



HR Analytics: A Literature Review and New Conceptual Model in Banking Sector of Pakistan

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Abstract

Employee analytics is a recent development in the corporate world that emphasizes the tactical value of the field of HRM for high-level executives. This essay aims to accomplish the following five goals: 1) Definition and significance of HR analytics; 2) HR analytics procedure; 3) HR questions that may be addressed by HR analytics; 4) new model for HR analytics; and 5) HR analytics obstacles. A structured 5-point liker scale questionnaire was circulated amongst employees of banking sector and the HR department of banking sector in Pakistan. To develop and evaluate the data (PLS-SEM) was used on the SMART PLS software. In this research, purposive sampling technique was used as the study revolved around gathering data from the selected individuals based on the predetermined criteria. Since it covers topics such as definitions, significance, procedure, models, difficulties, etc. within HR analytics, this study is conceptual in nature. HR analytics is the use of sophisticated statistical methods and research designs. Tools for conducting fact-based data analysis on HR data in order to spot issues or draw long-term conclusions about HR-related issues. Many academics have noticed that HR analytics play a crucial role in helping a corporation obtain an edge over its competitors.

Keywords: Employee analytics, HR data, Human resource management.

Introduction

Background of Study

The act of gathering, evaluating, and interpreting data on a company's personnel in order to make defensible choices regarding hiring, development, and retention is known as HR analytics. By using this data, productivity can be raised, turnover can be decreased, and employee engagement can be enhanced. Nowadays, numbers are



regarded as the business language. Organizational decision makers make decisions based on data from descriptive, predictive, and prescriptive studies. Thus, using data analytics, firms are attempting to increase decision accuracy while simultaneously increasing efficacy and efficiency. Data pertaining to each area of the workforce within the firm should be carefully examined, assessed, and analyzed in order to make suitable decisions on the challenges faced by employees (Lochab et al., 2018). HR analytics is a powerful instrument that can enhance the effectiveness and efficiency of all associated HR department components and provide value to its operations through rational and quantitative arguments.

The use of data in HR is referred to as "workforce analytics," "human capital analytics," or "HR analytics". HR professionals may attract, retain, and improve employee performance by using HR analytics to guide their decision-making. A company can only remain successful in the long run if it keeps abreast of the latest advancements in the field of HR analytics.

The fact that analytics in human resources is a based on research topic of study is one of its primary advantages that aids in rational decision-making for HR professionals while maximizing the strategic influence of HR on corporate performance (Singh et al., 2017). As a result, HR intelligence is no longer only an operational partner; it is now a more strategic center of excellence. (Malla, 2018).

Problem Statement

Understanding and projecting human behavior is a significant barrier that every firm must now overcome due to the difficulty of measuring and quantifying the features of human resources. Nevertheless, the implementation of HR analytics presents obstacles for HR professionals, making its performance difficult as well. As stated by Malla (2018)

GAP Analysis

The research focuses on how quantitative model based tools and techniques, along with HR analytics, may provide a data-driven framework for addressing workforce challenges. Business executives can optimize HRM and maximize its strategic value by using this paradigm.

Research Objectives

This study aims to determine the percentage of staff departures, the level of employee happiness, and the effect of risk factors at work on worker productivity.

Research Questions

- a) What's known as HR data analysis and what significance is it?
- b) What exactly is the HR statistics be handled?
- c) What kinds of HR queries would HR data analytics be able to address?
- d) What have been the obstacles facing HR data mining today?



Significance of Study

Managers can forecast employee behavioral trends considering expenses related to training and turnover rates, enhancing staff engagement by utilizing workforce analytics, an empirical model-based approach to gaining knowledge about employee data. Employee data usually comes from HRIS using an HR analytics solution. Social media, mobile apps, and corporate performance records combine to form a data warehouse. The data's hidden patterns, linkages, probabilities, and forecasts are then made visible through the application of big data, statistical analysis, and data mining tools. Data warehousing systems manage the collection, examination, and modification of data as well as its storage across multiple databases.

Literature Review

External forces will play a significant role in the widespread use of HR data analytics in the year 2023. This study examines how external factors impact the adoption of human resource analytics (HRA) using the model as a foundation. The conceptual framework of four independent factors under the category of external forces that could impact the implementation of HRA is based on recommendations from the literature for additional study. As variables to control for, the research examined into race, maturity, and analytical history in a greater extent. The research comprises 123 replies provided by HR experts working in domestic banking sector. That analysis of the compile data was done with SmartPLS V. 3.2.8. The study's conclusions support the notion that the scientific backdrop and societal impact are the two main variables influencing HR professionals' the implementation of HRA. Furthermore, it seems that the control variable "statistical background" had an impact on the association between HRA and Social Influence. The study's theoretical and practical ramifications were also incorporated in the results. The factors impacting the use of HR analytics in Pakistani enterprises are clarified by this research. These are the essential HR professionals around the world are using HR Analytics (HRA) more and more in organizations to improve decision making. The purpose of the study is to comprehend why HR analytics are taking so long to become popular, both among individuals and within organizations. It is thought that attitudes toward HRA play a mediating effect in revealing a more nuanced idea. To describe the adaption process, the writers combine the "Philosophy of deliberate conduct" and the Innovation Diffusion concept." Three steps of the decision-making process are examined: knowledge, persuasion, and the ultimate decision. During this procedure, independent and mediating variables are identified as facilitators and barriers. Self-efficacy: The conviction that one can use HR analytics successfully. Trial ability: How simple it is to test out HR analytics software. The influence of coworkers and peers on adoption. Relative advantage: The advantages of HR analytics as seen from distance. Risk-taking: The readiness to accept the possible dangers involved in adoption. Perception of HR Analytics: A crucial element impacting its implementation

To hasten adoption, organizations should concentrate on eroding obstacles and



motivating facilitators. HR professionals must use HR analytics to gain a competitive edge and align themselves with corporate goals. HR analytics can be useful in areas like training, talent management, and performance management. September 2023 will see SALMAN HASAN KHAN Air University School of Management, With the integration of numerous technology-based breakthroughs like Human Resource Analytics, the business sector is experiencing a change of perspective from a typical strategy for managing people to a holistic strategy. The research employs a quantitative methodology to examine the impact of three factors: perceived usefulness, social influence, and enabling conditions on the adoption of HR analytics among employees at Pakistani listed firms' HR departments. 490 respondents who worked for the aforementioned companies provided the data that was gathered. Using structural equation modeling, the psychometric analysis and path analysis (to test proposed relationships) were carried out. From the perspective of employees working in human resource departments, the results confirm that perceived usefulness, social influence, and facilitating conditions are positively associated with intentions to adopt HR analytics, and that intentions are positively related with actual adoption of HR analytics. The results of this study advance our knowledge of how human resource professionals behave when implementing new strategies in strategic human resource management. The business sector is using technology to obtain a competitive edge in order to overcome the difficulties presented by the dynamics of modern business. Technology has fundamentally altered corporate procedures, having an impact on both important strategic choices and day-to-day organizational operations. One such fundamental corporate function that has directly benefited from technology advancements is human resource management. HRA is a technology advancement that involves integrating artificial intelligence (AI) applications into human resource management with the goal of automating HR operations. This allows firms to identify problem areas and implement timely and targeted initiatives (Jain & Jain, 2020). Organizations are using Human Resource Analytics, a technology spinoff that allows them to obtain data-driven, rational, and realistic HR projections. By 2023 managing the pandemic using both conventional and green human resource practices. In the framework of global enterprises situated in Karachi, Pakistan, during the pandemic, the research examines the correlation between green HR practices and organizational adaptability. The study examines the effect of Flexibility in the organization and traditional and environmental human resources practices drawing on prior research and theories. The study emphasizes how important organizational support is in predicting organizational agility in the midst of a pandemic. The study makes use of a convenience sample of foreign companies based in Karachi that were selected based on their propensity to implement green HR practices. A survey questionnaire with two sets of questions one for companies using green HR practices and the other for those using traditional HR methods was used to gather data. The study examined traditional HR counterparts, organizational support, green incentives and recognition, and green training and development. Cornbrash's alpha values demonstrated the constructions' internal



consistency, showing high dependability. The findings validated the conjectures that firms possessing environmentally conscious training and development, as well as green rewards and recognition, demonstrate greater organizational agility in comparison to their conventional HR counterparts. Organizational support and green HR practices together, however, did not substantially predict organizational agility.

In spite of this, the report emphasizes how important organizational support was for maintaining organizational agility during the epidemic. Given that green HR practices have the ability to increase organizational agility, these findings highlight the necessity for firms to make investments in them. Companies are urged to think about implementing green HR practices as a way to improve their capacity to handle uncertain and complex circumstances, in addition to being an environmental initiative. Individually, institutional assistance An effective moderator trait is one that strongly predicts organizational agility. It was far from meeting our moderation requirements. Even though organizational support did not show a moderating link between green HR and organizational agility, we expected the IV-DV model, which was initially weak, to do so. Consequently, it is difficult to forecast why moderation failed. Perhaps more research on this is necessary. As previously said, the significant and positive influence of organizational support in forecasting organizational agility during the COVID-19 pandemic is noteworthy and consistent with expectations.

Based on company performance in 2020, Sana Arz Bhutto Augangzeb A Research Investigation on Domestic Firms Investigating the Effect of Environmental Human Resources Management on Company Results This investigation aims to determine the effects of environmentally friendly human resources on the performance of Pakistani firms, such as hiring, training, and development. 376 Pakistani businesses have provided responses. Regarding green HRM at their companies, the HR managers gave the information. All of the answers were gathered using a closed-ended questionnaire and a five-point Likert scale. To investigate Multiple regression analysis is used to examine the way environmentally friendly HRM variables green recruiting, green instruction and growth, and green learning affect business performance. According to the findings, the success of the company is significantly impacted by this factor. The results will be quite beneficial to the HR department and upper management as they design their green HRM policy. Additional studies on HRM's roles and their connections to workers' productivity and company success may be undertaken in the future. Summary How successfully a business protects the natural world with regard in the output is referred to as its commitment to sustainability. One can assess a company's level of performance by looking at how much work it puts into reuse, air quality systems, waste management, and ambient discharge prevention. its effectiveness in terms of preservation of the environment (Lober 1996). In today's research issues, the emergence of sustainable development through environmental management which is emerging as the top significant field of research. In addition to addressing environmental challenges, GHRM considers how human welfare in terms of their social and economic growth is actually going.



One of the most significant operational fields in a company nowadays is human resource management (Opatha and Uresha, 2020). According to Opatha (2009), HRM is a successful and productive utilization of personnel to accomplish company targets. Its general goal is to create and to keep suitable, happy staff members who contribute fully to the accomplishment of organizational objectives and goals. All categories of personnel who work for the company are included in the HR department. Due to their scarcity, value, uniqueness, and non-substitutability in the current competitive business environment, human resources have emerged as a strategic asset for the organization.

Within the context of the original UTAUT paradigm, this study examines the influence of external influences on the adoption of HR analytics. The literature's suggestions for further research form the basis of the theoretical structure of four distinct variables beneath the heading of outside forces that can impact the widespread acceptance of HRA. As control variables, the research looked into race, maturity, and analytical history in more detail. The study's set consists of 124 replies from HR specialists working in the financial services sector in Pakistan. The information gathered was examined by The results of the research support the notion that psychological factors and analytical expertise are the two main variables influencing HR practitioners' willingness to utilize HRA. In addition, it seemed that the input parameter "empirical experience" was affecting the connection between Influence of society and personnel The study's both theoretical and actual ramifications were also incorporated in the results. Research entitled "slowly Acceptance of Employment statistics Viewing through the Perspective of Innovative Spread Hypothesis". The factors impacting the use of workforce metrics within Pakistani enterprises are clarified by this study. Here are the key Organizations worldwide are increasingly adopting HR Analytics (HRA) among HR professionals to enhance decision-making. The study aims to understand the slow adoption rate of HR analytics, both at the organizational and individual levels. The mediating role of attitudes towards HRA is considered to reveal a more complex concept. The authors integrate the "Innovation Diffusion Theory" with the "Theory of Planned Behaviour" to explain the adaptability process. HR analytics impacts on decision making.

The decision-making process is examined in three stages information, convincing, and the choice itself. Obstacles and enablers are identified as independent and mediating variables during this process Self-efficacy: The belief in one's ability to use HR analytics effectively. trial ability: The ease of trying out HR analytics tools. Social influence: The impact of peers and colleagues on adoption. Relative advantage: The perceived benefits of using HR analytics. Risk-taking: The willingness to take risks associated with adoption. Attitude towards HR Analytics: A critical factor influencing adoption Organizations should focus on removing barriers and encouraging facilitators to speed up the adoption process. HR professionals need to align themselves with business goals by leveraging HR analytics for competitive advantage. Areas like performance management, talent management, and training can benefit from HR analytics. In September 2023 SALMAN HASAN KHAN , AMIR ISHAQUE Asstt. Prof., SAAD



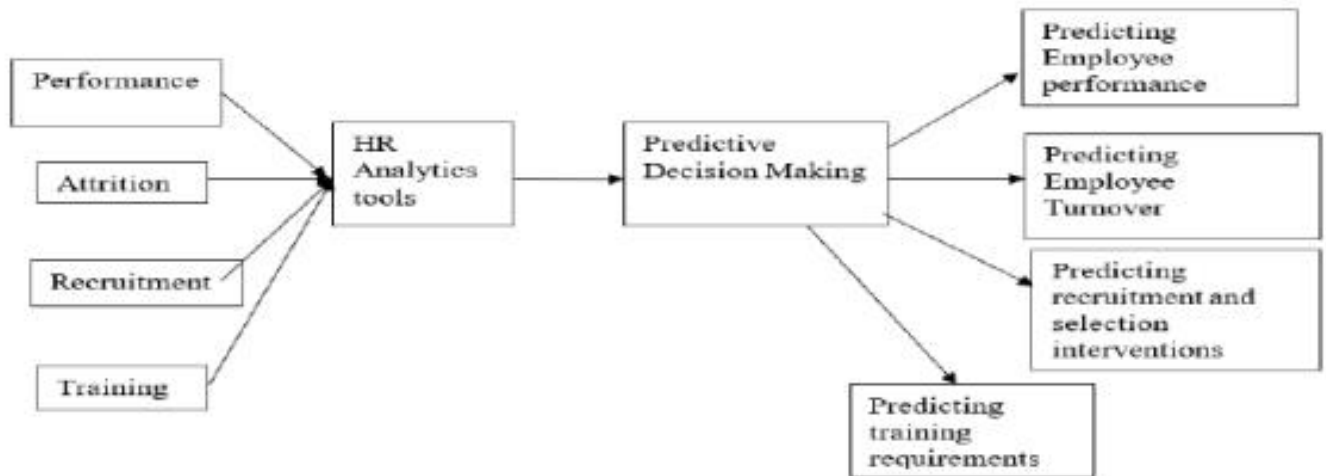
HASSAN Asstt. Prof. Working on a .Research tittle Human Resource Analytics: Perspective of Human Resource Employees To survive in a highly competitive world, the corporate world is witnessing a paradigm change to a strategic approach to managing employees from a conventional one approach through the incorporation of various technology-based advancements such as Human Resource Analytics. This quantitative research seeks to determine how the acceptance of employee subtle is impacted by alleged value, political power, and enabling circumstances. by employees working in HR departments of listed companies in Pakistan. Data was collected from 490 respondents working in the listed companies. The psychometric analysis and path analysis (to test hypothesized relationships) was conducted through Structural Equation Modeling. The results confirm that Perceived Usefulness, Social Influence, and Facilitating Conditions are positively associated with Intentions to adopt Human Resource Analytics and intentions are positively related with actual adoption of Human Resource Analytics from the perspective of employees working in Human Resource Departments. The findings of this research contribute to our understanding of the behavior of Human Resource employees for the adoption of novice approaches in Strategic Human Resource Management.

The corporate world is leveraging technology to gain a competitive advantage for meeting the challenges posed by the present-day business dynamics. Technology has radically changed the business processes affecting basic organizational operations and major strategic decisions equally. Human Resource Management is one such core business operation that has witnessed giant strides as a direct impact of technology. HRA is a technological innovation involving the incorporation of AI applications in Human Resource Management aimed at automating HR functions so that not only problem areas can be identified but timely and targeted strategies may also be adopted by organizations (Jain & Jain, 2020). The adoption of Human Resource Analytics by organizations is an offshoot of technology by which organizations can get realistic, logical, and data-driven forecasts about HR (Qamar & Samad, 2022). The strategic interventions based on these forecasts are being used by organizations as a source of competitive advantage (Qamar & Samad, 2022)

Let's look at this study's primary conclusions. Understanding how HR analytics could enhance organizational efficacy and efficiency in academic contexts is the goal of the research. It focuses on examining how HR statistics affect how decisions are made. HR analytics has allowed HR professionals to take on the role of strategic partners. It improves employee retention and workforce planning. By making HR a strategic partner, it enhances workforce management. Its main concerns were educational results, student performance, and institutional efficacy.

Conceptual Model and Frame Work

Figure 1 HR Analytics Model Developed



Hypothesis Development

HR metrics serve to develop a sustainable company by balancing social, environmental, and economic aspects from both short- and long-term perspectives. Personnel has several goals. 1) to gather and store information in a way that will be beneficial for both immediate and future patterns in how much is available for labor spanning sectors and occupations; 2) to assist international companies in selecting the most advantageous acquisition; 3) to encourage the development and maintenance of human capital; 4) to provide an organization with understanding of the efficient and effective management of its workforce, enabling it to swiftly and effectively accomplish its goals; and 5) to have a positive impact on the successful execution of its plans.

Additionally, the primary objective of workforce metrics is to raise durability and improve organizational performance by using analytical approaches to make informed decisions about HR after analyzing large amounts of data. Here are a few benefits of personnel.

H1 staff satisfaction and staff turnover have a positive relationship.

According to the study, there is a strong positive causal relationships between turnover intent and job happiness, with frustrated personnel usually expressing desires to depart the company. When things are going well, the correlation is highest. On the other hand, the results show that age groups and length of service groups differ in terms of the reason for employee turnover. It's interesting to note that the survey results indicate that dissatisfied employees with low perceptions will still have a greater intent to leave their jobs than satisfied employees with low perceptions. This suggests that there is a regulating substantial beneficial association among believed provided job chances and worker resignation intention.



H2. The employee satisfaction is positively impact on employee turnover.

The degree to which an employee's own aims and views fit with the organization's values determines how satisfied they are with their work. The motivation and well-being of employees are greatly impacted by the business culture. A positive workplace culture encourages employees to feel satisfied and like they belong, which improves their general well-being and work-life balance. Retention rates increase and turnover is decreased when staff members experience a supportive workplace culture and feel valued and appreciated. Furthermore, a positive workplace culture raises motivation and morale among staff members. Positive workplace cultures inspire people to go above and beyond in their job, which boosts output and performance. For this reason, there is a critical relationship between business culture and employee motivation. Therefore, in order to guarantee employee happiness and wellbeing, businesses should place a high priority on developing and preserving a positive workplace culture.

H3. The employee turnover is positively influence by employee grievance.

It is true that employee complaints may influence staff attrition. Ineffectiveness, low morale, and eventually increased turnover rates can result from issues that are not swiftly resolved in the workplace¹. But it's important to understand that other elements, like career advancement, workplace culture, and general job happiness, are also important in determining turnover. According to Husain et al. (2016) Gartner predicts that staff turnover will reach 50–75% of what it has historically been for businesses. The fact that it currently takes 18% longer to fill posts than it did before the pandemic exacerbates this problem. In a competitive market, managers who are already overworked spend time looking for new hires. Leaders should concentrate on retention initiatives to counter this. The present research aims to understand employee turnover causes and strategies for worker retention. Significant research findings indicate that a range of reasons might lead people to leave their jobs, including motivation, salary, perks, workplace anxiety, happiness at work, security at work, and the office atmosphere. Moreover, personnel turnover has a big impact on a business and can hurt its productivity, long-term viability innovation, and prosperity due to the costs associated. Businesses can use a variety of strategies to improve worker efficiency and reduce attrition by first gaining insight into the needs of their staff. Thus, implementing plans will increase the motivation, job satisfaction, and earnings of individuals and organizations, all of which can reduce abandonment, layoffs, and hiring issues.

H4. The employee layoffs is positively influence by employee health and safety.

In today's cutthroat economic environment, employee retention has emerged as a critical problem for businesses of all stripes. The dedication of a business to health and safety is a factor that affects employee retention that is frequently disregarded. However, to what extent does a well-executed safety and health program contribute to



talent retention? A supportive workplace culture is essential to workers' emotional health. Businesses that put safety and health first convey to their employees that they value them. The sentiment is particularly meaningful to employees, who have a greater sense of appreciation and belonging. A highly engaged and morale-booster workforce is the end outcome. Additionally, trust is reinforced, which is a necessary component of any healthy relationship. Workers have faith in the company's leadership and know that their interests are taken into account at all times. It's a straightforward calculation: Workers can focus entirely on their work when they are not distracted by possible workplace dangers. An atmosphere that is safe facilitates optimal performance from employees by eliminating any hindrances. Additionally, businesses that fund wellness initiatives such as ergonomic desk arrangements or seminars find that employees are less worn out and uncomfortable, which improves their capacity for concentration. Increased efficiency boosts the bottom line of the business, making safety both a financial and ethical imperative. The effects of staff turnover on the bottom line are profound. Expenses include more than just hiring; they also include training, onboarding, and the period of time it takes for a new hire to perform at their best. Businesses that proactively enforce strict safety and health protocols lower the risk of accidents and diseases related to the workplace. This implies that workers are less likely to quit over health issues or take extended medical leaves. Businesses can devote resources to expansion projects rather than always having to play catch-up when it comes to filling positions when turnover is reduced.

H5. The employee planning is positively influence by employee grievance handling.

The need to maintain harmonious relationships in order to boost employee morale, improve organizational effectiveness, and improve business efficiency has made the handling of employee grievances an important organizational problem in the modern workplace. Handling complaints from staff has grown into a key issue for many intelligent administrators and executives in today's company world. This is due to the fact that organizations that want to optimize the capabilities of every worker need to maintain a favorable labor-management dynamic, which is critical to the organization's continued existence, prosperity, and development. Effective handling of employee grievances is so important that companies have begun to restructure their working procedures to consider the opinions, sentiments, and viewpoints of their employees in attempts to gain trust from them. The goal of management is to ensure that the company has an efficient grievance management mechanism in place in addition to recruiting, motivating, and keeping personnel as well as enforcing the required consequences to elicit behavioral reactions from them. Bean (1996) pointed out that grievance concerns arise when workers are not happy with the service they receive. Employees who disagree with the company's policies can also file grievances (Ayadurai, 1996). Put another way, grievances are likely to occur when an employee cannot easily understand a corporate policy that does not explicitly outline expectations for behavior,



how to receive rewards, or how to voice concerns The effective handling of employee complaints is one of the most significant responsibilities of people executives in modern businesses. Spirit, inspiration, and management-labor relations are all significantly impacted by unresolved or badly managed grievances, They must be treated seriously since they have a detrimental impact on the production of the company. Managers make an effort to apply established procedure to reduce disputes at work and other concerns.

H6 Employee performance appraisal impact by employee grievance handling.

Every workplace has its share of grievances, and managing them effectively is key to preserving a peaceful and effective working atmosphere. The key to effective grievance management is how well issues are handled (and resolved). In the modern world, it is quite important. Many businesses today claim that their people resources—now known as human capital rather than human resources—are their most valuable assets. Therefore, it is necessary to confirm whether or not these statements are true. This can be achieved by tracking how quickly issues raised by staff members are resolved. If it is completed more quickly, it can be said that there is a large presence of employee concerns within the company. The concerns that the employees are concerned about include the agreement, work rule or governance, plan or method, safety and wellness control, prior practice, unilaterally changing standards of conduct, persecution of a person, salary, reward, etc. are complaining about. In this case, management's approach in trying to comprehend staff concerns and find a peaceful solution has a higher chance of preserving a high-performance culture. It is imperative that managers get education regarding the grievance process's significance and their part in sustaining positive union relations. Managing grievances in an efficient manner is crucial to maintaining positive employee relations and creating an equitable, prosperous, and efficient work environment. Good labor relations require cooperation and a little bit of giving on both sides. In the modern workplace, handling employee complaints well has a big impact on employees' general well-being and productivity in addition to being crucial to preserving a positive work atmosphere. With the intention of enlightening industry professionals on best practices, this enlarged article offers a thorough examination of contemporary methods for handling employee grievances without mentioning any particular businesses.

Research Methodology

The present study adds an analytical viewpoint to the corpus of current behavioral analytics expertise. It attempts to methodically seek solutions to academic concerns and presents a novel model of HR analytics with an example. Using the desk research approach coupled with the writer's intellectual opinions, an in-depth review of literature was completed.

Research Paradigm



Today's organizations work in dynamic contexts with constantly advancing technology. Innovation is what they need to stay competitive. Although HR analytics has become a major source of competitive advantage, most HR practitioners do not possess the analytical capabilities needed to completely execute the process. Consequently, a company needs to engage in the education for leadership that have the expertise in performing HR analytics if it wants to make effective and successful decisions concerning its human resources. Training in statistical methods is necessary to transform data into meaningful findings. Managers and employees cannot make meaningful conclusions if they are not able to assess data.

Research Design

This study uses quantitative research and casual research design for study whereas cause and effect method are used to analyze the relationship between variables. This quantitative survey drives data from employees and managers through Google form to collect and assess HR practices, HR analytics, and employee turnover and employee satisfaction. The sampling was collected by Targeting banking sector, varying in size and technological maturity Include both HR professionals and frontline employees.

Research Instrument

The study uses a structure questionnaire and the Information was gathered through the entirety of 50 employees of banking industry of Pakistan. The measurement scale was made using the VAM model and some paradigm of TOE model. The construct was adopted from previous researchers to ensure validity.

Construct	Code	Item
Employee Planning and Staffing	EP1	3
	EP2	
	EP3	
Training and Development	TD1	2
	TD2	
Remuneration	R1	2
	R2	
Performance Appraisal	PA1	2
	PA2	
Health and Safety Management	HS1	2
	HS2	
Grievances Handling	GH1	2
	GH2	
LMR (Labor Management)	LMR1	2



Relations)	LMR2	
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Pilot Testing

The structured questionnaire was made on google docs and distributed to the selected participants. There was total 40 respondents and the questionnaire were used without any changes. Feedback was collected on the clarity, relevance, and comprehensiveness of the questions. The responses were analyzed for reliability testing using Cronbach's alpha to insure internal consistency. Feedback from participants was also reviewed to identify any issue with the questionnaire.

Normality Testing

An essential component of research that determines whether or not the data is obtainable, ready for testing, and properly modeled by a normal distribution is normality testing. Regression analysis is one of the many statistical tests. Ensuring normalcy is crucial since it provides information on the validity and dependability of the findings.

CD	Excess kurtosis	Skewness
EP	1.113	-0.952
GH	0.449	-1.155
HS	1.094	-0.300
LMR	1.396	-0.320
PA	1.449	-0.587
R	-0.820	-0.474
TD	-0.846	-0.369

Sampling & Data Collection

Between May and June of 2024, an online survey was sent to banking sector personnel in Pakistan. Of those, 40 valid responses were obtained. Seventy questionnaires were distributed to Pakistani banking sector workers. The first section of the questionnaire's descriptive data are presented. In the second section, modified items from earlier research were utilized to measure participants' perceptions of particular variables. Likert scales with a range of 5 to 1 were used for all the items; 1 represented "Strongly Disagree" and 5 represented "Strongly Agree."

Descriptive Analysis

Descriptive analysis is used in the research to provide a thorough overview of the data, providing insights into the respondents' demographic distribution as well as the main trends and variations of the measured variables. The foundation for more intricate



statistical testing and analysis is laid by this approach. The age, gender, qualification, job experience, and designation are among the demographic variables that characterize the traits and features of the respondents. The statistical package for social science was the instrument utilized for data analysis. In the meantime, Smart PIs was used to run the data that was obtained from the respondents for variable analysis.

Assesment of Measurement Model

Following the guidelines established by leading authorities in the field validating and dependable assessment model in partial least-squares calculus framework modeling (PLS-SEM). According to Hair, Risher, et al. (2019), Cronbach's Alpha (CA) values above 0.7 indicate strong internal consistency across the items within each construct, which is necessary to ensure that the items reliably measure the latent variables for which they are intended. In a similar vein, composite reliability (CR) values larger than 0.6 or 0.7, as proposed by Bagozzi & Yi (1988) and Dibbern & Chin (2010), respectively, validate the constructs' dependability. This suggests that the items evaluate the underlying concepts in a consistent manner. The rho_A statistic supports the validity of your measurement model; Henseler considers values above 0.6 to be satisfactory. Convergent validity, as defined by Average variation Extracted (AVE) values exceeding 0.5, as suggested by Chin (2010), ensures robust measurement of theoretical notions. This demonstrates that measurement error is not as good at explaining variation among the items as the constructs are. For discriminant validity, Gold et al. (2001) recommend HTMT ratio values less than 0.90 to ensure that the constructs are distinct from one another. Tables 3 and 4 of your analysis show that each indicator meets these strict requirements. Specifically, validity and reliability hold true, indicating that the measurement model appropriately captures and measures the correlations between the variables in your PLS-SEM study.

Assesment of Structural Model

The structural model is tested using Smart PLS to determine the relationships between variables. The structural model analysis reveals interesting findings about the relationship between employee turnover and employee satisfaction, Well-being and security supervisors, recruiting and hiring, instruction and growth, compensation, assessment of progress, and dealing with complaints and labor management relations in banking sector of Pakistan. The data can be seen below in path coefficient which shows the strongly positive relation between variables.

Variables	Path coefficients
EP -> GH	0.463
GH -> R	0.227
PA -> GH	0.160
R -> HS	0.235



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R -> LMR	0.282
TD -> GH	0.234

Data Analysis and Result Respondent Profile Analysis

I.

Variable Category	Respondent	Percentage
<i>Gender</i>		
Male	36	73.50%
Female	13	26.50%
<i>Age</i>		
20-25	16	32.70%
26-35	30	61.20%
36-45	2	4.10%
46-55	1	2.0%
<i>Location</i>		
Karachi	45	91.80%
Islamabad	4	8.20%
<i>Academic Qualification</i>		
Intermediate	8	16.30%
Bachelor	16	32.70%
Masters and above	25	51.0%
<i>Experience in</i>		
Current Org		
1 to 5 Years	32	65.30%
6 to 10 Years	12	24.50%
10 to 15Years	3	6.10%
More Than 15 Years	2	4.10%



	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
EP	0.798	0.998	0.714	0.555
GH	0.764	0.807	0.783	0.645
PA	0.848	-0.749	0.997	0.727
TD	0.704	0.812	0.865	0.763

Descriptive Statistic Analysis

The variables have Cronbach's Alpha and composite reliability greater than and equals to 0.7 which means that it fulfils the criteria of Straub (1987). If we talk about individual item reliability (also called loadings), it too has individual reliability greater than 0.7 which means that it fulfils the criteria of Churchill (1979). The loading that is above 0.7 validates the instruments' reliability. The convergent validity was assessed via average variance extracted (AVE), thereby variables have minimum 0.50 as a value which fulfills the standard provided by Fornell and Larcker (1981).

Discriminat Validity

	EP	GH	HS	LMR	PA	R	TD
EP							
GH	1.733						
HS	0.380	0.393					
LMR	0.610	0.117	0.534				
PA	0.726	0.845	0.688	0.652			
R	0.801	0.523	0.235	0.282	0.300		
TD	0.303	0.610	0.553	0.456	0.767	0.398	

Structural Model Analysis

A total of six hypothesis were developed ranging from H1 to H6 based on the literature review above. Out of eight regression paths, all hypothesis were accepted. As per the



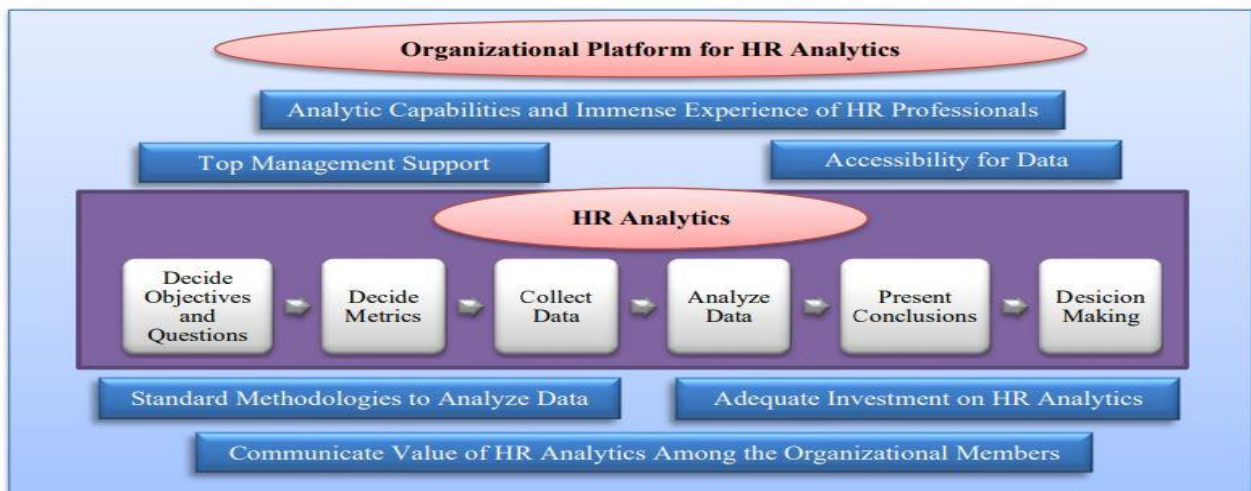
table relative advantage. Employee turnover is significantly impacted by all the hypothesis in context to banking industry of Pakistan.

	Path coefficients
EP -> GH	0.463
GH -> R	0.227
PA -> GH	0.160
R -> HS	0.235
R -> LMR	0.282
TD -> GH	0.234

Discussion

Result Interpretation

What effect would it have on employee turnover if the company decides to sponsor efforts that increase employee satisfaction. The Employee Satisfaction Index and Employee Turnover Rate are pertinent measures. Gather, arrange, and keep track of data for the designated metrics. Assume that the company has access to data from employee satisfaction surveys and staff turnover reports covering the previous 12 months or more. The statistical software SPSS was employed, along with regression analysis, correlation analysis, and descriptive statistics analysis as statistical methods. Correlation and regression studies were performed using g fictitious data detailed examination.





Conclusion & Recommendation

HR can now fulfill its role as a true collaborator in strategy thanks to a developing field known as HR analytics (Levenson, 2005). Analytics may boost the predictive potential of data, enabling employees to forecast events to come and use this data in conjunction with their expertise to execute action when needed. Statistics ensures that workforce insights provide reliable and accurate foundations for prudent personnel choice, reinforcing the necessity of analytics as a rigorous and thorough logical ingredient for an evaluation framework to be successful. Because HR statistics improves worker efficiency and boosts the value on expenditure on staffing, it is more important than ever. Gives an opportunity to evaluate how employees contribute to the company, estimates labor needs, and identifies the most. It offers data and supporting evidence that is statistically sound and can be applied for creating new HR rules, implementing existing HR plans, and launching other projects.. There is a strong and favorable correlation between HR analytics and the enhancement of HR's strategic value. For every HR professional planning to implement HR analytics, business knowledge Proficiency in data gathering and extraction, intellectual aptitude, interaction, and delivery are vital. The investigation comes to the conclusion that HR analytics provides an information-driven structure for resolving workforce-related challenges as a consequence of the analysis carried out utilizing a mix of tools and procedures that apply computational models to data. With the help of these guidelines, business executives may maximize HRM and raise its strategic significance. Thereby maintaining a competitive advantage in the rapidly changing business environment.

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