SIFT

A JOURNAL OF BUSINESS AND SOCIAL SCIENCES

A Quartely Journal

Vol 1, Issue 1
December 2025

SIFT

A JOURNAL OF BUSINESS AND SOCIAL SCIENCES

A Quartely Journal

Editorial Board

About the Journal

SIFT – Journal of Business and Social Sciences is a peer-reviewed, double-blind academic journal dedicated to advancing high-quality research at the intersection of business, management, and social sciences. The journal provides a global platform for scholars, practitioners, and policymakers to publish innovative studies, conceptual frameworks, case analyses, and empirical research that address emerging challenges in today's dynamic business and societal landscape. With a strong commitment to ethical standards, interdisciplinary dialogue, and impactful knowledge dissemination, SIFT aims to bridge theory and practice, promote responsible leadership, and contribute meaningfully to academic and real-world decision-making. Our mission is to support research that inspires progress, enhances understanding, and drives positive social and organisational outcomes.

Explore our Subject area

- Business Strategy & Policy
- Organizational Behaviour & Theory
- Human Resource Management
- Marketing & Consumer Behaviour
- Finance, Accounting & Auditing
- Entrepreneurship & Innovation
- Operations & Supply Chain Management
- Corporate Governance & Leadership
- Sociology & Social Behaviour
- Psychology & Behavioural Studies
- Consumer Psychology (Behavioural Studies)
- Communication & Media Studies
- International Relations
- Cross-Cultural Studies
- Public Policy & Public Ethics
- Social Impact, Equity & Inclusion
- Business–Society Relations
- Corporate Social Responsibility (CSR)
- Sustainable Business Practices
- Technology, Digital Transformation & Society
- AI, Automation & Workforce Studies
- Ethics & Responsible Management
- Environmental, Social & Governance (ESG) Research

Aims and Scope

SIFT – Journal of Business and Social Sciences is a double-blind, peer-reviewed scholarly journal committed to advancing interdisciplinary knowledge at the crossroads of business studies and the social sciences. The journal serves as an academic platform for researchers, academicians, industry professionals, policymakers, and graduate scholars to publish high-quality research that contributes to theory, practice, and societal development.

SIFT recognizes that contemporary challenges in business and society are interconnected and require a holistic understanding across disciplines. The journal therefore welcomes a wide range of research contributions, including empirical studies, conceptual papers, theoretical advancements, case studies, analytical models, and review articles. Its subject areas span core business fields such as management, marketing, finance,

entrepreneurship, organisational behaviour, and consumer psychology, as well as social science domains including sociology, psychology, communication, public policy, ethics, and cross-cultural studies.

At the heart of the journal is a commitment to academic integrity, ethical research practices, and rigorous scientific standards. Every manuscript undergoes a strict double-blind peer-review process to ensure originality, methodological soundness, relevance, and contribution to existing literature. The journal also promotes responsible research by encouraging authors to address contemporary societal issues such as sustainability, corporate governance, technological transformation, digital behaviour, ethical leadership, and social responsibility.

SIFT aims not only to be a publication outlet but also a knowledge bridge. By fostering dialogue between academics and practitioners, the journal facilitates evidence-based decision-making, policy improvements, and innovative solutions to global business and social challenges. The journal supports the dissemination of impactful research that advances professional practice, stimulates intellectual debate, and enhances the understanding of how businesses operate within social, cultural, and ethical contexts.

Through its inclusive approach, international outlook, and dedication to excellence, SIFT – Journal of Business and Social Sciences aspires to become a leading contributor to scholarly discourse and a trusted resource for researchers and practitioners worldwide.

Scope and Academic Focus

The journal welcomes a wide spectrum of contributions, including original research articles, theoretical papers, applied studies, conceptual frameworks, policy analyses, case studies, systematic reviews, and book reviews. Core areas of interest include:

Business strategy, leadership, and governance

- Human resource management, HR analytics, and organisational development
- Marketing, consumer behaviour, and consumer psychology
- Finance, accounting, financial decision-making, and corporate performance
- Entrepreneurship, start-up ecosystems, and innovation management
- Operations, supply chain, and sustainability practices
- Sociology, psychology, communication studies, and cultural studies
- Public administration, ethics, and social impact research
- Technology, digital transformation, AI in business, and workforce studies
- ESG (Environmental, Social & Governance) frameworks and responsible management

SIFT encourages research that addresses critical societal concerns such as inequality, digital inclusion, sustainable business practices, the future of work, behavioural change, ethical leadership, and globalisation.

Commitment to Ethical and High-Quality Research

Academic integrity is at the core of SIFT's philosophy. Every submission undergoes a rigorous double-blind peer-review process conducted by qualified reviewers and subject experts. Manuscripts are evaluated for originality, methodological integrity, relevance to the field, clarity of argument, and contribution to academic and practical knowledge.

The journal adheres to the highest standards of publication ethics, following guidelines inspired by COPE (Committee on Publication Ethics). We ensure:

Transparent and ethical research practices

- Protection of human participants and responsible data collection
- Proper authorship credit and conflict-of-interest disclosure
- High professional standards in editing, reviewing, and publication

Bridging Theory and Practice

One of the distinguishing features of SIFT is its emphasis on research that not only contributes to theory but also influences real-world decisions. We encourage submissions that provide actionable insights for business leaders, educators, policymakers, NGOs, and social practitioners.

- The journal supports studies that:
- Offer evidence-based solutions to current business challenges
- Influence organisational policy and management practices
- Support public policy development and community-level improvements
- Address socio-economic issues through academic inquiry
- Strengthen the link between academic knowledge and professional application
- Platform for Global Knowledge Exchange

SIFT positions itself as a platform for global academic interaction. Our contributors and reviewers include scholars and professionals from diverse countries, ensuring a wide range of perspectives and global relevance. The journal seeks to amplify voices from emerging economies, promote diverse methodologies, and encourage comparative and cross-cultural research.

Mission and Vision

Mission

To promote high-quality interdisciplinary research that enhances the understanding of business and social systems, supports ethical and responsible organizational practices, and generates knowledge with meaningful social impact.

Vision

To become a globally recognized and trusted academic journal that shapes discussions in business, management, and social sciences by fostering innovation, integrity, and inclusiveness in scholarly publishing.

Why SIFT Matters

- By combining academic depth with societal relevance, SIFT strives to:
- Enhance scholarly dialogue across disciplines
- Provide an accessible platform for emerging and established researchers
- Contribute to global academic thought leadership
- Influence real-world business and social practices
- Support the advancement of ethical, sustainable, and innovative research
- Encourage critical thinking and new theoretical perspectives

Exploring the role of HR analytics and its impact on talent management in IT sector

Dr. C. Thirumal Azhagan & R. Padmavathi

Abstract

HR analytics plays a crucial role in IT sector by using data-driven insights to improve decision- making. It helps organizations to identify patterns and trends in employee performance, recruitment, retention, and development. HR analytics enhances the effectiveness of talent management by aligning human resources strategies with business goals and improving overall organizational performance. This study focuses on role of HR analytics on talent management and exploring impact in IT industry. HR analytics is the examination, and reporting of employee information to inform evidence-based decisions in all the key HR functions. This study focuses on HR analytic impact areas like talent acquisition, performance management, compensation metrics, and employee retention. This study based on a sample of 161 employees from IT industry and uses a descriptive study design with snowball sampling and a structured questionnaire. The collected data was analyzed through factor analysis which indicates to increases employee performance, hiring, compensation metrics and retinting top talent and also challenges such as data quality and integration, skill gaps in HR team and resistance to change. Generally, the study emphasizes the strategic significance of HR analytics in aligning human capital with business strategy and thereby enhancing the efficiency of talent management in the IT sector. Facilitative tools like SPSS and Excel helped confirm the data's reliability and yield insightful meaning.

Keywords*: HR analytics, talent acquisition, workforce planning, compensation metrics, diversity, employee engagement.*

Dr. C. Thirumal Azhagan, *Assistant Professor Department of Management Studies, University College of Engineering, Anna University- BIT Campus, Tiruchirappalli, Tamil Nadu, India. Email: azhaganct@gmail.com*

R. Padmavathi, *Final year MBA Student, Department of Management Studies, University College of Engineering, Anna University- BIT Campus, Tiruchirappalli,*
Tamil Nadu, India. Email: rpadmavathi2012@gmail.com

Introduction

Human resource management is focused on the most effective use of people to achieve organizational as well as personal goals. It encompasses a broad spectrum of lifecycle.

Early 20th century, inspired by Frederick Winslow Taylor (18561915) Taylor's principles focused on increasing efficiency by optimizing work processes and worker performance. Taylor believed that workers could be motivated to work harder and faster by offering incentives, such as piece rates, which rewarded higher productivity. John R. Commons, an American institutional economist, first used the term "human resource' in his book "The Distribution of Wealth" that was published in 1893. However, it was not until the 20th century that HR departments were formerly developed to manage the relationships between employers and employees. In the present business environment, HR analytics is used for better forecasting talent needs, tailored career management, and minimizing turnover, to the advantage of being competitive. HR analytics uses advance analytical methods and tools to examine various aspect of workforce performance, behaviour, and potential. In the IT industry, where competition for talent intense, HR analytics is an important tool for optimizing hiring, improving employee engagement, forecasting attrition, and succession planning. This method enables HR professionals to deeper understand their workforce, forecasting future talent needs, and optimize strategies to attract and retain the top talent in the competitive IT sector. finally, HR analytics improve the effectiveness of talent management by aligning human resources strategies with business goals and enhance overall organizational performance. There are various professional HR Analytical tools used in today's organization like Visier, Tableau, QLIK, SPSS, Microsoft Excel.It facilitates the procurement of the most suitable organizational talent needs for certain jobs without discrimination. In this research, exploring the role of HR analytics impact on talent management in IT sector is considered as core objective.

Review of Literature

Sharma, Bhattacharya, and Bhattacharya (2025) The study emphasized the need for HR professionals to develop technical skills and address challenges like data privacy and system integration to fully leverage these technologies. highlighted that HR analytics and AI significantly transform HR functions by improving decision-making, employee engagement, and performance management. The study emphasized the need for HR professionals to develop technical skills and address challenges like data privacy and system integration to fully leverage these technologies.

Fatima Bibi and Nadir Ali (2024) concluded Human Resource Analytics (HRA) is a powerful tool allowing organizations to enhance employee performance and reduce turnover on the basis of data-driven insight. HRA allows HR experts to track patterns of performance, tailor development strategies, and mark high-risk personnel through predictive analysis. HRA

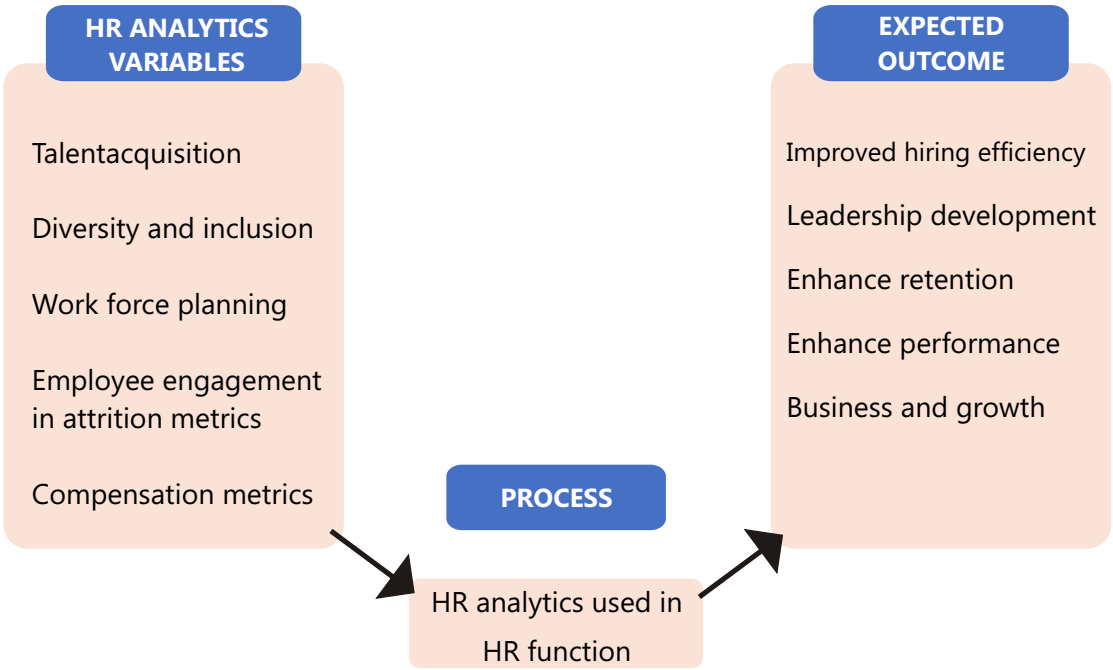
empowers HR procedures from intuition towards strategic, information-driven decision-making, leading to a more effective, it promotes long-term organizational effectiveness and competitiveness.

Zahra Ishtiaq Paul, Hafiz Muhammad Sohail Khan (2024) explored Globalization and changing business dynamics have raised HR and management's responsibility to improve and use flexible and capable staff while keeping cost efficiency. HR analytics identifying the best employees, and focusing on training and development to strengthen the organization.

Vira & Mulay (2024) explained HR analytics tools significantly enhance HRM functions such as talent acquisition, compensation and benefits, and workforce planning. The study emphasized the growing shift toward data-driven HR practices, showing how analytics tools improve recruitment efficiency, enable strategic planning, and align HR goals with organizational objectives.

Sravan Kumar Pala (2021) described that how data analytics is transforming human resource management and talent acquisition by improving decision making, workforce planning and employee retention. analysis tools predictive modeling and sentiment analysis.to refine recruitment process minimize hiring biases and enhance employee engagement. The importance of leveraging data analytics as a strategic tool for driving organizational success and fostering a culture of data driven decision making.

Research Model



Methodology

Instrument measures

A structured questionnaire was administered to gather information from IT employees. A 5-point Likert scale was used to analysis HR analytics impact on talent management. The scale used was a "Strongly Disagree" to "Strongly Agree" with close-ended questions. The items were constructed utilizing the item analysis method to determine discriminatory validity. Only those statements that clearly differentiated between high and low scorers were kept.

Reliability Analysis

Reliability analysis was done to check the reliability of the questionnaire. Cronbach's alpha value is 0.944 which means questionnaire is highly reliable.

Table - 1
Reliability Check

Reliability Statistics	
Cronbach's Alpha	No of Items
0.944	25

A sample of **25** was taken to test the validity and reliability of the questionnaire

Data Analysis

The population for this study is infinite and the study uses a descriptive study design with snowball sampling. Due to time constraints, data collected from 161 samples. Data have been collected from IT employees.

Demographic analysis: with the gender of the respondents 57.1% are female and 42.2% are male.

Results and Discussion

Factor Analysis

Factor analysis of all variables from the questionnaire

Table -2

KMO and Bartlett's Test Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.898
Bartlett's Test of Sphericity	Approx. Chi-Square	1788.318
	Df	276
	Sig.	.000

Table -3
Communalities

	Initial	Extraction
The recruitment process I faced is fair, transparent, and free from bias	1.000	.714
The job description accurately reflected my role and responsibilities.	1.000	.592
My onboarding experiences helped me integrate into the company smoothly.	1.000	.520
I had access to the necessary tools and resources when I started my role	1.000	.606
I feel valued and respected, regardless of my background, gender, or identity	1.000	.587
The company actively promotes an inclusive and diverse work environment.	1.000	.540
I have seen leader's take meaningful actions to support diversity and inclusion	1.000	.446
I have equal access to career growth and promotion opportunities.	1.000	.456
My organization provides clear career growth opportunities.	1.000	.642
I have access to training and upskilling programs to improve my skills.	1.000	.568
Internal job opportunities are well-communicated and accessible to employees.	1.000	.502
The company's leader's plans effectively for future workforce needs.	1.000	.700
I feel engaged and motivated in my work	1.000	.547
My contributions to the company are recognized and appreciated	1.000	.772
I see a long-term future for myself at this company.	1.000	.553
I believe I have a good work-life balance	1.000	.585
I believe my compensation is fair based on my skills, experience, and performance	1.000	.632
My salary is competitive compared to similar roles in the industry	1.000	.590
The company effectively uses HR analytics to improve employee benefits and incentives.	1.000	.676
I understand how compensation and performance evaluations are determined.	1.000	.573
Extraction Method: Principal Component Analysis.		

Figure-1

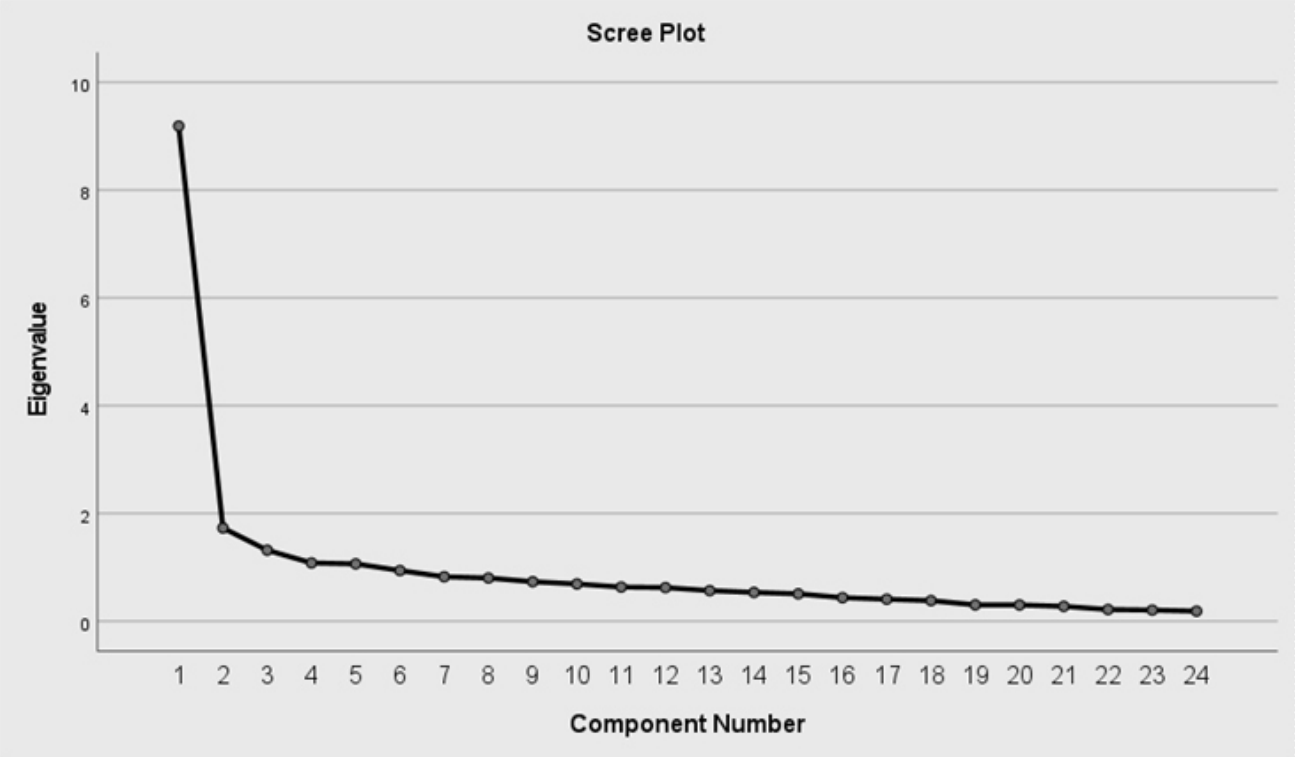


Table - 4

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.189	38.28	38.289	9.189	38.289	38.289	4.155	17.314	17.314
2	1.732	7.216	45.505	1.732	7.216	45.505	3.670	15.291	32.606
3	1.320	5.499	51.004	1.320	5.499	51.004	3.527	14.696	47.302
4	1.083	4.512	55.516	1.083	4.512	55.516	1.736	7.235	54.537
5	1.066	4.442	59.958	1.066	4.442	59.958	1.301	5.421	59.958
6	.942	3.925	63.883						
7	.827	3.444	67.326						
8	.803	3.347	70.673						
9	.735	3.061	73.734						
10	.693	2.887	76.621						
11	.636	2.648	79.269						

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
12	.626	2.607	81.876						
13	.569	2.372	84.248						
14	.537	2.236	86.484						
15	.510	2.125	88.610						
16	.438	1.825	90.435						
17	.410	1.708	92.143						
18	.384	1.599	93.742						
19	.305	1.273	95.015						
20	.303	1.262	96.277						
21	.278	1.158	97.435						
22	.219	.912	98.347						
23	.208	.867	99.214						
24	.189	.786	100.000						

Extraction Method: Principal Component Analysis.

Table -5
Rotated Component Matrix

	Component				
	1	2	3	4	5
Recruitment, DEI metrics	.173	-.025	.809	.139	.097
Job analysis, role benchmarking	.230	.321	.649	.101	-.067
Onboarding effectiveness metrics, employee integration analytics	.312	.306	.528	.187	.124
Operational readiness tracking, Employee feedback analytics	.320	.288	.643	.066	.049
Inclusion index tracking, Survey analytics	.146	.333	.665	.056	-.096
Diversity metrics, Inclusion dashboards, DEI program evaluation	.475	.350	.429	.058	.062
Leadership accountability metrics, DEI policy impact analysis	.416	.341	.326	.131	-.183
Promotion rate analytics, Career pathing tools, Bias detection in promotions.	.514	.344	.226	.139	-.044

	Component				
	1	2	3	4	5
Internal mobility tracking, Career progression mapping	.663	.092	.328	-.104	.275
Learning & development analytics, Skills gap analysis	.446	.519	.220	.224	.029
Internal job posting metrics, Employee communication analysis	.384	.419	.351	-.005	.236
Workforce planning analytics, Succession planning, HR forecasting	.214	.740	.266	.066	-.180
Employee engagement analytics	.634	.268	.087	-.068	-.248
Recognition program effectiveness, Employee value measurement	.248	.811	.219	.032	.062
Retention prediction models, Career outlook tracking	.629	.125	.377	.013	.000
Work-life balance tracking, Wellness analytics	.283	.638	.209	.045	.228
Compensation benchmarking, Pay equity analysis	.719	.248	.150	.166	-.055
Industry compensation analytics, Salary survey data interpretation	.442	.584	.187	-.073	.118
Benefits utilization analytics, Total rewards optimization	.736	.294	.204	-.026	.073
Transparency in performance metrics, Compensation framework modeling	.355	.438	.499	.079	.008

Extraction Method: Principal Component Analysis.

Interpretation

From the Table 5.1.1, it is inferred that the Kaiser-Meyer-Olkin (KMO) test value is 0.898, which is above the threshold of 0.5 and is considered good, indicating the data is suitable for applying data reduction techniques like factor analysis. The Bartlett's Test of Sphericity is significant at $p < 0.001$, confirming that there is a high level of correlation among variables, and hence, the dataset is appropriate for factor analysis.

From Table 5.1.2, the extraction values range from 0.446 to 0.772, indicating that each item shares between 44.6% and 77.2% of its variance with the extracted components. This confirms a good level of variance explanation and supports the adequacy of the factor model.

From the Table 5.1.3, it is inferred that the total variance contributed by the first component is 38.289%, by the second component is 7.216%, by the third component is 5.499%, by the fourth component is 4.512%, and by the fifth component is 4.442%. The Eigenvalue for the first factor is 9.189, for the second factor is 1.732, for the third factor is 1.320, for the fourth factor is 1.083, and for the fifth factor is 1.066. Together, these five components explain a cumulative variance of 59.958%, indicating a strong representation of the dataset through factor extraction.

From Table 5.1.4 the highest loading is for Benefits utilization analytics, Total rewards optimization (.736), indicating emphasis on technical/hard HR skills. This is followed by Compensation benchmarking (.719), Internal mobility tracking (.663), and Employee engagement analytics (.634), reflecting focus on strategic planning, career progression, and employee behavior and experience.

Major Finding

Factor Analysis

Factor analysis was used to identify the dimension and reduce the number of variables, and also it is used to check the validity and of the questionnaire. We thoroughly analyzed the result of this section that were collected from 161 respondents. Application of principal component analysis using SPSS was to investigate the latent factor linked to these 24 items. It is inferred that,

1. Variable (23) Compensation metrics has very high significant loading factor (.736) under the Benefits utilization analytics, Total rewards optimization.
2. Variable (13) Workforce planning has very high significant loading factor (.663) under the Internal mobility tracking, Career progression mapping.
3. Variable (19) Employee engagement and attrition metrics has very high significant loading factor (.629) under the Retention prediction models, Career outlook tracking.
4. Variable (12) Diversity and inclusion has very high significant loading factor (.514) under the Promotion rate analytics, Career pathing tools, Bias detection in promotions.
5. Variable (08) Talent acquisition has very high significant loading factor (.320) under the Operational readiness tracking, Employee feedback analytics.

Implications and Suggestions

1. It's recommended to utilize HR analytics to measure internal pay equity between roles, gender, and departments to promote equity and inclusiveness in compensation programs. Periodic measurement using tools such as the Pay Equity Index promotes DEI objectives and reinforces employer reputation.
2. For improved employee satisfaction and turnover mitigation, organizations can implement Compensation Satisfaction Surveys and monitor progress over time. Sentiment analytics help them align reward with employee perceptions and resolve concerns in advance.
3. HR departments are advised to merge performance data with compensation trends to create powerful pay-for-performance linkages so that, they can reward and retain high performers appropriately.
4. It is recommended to monitor Offer Acceptance Rates in relation to compensation packages to determine whether low acceptance is caused by uncompetitive pay. Tailoring offer strategies on this basis can enhance hiring success.

5. It is recommended that IT companies adopt predictive workforce planning models using HR analytics tools to forecast future talent needs based on project pipelines and technology trends. In addition, they may identify potential skill gaps in advance to support timely recruitment or reskilling initiatives.
6. HR teams are advised to utilize predictive models in order to determine compensation-related risks and provide retention bonuses or career growth opportunities proactively. This aligns compensation strategy with employee lifecycle planning.

Conclusion

To conclude that HR analytics has become a strategic driver in the IT industry by converting conventional HR processes into evidence-based, fact-driven processes. The research once again confirms that HR analytics holds significant value across various talent management functions such as talent acquisition, diversity and inclusion, workforce planning, employee engagement, and compensation. Through factor analysis, the study singles out compensation metrics as being one of the most powerful variables with a strong factor loading (0.736) indicating its imperative function in maximizing employee rewards and retention. Finally, the research points out that the incorporation of HR analytics into company strategy benefits in linking human capital to business objectives, improving decision-making, and fostering a high-performance culture. It not only increases the efficiency in hiring but also enhances employee satisfaction, engagement, and retention within the competitive IT sector.

References

Edwards, M. R., & Edwards, K. (2016). Predictive HR analytics: Mastering the HR metric. *Kogan Page* edition 3, publication on 3 June 2024.

Nitya B, Ragini Bose, K subha (2021) A study on the application of HR analytics on talent acquisition, compensation &benefits and employee turnover in the Indian IT industry Vol-44 No -01(XIV):2021 *UGC care journal*.

Sarvan Kumar Pala (2021) use and applications of data analytics in human resources management and talent acquisition. *International journal of enhanced research in management & computer application*. ISSN:2319-7463, vol,10 issue 6, June, -2021 factor:7.751

Zahra Ishtiaq Paul, Hafiz Muhammad Sohail Khan (2024) Reshaping the future of HR: Human Resource Analytics and Talent Management Issue Vol. 13 No. 2 (2024) *Bulletin of Business and Economics (BBE)*, *13*(2), 332-340.

Ali, E., & Elias, H. (2023, January). Potential Application of HR Analytics to Talent Management in the Public Sector. In 2023 International Conference on Cyber Management and Engineering (CyMaEn) (pp. 8-11) *Bulletin of Business and Economics*.

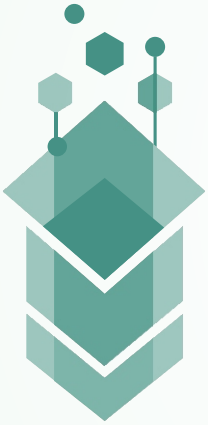
Hritik kale, Nilesh balvant anute (2022) HR Analytics and its Impact on Organizations Performance Volume 9, Issue *3 International journal of research and analytical review* (E-ISSN 2348-1269, P- ISSN 2349-5138)

Dr. P. Raghunadha Reddy, P. Lakshmi Keerthi (2017), "HR Analytics' - An Effective Evidence Based HRM Tool*", International Journal of Business and Management Invention*, Volume 6, Issue 7.

Anshu Sharma, Tanuja Sharma, (2017), "HR analytics and performance appraisal system: A conceptual framework for employee performance improvement", Management Research Review, *Emerald publishing limited* Vol.40, Issue 6.

R. Anita. Dr. N. Sumathi (2019), "A study on the measuring the factors of HR analytics on performances management in services sector of selected companies in Chennai", JAC: *A Journal of Composition Theory*, Volume 12, Issue 12.

Steven McCartney and Na Fu (2022), "Bridging the gap: why, how and when HR analytics can impact organizational performance", *Management Decision, Vol. 60, No. 13. https://doi.org/10.1108/MD-12-2020-1581*



SIFT

A JOURNAL OF BUSINESS AND SOCIAL SCIENCES

Publishing House : SIFT JBS ACADEMY
53, 4th Street Saibaba Colony, Thiyagaraja Nagar,
Tirunelveli - 627011 Tamil Nadu, India