

**A**  
**PROJECT REPORT**  
**ON**  
**“A STUDY ON H.R ANALYTICS BY USING DATA-DRIVEN STRATEGIES”**

Project Report submitted in partial fulfilment for the award of the degree of

**“MASTER OF BUSINESS ADMINISTRATION”**

**Mr. U. SAI GANESH**

**(23951E0031)**

**UNDER THE ESTEEMED GUIDANCE OF**

**Dr. T. VARA LAKSHMI**

**PROFESSOR**



**DEPARTMENT OF MASTER OF BUSINESS ADMINISTRATION**

**INSTITUTE OF AERONAUTICAL ENGINEERING**

**Dundigal(V), Medchal (M), Medchal-Malkajgiri (D), Hyderabad-TS- 500043**

**2023-2025**



# **INSTITUTE OF AERONAUTICAL ENGINEERING**

**(Autonomous)**

Dundigal - 500 043, Hyderabad, Telangana

## **CERTIFICATE**

This is to certify that the project report entitled, **“A STUDY ON H.R ANALYTICS BY USING DATA-DRIVEN STRATEGIES”** submitted by **U. SAI GANESH** bearing roll number **23951E0031** to **Institute of Aeronautical Engineering, Hyderabad**, is a record of bonafide project work carried out by his under my supervision and guidance and is worthy of consideration for the award of **MBA** degree

**Signature of Internal Guide**

**Signature of External Examiner**

**Head of the Department**

**Principal**



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## **CERTIFICATE**

This is to certify that **Mr. Utlai Sai Ganesh**, bearing **Roll No. 23951E0031**, a student of the Department of Business Administration (Major in Human Resource), Institute of Aeronautical Engineering, Dundigal, Hyderabad, has successfully completed his academic project work titled "**A Study on H.R. Analytics by Using Data-Driven Strategies**" in our organization, Ts Bridge Edu, under our guidance.

He has completed his project successfully and satisfactorily in our company. We wish him all the best in his future endeavours.

From,



Ts Bridge Edu

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Our address: **Dilsukhnagar, Hyderabad - 500060, Telangana, India.**

Website: [www.tsbridgeedu.in](http://www.tsbridgeedu.in) | Email: [hr@tsbridgeedu.in](mailto:hr@tsbridgeedu.in) | Ph: +91 9381391721, +91 7989265436



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**(Autonomous)**

Dundigal - 500 043, Hyderabad, Telangana

## **DECLARATION**

I hereby declare that the project report on “**A STUDY ON H.R ANALYTICS BY USING DATA-DRIVEN STRATEGIES**” submitted by me to the Department of Master of Business Administration, Institute of Aeronautical Engineering, Hyderabad, is a bonafide work undertaken by me and it is not submitted to any other University or Institution. This is genuine analysis work undertaken by me and it has not been published anywhere either.

**U.SAI GANESH**

**(23951E0031)**



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**(Autonomous)**

Dundigal - 500 043, Hyderabad, Telangana

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**U.SAI GANESH**

**(23951E0031)**

## **ABSTRACT**

In today's HR field, HR analytics, called People Analytics, has changed the way companies operate, helping them move from depending on instincts to making data-based choices. The aim of the study is to show how HR analytics can be used with data to help managers choose better and set HR priorities that connect to the overall goals of the company.

Analytics in HR uses data and statistical tools to offer useful tips for recruitment, managing people, setting performance goals and planning staffing. With data, companies can choose the right people, keep more staff for longer and build plans that meet their future workforce goals.

Furthermore, using these approaches, employees receive training that fits their specific needs, supports their work goals and upholds positive feelings by reviewing different types of data. The research shows that when HR analytics are applied to HR planning, it boosts employee interest, improves working processes and fuels the organization's long-term growth by helping HR act wisely and promptly.

## **KEY WORDS:**

HR Analytics, People Analytics, Data-driven decision making, Recruitment Employee retention, HR planning & Organizational growth

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# **CHAPTER 1**

## **INTRODUCTION**

## 1.1 INTRODUCTION

Nowadays, with rapid changes in digital technology and competition, organizations look for smart ways to boost productivity, continue with successful teams and keep growing over time. Human Resource Management which used to help people on an everyday level, is now playing a bigger role in the business world because of HR Analytics.

It is the practice of finding and counting the contributions of people to the success of a business. This practice is based on analysis and models, making it easy to review, organize and boost the efficiency of HR activities. Data helps companies to decide using proof and abandon making decisions through intuition alone.

HR Analytics is helpful because it can transform what HR collects into useful feedback. In this manner, HR professionals make use of historical information, up-to-date dashboards and artificial intelligence to study how employees act, anticipate future trends and improve the company's performance. By using analytics, one can project which candidates have the highest chance of doing well in a role, learn what motivates staff or recognize reasons for people leaving the company.

In finding and selecting candidates, HR Analytics lets HR managers check the success of various channels, estimate the chances of candidates succeeding and keep time and costs low. This makes it possible for organizations to identify people who are dissatisfied or not engaged at an early stage, so they can handle the situation quickly. Also, the process of managing performance improves with KPIs, sentiment analysis and well-defined goals.

HR Analytics helps ensure that the organization hires, positions and develops the right talents at the proper moment. It provides insight into how many employees are needed, how the company's workforce should be adjusted and how money can be saved. DEI initiatives get assisted by monitoring demographics among company staff, interviewing plans and the thoughts of staff via surveys.

Nowadays, talent is seen as the most important asset in the knowledge economy. Consequently, it is now crucial to make HR choices with analytics, based on the strategies of the company. When employers use data solutions in HR, they can improve work processes, please their employees, boost employee morale and make the organization flexible.

HR Analytics, when put into practice, aids organizations in measuring, improving and managing how they handle HR operations. Its purpose is to study the effects of data analytics on important HR areas including how well recruitment is performed, following candidates' progress, reducing time to hire a client and achieving client hiring goals. It also stresses how companies should set up an HR system that helps them make decisions and achieve their goals over time.

In order to succeed in today's competition, HR Analytics provides human resources a way to lead and achieve business results accurately and confidently.

## **Types of HR Analytics and Their Practical Applications**

HR Analytics can be broadly classified into **four main types**, each serving a different purpose based on the level of complexity and insight provided:

### **1. Descriptive HR Analytics**

Descriptive analytics is the practice of summarizing old HR data to see what has occurred in the organization. It explains the main things that took place.

**The following are examples of metrics:**

- How many employees quit every year
- The time it takes to find and hire a person.
- The rate of absenteeism
- The frequency with which courses are finished

### **Practical Applications:**

Quarterly turnover reports allow the HR team to detect which areas in the company have the highest rate of staff leaving.

To guide recruitment, a manager reviews the number of applications received, the number of interviews given and the number of employees picked for several roles over the year.

Reviewing staff demographics will give insight into the diversity of genders or ethnicities between different departments.

### **2. Diagnostic HR Analytics**

This means that diagnostic analytics works out the reasons for the problems found by descriptive analytics. It tries to explain why events occurred.

**The following are examples of metrics:**

- Uncovering the main reasons for the issue

### **Relationship analysis**

- Asking staff for their views and opinions

### **Practical Applications:**

- Looking at exit interviews and employee performance data to discover the reasons for leaving.
- Low Engagement Diagnosis: Matching how well a team performs with the leadership present and the work environment to spot the reason behind low engagement.

Analysing how long it takes to hire people and finding where the process is slow.

### **3. Predictive HR Analytics**

With predictive analytics, historical data and statistics are used to help predict possible HR outcomes in the future. It helps you determine the possibility of different events.

#### **Some Techniques Are:**

- Regression analysis is the process where a line guides the relationship between variables.
- Forecasting the outcome of events
- Technology using machine learning

### **Practical Applications:**

- Attrition Prediction Modeling: Figuring out those who are more likely to resign within the upcoming 6 months using information such as work duration, how satisfied they are and their career advancement.

Predicting possible future outcomes for candidates, using historical data of who has performed well in jobs.

Projected staffing estimations are useful for managing workforce levels during significant seasons or whenever the company expands.

### **4. Prescriptive HR Analytics**

Prescriptive analytics helps by suggesting the best steps to take for achieving outcomes. It explains to us the best way to act in this situation.

#### **Examples of these Techniques Are:**

A decision tree is when the question you ask is simple and leads to a straightforward answer.

Some techniques solve problems by using optimization models.

- Using scenarios to help train teams

### **Practical Applications:**

- Retention Strategy Design: Coming up with individualized solutions (such as training and providing incentives) to keep employees who might leave.

Making training recommendations for employees that fit their professional needs and ambitions.

- Managing Workforces: Preparing schedules or allocation plans that give the most output for work and resources.

## **1.2 NEED OF THE STUDY**

Currently, organizations encounter more challenges in hiring, keeping and training qualified employees in the technology-driven market. Nowadays, using intuition, experience or gut feeling in HR does not provide companies with the necessary support to adjust to ongoing workforce changes. There is a strong and pressing demand for using evidence in HR decision-making which is why HR Analytics becomes essential.

This study is important because HR departments are under more pressure to produce results, cut waste and match the company's objectives. Although HR collects feedback and records by using resumes, appraisals, surveys and attendance records, they usually don't make the most out of this data. Using advanced analytics, businesses can discover helpful information from their HR data and plan effective, timely and smart actions.

For instance, numerous companies have difficulties dealing with a lot of employee resignations, lengthy late-phase recruitment or decisions that do not align perfectly with the position. These issues can be addressed with the help of HR Analytics because it points out strengths and weaknesses. It helps discover which methods bring the best employees, why some teams experience more employees leaving and what factors improve both productivity and satisfaction at work.

Employers are now more than ever required to give employees personalized experiences. Today, employees want career development, job benefits and opportunities that suit their requirements. When HR uses data, it is possible to group people and deliver the best help, this increases employee satisfaction and decreases people who leave.

With help from HR Analytics, hiring managers can make smart decisions by looking at important statistics such as time required to hire someone, the cost associated and how often offers are accepted. Thanks to these tools, managers can review their team's performance, find out where problems may occur during the application process and anticipate if a candidate is suitable for the role.

Senior leaders may encourage HR teams to prove why they made a certain decision with the help of data. A study is necessary to explain how analytics allows HR to become a key partner in strengthening the company's position and prospects.

With digital and AI tools being introduced in various industries, people who understand HR and data analytics are becoming in greater demand. HR teams can use this study to guide themselves and HR specialists who want to stay ahead in the world of data can benefit as well.

All in all, the study is required for the following reasons:

- Help traditional HR practices meet the demands of using modern data.

The data can assist with choices for hiring, retaining and organizing the company's staff.

Use tools to track and show the results of the HR strategies put in place.

- Make sure that HR teams based their decisions on research.

### **1.3 PROBLEM STATEMENT**

Although Human Resource Management is becoming more important for a company's success, many businesses still depend on outdated HR techniques that are not precise, consistent and based on evidence. Applying these old methods often causes the company to face inefficient hiring, a lot of staff turnover, poor planning of their employees and low employee involvement which then affects the company's achievements and profit.

Digital transformation is causing organizations to keep more employee-related data on recruitment sites, performance management, attendance tools, surveys and so on. Yet such data is not fully utilized or misread mostly because there are not enough organized methods and tools to keep it accurate.

There are many problems that HR departments often encounter.

- Knowing which places to look for hires are most helpful.
- Understanding the reasons why employees leave or get dissatisfied.
- Properly tracking how well recruiters and their teams are doing.
- Anticipating the job roles required in the future.

Personal development plans should take into account each employee's performance.

Furthermore, it is common for HR activities to miss out on business goals because there are usually no reliable metrics involved. Sometimes, senior leaders doubt the investments in HR since they find it difficult to connect those efforts to seeing better results for the company.

Despite the fact that HR Analytics provides answers, lots of companies have a hard time adopting it because of:

Lack of the needed skills and knowledge among HR members.

- The combination of HR systems and analytics is not complete enough.
- People may struggle with embracing new ways or don't understand data-driven culture well.
- Issues regarding the privacy, accuracy and proper use of data.

So, it is important to look into how HR Analytics can be helpful right now and how it can boost decision-making when facing HR problems. The main goal is to identify where current HR practices fall short and find out how analytics can improve HR and give it a key business role.

In short, the main problem is:

In what ways can HR Analytics assist organizations in better recruiting, meeting retention issues and overall human capital management, but what problems should be solved to ensure this task goes smoothly?

## **1.4 OBJECTIVES**

- To monitor job-level metrics for improving the recruitment process.
- To assess how well the client handles hiring and teamwork activities.
- To use analytics software to appraise how well the team is performing in recruitment.
- To find methods to decrease hiring time using data analytics in real time.
- To show the usefulness of HR Analytics in bringing HR activities closer to the company's goals.
- To look into difficulties and barriers when using an HR Analytics framework.

## **1.5 SCOPE OF THE STUDY**

The goal of this study is to check how HR Analytics enhances human resource functions by making decisions based on data. It mainly deals with using analytics to speed up the recruitment process, assess how teams are doing, manage candidates smoothly and decrease the time spent on hiring. Through studying both current and past HR data, the aim is to detect useful patterns and notice performance issues, so that organizations can act wisely and take well-prepared decisions. This involves reviewing recruitment results, finding out where talent comes from and checking the story of employees' beginnings within the business to make sure HR supports the business's overall goals.

Several major HR areas are part of the study, for example talent acquisition, onboarding, retaining employees, handling performance issues and developing staff. It points out how analytics allow HR specialists to track these



factors as well as guess future behavior and find ways to save money and make things more efficient. Moreover, this study focuses on organizations that are medium to large in size, mainly those moving from manual HR processes to digital and automated ways of working. The insights will matter a lot for IT, consulting, healthcare, finance and manufacturing industries whose high data volume makes the management of talent a priority.

On the technology side, the research looks at HR tools such as HRIS, ATS and Power BI, Tableau and AI software in recruitment. Most of the study concerns itself with Indian companies, but it also draws from worldwide best practices to make the study useful in many corporate settings. We pay attention to recent events over the past 3–5 years and especially to how social changes during the pandemic have affected recruiting, orientation and analytics in HR. All in all, the study seeks to offer insights on how HR Analytics can be spread throughout various areas to help in deciding, support staff and allow the organization to easily adjust to changing challenges related to the workforce.

## **1.6 HYPOTHESIS FORMULATION**

**H1:** The use of HR analytics significantly improves recruitment effectiveness by reducing time-to-hire, enhancing team performance, and aligning hiring practices with organizational goals.

**H2:** The implementation of HR analytics is significantly hindered by challenges such as lack of training, data integration issues, and limited leadership support.

## **1.7 METHODOLOGY**

For this study, a mixed-methods approach was applied, using numbers and text together to properly understand the adoption, effects, obstacles and best ways to use HR analytics within companies. Using various study methods means the findings can be checked for accuracy and completeness, since it provides a better perspective on HR analytics in practice. This framework is appropriate for overcoming the challenges of HR analytics, since it includes objective facts and personal organizational perspectives.

### **Research Design**

The descriptive research design in this study helps us to examine and analyze how HR tools and methods are put into place in different organizations. With the design, gathered information covers both numbers and stories, so HR analytics influences on employee performance, keeping rates and general success of the organization can all be checked in detail. The study looks at recent HR practices and uses both data that has been collected and data that is already available in the field to provide a complete overview.

### **Data Collection**

**Primary Data:** Survey questions will be set up in advance and will be provided to many participants; these include HR managers, analytics experts and average workers from companies in information technology, production and services. The questionnaire will mainly contain closed-ended questions surrounded by Likert scales, multiple-choice and ranking to measure the degree of HR analytics adoption, its perceived benefits, the organization's readiness and problems encountered.

Besides the data analysis, certain senior HR leaders, analytics experts and decision-makers will be interviewed through semi-structured interviews. The goal of these interviews is to discover valuable qualitative information on how HR analytics are managed and how issues and context play a role in either succeeding or failing at the integration. Since the interviews are not structured firmly, the participants can speak freely and new topics may emerge.

**Secondary Data:** Secondary data will come from employees' files in the Human Resource office, measuring things such as turnover rates, regular absences and company ranking. The measures obtained from this data will help to check the accuracy of survey results and be used for quantitative work exploring the links between HR analytics and important performance stats.

### **Sampling Strategy**

Organizations will be chosen using purposeful sampling to find companies with a standing or beginning usage of HR analytics. It guarantees that the collected data is both important and of good quality. Here, stratified random sampling will help choose people to be interviewed from all sections and ranks within the company.

It is planned that there will be 120 respondents for the survey and 15 people taking part in the interviews. It is important that this sample has enough subjects to let us analyze our results, but not so many that it is impossible to go into more detailed exploration.

### **Data Analysis**

With the aim of studying how variables influence each other, Pearson's correlation and multiple regression tests will be applied. They will allow researchers to see how HR analytics affect things such as employee performance and loyalty.

### **Ethical Considerations:**

This research observes the ethical standards that are in place. All participants will be informed about the reason for the study, how it will be carried out, their rights and that they can participate and drop out at any time, with no penalty. A document of informed consent will be completed in writing or electronically.

The research team will make sure that any identifiable information is removed from every piece of data. All research data will be kept safe in encrypted storage that is only available to the team members. Through the study, researchers assure **that all data privacy laws are met and guidelines are followed by the institution.**

## **1.8 LIMITATIONS OF THE STUDY**

Even though the research included many factors, there are still some boundaries that may affect our analysis and conclusions.

1. **Sampling Constraints:** The research team uses purposive sampling to select organizations that currently depend on HR analytics. Unfortunately, it means that knowledge from the research may not be valid for companies just starting with analytics or in fields where HR analytics is uncommon.

2. **Having Data and Checking its Quality:** Secondary data such as statistics on worker performance and turnover depend on whether participating firms can and do give accurate and complete information. Difficulties with how and who accesses data are likely to result in less consistent and comparable measurements.

3. **Response Bias:** There is a danger that those who participate in surveys or interviews could answer politely and describe having more success with their usage.

4. **Uses and Limitations of Qualitative Insights.** Even though semi-structured interviews give a lot of detail, using only a small number of people for interviews may not expose the full range of perspectives or all the unique challenges found in the organization or sector.

5. **The Continuous Progress of HR Analytics.** Progress in technology and continual changes in what organizations require strongly influence the evolution of HR analytics. The results reflect what was true at the time and may need to be revised as more ideas, methods and changes arrive in the industry.

6. **What was the location and what cultural background did the author come from:**

Despite these limitations, the study's mixed-methods design and methodological rigor provide valuable insights into HR analytics implementation and its organizational impact, offering a solid foundation for future research and practical applications.

## **CHAPTER 2**

### **REVIEW OF LITERATURE**

## **2.1 REVIEW OF LITERATURE**

Also known as People Analytics, HR Analytics is now a valuable tool for making HR activities support organizational goals. It is clear from this literature that data is playing a larger role in recruitment, staying with the organization, planning the workforce and increasing performance. Here, we explain how analysis of existing research gives a foundation for understanding analytics in HRM.

### **Evolution of HR Practices**

At first, human resource tasks relied on people's instincts and their past experiences. Yet, as businesses grew more advanced and workers' data increased, organizations turned to using data and analysis in HR. According to Marler and Boudreau (2017), data analytics in HR enables seeing patterns that were missed before with traditional techniques which helps with strategy.

### **Role of Descriptive and Diagnostic Analytics**

Summarizing the company's earlier data forms the basis for HR's decision-making through descriptive analytics. Rasmussen and Ulrich (2015) state that descriptive analytics in HR improves how transparent these three functions—hiring, employee turnover and absenteeism—are. Diagnostic analytics helps HR teams to discover the root of any issues affecting the workforce. As an example, studying how leadership styles affect employee engagement can offer useful advice for developing an organization (Minbaeva, 2018).

### **Predictive and Prescriptive Applications**

By combining statistical models and machine learning, predictive analytics within HR helps identify future opportunities such as what employees have a high chance of succeeding or those who might quit the company. organization turnover by up to 25% with the help of predictive tools, as showed by Edwards and Edwards (2016, Study). On the other side, prescriptive analytics recommends actions that could decrease employee turnover and boost workforce management (Cascio & Boudreau, 2016).

### **Impact on Recruitment and Retention**

Bersin (2018) suggests that HR analytics has made an impressive impact on recruitment by making it possible for organizations to see how candidates are sourced, track the quality of applicants and monitor how recruiters are working in real time. In a similar way, Sharma and Sharma (2021) highlighted that using data in recruitment decreases the time taken to hire and boosts the quality of new employees. Through its predictions such a system highlights which employees could be at risk of leaving and advises on solutions such as skill development, switching to new jobs or changing their roles within the company.

## **Enhancing Performance Management and Engagement**

Analytics has been proven to increase effectiveness in objective assessments of employees' performance. Reference to performance metrics, analysis of employee opinions and feedback from all sides help organizations evaluate employees' progress and requirements. Findings by Buckingham and Goodall (2019) show that working with analytics in performance systems provides quicker feedback which encourages both engagement and according to standards.

## **Role in Workforce Planning and Organizational Agility**

It is possible for businesses to plan their talent needs and divide resources appropriately based on HR analytics. It is proposed by Boudreau and Ramstad (2007) that using data, workforce modeling helps manage the balance between employees and what the business needs. By acting in advance, HR is able to strengthen the organization's flexibility and prepare itself for mergers, expansions or other changes in the market.

## **Technology Integration in HR Analytics**

Lately, experts have published works that involve using AI, machine learning and analysis platforms based on the cloud, for example, Power BI, Tableau and Workday. According to Jain and Singh (2022) such platforms support HR in automating reports, tracking important metrics and making use of gathered insights. Moreover, concrete data for analytics derives from systems such as ATS and HRIS.

## **Challenges and Ethical Considerations**

Even with its positive aspects, many problems are identified in using HR analytics in practice. Lacking technical abilities within the team, data spread in various locations, a fear to try new techniques and worries about how information is treated are some of them. According to Giermindl et al. (2020), good management of information about employees helps a company stay ethical, trustworthy and legal when working with predictive models. Besides, HR professionals are discussing how to make AI tools good and bias-free.

## **2.2 RESEARCH GAP**

Although research has pointed out numerous ways HR analytics can make HR operations faster, several major issues are unresolved.

Empirical studies are scarce in India and it is especially hard to locate studies on Indian businesses, particularly medium-sized companies adjusting HR functions due to analytics.

It is clear from research that efforts to boost efficiency and cut costs happen more often than efforts to check if recruited talents can deliver on the job.

There are very few studies that evaluate the practical approach to merging HRIS/ATS systems with advanced analytics and outline the possible difficulties during this process.

Few researchers examine the correctness of predictions or the benefits of the investment made in analytics projects.

When it comes to emerging economies, ethical factors related to letting employees consent, giving them information about data and using fair algorithms are not often brought to attention.

Our study aims to link these gaps by looking at how HR analytics help recruit and retain employees and by studying how HR practices can be made more effective and connected to the company's goals in Indian industries.

## **2.3 CONCLUSION**

The writers have emphasized that HR analytics makes it easier to use evidence in managing human capital. It improves decision-making in recruitment, keeping employees, performance changes and making business strategies through various models. Analytics continues to prove, through research, that they give organizations an advantage in being efficient, flexible and competitive.

At the same time, certain issues such as skill gaps, problems with system integration and data privacy stop many from using AI. It is important to look into HR analytics in the Indian workplace and how data governance can be properly managed.

The findings depend on prior works to support the use of HR analytics for enhancing recruitment and retention, aiming to make HR a forward-looking function in line with long-term business target.

# **CHAPTER 3**

## **INDUSTRY PROFILE & COMPANY PROFILE**



### **3.1 INDUSTRY PROFILE – HUMAN RESOURCE MANAGEMENT & HR ANALYTICS**

For years, HRM has been essential for organizational development since it looks after a company's most important resource—its people. In early days, the role of HRM mainly concerned itself with tasks like payroll management, hiring people and resolving employee grievances. Still, impactful changes in the world's economy, more competitors, globalization, new technologies and workers' expectations have all brought about major changes for HR. Now, IT is believed to provide direct contributions to the organization's growth and stability.

For the past two decades, HRM has gone beyond performing routine tasks and now helps with strategic planning for employees, developing leaders, supporting changes in the company and influencing the culture. Other than running routines smoothly, HR teams in modern organizations are expected to provide data-based advice for better decision making. Mostly because of the digital revolution and the increase in data, managers now have to rely more on data and analysis when handling human capital.

For this reason, HR Analytics (or People Analytics or Workforce Analytics) is regarded as one of the best new developments for HR. HR Analytics means gathering, understanding and making use of data that deals with human resources. With statistical modeling, predictive analytics, machine learning and data visualization, HR Analytics helps organizations find insights in employee behaviour, expect talent needs, check employee engagement, judge how useful their leaders are and raise their overall HR strategy.

HR Analytics can be used in many ways and has a big positive impact. Companies are now able to oversee and boost measurements such as hiring expenses, recruitment timeframes, share of accepted job offers, staff retention, staff absenteeism, rates of accomplishment and learning success. With predictive models, a company can predict loss of employees, identify who has promotion potential and build a succession strategy. You can understand how your recruitment process works, how diverse it is and how the workforce is assigned by using real-time dashboards. Finally, these insights help HR be flexible, well-equipped with data and active.

The use of HR Analytics globally is growing more rapidly every day. It is anticipated by Markets and Markets that the HR Analytics industry will rise to a value of over USD 5.5 billion by 2025, expanding at a rate of more than 13% each year. It is happening because more companies rely on cloud-based HR, need data-based hiring and performance choices and require predictive HR services. At present, North America and Europe are way ahead in using HR technology, but Asia-Pacific, especially India, is following closely and seeing an increase in HR tech investments.

In India, the COVID-19 pandemic led to a strong push towards HR Analytics, mainly because companies had to move their HR processes online, allow most employees to work from home and revisit how they plan their

teams. In recent times, Information Technology, Banking & Financial Services, Healthcare, E-commerce and Manufacturing have adopted analytics in HR practices more than others. Firms are currently focusing on HR analytics software such as SAP SuccessFactors, Oracle HCM Cloud, Workday, Zoho People, Darwinbox, People Strong and Keka which have combined features for recruitment analytics, talent management, payroll services and employees' experience.

AI-powered HR tools are becoming more prominent in India and can be used to review applicants' resumes, estimate their suitability for a job, gauge staff mood by reading their messages and give HR queries help using chatbots. Because of more people using the internet, smartphones and learning about digital tools, companies of all sizes now use affordable, cloud-based solutions for HR analytics to assist in hiring and boosting their effectiveness.

All in all, the HR Analytics industry is experiencing important changes. Because of more employee data, better analysis tools and higher expectations from HR, organizations are adopting data-driven decisions. Besides updating technology, it is about changing the culture in HR, bringing together strategies and preparing for the future in workforce management. With the help of people, process and predictive intelligence, analytics is becoming a requirement in today's HR world.

## **3.2 Company Profile**

### **3.2.1. TS Bridge Edu**

Established: 2024

Location: Telangana, India

Field: E-Learning and Online Education

CEO: Mudavath Chandar

Website: [www.tsbridgeedu.in](http://www.tsbridgeedu.in)

Overview: TS Bridge Edu is an innovative e-learning platform that provides skill development courses, certification programs, and online tutoring services.

### **Company Vision**

TS Bridge Edu is a cutting-edge online platform that gives people access to skill development classes, qualification courses and lessons with tutors.

Company Vision

Our goal at TS Bridge Edu is to equip learners for the digital world by using practical education that is up to date with the demands of technology in career paths. With technology advancing so quickly, the usual approach to education is failing to get students ready for what they will face in the working world. We understand that with our blended approach, we can ensure our learners learn both what is important in the classroom and what is needed in today's jobs.

We concentrate on providing excellent programs for newer areas like Digital Marketing, UI/UX Design, Fullstack Development, AI & ML and Data Science. Since these fields are changing businesses worldwide, we want to ensure that students are ready to deal with these changes. To provide our students with the best learning experience, we mix expert classes, involved projects, internships at big companies and personal support for finding jobs.

At TS Bridge Edu, we feel that preparing students for the future isn't only about classes but also about making them ready to solve challenging issues of tomorrow. Because of our innovative way of thinking, learners at any level can make use of the latest tools and information, along with expert advice.

We think that the future of education means preparing well-rounded professionals who are geared up to deal with future challenges. Because of our creativity, those just entering the field and those wishing to grow in their skills can all make use of current tools, resources and guidance from knowledgeable mentors. We make sure to assist and encourage our students throughout school and beyond, building a community where everyone can flourish, join forces and advance.

We use our personalized strategy so that every student feels confident as they join the workforce. We support learners by giving them hands-on business experience, the latest industry trends and powerful industry networks, so they are ready to grow in their careers with complete understanding of what is expected in digital fields. For us, success means preparing our students to be successful in their work and become prominent figures in the digital world, not only by finishing a course.

### **Core Values**

- Always updating our courses based on the most recent changes in the industry.
- Partnerships: Creating partnerships with top businesses to provide students with internships and chances of being employed.
- Ensuring students become job-ready by giving them tasks and experiences based on real-life situations.
- Community: Building a relationship among students and mentors in which everyone helps each other to learn.

- Empowerment refers to aiding students in building successful careers using the latest digital tools and technologies.

### **Key Offerings**

- **Sophisticated Courses:** These courses are created by working alongside companies and experts so they respond to the demands of the current marketplace.
- **Internships:** You get valuable experience from working with famous companies.
- **Guidance in finding a job after graduation** to meet students' career aspirations.
- **Doing real projects** gives you a chance to gain practical skills.
- **Help from the Community:** An environment where students and alumni can help and strengthen each other.

### **Experience Being a TS Bridge Edu Student**

Our curriculum is shaped by industry experts so that it matches the latest trends and technology used in the field.

- **Current Experience:** Airvirtual gives students live experience through internships and hands-on projects before they begin looking for work.

All our instructors are qualified industry leaders with a plenty of relevant experience, so you are guaranteed solid education.

We guide students by recommending jobs that fit their strengths and interest.

- Students are supported by mentors and active communities, helping them achieve success after finishing their training.

# **CHAPTER 4**

## **DATA ANALYSIS AND INTERPRETATION**

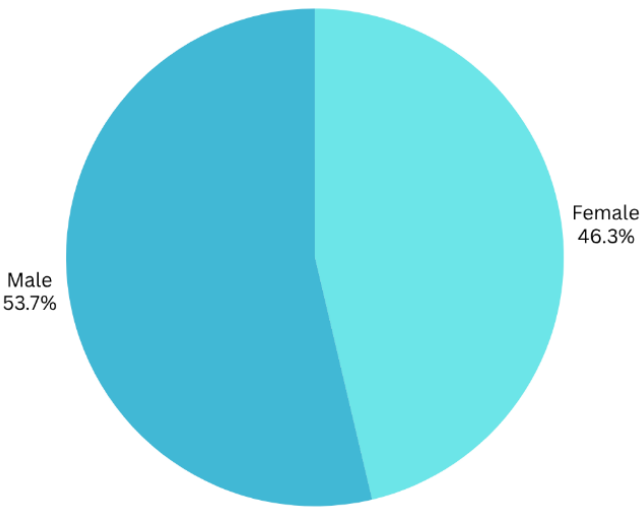
4.1.1 Quantitative Data – Survey Analysis

Table 4.1.1 Gender Distribution:

Gender	No. of Respondents	Percentage (%)
Female	69	45.3%
Male	80	53.7%
Non-binary	0	0%
Prefer not to say	1	1%

Source: Extracted from Questionnaire

Chart 4.1.1 Gender Distribution:



Inference:

- Out of 150 respondents, 69 (45.3%) are females, 80 (53.7%) are males, and 1 (1%) did not wish to disclose, with no responses from the non-binary category.

Interpretation:

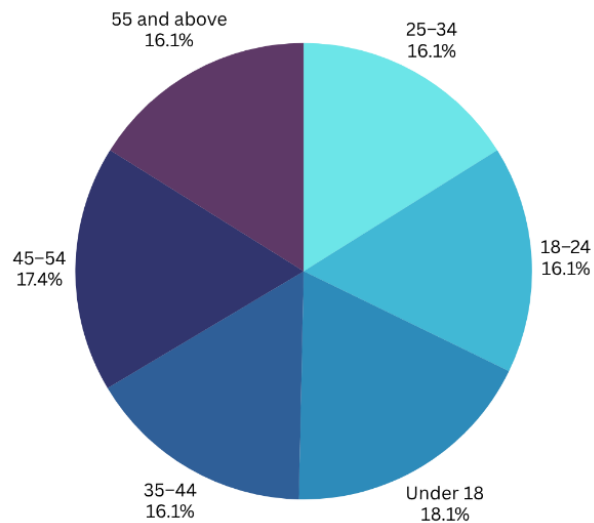
- Respondents were mostly male, with women falling just behind, which reflects an almost equal gender representation. The survey was designed with inclusiveness; however, this data set did not reflect gender diversity beyond the binary, what with the nonexistence of non-binary responses and the presence of one respondent who preferred not to say. All in all, this does suggest an effort toward equal gender participation.

**Table 4.1.2 Age Distribution:**

Age Group	No. of Respondents	Percentage (%)
Under 18	27	18.1%
18-24	24	16.1%
25-34	24	16.1%
35-44	24	16.1%
45-54	26	17.4%
55+	24	16.1%

Source: Extracted from Questionnaire

**Chart 4.1.2 Age Distribution:**



**Inference:**

- Out of the 149 respondents, most belonged to the "Under 18" group, with 27 respondents, representing 18.1% of the sample. The remaining classes measured near-equal quantities, each standing about 16-17% of the whole responses.

**Interpretation:**

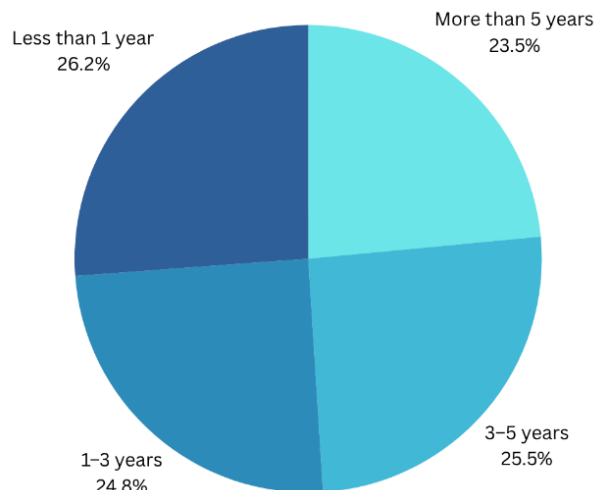
- The responses demonstrate fairly an even distribution across age classes with a slightly less majority who are in the under-18 age class. This suggests that the target samples reflect varieties of opinions: in particular, those of early-career individuals, ensuring that the data contains varied generational insights.

**Table 4.1.3 Experience in H.R:**

Experience Level	No. of Respondents	Percentage (%)
Less than 1 year	39	26.2%
1-3 years	37	24.8%
3-5 years	38	25.5%
More than 5 years	35	23.5%

Source: Extracted from Questionnaire

**Chart 4.1.3 Experience in H.R:**



**Inference:**

- According to the data collected, "Less than 1 year" is the experience level with maximum respondents (26.2%), followed by "3 to 5 years" (25.5%), "1 to 3 years" (24.8%), and "More than 5 years" (23.5%).

**Interpretation:**

- This figure indicates a fairly proportional distribution of participants across different experience levels in Human Resource. But a larger number of respondents are still into 5 years of experience or below, so this may mean insights mostly come from mid-early-career type professionals, impacting the strategic depth.

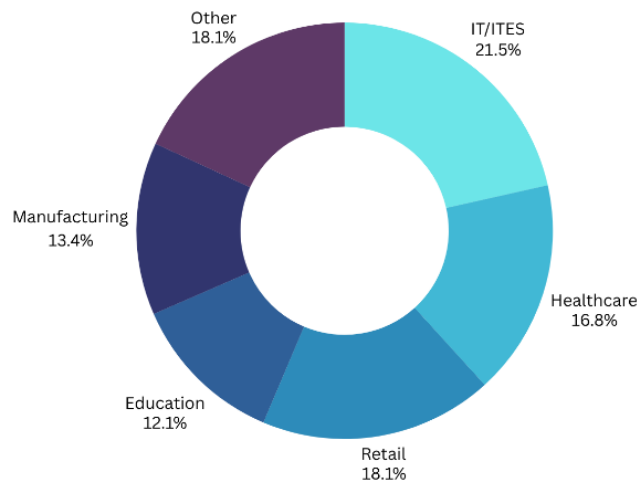


**Table 4.1.4 Organization Sector:**

Name of Sector	No. of Respondents	Percentage (%)
Manufacturing	20	13.4%
Education	18	12.1%
Retail	27	18.1%
Health Care	25	16.8%
IT/ITES	32	21.5%
Other	27	18.1%

Source: Extracted from Questionnaire

**Chart 4.1.4 Organization Sector:**



**Inference:**

- Among the 149 respondents, IT/ITES accounted for the largest share at 21.5% and would be followed by Retail and Other sectors (18.1% each). Manufacturing and Education sectors were the smallest.

**Interpretation:**

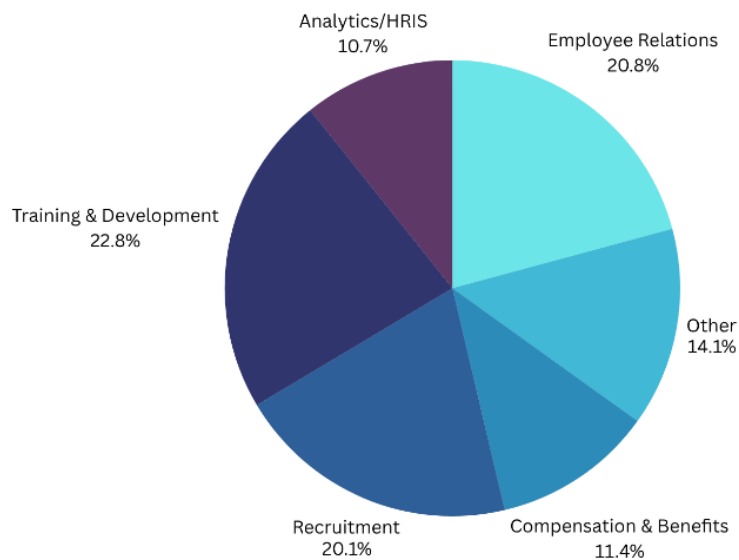
- Findings suggest that respondents belong mainly to technology-oriented and retail sectors, ensuring a broad view of HR practices in the service industry. The heterogeneity strengthens the validity of the findings across sectors.

**Table 4.1.5 H.R. functions:**

Type of Function	No. of Respondents	Percentage (%)
Training & Development	34	22.8%
Recruitment	30	20.1%
Compensation & Benefits	17	11.4%
Other	21	14.1%
Employee Relations	31	20.8%
Analytics/HRIS	16	10.7%

Source: Extracted from Questionnaire

**Chart 4.1.5 H.R. functions:**



**Inference:**

- Among all the answers, “Training & Development” led with the highest number (22.8%)—followed by “Employee Relations” (20.8%) and “Analytics/HRIS” was behind with 10.7%.

**Interpretation:**

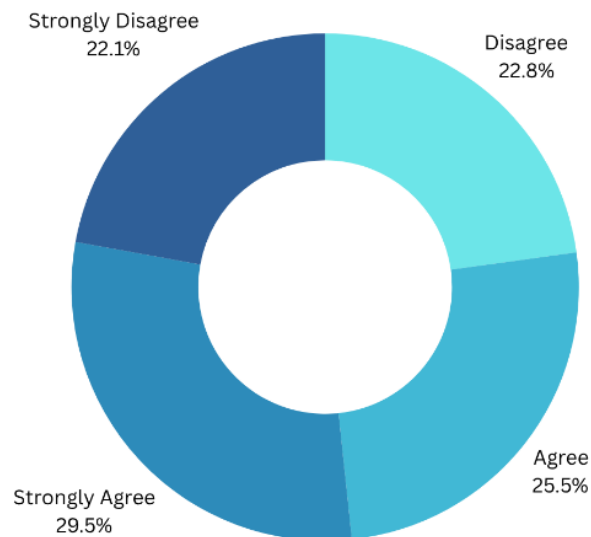
- The survey demonstrates that HR functions are often focused on employees. Not many responses indicated that data-driven roles exist extensively or have many representatives in their companies

**Table 4.1.6 Data Analytics to track Job level:**

Response Category	No. of Respondents	Percentage (%)
Agree	38	25.5%
Disagree	34	22.8%
Strongly Disagree	33	22.1%
Strongly Agree	44	29.5%

Source: Extracted from Questionnaire

**Chart 4.1.6 Data Analytics to track Job level:**



**Inference:**

- Among all the answers, “Training & Development” led with the highest number (22.8%)—followed by “Employee Relations” (20.8%) and “Analytics/HRIS” was behind with 10.7%.

**Interpretation:**

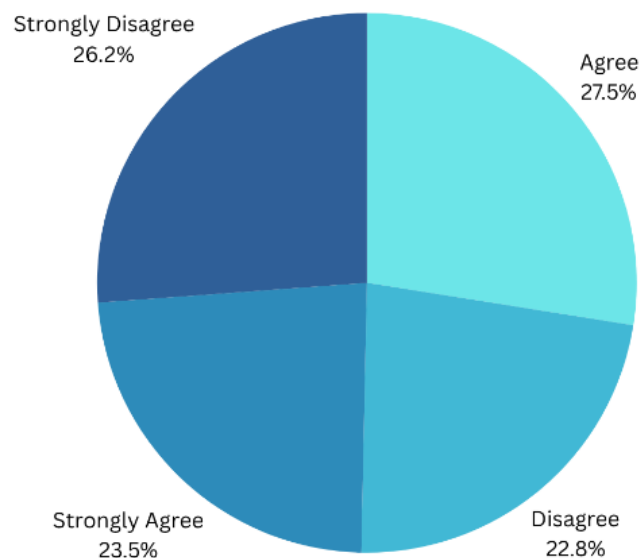
- The survey demonstrates that HR functions are often focused on employees. Not many responses indicated that data-driven roles exist extensively or have many representatives in their companies.

**Table 4.1.7 Predictive Analytics Tools:**

Response Category	No. of Respondents	Percentage (%)
Strongly Agree	35	23.5%
Agree	41	27.5%
Strongly Disagree	39	26.2%
Disagree	34	22.8%

Source: Extracted from Questionnaire

**Chart 4.1.7 Predictive Analytics Tools:**



**Inference:**

- There were 41 (27.5%) who agreed and 35 (23.5%) who strongly believed predictive analytics tools are useful and 34 (22.8%) were against, along with 39 (26.2%) who strongly disagreed.

**Interpretation:**

- Both agreeing and disagreeing responses are almost the same, indicating that predictive analytics in HR is still not fully understood by a sizable number of people.

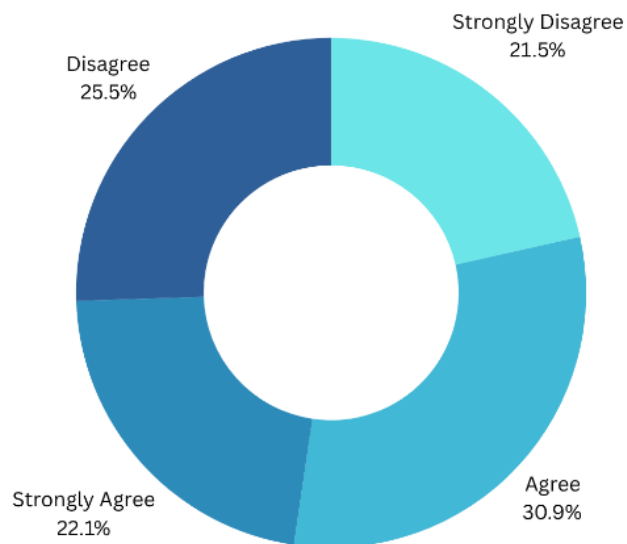
**Table 4.1.8 performance of recruitment:**

Response Category	No. of Respondents	Percentage (%)
Disagree	38	25.5%
Strongly Agree	33	22.1%
Agree	46	30.9%
Strongly Disagree	32	21.5%

Source: Extracted from Questionnaire

**Chart 4.1.8 performance of recruitment:**

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**Inference:**

- 46 (30.9%) respondents said they agreed while 33 (22.1%) strongly agreed that data improves the way recruitment is done. At the same time, 38 (25.5%) answered disagreed and 32 (21.5%) **responded strongly disagreed.**

**Interpretation:**

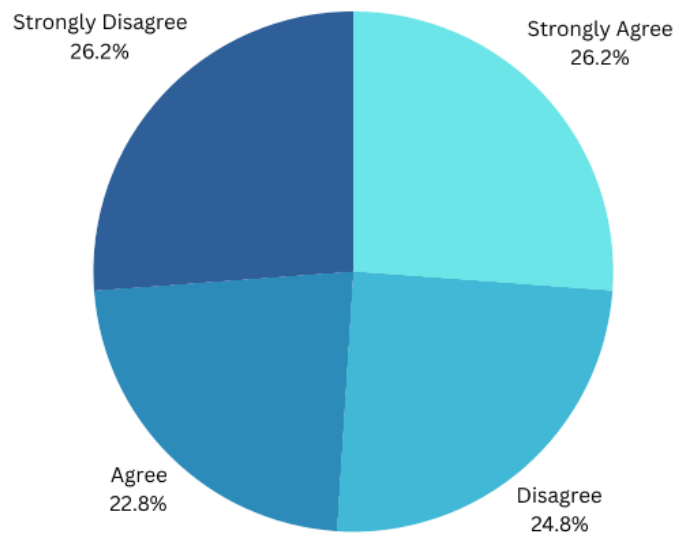
- While the results showed more people agreed, there were still many people who didn't agree. It is clear that experts understand the benefits of data in recruitment, although difficulties with putting it into practice may stop more companies from embracing it.

**Table 4.1.9 Real-time Dashboards:**

Response Category	No. of Respondents	Percentage (%)
Agree	34	22.8%
Disagree	37	24.8%
Strongly Agree	39	26.2%
Strongly Disagree	39	26.2%

Source: Extracted from Questionnaire

**Chart 4.1.9 Real-Time Dashboards:**



**Inference:**

- Out of all respondents, 26.2% strongly agreed with the usefulness of live dashboards, while 22.8% agreed. On the other hand, 24.8% of the participants strongly disagreed and 22.8% disagreed.

**Interpretation:**

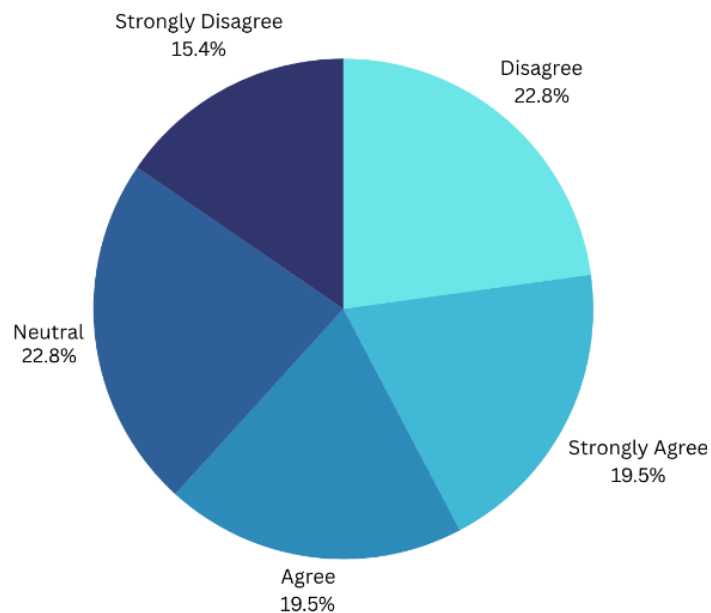
- The agreement on the issue is almost split in half, as more than half of participants oppose real-time dashboards. It means that some organizations might be lacking information, preparation or access to these important tools.

**Table 4.1.10 Data-Driven Tools:**

Response Category	No. of Respondents	Percentage (%)
Agree	29	19.5%
Strongly Agree	29	19.5%
Disagree	34	22.8%
Strongly Disagree	23	15.4%

Source: Extracted from Questionnaire

**Chart 4.1.10 Data-Driven Tools:**



**Inference:**

- Regarding 149 surveys, 29 individuals (19.5%) agreed that HR should use data-driven tools and 29 (19.5%) strongly agreed. Two-thirds of respondents who disagreed were 34 (22.8%) and 23 (15.4%) strongly disagreed.

**Interpretation:**

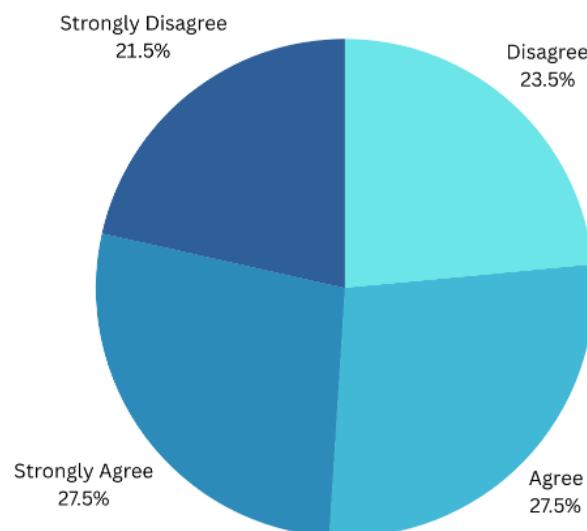
- Since the views shared are not strongly one way or another, it seems that fully including data tools in HR work is still under progress. It could be helpful to provide more examples showing the effects of sociology.

**Table 4.1.11 Recruitment-Related Performance Data.:**

Response Category	No. of Respondents	Percentage (%)
Strongly Disagree	26	18.1%
Disagree	25	29.5%
Strongly Agree	27	23.5%
Agree	41	28.9%

Source: Extracted from Questionnaire

**Chart 4.1.11 Recruitment-Related Performance Data:**



**Inference:**

- From the 149 different responses, 41 (28%) agreed and 27 (23.5%) strongly agreed that recruitment-related performance data is useful. But, 25 (29.5%) participants disagreed with this statement and 26 (18.1%) strongly disagreed.

**Interpretation:**

- There are more people who agree, but disagreement is also visible among the responses. This means that a lot of people value performance data for recruitment yet there are still doubts about its use.

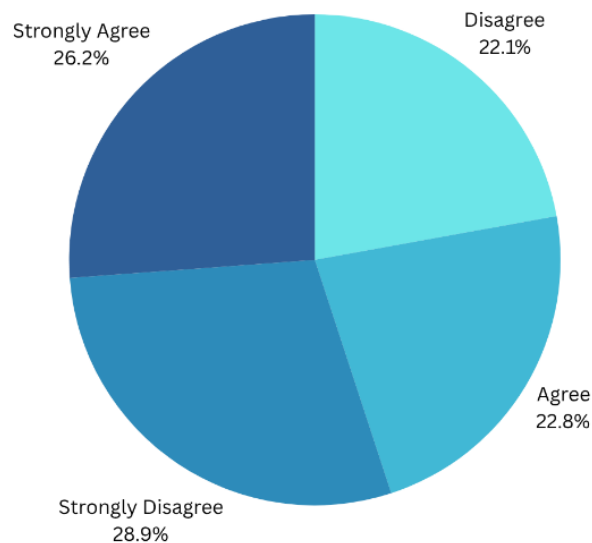


**Table 4.1.12 Recruitment Decisions:**

Response Category	No. of Respondents	Percentage (%)
Strongly Disagree	46	30.9%
Disagree	31	20.8%
Agree	38	25.5%
Strongly Agree	34	22.8%

Source: Extracted from Questionnaire

**Chart 4.1.12 Recruitment Decisions:**



**Inference:**

- There were 38 (25.5%) respondents who agreed and another 34 (22.8%) who strongly agreed that analytics are helpful in recruiting. The respondents who disagreed were 46 (30.9%), of which 31 (20.8%) were strongly against and another 31 (20.8%) who disagreed.

**Interpretation:**

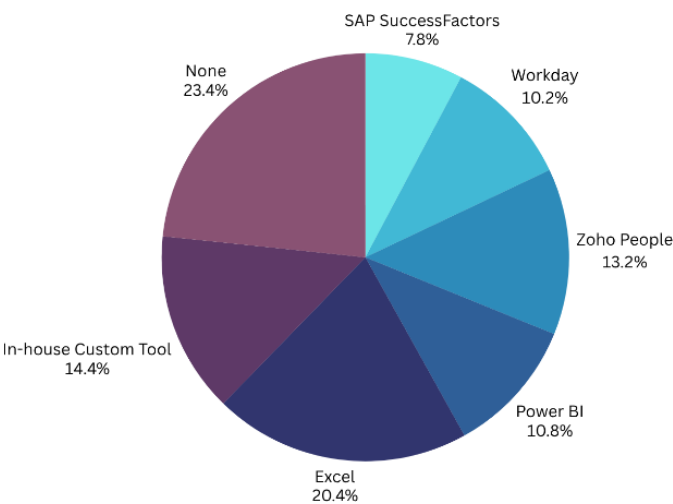
- A large number of respondents said they were doubtful that analytics would help with recruiting more effectively. It might be because they don't have handy tools for analysis or recognize that analytics haven't yet delivered much value to HR.

**Table 4.1.13 Analytics Tools:**

Tool Name	Count	Percentage (%)
SAP SuccessFactors	13	10.00%
Workday	17	13.08%
Zoho People	22	16.92%
Power BI	18	13.85%
Excel	34	26.15%
In-house Custom Tool	24	18.46%
None	39	30.00%

Source: Extracted from Questionnaire

**Chart 4.1.13 Analytics Tools:**



**Inference:**

- The most used tool for HR analytics is None (23.4%), meaning nearly a quarter of respondents don’t use any tool. This is followed by Excel (20.4%) and In-house Custom Tools (14.4%). SAP SuccessFactors is the least used (7.8%).

**Interpretation:**

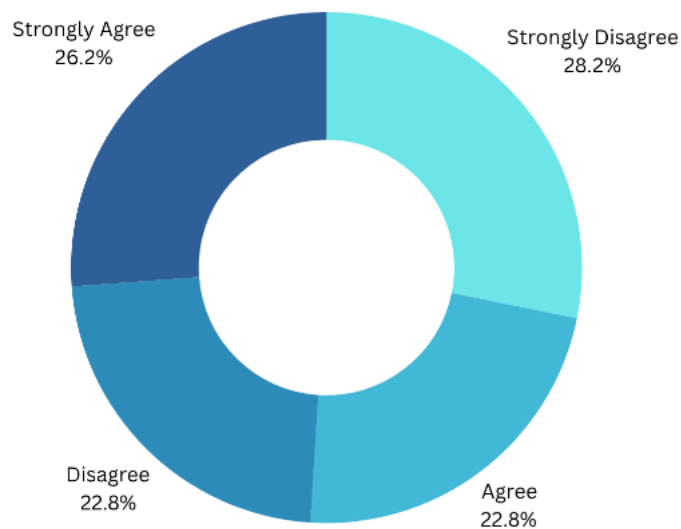
- The results indicate a significant gap in tool adoption, with many organizations still not using any HR analytics platform. Among users, Excel remains the most preferred tool, suggesting a reliance on basic data handling rather than advanced analytics. The relatively lower usage of cloud-based platforms like Workday and SAP implies possible constraints in adoption such as cost or complexity.

**Table 4.1.14 recruitment and strategic HR decisions:**

Response Category	No. of Respondents	Percentage (%)
Disagree	34	22.8%
Strongly Disagree	42	28.2%
Agree	34	22.8%
Strongly Agree	39	26.2%

Source: Extracted from Questionnaire

**Chart 4.1.14 recruitment and strategic HR decisions:**



**Inference:**

- On this question, 39 (26.2%) responded strongly in agreement, 34 (22.8%) agreed, 42 (28.2%) strongly disagreed and 34 (22.8%) disagreed with the statement that analytics supports strategic HR choices.

**Interpretation:**

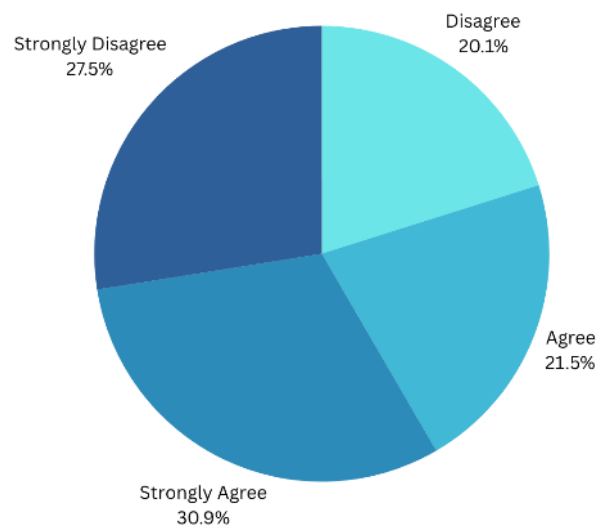
- The results are almost even, suggesting that people have strong opinions on either side. It seems that companies have varying views on how much value analytics provides and this could be linked to their knowledge or age with these tools.

**Table 4.1.15 Identify bottlenecks:**

Response Category	No. of Respondents	Percentage (%)
Strongly Agree	46	30.9%
Disagree	30	20.1%
Strongly Disagree	41	27.5%
Agree	32	21.5%

Source: Extracted from Questionnaire

**Chart 4.1.15 Identify bottlenecks:**



**Inference:**

- From the responses, it was found that 78 people (52.4%) agreed to different degrees that analytics can help detect **problems blocking the workflow**.

**Interpretation:**

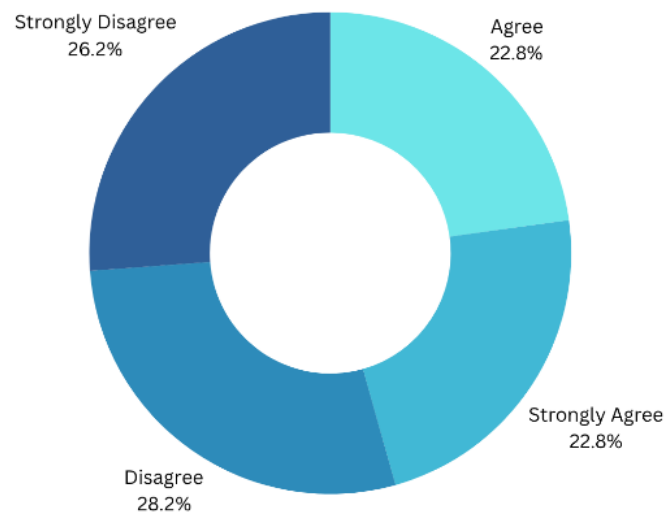
- Most people agree that analytics play a role in identifying problems in HR processes. Though more people are using analytics to address HR challenges, a notable group still does not accept or understand them.

**Table 4.1.16 quality of candidates hired:**

Response Category	No. of Respondents	Percentage (%)
Strongly Agree	34	22.8%
Agree	34	22.8%
Strongly Disagree	39	28.2%
Disagree	42	26.2%

Source: Extracted from Questionnaire

**Chart 4.1.16 quality of candidates hired:**



**Inference:**

- From a survey of 149 people, 34 (22.8%) strongly agreed and 34 (22.8%) agreed that using analytics makes hires better, whereas 42 (28.2%) strongly disagreed and 39 (26.2%) disagreed with this.

**Interpretation:**

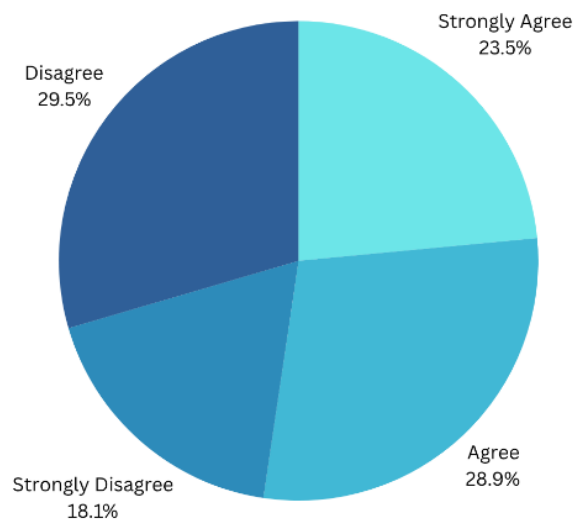
- The survey outcomes indicate that a good number of HR professionals either do not notice any significant outcomes analytics brings to their hires or they have issues tracking it efficiently. We should make it clear how results from analytics are improving our hiring process.

**Table 4.1.17 Time-To-Hire:**

Response Category	No. of Respondents	Percentage (%)
Strongly Agree	35	23.5%
Disagree	44	29.5%
Agree	43	28.9%
Strongly Disagree	27	18.1%

Source: Extracted from Questionnaire

**Chart 4.1.17 Time-To-Hire:**



**Inference:**

- Regarding the 149 respondents, 43 (28.9%) thought analytics makes it possible to hire quickly, while 35 (23.5%) were extremely confident it helps out. At the same time, 44 (29.5%) believed otherwise and 27 (18.1%) strongly disagreed.

**Interpretation:**

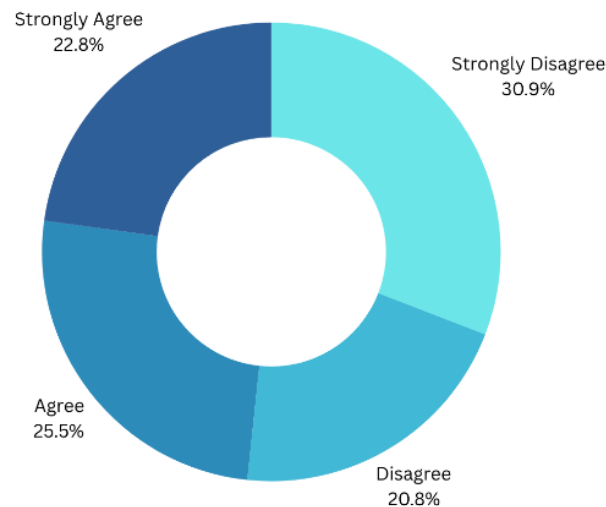
- The data suggests that most people are in agreement and also disagreement. While some feel analytics can hasten the recruitment process, others are still dealing with either late implementation or ineffective analytics tools.

**Table 4.1.18 Cross-Functional Collaboration:**

Response Category	No. of Respondents	Percentage (%)
Strongly Disagree	46	30.9%
Agree	38	25.5%
Strongly Agree	34	22.8%
Disagree	31	20.8%

Source: Extracted from Questionnaire

**Chart 4.1.18 Cross-Functional Collaboration:**



**Inference:**

- From the 149 responses, 38 participants (25.5%) said that analytics enhances cross-functional teamwork and 34 observed that it does (22.8%). At the same time, 46 people (30.9%) stated strongly that analytics does not help and 31 individuals **(20.8%) felt that it does not.**

**Interpretation:**

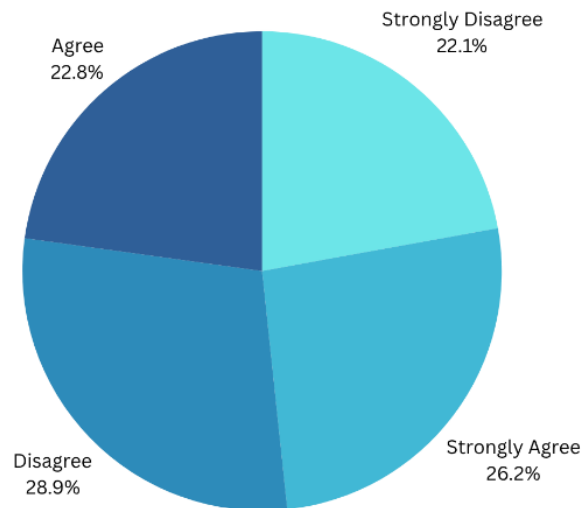
- Almost sixty percent of those surveyed disapproved which indicates that analytics are not popular or totally effective in facilitating interdepartmental teamwork. It could mean that teams are not working together or that the company lacks integrated ways to analyze data.

**Table 4.1.19 Reduce Recruitment Costs:**

Response Category	No. of Respondents	Percentage (%)
Strongly Agree	39	26.2%
Agree	34	22.8%
Strongly Disagree	33	22.1%
Disagree	43	28.9%

Source: Extracted from Questionnaire

**Chart 4.1.19 Reduce Recruitment Costs:**



**Inference:**

- According to the responses, 39 (26.2%) of the people taking part strongly agreed that analytics cuts down the costs of hiring and 34 (22.8%) agreed. On the other hand, 43 (28.9%) thought analytics does not save money for hiring and 33 (22.1%) strongly believed this.

**Interpretation:**

- Opinion is about even and slightly more people show agreement. While analytics can reduce costs for a lot of companies, a big portion continues to pay steeply because they do not use data as well or are still inefficient.

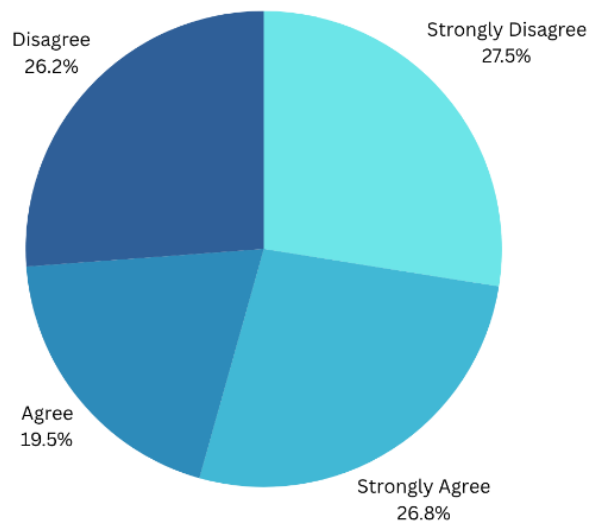


**Table 4.1.20 Align Recruitment Goals:**

Response Category	No. of Respondents	Percentage (%)
Agree	29	19.5%
Strongly Agree	40	26.8%
Strongly Disagree	41	27.5%
Disagree	39	26.2%

Source: Extracted from Questionnaire

**Chart 4.1.20 Align Recruitment Goals:**



**Inference:**

- The results from the survey showed that 40 people (26.8%) strongly agreed, while 29 (19.5%) agreed that data analytics support recruitment goals. 41 (27.5%) strongly opposed this idea and 39 (26.2%) more individuals disagreed.

**Interpretation:**

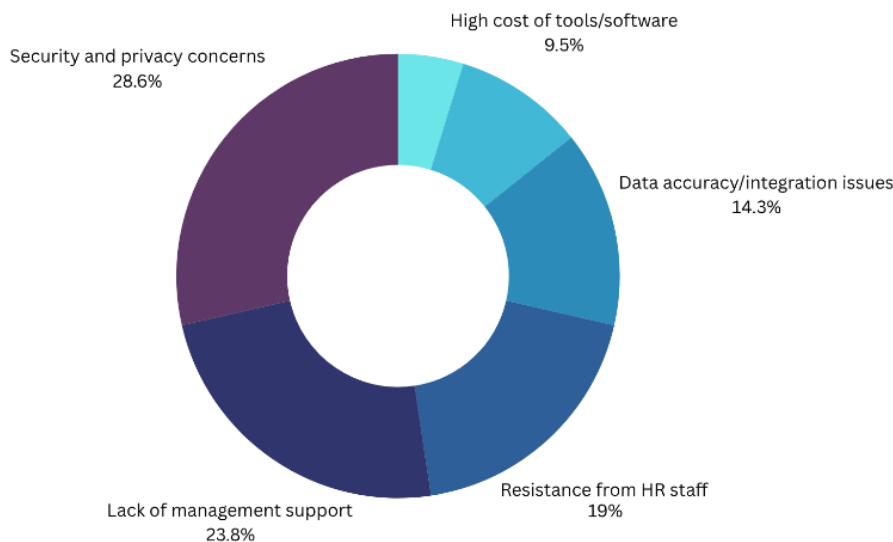
- Most respondents have opposing views on the topic. This might happen because each organization has a unique approach to strategic planning and using analytics.

**Table 4.1.21 Challenges:**

Option No.	Challenge Description	Count	Percentage (%)
1	Lack of awareness or training	26	17.22%
2	High cost of tools/software	27	17.88%
3	Data accuracy/integration issues	39	25.83%
4	Resistance from HR staff	32	21.19%
5	Lack of management support	27	17.88%
6	Security and privacy concerns	0	0.00%

Source: Extracted from Questionnaire

**Chart 4.1.21 Challenges:**



**Inference:**

- The most cited challenge in implementing HR analytics is Security and Privacy Concerns (28.6%), followed by Lack of Management Support (23.8%) and Resistance from HR Staff (19%). The least cited issue was the High Cost of Tools/Software (9.5%).

**Interpretation:**

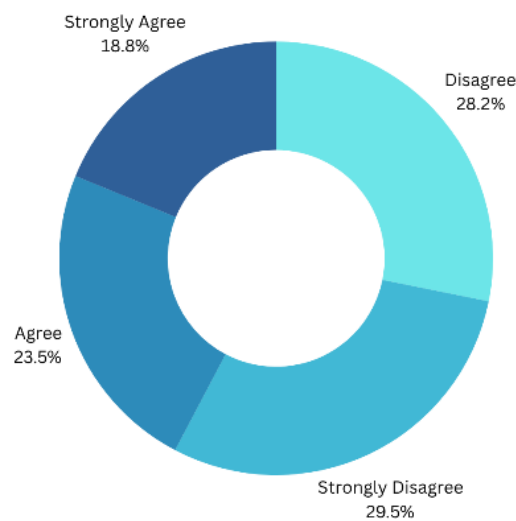
- The data suggests that trust and support issues—both from leadership and in terms of data security—are the biggest barriers to HR analytics adoption. Technical issues like cost and integration accuracy, while relevant, are less significant according to respondents.

**Table 4.1.22 Various HR systems:**

Response Category	No. of Respondents	Percentage (%)
Disagree	42	28.2%
Agree	35	23.5%
Strongly Agree	28	18.8%
Strongly Disagree	44	29.5%

Source: Extracted from Questionnaire

**Chart 4.1.22 Various HR systems:**



**Inference:**

- From the total of 149 participants, 35 (23.5%) answered that different HR systems are effective and 28 (18.8%) said they are highly effective. Even so, 44 (29.5%) people did not agree and 42 (28.2%) disagreed.

**Interpretation:**

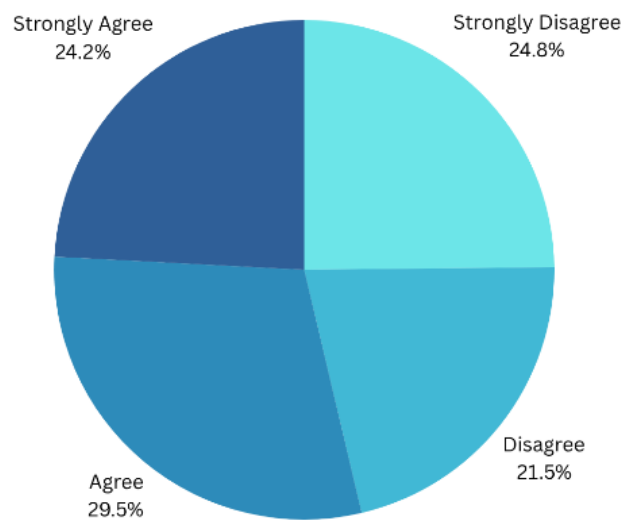
- The majority of those surveyed were not satisfied with how well HR systems are integrated in the company. It means there is a requirement for better or more effective HR systems to handle operations and analysis.

**Table 4.1.23 Leadership Support:**

Response Category	No. of Respondents	Percentage (%)
Strongly Disagree	37	24.5%
Agree	44	29.5%
Disagree	32	21.5%
Strongly Agree	36	24.2%

Source: Extracted from Questionnaire

**Chart 4.1.23 Leadership Support:**



**Inference:**

- Responses showed that among 149 people, 44 (29.5%) agreed that leadership supports HR analytics, while 36 (24.2%) strongly agreed, 37 (24.5%) strongly disagreed and 32 (21.5%) disagreed.

**Interpretation:**

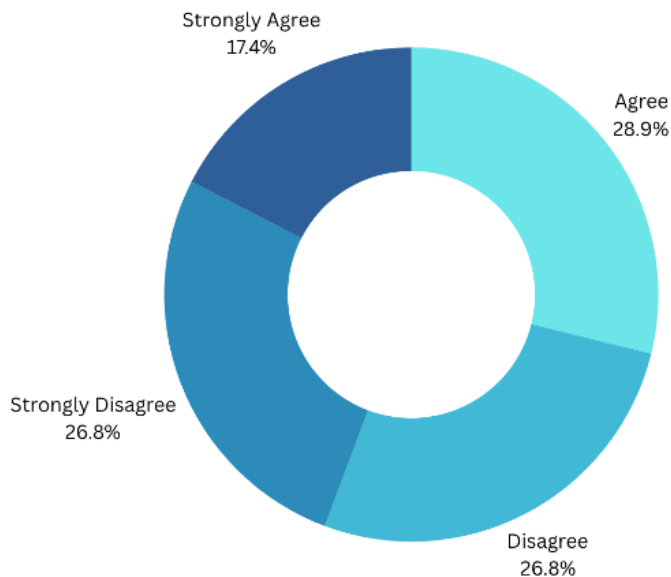
- The majority of managers agree with this statement which indicates that leadership support is quite common in companies. Still, many individuals believe that strong leadership advocacy is required to make HR analytics succeed.

**Table 4.1.24: Future Of Strategic HRM:**

Response Category	No. of Respondents	Percentage (%)
Agree	43	28.9%
Strongly Disagree	40	26.8%
Disagree	40	26.8%
Strongly Agree	26	17.4%

Source: Extracted from Questionnaire

**Chart 4.1.24 Future Of Strategic HRM:**



**Inference:**

- Of all 149 answers, 43 (28.9%) responded positively and 26 (17.4%) answered strongly that HR analytics will influence how HRM is managed in the future. In addition, 26.8% of the respondents strongly disagreed and another 26.8% disagreed with the idea.

**Interpretation:**

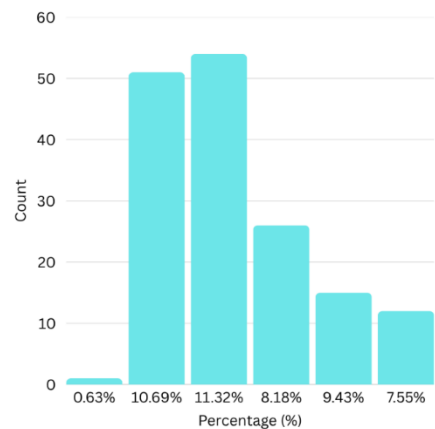
- HR analytics plays a different role in companies based on the survey results. Certain people appreciate AI's capability, but another group is still undecided, mainly because AI itself is seen in an unclear light, there is not much training available and its continuous gains are yet to be proven.

Table 4.1.25 Recommendations:

Count	Percentage (%)
1	0.63%
17	10.69%
17	10.69%
18	11.32%
13	8.18%
15	9.43%
12	7.55%
13	8.18%
17	10.69%
18	11.32%
18	11.32%

Source: Extracted from Questionnaire

Chart 4.1.25 Recommendations:



Inference:

- Most responses were concentrated around **11.32%** and **10.69%**, with the highest count at **11.32%** (~55). The lowest response was at **0.63%**, indicating it as a rare case.

Interpretation:

- The data shows a clear peak near **10–11%**, suggesting a common trend among respondents. The drop in other percentages indicates less frequent occurrences, while **0.63%** may be an outlier. This reflects a focused pattern in responses.

4.2 Hypothesis Testing

Regression Analysis

**H1:** The use of HR analytics significantly improves recruitment effectiveness by reducing time-to-hire, enhancing team performance, and aligning hiring practices with organizational goals.

Usage of HR Analytics (X)	Recruitment Effectiveness (Y)
38	29
34	29
33	34
44	23
35	26
41	25
39	27
34	41
38	46
33	31
46	38
32	34

Source: Extracted from Questionnaire

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.154185
R Square	0.023773
Adjusted R Square	-0.0847
Standard Error	4.99085
Observations	11

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	5.45912418	5.45912418	0.219166	0.650806
Residual	9	224.1772395	24.90858216		
Total	10	229.6363636			

## INTERCEPT 1

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	40.47403	7.1915587	5.627991713	0.000323	24.2056	56.74247	24.2056	56.74247
29	-0.1023	0.218519689	-0.468152108	0.650806	- 0.59663	0.392025	- 0.59663	0.392025

## RESIDUAL OUTPUT

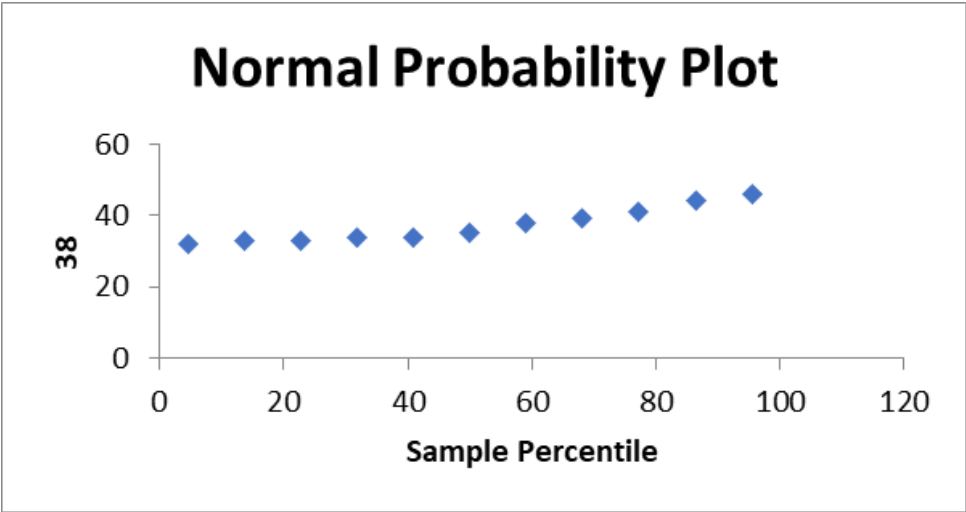
Observation	Predicted 38	Residuals	Standard Residuals
1	37.50732	-3.507319624	-0.74076352
2	36.99582	-3.995817358	-0.843936695
3	38.12112	5.878877658	1.241648488
4	37.81422	-2.814220983	-0.594377606
5	37.91652	3.083478564	0.651246159
6	37.71192	1.28807947	0.272048853
7	36.27971	-2.279714186	-0.481487086
8	35.76821	2.231788079	0.471364851
9	37.30272	-4.302718717	-0.908755803
10	36.58662	9.413384455	1.988154075
11	36.99582	-4.995817358	-1.055141717

## PROBABILITY OUTPUT

Percentile	38
4.545455	32
13.63636	33
22.72727	33
31.81818	34
40.90909	34
50	35
59.09091	38
68.18182	39
77.27273	41
86.36364	44
95.45455	46



Chart 4.2.1 HR Analytics And Recruitment Effectiveness



Hypothesis Testing

Hypothesis Statement:

- **H<sub>1</sub> (Alternative Hypothesis):** The use of HR analytics significantly improves recruitment effectiveness by reducing time-to-hire, enhancing team performance, and aligning hiring practices with organizational goals.
- **H<sub>0</sub> (Null Hypothesis):** There is no significant relationship between the use of HR analytics and recruitment effectiveness.

Regression Output Analysis:

Interpretation:

Statistic	Value	Interpretation
Multiple R	0.154	Very weak positive correlation between HR Analytics usage and Recruitment Effectiveness.
R Square	0.024	Only 2.4% of the variation in recruitment effectiveness is explained by HR analytics usage.
Adjusted R Square	-0.085	After adjusting for the number of predictors, the model performs even worse—indicating overfitting.
Significance F (p-value)	0.651	> <b>0.05</b> — not statistically significant. Fail to reject the null hypothesis.
t-Stat for Slope	-0.468	Indicates the slope is not significantly different from zero.
P-value for Slope	0.651	Again, confirms the relationship is not statistically significant.

- The regression analysis shows a **very weak and statistically insignificant relationship** between the usage of HR analytics and recruitment effectiveness.
- The **p-value (0.6508)** is much greater than the typical threshold of 0.05, indicating that we **fail to reject the null hypothesis**.
- The **R<sup>2</sup> value (0.024)** implies that only **2.4%** of the variation in recruitment effectiveness can be explained by the variation in HR analytics usage — this is **not practically significant**.
- The **negative coefficient (-0.1023)** suggests a slight negative association, but this is not reliable due to the low t-stat and high p-value.
- **Overall**, the regression model does not provide evidence to support the hypothesis that **HR analytics significantly improves recruitment effectiveness** in this dataset.

#### Conclusion:

- **Statistical Decision:** *Fail to reject the null hypothesis.*
- **Conclusion:** There is **no statistically significant evidence** from this sample data to conclude that the use of HR analytics has a measurable impact on improving recruitment effectiveness.
- **Recommendation:** A **larger sample size**, **additional variables** (e.g., quality of hire, recruiter efficiency, satisfaction), and **better model refinement** may be needed to more accurately evaluate the relationship.

**H2:** The implementation of HR analytics is significantly hindered by challenges such as lack of training, data integration issues, and limited leadership support.

Challenges of HR Analytics	Implementation of HR Analytics
42	34
35	34
28	39
44	42
37	35
44	44
32	43
36	27
43	39
40	34
40	33
26	43

Source: Extracted from Questionnaire

## SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.06583
R Square	0.004334
Adjusted R Square	-0.1063
Standard Error	5.651706
Observations	11

## ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	1.251206	1.251206377	0.039171461	0.847507
Residual	9	287.4761	31.94178515		
Total	10	288.7273			

## INTERCEPT 2

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	39.6481	10.75965	3.684888231	0.005037141	15.30809	63.98812	15.30809	63.98812
42	-0.05711	0.288549	-0.197917813	0.847507489	-0.70985	0.595634	-0.70985	0.595634

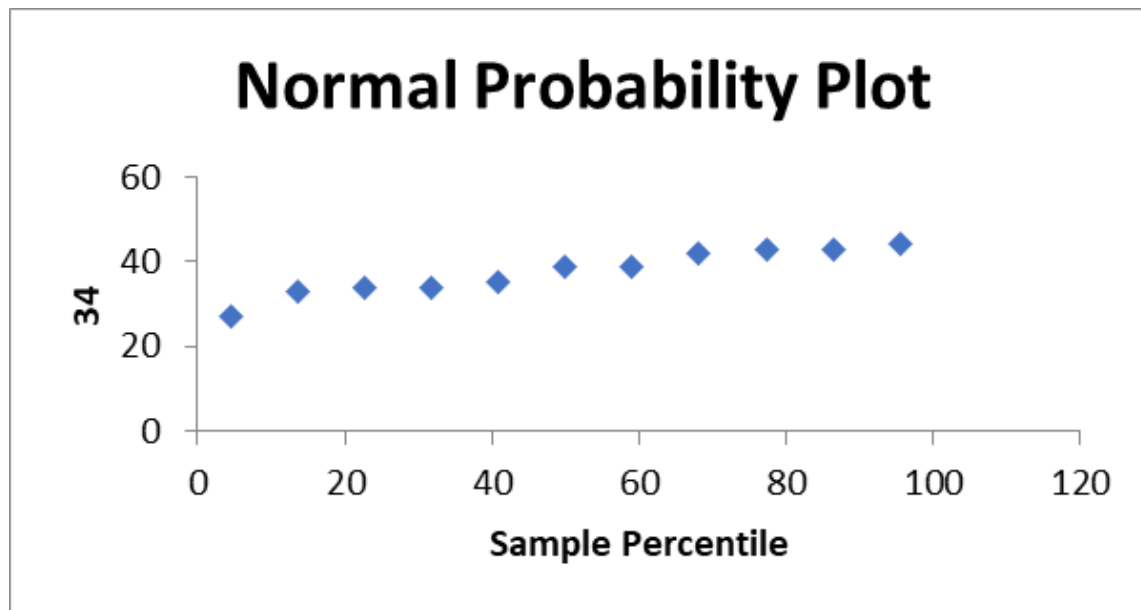
## RESIDUAL OUTPUT

Observation	Predicted 34	Residuals	Standard Residuals
1	37.64929	-3.64929	-0.680624257
2	38.04905	0.950948	0.177360074
3	37.13531	4.864692	0.907307492
4	37.53507	-2.53507	-0.472812877
5	37.13531	6.864692	1.280324942
6	37.82062	5.179384	0.966000285
7	37.59218	-10.5922	-1.975534004
8	37.19242	1.807583	0.337129989
9	37.36374	-3.36374	-0.627367619
10	37.36374	-4.36374	-0.813876344
11	38.16327	4.83673	0.902092319

## PROBABILITY OUTPUT

Percentile	34
4.545455	27
13.63636	33
22.72727	34
31.81818	34
40.90909	35
50	39
59.09091	39
68.18182	42
77.27273	43
86.36364	43
95.45455	44

Chart 4.2.2 Challenges and Implementation of HR Analytics



## Hypothesis 2 Testing

### Hypothesis Statement:

- **H<sub>2</sub> (Alternative Hypothesis):** The implementation of HR analytics is significantly hindered by challenges such as a lack of training, data integration issues, and limited leadership support.
- **H<sub>0</sub> (Null Hypothesis):** There is no significant relationship between the challenges of HR analytics and the implementation effectiveness of HR analytics.

### Regression Output Analysis:

Statistic	Value	Interpretation
Multiple R	0.06583	Very weak positive correlation between challenges and implementation effectiveness.
R Square	0.0043	Only 0.43% of the variation in implementation effectiveness is explained by challenges.
Adjusted R Square	-0.1063	After adjusting for model complexity, the fit gets worse, suggesting no predictive power.
Significance F (p-value)	0.8475	> 0.05 — Not statistically significant; we fail to reject the null hypothesis.
t-Stat for Slope	-0.198	Slope is nearly zero; implies no meaningful linear relationship.
P-value for Slope	0.8475	Indicates slope is not significantly different from zero.

### Interpretation:

- The regression results show an **extremely weak and statistically insignificant relationship** between the **challenges** of HR analytics and its **implementation effectiveness**.
- The **p-value (0.8475)** is far greater than 0.05, indicating that the model **fails to reject the null hypothesis**.
- The **R<sup>2</sup> value (0.0043)** means that **only 0.43%** of the variation in implementation is explained by the identified challenges — making the model practically useless.
- The **negative slope (-0.05711)** is small and insignificant, suggesting that challenges may have a slight negative influence, but this is not supported by evidence.

### Conclusion:

- **Statistical Decision:** Fail to reject the null hypothesis.
- **Conclusion:** There is **no statistically significant evidence** from this data to suggest that implementation of HR analytics is meaningfully affected by challenges such as lack of training, data integration, and limited leadership support.
- **Recommendation:** For a more accurate understanding, consider including a **larger sample size, more detailed challenge dimensions, or qualitative data** to support the regression analysis.

### 4.3 Correlation Analysis

Usage of HR Analytics (X)	Recruitment Effectiveness (Y)
38	29
34	29
33	34
44	23
35	26
41	25
39	27
34	41

38	46
33	31
46	38
32	34

### Correlation Matrix

	38	29
38	1	
29	-0.15418	1

### Interpretation

The correlation coefficient between the usage of HR analytics and recruitment effectiveness was found to be - **0.154**, indicating a **very weak negative linear relationship**. This suggests that in the current dataset, an increase in HR analytics usage does **not strongly correspond** with improved recruitment effectiveness. The low strength of correlation reflects a **lack of meaningful association** between these two variables.

### Correlation Analysis

Challenges of HR Analytics	Implementation of HR Analytics
42	34
35	34
28	39
44	42
37	35
44	44
32	43
36	27
43	39
40	34
40	33
26	43

### Correlation Matrix

	42	34
42	1	
34	-0.065829502	1

### Interpretation

There is **no strong or significant linear relationship** between the **challenges of HR analytics** and its **implementation level**. Other factors may have a greater influence and should be explored for better insights.

# **CHAPTER 5**

## **CONCLUSION**

## 5.1 FINDINGS

- HR analytics make it possible for organizations to hire better, since they see reductions in hiring time and improvements in matching people to the job.
- By using predictive analytics, HR teams can spot potential staff leaving and address the issue in time to save valuable employees.
- Better Decisions: HR managers can now base choices on facts and patterns which works better for the organization's goals.
- Better Team Results: Analysis tools let managers check team performance, highlight weaknesses and measure how well recruiters are working.
- There are several obstacles in the implementation, for example, some HR workers do not have the required technical skills, systems are not well connected, leadership does not provide enough help and security concerns come up because of data privacy worries.
- Accurate data analysis can lead to training programs that fit each employee's needs and improve how they feel at work.
- More organizations that depend on HR analytics are achieving better alignment between their HR activities and the strategies they pursue.
- You cannot gain value from HR data if you fail to study it for use in major decisions.

## 5.2 SUGGESTIONS

- Help your HR team upgrade their skills by offering learning programs in data analysis, visual tools and analytics.
- Introduce HRIS, ATS and business intelligence systems to help gather data and gain useful insights easily.
- Convince your top executives to support analytics efforts which will ensure alignment with the main strategy and that important resources are given.
- Set up proper rules for handling employee information and make sure they do not break ethical standards.
- Try out pilot projects first, then add more functions gradually after you have mastered analytics in recruitment or retention.
- Implement machine learning for forecasting which enables you to notice changes and act early, making future strategies possible.

## 5.3 CONCLUSION

HR analytics is now an important part of modern human resource management because it allows organizations to base their decisions on facts and data. It is confirmed in the study that if analytics is applied to HR work, it helps recruit more effectively, reduce turnover, encourage greater employee involvement and make HR activities consistent with the company's goals. Although there are many benefits, the process of adopting depends on overcoming technical, cultural and organizational issues. If used thoughtfully, HR analytics helps companies improve their work and make HR key to future achievements. The use of evidence-based HR is now a must because it supports an organization's ability to compete and remain agile in this digital age.



## 5.4 FUTURE SCOPE

- **Cross-Industry Comparisons:** In the future, it would be informative to analyze HR analytics methods used in various sectors (e.g., information technology versus healthcare) to find out what issues or advantages they present.
- **Developing Accurate Predictive Techniques** One can also use more research to investigate how artificial intelligence and deep learning can help foresee employee behavior and organization outcomes.
- **Global Contextualization:** Extending the investigation to cover international organizations can offer understandings about the effect of cultural and legal backgrounds on analytics adoption.
- **Real-Time Analytics:** Check how real-time analytics and dashboards affect quick decisions and regular HR activities.
- **Examining Things from the Employee's Point of View** More research may be done on how workers react to HR approaches that use analytics and how that impacts trust, transparency and satisfaction at work.
- **Longitudinal Studies:** A long-term study can show the lasting impacts of using HR analytics.

## BIBLIOGRAPHY

1. **Edwards, M. R., & Edwards, K.** (2019). *Predictive HR Analytics: Mastering the HR Metric* (2nd ed.). Kogan Page.  
<https://www.amazon.com/Predictive-HR-Analytics-Mastering-Metric/dp/0749484446>  
[amazon.com+7amazon.com+7campusbooks.com+7](https://www.amazon.com/7campusbooks.com/7)
2. **Fitz-enz, J.** (2010). *The New HR Analytics: Predicting the Economic Value of Your Company's Human Capital Investments*. AMACOM.  
<https://www.amazon.com/New-HR-Analytics-Predicting-Investments/dp/0814438849>  
[target.com+8amazon.com+8ouci.dntb.gov.ua+8](https://www.target.com/8amazon.com/8ouci.dntb.gov.ua/8)
3. **Becker, B. E., Huselid, M. A., & Ulrich, D.** (2001). *The HR Scorecard: Linking People, Strategy, and Performance*. Harvard Business School Press.  
<https://www.archive.org/details/hrscorecardlinki0000beck>
4. **Giermindl, L. M., Strich, F., Christ, O., Leicht-Deobald, U., & Redzepi, A.** (2021). *The Dark Sides of People Analytics: Reviewing the Perils for Organizations and Employees*. *European Journal of Information Systems*.  
<https://dx.doi.org/10.1080/0960085X.2021.1927213>  
[aihr.com+15alexandria.unisg.ch+15dro.deakin.edu.au+15](https://www.aihr.com/15alexandria.unisg.ch/15dro.deakin.edu.au/15)
5. **Samson, K., & Bhanugopan, R.** (2022). *Strategic Human Capital Analytics and Organisation Performance: The Mediating Effects of Managerial Decision-Making*. *Journal of Business Research*, 144, 637-649.  
<https://doi.org/10.1016/j.jbusres.2022.01.044>  
[ouci.dntb.gov.ua+9researchoutput.csu.edu.au+9ideas.repec.org+9](https://www.ouci.dntb.gov.ua/9researchoutput.csu.edu.au/9ideas.repec.org/9)
6. **McCartney, S., & Fu, N.** (2022). *Promise versus Reality: A Systematic Review of the Ongoing Debates in People Analytics*. *Journal of Organizational Effectiveness: People and Performance*, 9(2), 281-311.  
<https://doi.org/10.1108/JOEPP-01-2021-0013>  
[studocu.com+8mendeley.com+8mural.maynoothuniversity.ie+8](https://www.studocu.com/8mendeley.com/8mural.maynoothuniversity.ie/8)
7. **Bersin/Deloitte** (2017). *People Analytics Maturity Model*.  
<https://www2.deloitte.com/content/dam/Deloitte/us/Documents/human-capital/us-human-capital-bersin-lt-people-analytics-solutions-market-primer.pdf>  
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8. **Deloitte** (2023). *2023 High-Impact People Analytics Research*.  
<https://www2.deloitte.com/content/dam/Deloitte/us/Documents/human-capital/us-high-impact-people-analytics-report.pdf> [researchgate.net+2www2.deloitte.com+2www2.deloitte.com+2](https://www.researchgate.net/2www2.deloitte.com/2www2.deloitte.com/2)
9. **SHRM** (2021). *The Use of People Analytics in Human Resources – SHRM Research Report*.  
<https://www.shrm.org/content/dam/en/shrm/research/use-of-people-analytics-in-hr.pdf>
10. **AIHR** (2018). *15 HR Analytics Case Studies with Business Impact*.  
<https://www.aihr.com/blog/hr-analytics-case-studies/>  
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## ANNEXURE

### Section 1: Demographic Information

**1. What is your gender?**

- ☐ Woman
- ☐ Man
- ☐ Non-binary
- ☐ Prefer not to say

**2. What is your age group?**

- ☐ Under 18
- ☐ 18–24
- ☐ 25–34
- ☐ 35–44
- ☐ 45–54
- ☐ 55 and above

**3. How many years of experience do you have in HR or recruitment-related roles?**

- ☐ Less than 1 year
- ☐ 1–3 years
- ☐ 3–5 years
- ☐ More than 5 years

**4. Which sector does your organization belong to?**

- ☐ IT/ITES
- ☐ Manufacturing
- ☐ Retail
- ☐ Education
- ☐ Healthcare
- ☐ Other (please specify): \_\_\_\_\_

**5. What HR function are you primarily involved in?**

- ☐ Recruitment
- ☐ Training & Development
- ☐ Compensation & Benefits
- ☐ Employee Relations
- ☐ Analytics/HRIS

- Other: \_\_\_\_\_

## **Section 2: HR Analytics Usage & Application**

6. **My organization uses data analytics to track job-level statistics for improving recruitment processes.**
  - Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
7. **We use predictive analytics tools to reduce time-to-hire and improve planning.**
  - Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
8. **Data is used in my organization to evaluate performance of recruitment teams.**
  - Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
9. **My HR department uses real-time dashboards to monitor key hiring metrics like time-to-fill and quality of hire.**
  - Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
10. **Our HR team analyzes the complete candidate lifecycle, from sourcing to onboarding, using data-driven tools.**
  - Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
11. **Client satisfaction and collaboration effectiveness are measured using recruitment-related performance data.**
  - Strongly Agree

- Agree
- Disagree
- Strongly Disagree

12. **We make most recruitment decisions based on analytical insights rather than intuition.**

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

### **Section 3: Tools and Technical Infrastructure**

13. **Which of the following analytics tools are used in your organization?** (Select all that apply)

- SAP SuccessFactors
- Workday
- Zoho People
- Power BI
- Excel
- In-house Custom Tool
- None

14. **I am trained in using HR analytics tools to support recruitment and strategic HR decisions.**

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

15. **Our analytics system helps identify bottlenecks in the hiring pipeline.**

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

### **Section 4: Impact of HR Analytics**

16. **Use of HR analytics has improved the quality of candidates hired in our organization.**

- Strongly Agree

- Agree
- Disagree
- Strongly Disagree

17. **There has been a noticeable reduction in time-to-hire after implementing data analytics strategies.**

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

18. **HR analytics has improved cross-functional collaboration in recruitment processes.**

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

19. **Data-driven approaches have helped reduce recruitment costs in our organization.**

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

20. **Analytics helps our HR team align recruitment goals with overall organizational objectives.**

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

## **Section 5: Challenges in Implementation**

21. **What challenges do you face in implementing HR analytics?** (Select all that apply)

- Lack of awareness or training
- High cost of tools/software
- Data accuracy/integration issues
- Resistance from HR staff
- Lack of management support
- Security and privacy concerns

**22. My organization struggles to integrate data from various HR systems effectively.**

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

**23. There is a need for stronger leadership support for HR analytics initiatives.**

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

#### **Section 6: Evaluation and Perception**


**24. HR analytics is essential for the future of strategic human resource management.**

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

**25. On a scale of 0–10, how likely are you to recommend HR analytics practices to other HR professionals?**

- 0 (Not likely at all)
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (Extremely likely)

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## The Impact of HR Analytics on Recruitment Efficiency and Strategic HR Decision-Making

Utlai Sai Ganesh<sup>a</sup>, Dr. Vara Lakshmi Thavva<sup>b\*</sup>

<sup>a</sup> MBA Student, Institute of Aeronautical Engineering, Telangana, India, [23951e0031@iare.ac.in](mailto:23951e0031@iare.ac.in)

### ABSTRACT

Human Resource (HR) Analytics has emerged as a transformative tool enabling data-driven decision-making across HR functions. This paper investigates the role of HR analytics in enhancing recruitment efficiency and supporting strategic HR decisions. Based on primary survey data from 149 professionals across various sectors and levels of experience, the study evaluates the extent to which analytics influences hiring processes, reduces time-to-hire, and aligns HR practices with broader organizational goals. Despite widespread recognition of its potential, the findings reveal mixed adoption and limited statistical significance in outcomes. Challenges such as lack of training, poor data integration, and insufficient leadership support persist. This paper concludes that while HR analytics holds considerable promise, its impact is contingent upon robust implementation frameworks and organizational readiness.

Keywords: HR Analytics, Recruitment Efficiency, Strategic HRM, Data-Driven Decision-Making, Workforce Management

### 1. INTRODUCTION

In today's rapidly evolving business environment, organizations are striving to remain competitive through smarter and more efficient workforce management. Human Resource departments, once driven by intuition and routine processes, are now transitioning into strategic hubs powered by analytics. HR analytics, or people analytics, refers to the use of data and analytical techniques to improve human resource decisions and performance. It plays a critical role in enhancing recruitment efficiency, reducing employee turnover, and aligning HR objectives with organizational goals. As digital tools become more sophisticated, HR analytics enables deeper insights into talent acquisition trends, employee behavior, and strategic workforce planning. This paper explores how HR analytics can improve recruitment efficiency and contribute to strategic HR decision-making.

### 2. OBJECTIVES

- To assess the effectiveness of HR analytics in enhancing recruitment processes.
- To evaluate the role of analytics in aligning HR functions with organizational goals.
- To identify challenges limiting the implementation of HR analytics.

### 3. LITERATURE REVIEW

Bersin (2018) discusses the emergence of people analytics as a core function in modern HRM, noting that data-driven HR teams are better equipped to measure talent outcomes and predict future workforce needs. He emphasizes that while technology provides the tools, organizational culture and leadership support are crucial for successful implementation.

Giermindl et al. (2020) examine the impact of HR analytics from a contingency perspective, arguing that its effectiveness depends on contextual factors such as organizational structure, data maturity, and employee engagement. They caution against a one-size-fits-all approach and recommend tailoring analytics strategies to specific organizational needs.

Rasmussen and Ulrich (2015) explore practical implementations of HR analytics and suggest that its value lies in actionable insights rather than complex data modeling. They advocate for iterative learning and the integration of analytics into day-to-day HR activities to ensure sustainable outcomes.

Minbaeva (2018) stresses the importance of building credibility in HR analytics by ensuring data accuracy, transparency, and relevance. She notes that organizations must foster data literacy among HR professionals and establish governance frameworks to enhance trust and utility in analytics.

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#### 4. RESEARCH GAP

While existing literature emphasizes the strategic importance of HR analytics, there is limited empirical evidence, particularly within the Indian context, demonstrating its real-world impact on recruitment effectiveness. Most studies focus on theoretical benefits, with few exploring actual implementation challenges or measuring statistical outcomes. There is also a scarcity of research examining how different sectors adopt HR analytics tools or the extent to which employees and managers trust and utilize these insights. Moreover, the majority of prior work lacks robust quantitative validation and overlooks the organizational readiness and support factors that influence adoption. This study addresses these limitations by combining survey data with regression analysis to evaluate both the perceived benefits and practical constraints of HR analytics.

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#### 5. NEED OF THE STUDY

As companies confront increasingly complex recruitment and retention challenges, traditional HR approaches fall short of delivering timely, data-backed decisions. There is a growing necessity to shift from intuition-driven processes to analytics-based systems that provide actionable insights. This study is essential to understand how organizations can leverage HR analytics to streamline recruitment, identify gaps, and enhance workforce strategy. It also sheds light on the tools currently in use, the awareness levels among HR professionals, and the organizational preparedness to integrate such systems effectively.

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#### 6. PROBLEM STATEMENT

Despite the growing emphasis on digital transformation and data utilization, many organizations still struggle with effectively implementing HR analytics. The lack of proper integration, insufficient training, and minimal leadership support prevent analytics from delivering expected results. This study aims to investigate whether HR analytics is genuinely impacting recruitment and strategic HR decisions or if its potential remains largely underutilized due to these persistent challenges.

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#### 7. METHODOLOGY

A mixed-method approach was used, combining quantitative survey data with qualitative insights. The primary data was collected via structured questionnaires distributed to 149 HR professionals from sectors like IT, manufacturing, education, and healthcare.

**Data Source** Primary data was gathered through online and in-person surveys administered to HR professionals, analytics specialists, and managerial staff. The questionnaire comprised multiple-choice and Likert-scale items covering recruitment practices, analytics tools, perceived outcomes, and organizational challenges. Secondary data was obtained from internal HR records (such as recruitment timelines and turnover rates) and published reports.

**Data Analysis** Quantitative data was analyzed using Microsoft Excel for statistical operations. Regression analysis and correlation tests were conducted to examine the relationships between HR analytics usage and recruitment effectiveness. Additionally, frequencies and percentages were calculated to identify trends in tool adoption, challenges faced, and HR functional focus. Qualitative responses from open-ended survey items were thematically categorized to support the interpretation of quantitative results.

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#### 8. ANALYSIS AND INTERPRETATION

##### Hypothesis 1: HR Analytics and Recruitment Effectiveness

**Data Table: HR Analytics Usage vs Recruitment Effectiveness**

HR Analytics Usage (X)	Recruitment Effectiveness (Y)
38	29
34	29
33	34
44	23
35	26
41	25
39	27
34	41

38	46
33	31
46	38
32	34

### 12.2 Hypothesis 2: Challenges Hindering HR Analytics Implementation

**Data Table: Challenges vs Implementation**

Challenges of HR Analytics (X)	Implementation of HR Analytics (Y)
42	34
35	34
28	39
44	42
37	35
44	44
32	43
36	27
43	39
40	34
40	33
26	43

### 12.3 Correlation Analysis

#### Correlation Matrix: HR Analytics Usage vs Recruitment Effectiveness

#### Correlation Matrix: Challenges vs Implementation

Variable Pair	Correlation (r)
HR Analytics Usage & Recruitment	-0.154

Variable Pair	Correlation (r)
Challenges & Implementation of Analytics	-0.0658

**Conclusion for Analysis** The analysis shows no significant relationship between HR analytics usage and recruitment effectiveness, nor between implementation challenges and success. Both hypotheses were not supported statistically. This suggests that while HR analytics is valuable in theory, its impact in practice may require deeper, more contextual evaluation.

## 9. FINDINGS

- HR professionals are generally aware of HR analytics but lack advanced tool adoption.
- Excel remains the most widely used tool, with minimal use of platforms like SAP or Workday.
- Recruitment and training are the most common HR functions utilizing analytics.
- Regression results show weak and statistically insignificant relationships.
- Key challenges identified include lack of training, poor data integration, and weak leadership support.

## 10. RECOMMENDATIONS

- Provide structured training to improve data literacy in HR teams.
- Invest in modern HR analytics platforms with better integration features.

- Encourage top management to champion analytics initiatives.
- Use pilot projects to measure and build trust in HR analytics outcomes.
- Supplement quantitative tools with qualitative feedback mechanisms for richer insights.

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## 11. CONCLUSION

This study explored the relationship between HR analytics and recruitment effectiveness, as well as the challenges that hinder analytics implementation. Despite the strategic promise of HR analytics, the study found no statistically significant impact on recruitment or implementation outcomes in the current dataset. While HR analytics adoption is visible in basic tools and awareness, its effectiveness is constrained by operational and organizational barriers. For HR analytics to truly become transformative, organizations must invest in infrastructure, leadership commitment, and continuous skill development.

## REFERENCES

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- Marler, J. H., & Boudreau, J. W. (2017). An evidence-based review of HR Analytics.
- Bersin, J. (2018). People Analytics: Recalculating the Route.
- Giermendl, L. M., Strich, F., & Fiedler, M. (2020). HR Analytics and Its Impact on HRM: A Contingency Perspective.
- Rasmussen, T., & Ulrich, D. (2015). Learning from practice: How HR Analytics avoids being a management fad.
- Minbaeva, D. (2018). Building credible human capital analytics for organizational competitive advantage.



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