

A STUDY ON IMPLEMENTATION AND CHALLENGES OF HRIS WITH REFERENCE TO KALEESUWARI REFINERY PVT LTD

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ABSTRACT

This study has been enriched in KALEESUWARI REFINERY PRIVATE LIMITED to identify the implementation and challenges of HRIS "An HRIS (Human Resources Information System) is a software solution used by human resources professionals to collect, manage, store, and process detailed employee information"

The implementation of Human Resource Information Systems (HRIS) presents both opportunities and challenges for organizations, particularly in dynamic industries such as oil refining. This study examines the implementation process and challenges faced by Kaleeshwari Refinery Private Limited in integrating HRIS into its operations. Amidst the evolving landscape of HR technology, understanding the specific implementation dynamics and hurdles encountered by Kaleeshwari Refinery provides valuable insights for similar organizations grappling with digital transformation in their HR practices.

The main objective is to study the implementation and challenges of HRIS with reference to Kaleesuwari refinery private limited. The secondary objectives is to study the level of employee adoption and satisfaction with the HRIS system at Kaleesuwari refinery private limited.

The research design is used for the study was descriptive research design. The descriptive research means the research which is done to know the current situation of the study. The data has been collected using structured questionnaire. The sample taken for this study was 200 out of population 1000 at KALEESUWARI REFINERY PRIVATE

LIMITED. The type of sampling technique used for the study was simple random sampling.

1.1 INTRODUCTION

A Human Resource Information System (HRIS) is a software solution that combines human resources and information technology to streamline HR processes and improve overall workforce management. HRIS serves as a centralized repository for storing, managing, and accessing employee data, facilitating efficient communication and decision-making within an organization. Traditionally, HR functions such as payroll processing, employee benefits administration, recruitment, and performance management were performed manually, often leading to inefficiencies, errors, and delays. However, with the advent of HRIS, these tasks can now be automated, allowing HR professionals to focus on more strategic initiatives.

HRIS encompasses a wide range of features and functionalities, including employee recordkeeping, time and attendance tracking, payroll processing, benefits administration, performance appraisal, training and development management, and compliance monitoring. These capabilities enable organizations to optimize their HR processes, enhance employee productivity, and ensure regulatory compliance.

Furthermore, HRIS provides valuable insights through robust reporting and analytics functionalities, allowing organizations to make data-driven decisions regarding workforce planning, talent management, and organizational development. By leveraging HRIS-generated data, organizations

can identify trends, patterns, and areas for improvement, thereby enhancing their competitive advantage in the marketplace.

1.2 INDUSTRY PROFILE

INTRODUCTION:

Oil refinery Industry, an oil refinery is a facility that takes crude oil and distills it into various useful petroleum products such as gasoline, kerosene, or jet fuel. Refining is classified as a downstream operation of the oil and gas industry, although many integrated oil companies will operate both extraction and refining services.

Largest refinery industry in India,

Located in India, the Reliance Industries-owned Jamnagar Refinery is the largest oil refinery in the world. As of 2021, the Jamnagar Refinery held a capacity of 1.24 million barrels per day, topping refineries, such as the SK Energy Co. refinery in Ulsan, South Korea and the Paraguana Refinery Complex.



1.3 COMPANY PROFILE

Kaleesuwari Refinery Private Limited is an unlisted private company incorporated on 28 March, 1984. It is private limited company and it is located in Chennai, Tamil Nadu. Its authorized share capital is INR 25.50 cr and the total paid up capital is INR 21.13 cr.



Description:

Food edible oils, food pluses, personal care, and home care.

Director of KRPL:

- 01Dec 1992 Mr. Gurusamy Munusamy and Mrs. Kaleesuwari.
- 01May 1995 Mr. karunaianandam and Mr. Kalavathi.
- 11June 2004 Mr. Munuswamy and Mr. Arun.
- 25July 2011 Mr. Ashok Kumar

1.4 NEED FOR THE STUDY

This study has been carried out in order to know the implementation and challenges of HRIS within Kaleeshwari Refinery Private Limited and to understand how HRIS is utilized, assess its effectiveness, and identify any obstacles encountered during implementation. Ultimately, the findings will inform strategies for enhancing HR processes and addressing industry-specific challenges.

1.5 OBJECTIVES OF THE STUDY PRIMARY OBJECTIVE

- To study the HRIS implementation and challenges with reference to Kaleeshwari refinery private limited

SECONDARY OBJECTIVES

- To assess the level of employee adoption and satisfaction with the HRIS system at Kaleeshwari Refinery Private Limited.
- To identify key obstacles and solutions related to HRIS implementation, aiming to enhance its effectiveness within the organization.

1.6 SCOPE OF THE STUDY

This study focuses on assessing the implementation and challenges of HRIS within Kaleeshwari Refinery Private Limited, analyzing its impact on HR processes and identifying barriers to effective utilization. It involves evaluating the system's effectiveness in payroll, recordkeeping, recruitment, and training, targeting HR professionals, managers, and employees to provide tailored insights and recommendations. Analyzing the impact of hands-on workshops and personalized training modules on HRIS proficiency among employees and managers at Kaleesuwari refinery private limited, assessing the effectiveness of interactive training sessions tailored to different user roles and proficiency levels.

1.7 LITERATURE REVIEW

Abu Naser Mohammad Saif (2024), "HRIS implementation in apparel manufacturing industry of developing economy"

Since contemporary research on business information systems has called for human-centered technologies in manufacturing, the time has emanated to identify the implementation challenges of human resource information systems (HRIS) in the apparel industry of developing economies. This qualitative systematic review intends to categorize

the implementation dares of HRIS in the garments manufacturing industry of a developing economy. From the top academic databases, a total of 553 research papers published during the period 2001-2021, were inspected to ascertain the applicable 22 publications using PRISMA flowchart. Using VOS viewer, term co- occurrence network maps were generated. Cross- mapping the terms from bibliographic analyses with concrete insights from detailed qualitative interviews piloted in a developing nation, researchers proposed four themes, i.e., sustainability, cultural, financial, and performance. The findings have revealed that these four are the groups of challenges that are required to be maneuvered to augment the benefits of HRIS in current settings.

Erfan Maulana (2024), "Utilization of Human Resource Information System (HRIS) in Facing the Industry 4.0 and Society 5.0 Era"

The Human Resource Information System (HRIS) used in the Ministry of Religious Affairs Office in Banjar Regency consists of e- performance and heritage attendance applications, which are part of technological advancements. In the utilization of HRIS, there are several challenges in its implementation. Therefore, this research will analyze variables that influence HRIS utilization from the user behavior perspective, including predisposition characteristics, capabilities, and user needs. The research methodology employed in this study is mixed methods research. Quantitative data was collected through questionnaire responses from a sample of 277 civil servants (ASN) selected through proportional random sampling. Data analysis was conducted using multiple linear regression in SPSS. On the other hand, qualitative data was gathered through in-depth interviews with personnel responsible for HRIS implementation, evaluators, and assessing officers. Data analysis was performed using directed content analysis. The research findings indicate that 69.9% of the predisposition characteristics, capabilities, and user needs variables influence HRIS utilization. A deeper examination of user predisposition characteristics reveals that users have good knowledge of HRIS, but their attitudes toward HRIS utilization are not yet optimal. User capabilities in HRIS utilization are considered

sufficient, and HRIS is deemed highly necessary, but there are some obstacles to its utilization. To optimize HRIS utilization, measures such as implementing supervision systems with rewards or punishments, periodic system improvements, and application management are necessary.

Neha Raheja (2024), “HRIS Implementation in Organizations”

The paper looks into the issues challenges faced by organizations in implementing and managing HRIS. Each organization has unique character owing to its size, sector to which it belongs, type of workforce engaged, type of top management, existing hierarchical structure, etc. Based upon its unique character, organizations formulate different HR policies to administer and engage its employees. An HRIS system enables an organization to integrate all the HR processes in order to enhance efficiency and maintain a competitive position. However, without successful implementation of the system, the projected benefits of improved productivity and competitive advantage would not be forthcoming (Fawaz, Salti, Eldabi, 2008). Hagood and Friedman (2002) observed that HRIS implementation success has emerged as a significant challenge for organizations attempting to justify planned investments or recover expenses associated with investments already incurred.

Ali Albouti (2023), “Use and challenges of HRIS in public organizations”

In recent years, developing economies have increasingly emphasized the adoption of Human Resource Information Systems (HRIS) as a vital aspect of human resource management (HRM). This paper reviews the usage and challenges associated with HRIS implementation, drawing insights from extensive literature reviews and analysis of laws and regulations. HRIS has demonstrated significant impact on HR functions such as employee selection, training, data management, reporting, and payroll processing, facilitating efficient HRM practices. The integration of Information and Communication Technology (ICT) applications with core HR processes has revolutionized HR management, replacing traditional paper-based systems with faster,

more reliable, and accurate digital solutions. Despite initial expectations for improved administrative efficiency and organizational performance, challenges such as manipulation of salaries and hiring practices have been observed, highlighting the need for effective implementation strategies and ongoing monitoring to maximize the benefits of HRIS adoption.

Meghana Panthangi (2023), “Exploring HRIS Adoption and performance outcomes in Hyderabad-based IT Enterprises”

This study aims to examine the IT companies in Hyderabad, India, and their adoption of HR information systems, as well as the impact of this adoption on performance results. The research aims to identify the factors influencing HRIS adoption, assess the challenges faced during implementation, and examine the overall impact of HRIS on organizational performance through the use of a case study methodology. In order to guide academic research and practical strategies for the implementation of HRIS, this study aims to analyze the special environment of Hyderabad's information technology sector. By doing so, it hopes to provide insightful information. Furthermore, it offers a thorough analysis of how HRIS impacts the dynamics and success of businesses.

Sathiyakumar Jenusan (2023), “Impact of the Challenges in Implementing Human Resource Information Systems in Sri Lankan MSMEs”

Nowadays, the Human Resource Information System (HRIS) is a trending software that is a highly efficient platform for the HR department to carry out their operations. Still, there are some challenges faced by organisations with regard to HRIS implementation. The primary objective of the research is to explore the impact of the challenges such as the cost of maintenance, technical knowledge, management support and staff training in implementing the HRIS in Sri Lankan micro, small and medium enterprises (MSMEs). The authors collected both primary and secondary data. The primary data have been referred from previous research. To study the impact of the challenges and to obtain secondary data, authors

analysed 300 surveys as a sample in the Western Province from a total of 1,017,352 MSMEs population in Sri Lanka. This survey had closed-ended questions to collect quantitative data from the respondents, and the convenience sampling method has been used as the data collection method. As the data analysis tool, the authors have used simple and multiple regression analysis to study the significant impact of the challenges on implementation. Lack of researches have been conducted on HRIS implementation, especially in MSMEs, and a minority of HRIS service providers are focusing on MSMEs to promote their systems. To conclude, this research will boost the demand for HRIS technology among MSMEs, pay attention to the HRIS service providers to focus on MSMEs. Further, it helps to spread HRIS knowledge among HR students and HR industrial people to improve the information technology units in the HR industry.

1.8 RESEARCH METHODOLOGY

Meaning of Research:

Research refers to a search for knowledge. It can also be given as a scientific and systematic search for pertinent information on a specific topic. In fact research is an art of scientific investigation. The Advanced Learner's Dictionary of current English lays down the meaning of research as "a careful investigation or inquiry especially through search for new facts in any branch of knowledge." Some people consider research as a movement from the known to the unknown. It is actually a voyage of discovery.

Research Design:

Research Design is defined as the "arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure".

Sampling design:

A sample design is a finite -plan for obtaining a sample from a given population.

Population:

The Employees of "KALEESUWARI REFINERY PRIVATE LIMIED" Chennai constitute the work place of the study. The employees of the company are 1000, and it forms the work place for the present study.

Sample size:

Number of the sampling units selected from the population is called the size of the sample. Sample of 200 respondents were obtained from the population.

Statistical Tools :

SPSS (STATISTICAL PACKAGE FOR SOCIAL SCIENCE):

Statistical package for social sciences (SPSS) is mean for statistical analysis of data. It has got tools to obtain accurate result. SPSS is a computer program used for survey authoring and deployment, data mining, text analytics, statistical analysis, and collaboration & deployment. The following statistical tools were used in this study:

- Simple Percentage
- Chi square
- Correlation
- Regression
- ANOVA

Percentage Analysis:

Percentage refers to a special kind of ratio. Percentage is used in making comparison between two or more series of data. In this study, the number of people who responded in a particular manner is interpreted in the form of percentages.

Percentage = No of respondents

$$\frac{\text{Total no. of respondents}}{\text{X100}}$$

Chi-square Test:

The chi - square test is also known as non-parametric test or distribution free test is used when it is impossible to make any assumptions about population or when the researcher is unable to estimate the population's parameters. The main advantages of using non parametric test are that, the researcher can analyse qualitative data. It is used to determine whether the two variables are associated with each other or not. It helps in finding the association between two or more attributes.

It has been worked out as follows:

$$\chi^2 = \sum (O_i - E_i)^2$$

$$F = \frac{MSA}{MSW}$$

Where, O_i = Observed frequencies

E_i = Expected frequencies

The calculated value of χ^2 is compared with the table value, for given degree of freedom at a specified level of significance (5% and 10%). If the calculated value of χ^2 is more than the table value, then difference between the variables is considered to be significant or otherwise insignificant.

Correlation:

Correlation analysis is made to determine the degree of relationship between two or more variables. It does not tell about cause and effect relationship. The values of coefficient of correlation lie between +1 to -1. When $r = +1$, it means there is a perfect positive correlation between the variables. When $r = -1$, it means there is a perfect negative correlation between the variables. When $r = 0$, it means no relationship between the two variables.

$$r = \frac{\sum xy}{n\sigma_x\sigma_y}$$

Where, $x = (X - \bar{X})$; $y = (Y - \bar{Y})$

Regression:

Linear regression is a statistical procedure

for calculating the value of a dependent variable from an independent variable. Linear regression measures the association between two variables. It is a modeling technique where a dependent variable is predicted based on one or more independent variables. Linear regression analysis is the most widely used of all statistical techniques.

$$Y = mX + b$$

Where Y = Dependent variable X = Independent variable
 m = Slope

b = y-intercept (point where line crosses y-axis at $x=0$)

ANOVA:

Analysis of Variance (ANOVA), ONE-WAY AND TWO-WAY

Analysis of variance (ANOVA) has been carried out to compare more than two means at a time. One-way analysis of variance involves only one categorical variable or a single factor, whereas in two-way analysis of variance, two factors on the dependent variable are studied. The process of analysis is given here under:

One-Factor ANOVA (F-statistics):

Sources of Variation	Degrees of Freedom (df)	Sum of Squares	Mean Square (Variance)
Among (Factors)	$c - 1$	SSA	$MSA = SSA / (c - 1)$
Within (Error)	$n - c$	SSW	$MSW = SSW / (n - c)$
Total	$n - 1$	$SST = SSA + SSW$	

Where,

σ_x = Standard deviation of series X σ_y = Standard deviation of series Y
 n = number of observations r = the correlation coefficient.

$$c - 1 = df_1$$

$$n - 1 = df_2$$

MSA is the mean squares among or between variances.

MSW is the mean squares within or error variance

1.9 LIMITATIONS OF THE STUDY

DATA ANALYSIS AND INTERPRETATION

PERCENTAGE ANALYSIS

Table-2.1 Table showing Age of the respondents

S. No	Age of the respondents (in years)	No. of respondents	% of respondents
1	20 to 30	23	12
2	30 to 40	85	43
3	Above 40	92	45
	Total	200	100

Interpretation:

Out of 200 respondents, 45% are above 40 years, 43% are between 30-40 Years, 12% are between 20-30 years

Chart No: 2.1(a) Chart Showing Age of the respondents

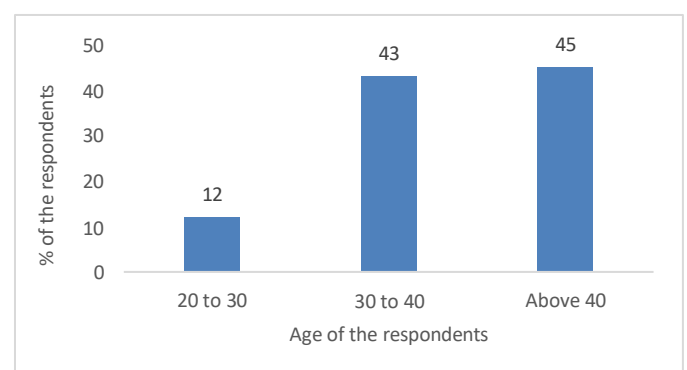


Table-2.2 Table showing adequacy of HRIS system for various organizational Departments

Si.no	Opinion	No. of respondents	% of respondents
1	Strongly Agree	70	35
2	Agree	34	17
3	Neutral	30	15
4	Disagree	27	14
5	Strongly Disagree	39	20
	Total	200	100

Interpretation:

From the above table observed that 35% are Strongly agree with the HRIS system adequacy meets the needs of different departments within the organization, 20% are strongly disagree with adequacy of HRIS system for various organizational departments. 17% are agree with the HRIS system adequacy meets the needs of different departments within the organization, 15% are neutral. 14% of respondents are disagree with the HRIS system adequacy meets the needs of different departments within the organization

Chart No: 2.2(a) Chart Showing adequacy of HRIS system for various organizational departments

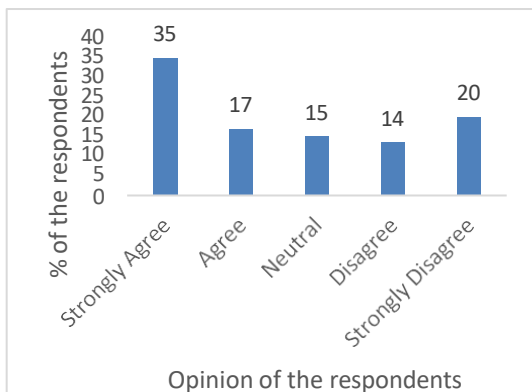


Table-2.3 Table showing impact of HRIS system on communication and teamwork among employees

Si.no	Opinion	No. of respondents	% of respondents
1	Strongly Agree	91	46
2	Agree	43	22
3	Neutral	24	12

4	Disagree	22	11
5	Strongly Disagree	20	10
	Total	200	100

Interpretation:

From the above table observed that 46% are Strongly agree with the impact of HRIS system on decision making process in HR department, 22% are agree with the impact of HRIS system on decision making process in HR department, 12% are neutral, 11% of respondents are disagree and 10% are strongly disagree with the impact of HRIS system on decision making process in HR department.

Chart No: 2.3(a) Chart Showing impact of HRIS system on communication and teamwork among employees

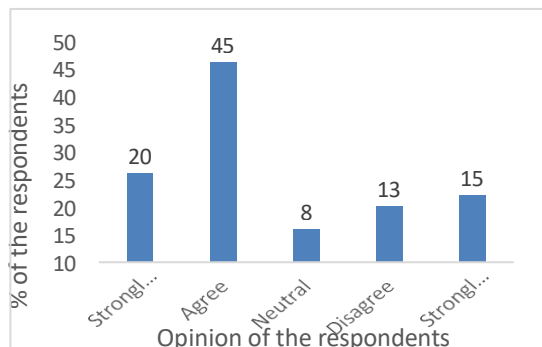
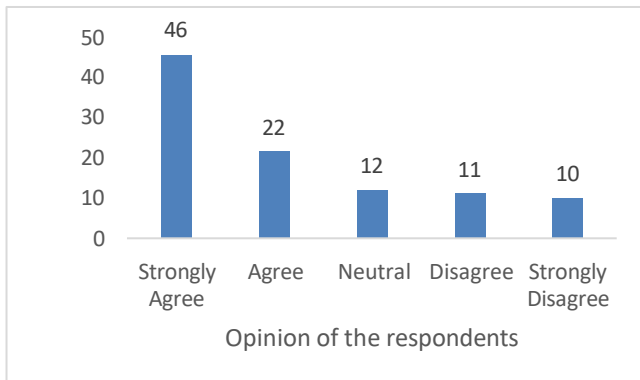


Table-2.4 Table showing impact of HRIS system on Decision-Making processes in HR department

Si.no	Opinion	No. of respondents	% of respondents
1	Strongly Agree	40	20
2	Agree	90	45
3	Neutral	15	8
4	Disagree	25	13
5	Strongly Disagree	30	15
		200	100

Interpretation:

From the above table observed that 45% are agree that the HRIS system has improved communication and teamwork among employees, 20% are strongly agree that the HRIS system has improved communication and teamwork among employees, 15% are strongly disagree that the HRIS system has improved communication and teamwork among employees.13% of respondents are disagree, 8% are neutral.

Chart No: 2.4(a) Chart Showing impact of HRIS system on Decision- Making processes in HR department**CHI-SQUARE DIFFERENCE BETWEEN AGE OF THE RESPONDENTS AND THE ADEQUACY OF HRIS SYSTEM IN MEETING THE DIFFERENT DEPARTMENTS****NULL HYPOTHESIS(H₀):**

There is no significant association between age of the respondents and the adequacy of HRIS system in meeting the different departments.

ALTERNATIVE HYPOTHESIS(H₁)

There is a significant association between age of the respondents and the adequacy of HRIS system in meeting the different departments.

STATISTICAL TEST

Chi-square was used the above hypothesis.

Frequencies

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age of the respondents *	200	98.0%	4	2.0%	204	100.0%
Adequacy in meeting the needs of different department						

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	143.503 ^a	8	.000
Likelihood Ratio	109.489	8	.000
Linear-by-Linear Association	20.148	1	.000
N of Valid Cases	200		
a. 6 cells (40.0%) have expected count less than 5. The minimum expected count is .35.			

Age of the respondents * Adequacy in meeting the needs of different departments Crosstabulation

Count

		Adequacy in meeting the needs of different departments					Total
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
Age of the respondents	20-30	3	5	1	11	3	23
	30-40	55	16	15	0	0	86
	Above 40	61	0	30	0	0	91
Total		119	21	46	11	3	200

INTERPRETATION:

Here the significance was occurs and has a value 0.000 is less than 0.01. Hence H₀ is accepted.

CORRELATION BETWEEN HRIS IMPLEMENTATION AND DECISION-MAKING IMPROVEMENT WITHIN HR DEPARTMENT

NULL HYPOTHESIS(H₀):

There is no significant inter relationship between HRIS implementation and decision- making improvement within HR department.

ALTERNATIVE HYPOTHESIS(H₁)

There is a significant inter relationship between HRIS implementation and decision- making improvement within HR department.

STATISTICAL TEST

Correlation was used the above hypothesis.

Symmetric Measures					
		Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Interval by Interval	Pearson's R	-.010	.116	-.135	.893 ^c
Ordinal by Ordinal	Spearman Correlation	-.404	.083	-6.213	.000 ^c
N of Valid Cases		20			
a. Not assuming the null hypothesis.					
b. Using the asymptotic standard error assuming the null hypothesis.					
c. Based on normal approximation.					

HRIS system on decision making process in HR department * Facilitation of communication between HR personnel and employees via HRIS system Crosstabulation							
Count							
		Facilitation of communication between HR personnel and employees via HRIS system					Total
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
HRIS system on decision making process in HR department	Strongly Agree	29	57	30	6	3	125
	Agree	44	0	0	0	1	45
	Neutral	21	0	1	0	0	22
	Disagree	0	0	0	0	4	4
	Strongly Disagree	0	0	0	4	0	4
Total		94	57	31	10	8	200

3.1 FINDINGS

- Majority 45% are above 40 years.
- Majority 35% are Strongly agree with the HRIS system adequacy meets the needs of different departments within the organization
- Majority 46% are Strongly agree with the impact of HRIS system on decision making process in HR department.
- Majority 43% are strongly agree with the HRIS system facilitate seamless communication between HR personnel and employees for inquiries and requests.
- INTERPRETATION:

Hence the significant occurs 0.893 so H1 is accepted. (i.e) There is a significant difference between HRIS implementation and decision making improvement within HR department.

RESULT:

The above table there is a strong positive correlation b value is 1. So, it is a perfect positive. correlation.

SUGGESTIONS

Based on the findings, it's crucial to focus on enhancing user training and support for the HRIS system to ensure effective utilization. Implementing comprehensive training programs and providing ongoing support can address difficulties reported by users and improve overall satisfaction. Additionally, fostering open communication channels within the HRIS platform can facilitate seamless interactions between HR personnel and employees, promoting transparency and collaboration.

Recognizing and rewarding employee skills and achievements within the system can boost motivation and engagement. Moreover, prioritizing continuous monitoring and updates of the HRIS system ensures it remains aligned with organizational needs and enhances its effectiveness over time, ultimately leading to improved efficiency and satisfaction across the organization.

3.2 CONCLUSION

The implementation of an HRIS system presents significant opportunities and challenges for organizations. While the findings underscore the system's potential to enhance efficiency and satisfaction, they also highlight the importance of addressing key challenges such as user training, communication, and resistance to change. By prioritizing comprehensive training programs, fostering open communication channels, and recognizing employee skills, organizations can maximize the benefits of HRIS implementation. Continuous monitoring and updates are essential to ensure the system remains aligned with evolving organizational needs. Overall, navigating these challenges strategically can lead to a successful HRIS implementation, ultimately enhancing organizational effectiveness and employee satisfaction.

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