6: HRIS positively relates to Employee Performance.

5.5.2 Conceptual Framework

The conceptual framework revolves around the impact of HRIS on various HRM functions and organizational performance.

5.5.3 Data Collection

Data were gathered from 347 respondents via a Google survey shared on LinkedIn and WhatsApp. Closed-ended questions were used for efficiency and consistency, facilitating quick and easy responses and streamlined data analysis.

5.5.4 Research Population and Sample Selection

The sample included individuals aged 21 and above, with at least a bachelor's degree and employed either full-time or self-employed. Non-probability sampling was used to select a purposeful and accessible group, resulting in 374 responses to ensure accuracy and richness in findings.

5.5.5 Research Limitations

The study is limited by its focus on HRIS impact in Egypt's private sector, with challenges in obtaining diverse samples and a representative population. Future research should consider broader geographic and demographic diversity.

5.5.6 Questionnaire Design

The questionnaire used multiple-choice questions for demographics and Likert scale questions for other sections. Respondents rated their agreement on statements using a 1-5 scale (1 = Strongly Agree, 5 = Strongly Disagree).

5.5.7 Tools of Statistical Analysis

Data were analyzed using SPSS version 25 and Microsoft Excel. The analysis included frequency tables, graphs (histograms, pie charts, bar charts), reliability and validity tests, descriptive measures, normality tests, and significance tests for correlation coefficients.

6.Research Results and Recommendations

Survey Analysis:

Analyzes collected data to evaluate the impact of HRIS on HRM functions and organizational performance. The analysis confirms the positive effects of HRIS adoption, highlighting improvements in efficiency, accuracy, and strategic planning.

Reliability and Validity Testing:

Ensures the consistency and accuracy of the research instruments used, validating the findings and supporting the research conclusions. Reliability tests (e.g., Cronbach's alpha) and validity assessments (e.g., construct validity) are conducted to ensure the robustness of the data.

Test of Normality:

Testing the normality of the responds of the questionnaire through applying the Kolomogorov-Smirnov test, were.

The Null Hypothesis (H0): The Responds are normally distributed.

The Alternative hypothesis (H1): The responds are not normally distributed.

Correlation Test:

To test all the suggested hypothesis, the correlation test must be used. Since all the variables are not normally distributed, the Spearman (Rank) correlation have to be used, where

The null hypothesis (H) : There is no significant relation between the two variables.

The Alternative hypothesis (H) : There is a significant relation between the two variables.

To take the decision, the researcher has to compare the value of Sig. (2-tailed) which is also called the P-value with (α) (where is the selected significance level (one - the confidence level)). If Sig. (2-tailed) is less than or equal (α) the null hypothesis must be rejected and cannot reject the alternative

which means that there is a significant relation between the two variables. To find the significant relation is direct or inverse, this can be decided from the sign of the correlation coefficient. If it is positive, then the relation is direct and if it is negative then the relation is inverse. Otherwise, there is no significant relation.

Summary of Research Results:

There is a significant direct relation between HRIS (HR Information System) and the other factors. The following are the arrangement of the correlation from the highest to the lowest

1. The correlation with the HR Planning (0.438)
2. The correlation with the Organization Performance (0.406)
3. The correlation with the Staff Development (0.404)
4. The correlation with the Recruitment and Selection (0.388)
5. The correlation with the HR Operations (0.359)
6. The correlation with the Employee Performance (0.301)

Using the Age as a mediator variable

- In the age group from 21 years to before than 25 years, the following is the arrangement of the correlation between HRIS (HR Information System) and the other factors from the highest to the lowest.

1. The correlation with the HR Operations (0.773)
2. The correlation with the Staff Development (0.707)
3. The correlation with the Recruitment and Selection (0.681)
4. The correlation with the HR Planning (0.562)

5. The correlation with the Employee Performance (0.511)
6. The correlation with the Organization Performance (0.455)

In the age group from 25 years to before than 35 years, the following is the arrangement of the correlation between HRIS (HR Information System) and the other factors from the highest to the lowest.

1. The correlation with the HR Planning (0.443)
2. The correlation with the Recruitment and Selection (0.402)
3. The correlation with the Staff Development (0.366)
4. The correlation with the Organization Performance (0.299)
5. The correlation with the HR Operations (0.289)
6. The correlation with the Employee Performance (0.240)

In the age group from 35 years to before than 45 years, there is no significant relation between HRIS (HR Information System) and both the HR Planning and the Recruitment and Selection. The following is the arrangement of the correlation between HRIS (HR Information System) and the other factors from the highest to the lowest.

1. The correlation with the Organization Performance (0.541)
2. The correlation with the Employee Performance (0.376)
3. The correlation with the HR Planning (0.368)
4. The correlation with the Staff Development (0.310)

In the age group from 45 years to before than 55 years, the following is the arrangement of the correlation between HRIS (HR Information System) and the other factors from the highest to the lowest.

1. The correlation with the Organization Performance (0.781)
2. The correlation with the Recruitment and Selection (0.715)
3. The correlation with the Staff Development (0.680)
4. The correlation with the HR Operations (0.576)
5. The correlation with the Employee Performance (0.550)
6. The correlation with the HR Planning (0.368)

Recommendations:

1.Encourage HRIS Adoption: Organizations should adopt HRIS to stay competitive and achieve strategic HRM objectives. The study suggests that companies that have not yet implemented HRIS should consider doing so to leverage its benefits.

2.Invest in Technology: Companies should invest in the latest HRIS technology to ensure they have the most efficient and effective systems in place. Regular updates and maintenance are crucial to keep the system functional and secure.

3.Training for HR Personnel: HR staff should be trained to effectively use HRIS. Continuous professional development ensures that HR personnel can maximize the potential of HRIS in managing human resources.

4.Align HRIS with Organizational Strategies: HRIS implementation should be aligned with organizational strategies to maximize its benefits. This alignment ensures that HRIS supports the overall strategic goals of the organization, enhancing its value and impact.

Conclusion:

The study concludes that HRIS is a crucial tool for modern HR management, providing substantial benefits in terms of operational efficiency, strategic decision-making, and overall organizational performance. The adoption of HRIS in the private sector in Egypt is essential for improving HRM functions and enhancing organizational performance. The findings and recommendations offer valuable insights for organizations considering the implementation of HRIS. By leveraging HRIS, organizations can achieve higher efficiency, better employee performance, and sustainable competitive advantage.

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