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Research Article

A Study To Evaluate The Impact Of SAP HR Module Interventions Concerning With Health Care HR Process

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ABSTRACT

The study evaluates the impact of SAP HR module interventions with reference to HEALTH CARE HR processes, shedding light on the significance of SAP ERP systems in enhancing organizational efficiency and competitiveness. Through a comprehensive analysis of various research articles and case studies, it is evident that SMEs can benefit significantly from proper preparation and business process reviews before implementing ERP systems. The research emphasizes the importance of understanding market dynamics, customer preferences, and the integration of SAP-ERP tools for effective data management and analysis in organizations, particularly in the electric power sector. Furthermore, the study highlights critical success factors for SAP ERP implementation processes, emphasizing the role of project management in ensuring successful outcomes. It also explores trends and innovations in ERP systems for the wood industry, underlining the need for continuous adaptation and improvement to address industry-specific challenges and meet user expectations.

Overall, the findings underscore the transformative potential of SAP ERP systems in driving operational excellence, strategic decision-making, and sustainable growth across diverse sectors. By leveraging the strengths of SAP ERP, organizations can overcome weaknesses, capitalize on opportunities, mitigate threats, and achieve long-term success in today's dynamic business landscape.

Key Words: SAP HR module interventions, HEALTH CARE HR processes, SAP ERP systems, Enterprise Resource Planning, Strategic Human Resource Management.

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INTRODUCTION TO RESEARCH

SAP ERP, crafted by SAP SE, is a reliable piece of software designed towards sleek business procedure over diverse domains like capitalize, distribution network, producing, exchange, and human resources. It serves as a unified system facilitating efficient operations, heightened productivity, and informed decision-making, ultimately fostering expansion of businesses and efficacy. Renowned for its comprehensive functionalities, SAP ERP stands as a

preferred choice for enterprises aiming to streamline their business processes and drive sustainable growth.

Key Features and Advantages of SAP ERP:

- **Industry Leadership:** SAP enjoys global recognition as an industry leader, trusted by businesses of varying sizes and across diverse sectors.
- **Comprehensive Functionality:** SAP ERP provides an extensive array of functionalities that span multiple business domains, providing a holistic way to address

the varied needs of organizations.

- **Scalability:** Engineered with scalability at its core, SAP ERP seamlessly adapts to the evolving requirements of businesses, ensuring sustained value and safeguarding investments over the long term.
- **Integration Capabilities:** SAP ERP boasts seamless integration with both other SAP modules and third-party systems, fostering data consistency and facilitating smooth cross-functional processes.

Robust Support Services: SAP offers comprehensive support services, encompassing training, documentation, and access to a global network of consultants and partners, thereby ensuring seamless

Benefits of SAP ERP:

- 1. Operational Efficiency:** SAP ERP and HRIS streamline processes, reducing manual effort and eliminating redundant tasks, thereby enhancing operational efficiency across the organization.
- 2. Data Accuracy and Consistency:** By centralizing data management, SAP ensures the accuracy, consistency, and integrity of data, providing reliable information for decision-making in both ERP and HR functions.
- 3. Real-time Insights:** SAP ERP and HRIS offer real-time visibility into organizational performance, workforce metrics, and financial data, empowering informed decision-making at all levels of the organization.
- 4. Compliance Management:** SAP solutions ensure compliance with legal and regulatory requirements in both ERP and HR functions, mitigating risks and avoiding penalties associated with non-compliance.
- 5. Scalability:** SAP ERP and HRIS are designed to adapt to the changing needs of businesses, supporting growth and expansion while maintaining performance and reliability.
- 6. Strategic Alignment:** Both SAP ERP and HRIS align processes with organizational goals and objectives, enabling tactical workforce management and supporting business growth and transformation initiatives effectively.
- 7. Employee Engagement and Satisfaction:** SAP HRIS enhances employee experience through self-service tools, transparent communication, and streamlined HR processes, foremost towards inflated worker involvement & fulfillment.

Employee Lifecycle Managed through SAP HR Modules:

- 1. Recruitment:** Attracts, sources, and hires candidates for open positions in the company.
- 2. Vacancy Planning:** Forecasts and plans for future job vacancies based on organizational needs and workforce projections.
- 3. Time and Attendance:** Tracks working hours, absences, leaves, and attendance data for accurate payroll processing and compliance
- 4. Compensation Administration:** Manages employee compensation structures, salary adjustments, bonuses, incentives, and benefits.
- 5. Payroll:** Automates processing of
- 6. Travel Expense:** Handles employee travel requests,

expenses, reimbursements, and approvals, ensuring compliance with policies.

7. Performance Management: Facilitates setting performance goals, conducting appraisals, providing feedback, and identifying development opportunities.

8. Individual Development Plan (IDP): Enables the creation of personalized development plans based on performance reviews and career goals.

9. Succession Planning: Identifies and develops potential successors for key roles within the organization.

10. Skill Management: Tracks employee skills, competencies, certifications, and training records for skill gap analysis and training planning.

11. Employee Training: Manages training programs, schedules, registrations, and evaluations to support employee development.

12. Retirement/Exit: Handles the offboarding process, including exit interviews, clearance procedures, and documentation for retiring or resigning employees.

NEED OF THE STUDY

The study is essential towards impart towards developing demands (HEALTH CARE) by assessing the impact of implementing SAP HR modules on its HR processes. Given HEALTH CARE's prominent stature as an aerospace and defense electronics company, effective HR management is essential for sustaining growth and operational excellence. Through an assessment of the transition from previous HR modules to SAP ERP solutions, the study endeavors to pinpoint potential enhancements in productivity, accuracy, compliance, and strategic alignment. These kinds of ideas are essential for HEALTH CARE to optimize its workforce management, ensure regulatory compliance, and effectively align HR practices with organizational objectives. Consequently, the study's findings will furnish HEALTH CARE's management with invaluable insights to make well-informed decisions regarding HR system implementations and enhancements, thereby contributing significantly to the company's sustained success and competitiveness in the defense electronics sector.

PROBLEM STATEMENT

The study is set to evaluate the effects of SAP HR module interventions on HR processes within HEALTH CARE. Utilizing a descriptive research design, it aims to delineate the characteristics of previous HR modules at HEALTH CARE and gauge the effectiveness of SAP HR modules in streamlining HR processes and bolstering productivity. Through a combination of descriptive and inferential statistical analyses, the research endeavors to shed light on the changes precipitated by the adoption of SAP HR modules, particularly concerning efficiency, accuracy, compliance, and strategic alignment within the organization. Specifically, the study seeks to determine whether the implementation of SAP HR modules has notably enhanced HR process efficiency and productivity compared to the preceding systems at HEALTH CARE.

SCOPE OF THE STUDY:

The study will commence by evaluating the current HR modules and practices deployed at (HEALTH CARE), conducting a thorough analysis of their strengths, weaknesses, and areas requiring enhancement. Subsequently, it will assess the impact of implementing SAP HR modules on HEALTH CARE's HR processes, with a specific focus on improvements in productivity and efficiency. Moreover, the study will investigate the seamless integration of SAP ERP with HEALTH CARE's existing systems to ensure uninterrupted operation. Through statistical analyses, a comparative assessment will be conducted to gauge the effectiveness of SAP HR modules vis-à-vis the previous systems. Recommendations will be formulated to optimize the utilization of SAP HR modules and address any identified challenges effectively. Furthermore, the study might propose few supervisions concerning further investigation aimed at further enhancing HR processes or exploring emerging technologies within the aerospace and defense industry.

OBJECTIVES

1. To study the earlier HR modules practiced at HEALTH CARE.
2. To measure the impact of the SAP HR module on streamlining HR processes, thereby enhancing productivity.
3. To evaluate the integration impacts of SAP HR module on employee satisfaction.

1. Quality Standards: Maintaining high-quality standards has been a priority for HEALTH CARE. The company has earned accreditations such as ISO 14001, ISO 9001, and ISO 27001, and implemented robust quality management systems to ensure customer satisfaction and reliability.

2. Research and Development: HEALTH CARE has made significant investments in research and development (R&D) to innovate and develop new technologies. Its R&D efforts have led to the creation of state-of-the-art defense systems and solutions tailored to the evolving needs of the Indian Armed Forces.

3. Recognition: HEALTH CARE has received numerous awards and accolades for its contributions to the defense and electronics industry, as well as for excellence in various fields such as R&D, manufacturing, and exports. These recognitions highlight HEALTH CARE's commitment to excellence and innovation.

LITERATURE REVIEW

1. Major Małgorzata ORŁOWSKA, PhD Eng (2024) ZWSI RON significantly supports logistics processes management in the Polish Armed Forces, expanding productivity, retrench, and enhancing combat readiness. The article concludes by reflecting on the future prospects of ZWSIRON in response to the evolving military reality, indicating its continued relevance and potential enhancements for military logistics management.

2. Karla Vukman, Kristina Klarić, Krešimir Greger, Ivana Perić (2024) The research explores the deployment of business planning system, or ERP in the wood industry, emphasizing the need for continuous adaptation and improvement to address challenges and meet users' expectations. Identifies essential ERP success factors like industry adaptability and integration with machinery, highlighting trends in data, AI, cloud security, and mobile access. Emphasizes continuous adaptation of ERP systems, integrating traditional and contemporary CSFs, and addressing industry-specific challenges.

3. H.H.D.P.J. Opatha, N.W.K.D.K. Dayarathna (2024):- The paper discusses the importance of HR analytics in bridging the gap between subjective and objective HR practices. It emphasizes the role of HR analytics applications in providing numerical evidence for HR decisions and highlights the significance of HR analytics competencies in boosting the adoption of HR analytics. Presents instruments for HR analytics application and competency assessment to assist organizations and HR professionals in understanding and improving their HR analytics practices. Emphasizes the importance of assessing HR analytics application and competencies, offering introduced instruments as valuable assessment tools for organizations and HR professionals.

4. Oluwasegun Julius Aroba* and Abdultaofeek Abayomi (2023):- An implementation of SAP enterprise resource planning – A case study of the South African revenue services and taxation sectors. The study aims to address business operation problems in the South African Revenue Services (SARS) and taxation sectors through SAP ERP implementation. Proposed SAP ERP implementation enhances connectivity and operational efficiency within SARS and taxation sectors, with a Cronbach's alpha of 0.85 indicating suitability for a SAP ERP mobile app. Implementation of SAP ERP can lead to improved connectivity and efficiency within SARS and taxation sectors, addressing various challenges and benefiting both employees and taxpayers.

5. Oluwasegun Julius Aroba, Adefemi Oluwaniyi Owoputi, Temitayo Mathew Fagbola (2023):- An System Applications and Products in Data Processing Business Planning Software carrying out using a Case study of Hospital Management System for Inclusion of Digital Transformation. The article discusses the implementation of an SAP ERP system in a hospital management system context, focusing on digital transformation and the challenges faced in adoption. The study identifies hospitals' struggles in implementing SAP ERP systems, leading to inefficiencies in supply chain management. It proposes the "hospitec" framework to improve information flow. Implementation of SAP ERP systems can significantly enhance hospital management processes, but challenges need to be addressed. The "hospitec" framework offers solutions for better information management.

TYPE OF RESEARCH **Descriptive Research**

The study will utilize a descriptive research design to effectively meet its objectives. Descriptive research is chosen as it emphasizes describing the characteristics of a phenomenon, in this instance, the HR processes at HEALTH CARE pre and post the integration of SAP HR modules. This approach facilitates in-depth inspection in regard to situation and enables the quantification of changes brought about by the intervention.

DATA AND VARIABLE DEFINATION

DATA – First Hand Information: Primary Data will be collected directly from employees at (HEALTH CARE) through the administration of a questionnaire. This questionnaire will serve as the first hand device towards meeting relevant information and insights from the employees regarding their perceptions, experiences, and observations related to the implementation of SAP HR modules. The questionnaire will be designed to capture key variables of interest, such as HR process efficiency, productivity, employee satisfaction, accuracy of HR data, compliance with regulations, and strategic alignment of HR processes with organizational objectives. This will enable a thorough analysis of the effects of putting SAP into practice HR modules on different aspects of HR management at HEALTH CARE.

VARIABLES

1. Independent Variable - Implementation of SAP HR modules
2. This variable refers to the introduction and integration of SAP HR modules within (HEALTH CARE). It represents the intervention or treatment administered to the organization's HR processes.

Dependent Variables

- 3 HR process efficiency - This variable measures the effectiveness and optimization of various HR processes within HEALTH CARE after the implementation of SAP HR modules. It encompasses factors such as the speed, accuracy, and cost-effectiveness of HR operations.
- 4 Productivity - Productivity refers to the output or work accomplished by employees within HEALTH CARE's HR department following the adoption of SAP HR modules. It assesses the efficiency and effectiveness of HR activities in achieving organizational goals. Other dependent variables- Additional dependent variables may include employee satisfaction, accuracy of HR data, compliance with

regulations, and strategic alignment of HR processes with organizational objectives. These variables capture various dimensions of HR performance impacted by the implementation of SAP HR modules.

SAMPLING FRAMEWORK

Purposive Sampling: A purposive sampling technique will be employed to choose members who have awareness of both the previous HR modules at (HEALTH CARE) and the implementation of the SAP HR module. This approach ensures that the sample comprises individuals who can offer pertinent insights into the research objectives.

Sample Size: The sample size for the study will consist of 100 participants, basically from HR department.

Previous HR Module at HEALTH CARE:

This section aims to gather information about participants' experience with the previous HR module, including their familiarity with its functionalities, duration of employment at HEALTH CARE, and perceptions of the implementation process.

Transition to SAP HR Modules:

This section focuses on assessing participants' opinions and observations regarding the transition to SAP HR modules. It includes questions about the perceived impact of SAP HR modules on HR processes, such as efficiency and productivity.

TESTABLE HYPOTHESIS

H0: There is no significant difference between the earlier HR modules practiced at HEALTH CARE.

H1: There is a significant difference between the earlier HR modules practiced at HEALTH CARE.

H0: There is no significant impact of the SAP HR module on streamlining HR processes to enhance productivity.

H1: There is a significant impact of the SAP HR module on streamlining HR processes to enhance productivity.

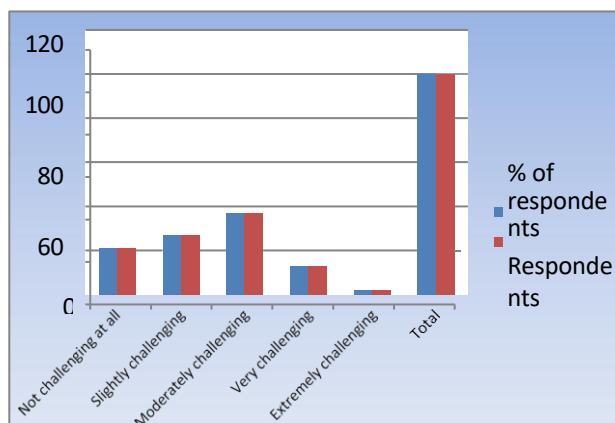
H0: There is no significant impact of the SAP HR module integration on employee satisfaction.

H1: There is a significant impact of the SAP HR module integration on employee satisfaction.

Data Analysis and Interpretation

1. Table representing how challenging were the processes related to transferring personal files within the previous HR system.

Particulars	% of respondents	Respondents
Not challenging at all	21	21
Slightly challenging	27	27
Moderately challenging	37	37
Very challenging	13	13
Extremely challenging	2	2
Total	100	100

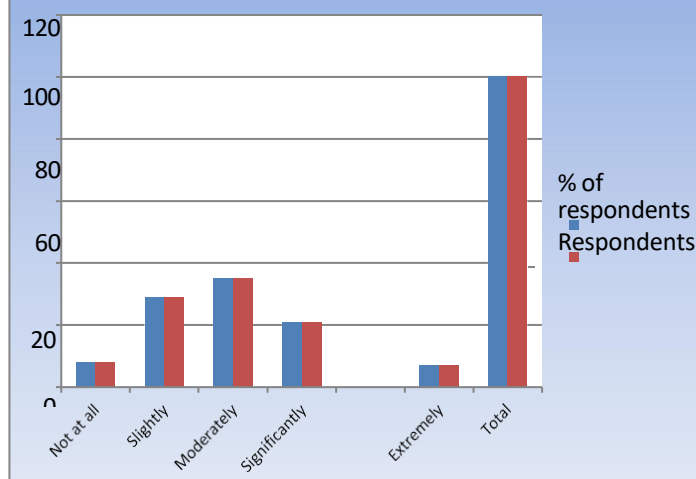


Analysis: By seeing the above table we can analyze that 21% of the respondents felt not challenging at all, 27% felt slightly challenging, 37% felt moderately challenging, 13% felt very challenging and the

remaining 2% felt extremely challenging.

2. Table representing to what extent did the lack of integration between different HR systems hinder the efficiency of HR processes.

Particulars	% of respondents	Respondents
Not at all	8	8
Slightly	29	29
Moderately	35	35
Significantly	21	21
Extremely	7	7
Total	100	100



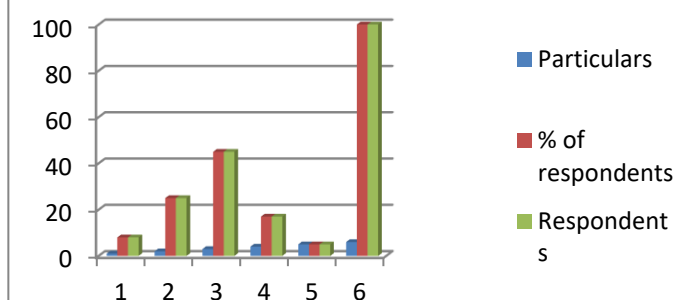
Analysis: Above table shows that 8% of the respondents tell that there was not at all a lack of integration between different HR systems hinder the efficiency of HR processes, 29% and 35% of the respondents are slightly and moderately feel that the lack of integration between different HR systems hinder the efficiency of HR processes and remaining 7% feel that there is a extreme extent lack of

integration between different HR systems hinder the efficiency of HR processes.

3. Table representing the rate the extent of digitization within HR processes under the previous system.

Note: 1. Fully digitized 2. Mostly digitized 3. Partially digitized 4. Minimal digitization 5. Not digitized at all 6. Total

particulars	% of respondents	Respondents
1	8	8
2	25	25
3	45	45
4	17	17
5	5	5
6	100	100



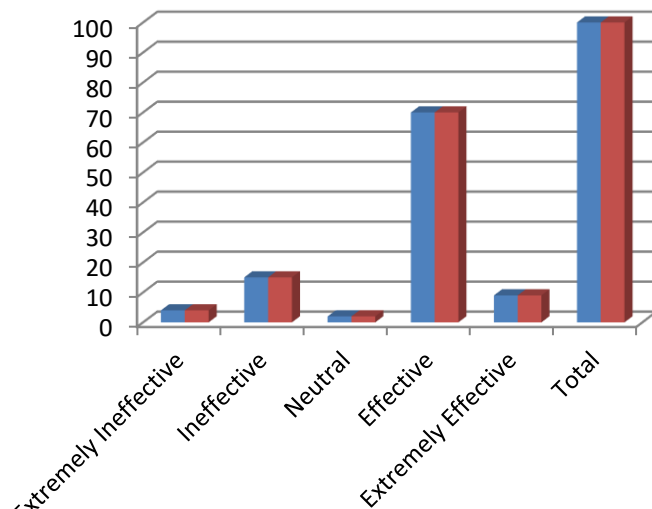
Analysis: From the above table we can analyze that 8% of the respondents feel that it is fully digitized, 25% of

them feel that it is mostly digitized, 45% feel that it is partially digitized, 17% feel that there is minimal

digitization and the remaining 5% feel that it is not digitized at all.

4. Table representing to what extent does SAP HCM's Personnel Administration feature effectively manage employee records and organizational assignments.

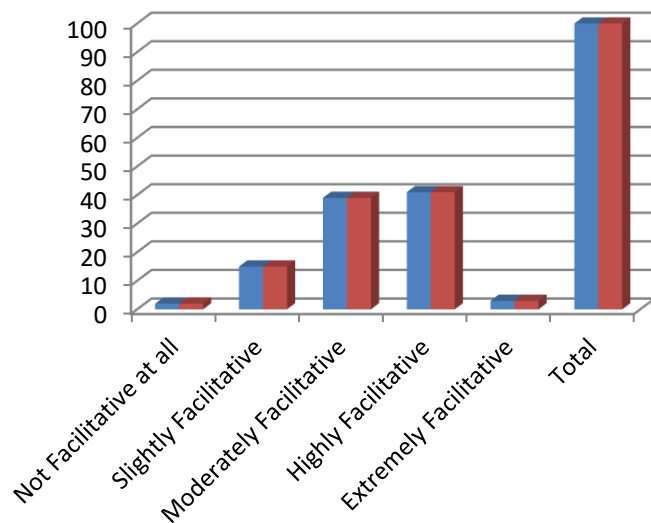
Particulars	% of respondents	Respondents
Extremely Ineffective	4	4
Ineffective	15	15
Neutral	2	2
Effective	70	70
Extremely Effective	9	9
Total	100	100



Analysis: From the above table we can analyze that 4% of the respondents feels that it is extremely ineffective, 15% of the feel it is ineffective, 2% of them feel it is neutral, 70% of the respondents feel effective, and the remaining 9 % feel extremely effective.

5. Table representing how well does SAP HCM's Organizational Management module facilitate efficient workforce planning.

Particulars	% of respondents	Respondents
Not Facilitative at all	2	2
Slightly Facilitative	15	15
Moderately Facilitative	39	39
Highly Facilitative	41	41
Extremely Facilitative	3	3
Total	100	100



Analysis: From the above table we can analyze that 2% of the respondents feel not facilitative at all, 15% of them feel it is slightly facilitative, 39% of them feel it is moderately facilitative, 41% of them feel it is highly facilitative, 3% of them feel extremely facilitative.

Hypothesis testing:-

Recognizing relation between influence of the SAP HR module on streamlining HR processes to enhance productivity.

➤ H0: There is no significant impact of the SAP HR module on streamlining HR processes to enhance productivity.

➤ H1: There is a significant impact of the SAP HR module on streamlining HR processes to enhance productivity.

- Dependent variable: HR process to enhance productivity
- Independent variable: SAP HR module

▪ Pearson's Correlation:

Table representing the Pearson's Correlation

Correlations

25.How much

has the integration of SAP HR improved access to technology and production factors, leading to enhanced productivity?		21.How much has the integration of SAP HR contributed to creating a positive and inspiring work environment in your organization?
25.How much has the integration of SAP HR improved access to technology and production factors, leading to enhanced productivity?	• Pearson Correlation	1
	• Sig. (2-tailed)	.382**
	• N	100
21.How much has the integration of SAP HR contributed to creating a positive and inspiring work environment in your organization?	• Pearson Correlation	.382**
	• Sig. (2-tailed)	1
	• N	.000
		100

Interpretation:

- From the above table, it can be interpreted that the significance value (0.000) is less than the table value 0.05. Therefore there is a relationship between two variables. Hence null hypothesis (H0) is refused and alternative hypothesis (H1) is accepted.
- The Pearson correlation coefficient value 'r' is 0.382. Therefore the two variables SAP HR module and HR process are moderately related.

Conclusion

The discovery of the learning shed light on the transition from previous HR modules to SAP HR modules at (HEALTH CARE). Overall, there was a moderate consensus among employees regarding the challenges and difficulties faced during the transition, with room for improvement in file transfer processes and data management. Integration issues significantly impacted HR efficiency, and there was a widespread perception of HR processes consuming significant time. While digitization levels varied, there was a notable impact of SAP HCM integration on aspects like employee satisfaction, efficiency enhancement, real- time data access, compliance assurance, and holistic enterprise solutions. Although some areas like Personnel Administration

and Organizational Management didn't show significant impacts, several aspects demonstrated a statistically significant relationship between SAP HCM integration and employee satisfaction, emphasizing its importance in enhancing HR processes. These findings underscore the need for continued efforts to optimize SAP HR module integration and address challenges to ensure smoother HR operations and higher employee satisfaction at HEALTH CARE.

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