# Data-Driven HCM

Leveraging Analytics for Strategic Decision-Making

# Table of Contents

# Contents

# Introduction

The use of data for informed decision-making can be traced back to ancient civilizations, where rudimentary forms of record-keeping were used to track things like agricultural yields, trade transactions, and census data.

For example, ancient Mesopotamians used clay tablets to record financial transactions, while the ancient Egyptians kept detailed records of their agricultural activities.

More recently, the term "business intelligence" gained popularity in the 1990s, referring to data analysis tools and techniques to extract insights from business data. The explosion of digital data in the 21st century, coupled with advancements in data storage, processing, and analytics technologies, has fueled the rise of big data and analytics. Organizations now have access to vast amounts of structured and unstructured data from sources like social media, IoT devices, and transactional systems.

Currently, every facet of a business produces numerous data points that can help with highly accurate and informed decision-making. The Human Resources department is no exception. If you are using an HRMS platform, chances are that you already have a massive repository of untapped data, waiting for you to be leveraged for business success.

This whitepaper aims to shed light on various data points you can collect during the entire employee lifecycle: Recruitment, Onboarding, Time & Attendance, Expense Management, Payroll, Performance Managment, and Exit. We will also discuss how you can analyze this data and drive deep insights for improved workforce planning and enhanced organizational performance. Let us dive into each stage of the employee lifecycle, one by one:
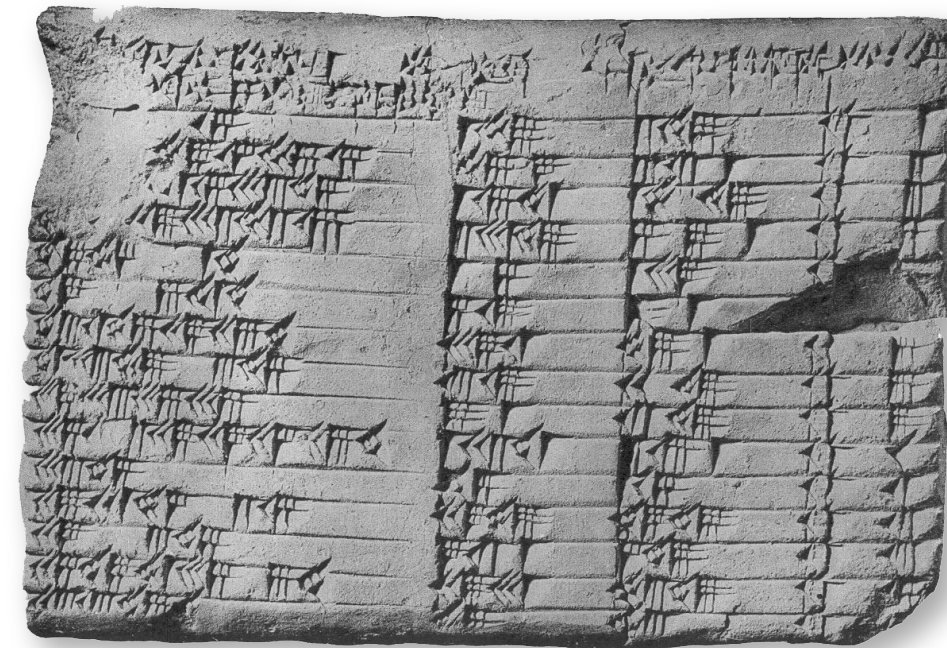


A Babylonian clay tablet with numbers

# 01 Recruitment & Onboarding

Data creation starts as soon as you publish a job on a portal. The ATS-integrated HRMS portal captures data points such as the number of candidates applying to an opening, their performance at each hiring stage, feedback from the interviewers, and so on. The data-driven reports from your ATS help you improve your hiring and onboarding efficiency.

## Hiring Status

Most ATS dashboards will show you the real-time status of your hiring. For example, the number of openings, the number of candidates in the pipeline, how many people are already hired, and so on. You can also see your pipeline in the funnel format, showing the number of candidates at each stage. Such reports help you predict whether your candidate pipeline is sufficiently equipped to fill the open positions on time.

# Sample Hiring Report Dashboard

**118**

Last Applicants

📈 +20% this week

**510**

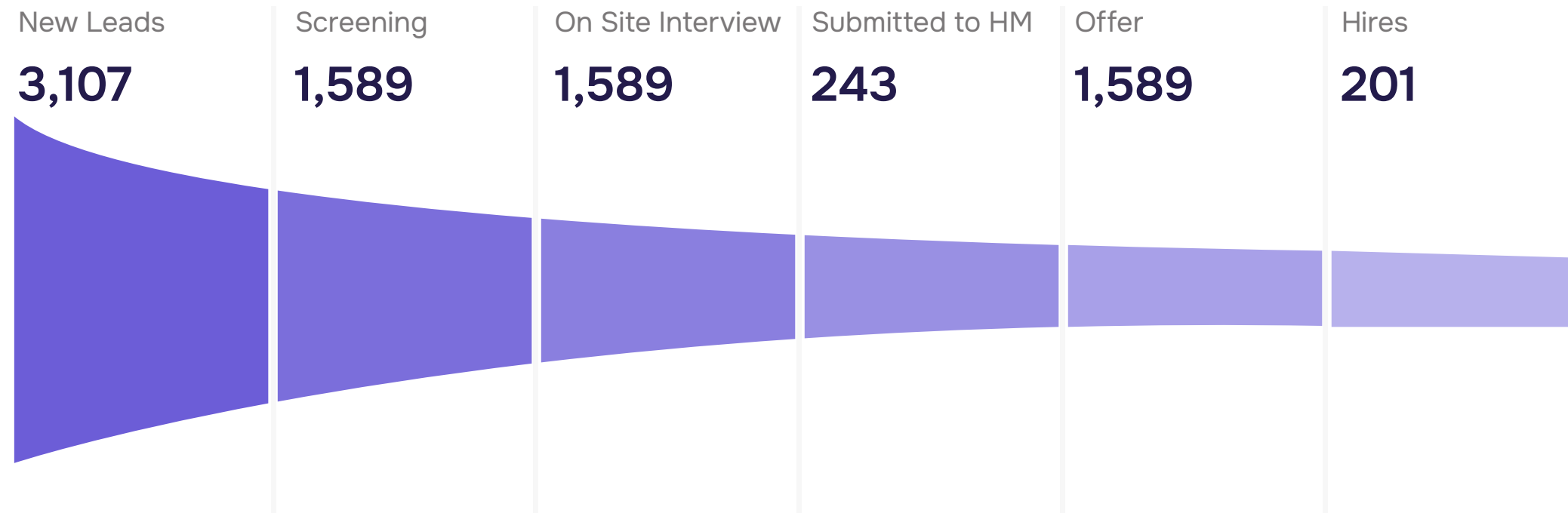Job Openings

📈 +8% this week

**24**

Total Hires

📉 -11% this week

**56**

Still In Progress

📉 -3% this week

## Funnel Analytics

| New Leads | Screening | On Site Interview | Submitted to HM | Offer | Hires |
|---|---|---|---|---|---|
| **3,107** | **1,589** | **1,589** | **243** | **1,589** | **201** |

# Candidate Source Reports

These reports help you measure the effectiveness of each hiring channel. They can show you the breakup of candidates applying from different sources like LinkedIn, Naukri, your website's career page, your vendor's site, and so on.

You can see further analytics like how many candidates viewed yourjob listing, what percentage of the viewers applied, what is the candidate qualification rate for each source, etc.

This information is helpful in finding out the best sourcing pools for different job profiles and deploying your talent acquisition resources accordingly.

## Sample Candidate Source Report Dashboard

| | Total Jobs | | Total Views | | Total Applications | | Total Conversion |
|---|---|---|---|---|---|---|---|
| | 02 | | 245 | | 32 | | 13.1% |

| Source | Views | Application | Conversion |
|---|---|---|---|
| Website Career Page | 40 | 05 | 12.5% |
| Third Party Job Portals | 80 | 20 | 25.0% |
| Vendor | 25 | 02 | 8.0% |
| Banner Ads | 100 | 05 | 5.0% |

# Hiring Efficiency Metrics

Metrics like time-to-hire, cost-to-hire, offer acceptance rate, offer decline rate, candidate experience, etc. tell you about your hiring process's efficiency. Tracking them continuously will uncover many areas of improvement to build a strong and highly optimized system for recruitment.

**Requisitions**
## 40
⬆ +15% in Q3

**Applications**
## 384
⬆ +3% in Q3

**Offers**
## 40
⬆ +7% in Q3

**New Hires**
## 36
⬆ +20% in Q3

## Sample Hiring Efficiency Report Dashboard

### Time to Fill

Days (y-axis: 0, 20, 40, 60, 80, 100)

Categories: Executive, Manager, Senior Manager

Legend: Q1, Q2, Q3, Q4

### Lead Generation

Candidates (y-axis: 0, 200, 400)

Months: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec

Legend: Online Ad, Referrals

### Offer Acceptance

Offer Acceptance Ratio

Rejected 10%

Accepted 90%
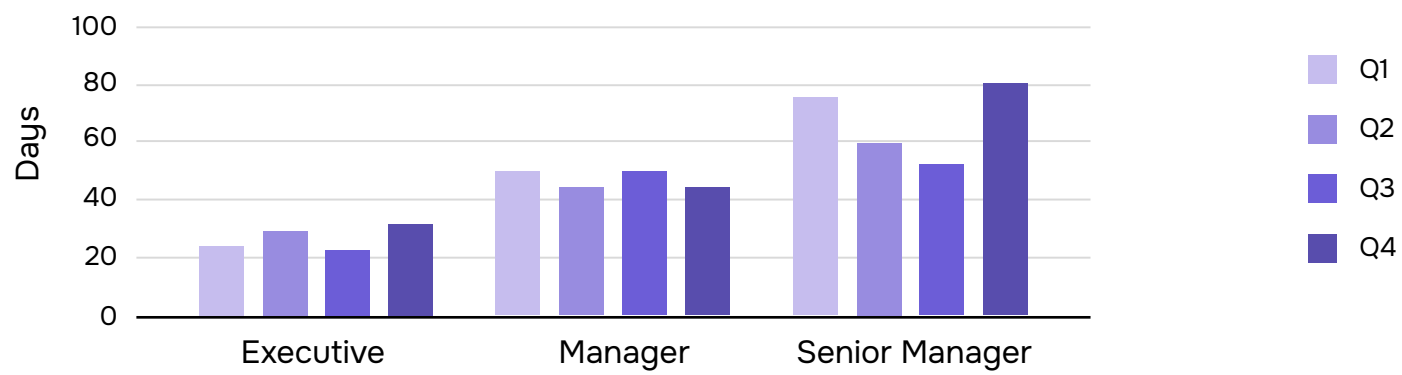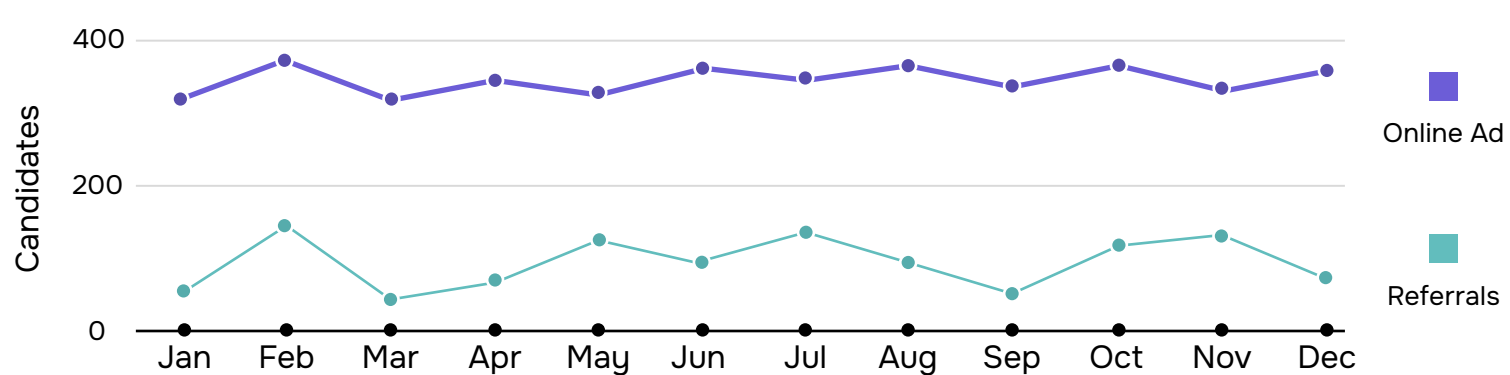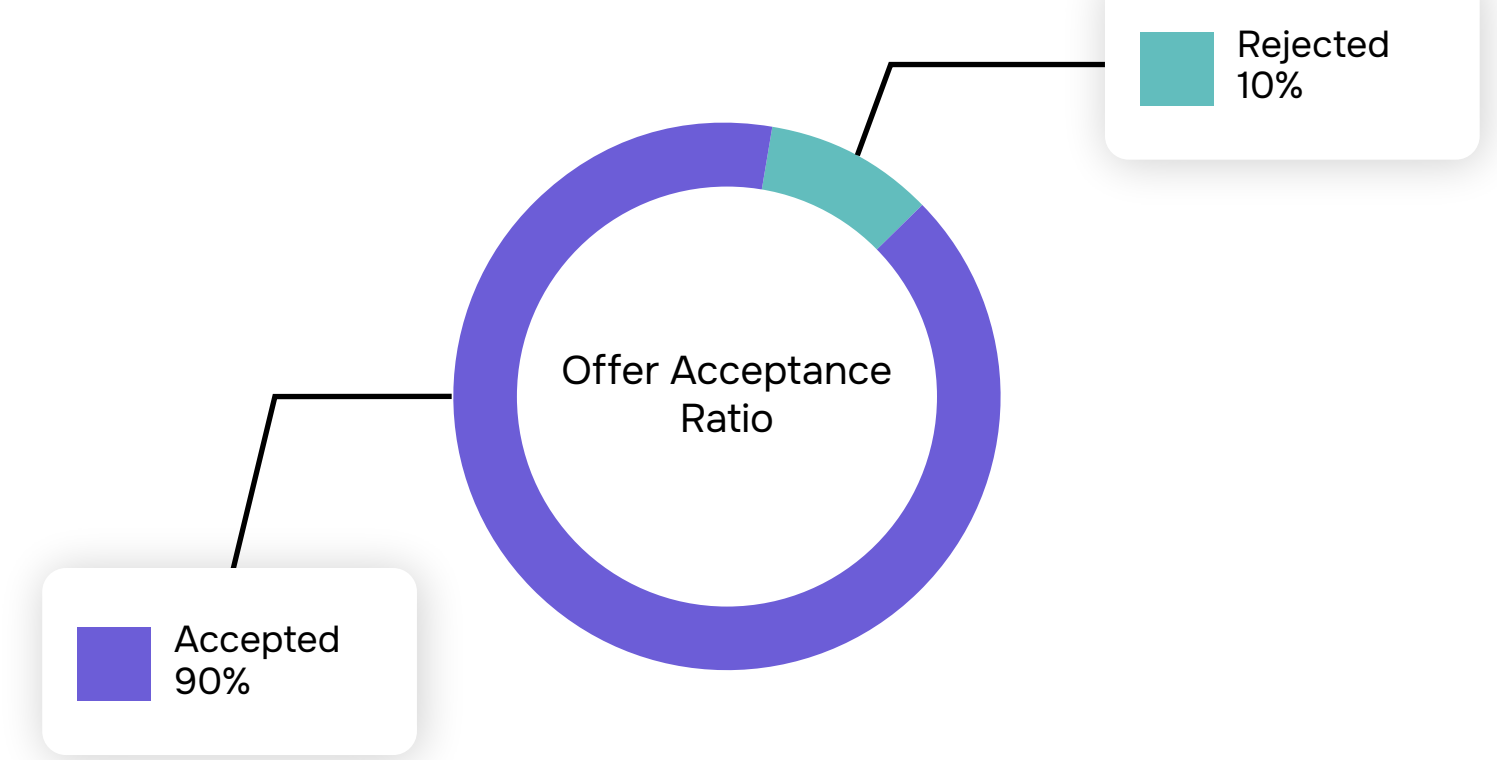
# Diversity Report

Many organizations are increasingly prioritizing the cultivation of diverse workforces. A diversity report helps you in this pursuit. This report serves as a comprehensive snapshot of the demographic makeup of job applicants and hires, providing critical insights into an organization's diversity and inclusion efforts.

For instance, it may highlight the ratio of male to female applicants within the recruitment pipeline, shedding light on gender representation throughout the hiring process. Such data-driven analyses enable organizations to ensure fair and equitable practices for a more diverse workforce.

## Sample Diversity Report Dashboard
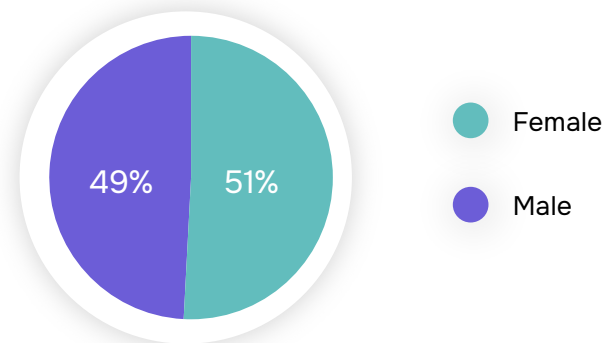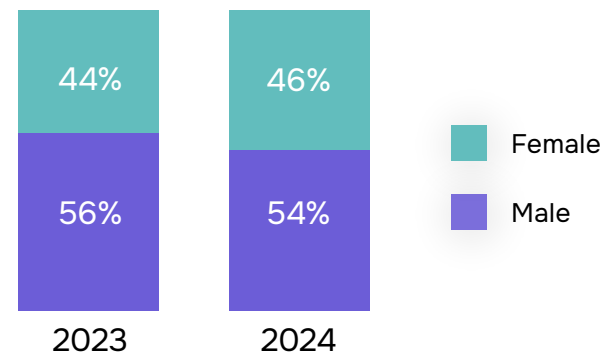
### Gender Distribution

- 49% Male
- 51% Female

Female
Male

### Hired By Gender

| | 2023 | 2024 |
|---|---|---|
| Female | 44% | 46% |
| Male | 56% | 54% |

### Turnover by Gender

**Male**

| | 2023 | 2024 |
|---|---|---|
| Total | 13.1% | 9.5% |
| Involuntary | 3.7% | 4.1% |
| Voluntary | 9.4% | 5.4% |

**Female**

| | 2023 | 2024 |
|---|---|---|
| Total | 12.3% | 10.9 |
| Involuntary | 4.2% | 2.2% |
| Voluntary | 8.1% | 8.7% |

Involuntary Turnover Rate
Voluntary Turnover Rate
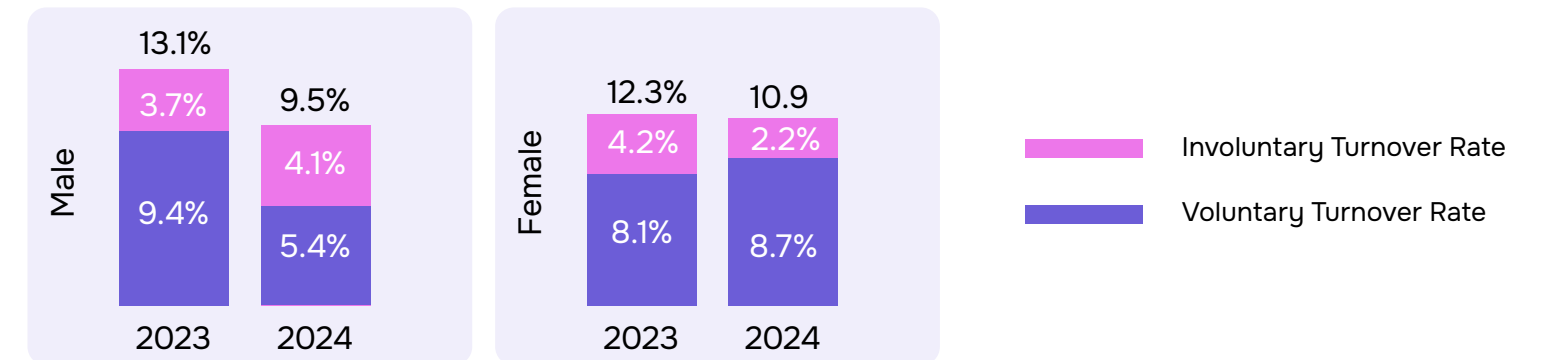
### Person with Disabilities

| In the Company | 3% |
|---|---|
| Industry Standard | 2% |
| Hired/Application Received | 86% |
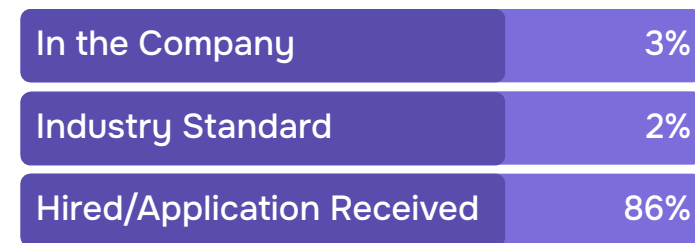
### Recruitment Breakdown by Gender

Female
Male
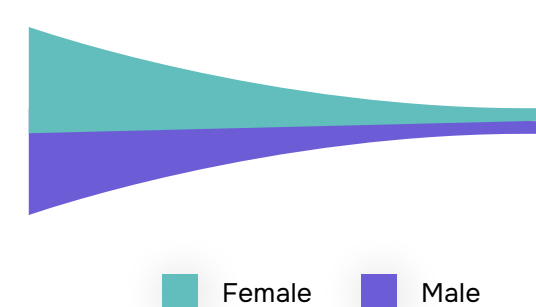
### Breakdown by Department

| | IT/Admin | Sales/Marketing | Technology | Payroll/Finance | HR/Recruiter |
|---|---|---|---|---|---|
| Female | 71% | 35% | 51% | 44% | 52% |
| Male | 29% | 65% | 49% | 56% | 48% |

Female
Male
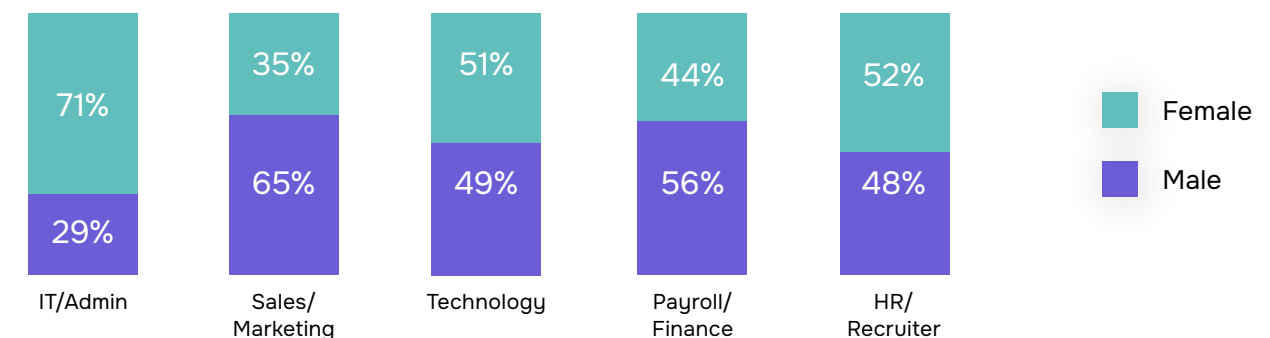
# Onboarding Status

An onboarding dashboard provides an overview of the onboarding progress for all employees, segmented stage by stage. From initial documentation to training completion, every step of the onboarding journey can be tracked and displayed visually for efficient management and seamless integration for new hires.

This data is collected from various sources within the HRMS, including employee profiles, task management systems, and feedback mechanisms, consolidating information into a centralized hub for easy monitoring and analysis by HR professionals.

## Sample Onboarding Report Dashboard

| New Hires Today | 07 | New Hires This Month | 14 | New Hires Last Month | 23 | Employees On File | 423 |

### My Pending Actions

New Hires to Onboard (41)
Review Now

Incomplete Onboarding Records (624)
Review Now

Converted to Employee (12)
Review Now

**View Status**

### Onboarding Status

**12**
New Hires in Queue

**487**
Incomplete Onboarding Records

**80**
Past Due Process

# 02 Time and Attendance

Modern attendance management systems register employee attendance with biometric devices such as fingerprints and facial scanners. It enables organizations to accurately record the in-time and out-time along with check-outs and ins during the work day. These data points help calculate multiple attendance metrics.

## Attendance Status

The real-time status of the number of employees present in the office. Most HRMS platforms also display the number of employees absent, or on leave. You can also find the breakdown of leave types on some platforms. For example, how many employees are on paid leave, unpaid leave, or comp-off?

Real-time attendance status is useful for industries where workforce allocation is very dynamic. For instance, manufacturing companies can decide production plans for the day based on how many workers are available on site.

# Timesheet Reports

An attendance tracking system also automates timesheet creation. The data in the timesheets builds reports to track work on multiple tasks. You can see a visual representation of who worked on which tasks and for how much time. Such reports are very useful for a lot of purposes, such as resource allocation, project budgeting, project forecasting, workload forecasting, identifying bottlenecks, and even performance measurement.
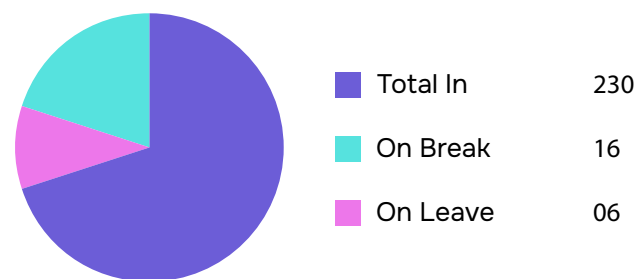
Timesheet-related reports are very helpful when working with contractual employees or freelancers, or in cases where you calculate payments based on hours worked.
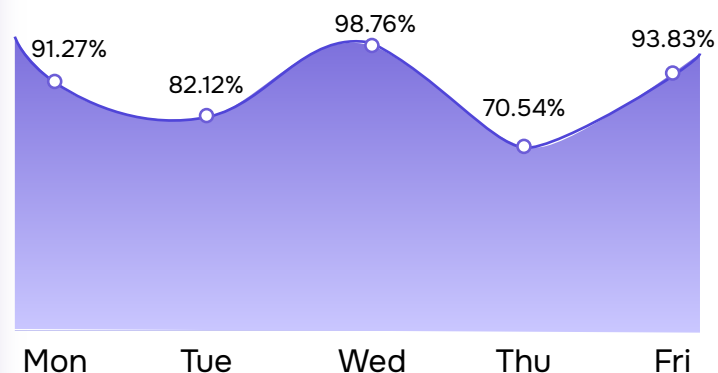
# Attendance Pattern

A monthly graph of employee attendance shows employee behavior on various days of the week. If you can compare the graphs of various months, it'll further strengthen your analysis. The graphs can be plotted for various data points, such as total number of employees present, total late log-ins, total late log-outs, hours worked, etc. Understanding such patterns helps you draft time and leave policies that can improve your organization's performance.

## Sample Time and Attendance Report Dashboard

### Attendance Current Day

| | |
|---|---|
| Total In | 230 |
| On Break | 16 |
| On Leave | 06 |

### Attendance by Weekday

91.27%  82.12%  98.76%  70.54%  93.83%

Mon  Tue  Wed  Thu  Fri

### Absence by Weekday

Planned Leave  Unplanned Leave  Emergency Leave

Count Marks
20
10
0

Monday  Tueday  Wednesday  Thursday  Friday
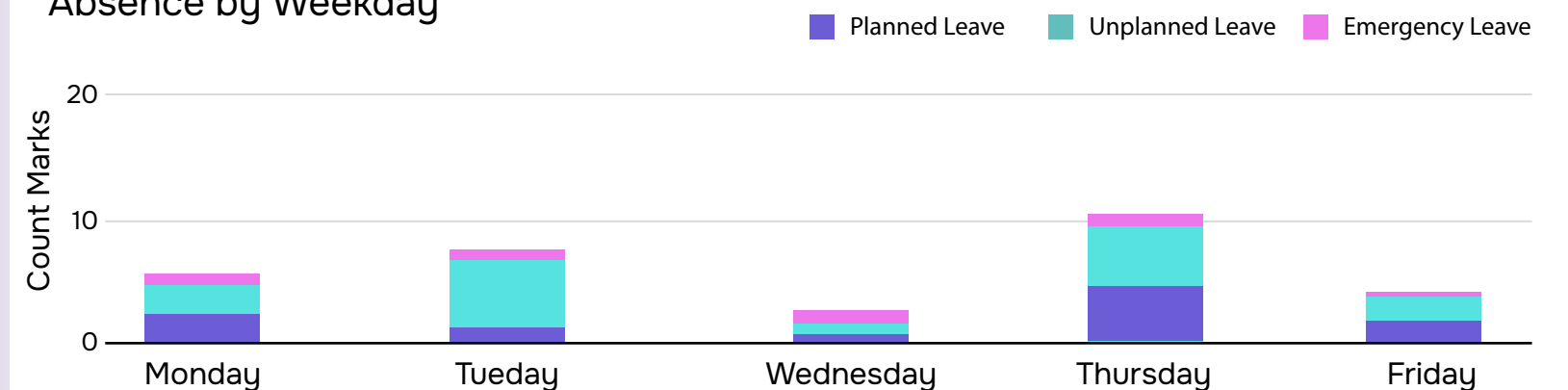
Monthly salary disbursal generates many data points that can be visually represented for insightful patterns and trends. The various components of your employees' remunerations act as the categories of your salary expenses and help build analytical reports.
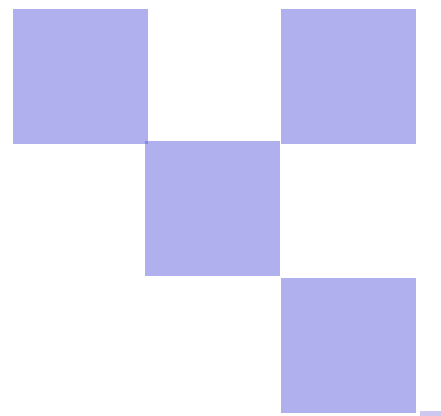
## Payroll Breakdown Report

The Payroll breakdown provides a comprehensive overview of the total costs associated with payroll for a specific period, typically a pay period, month, quarter, or year. It is used by businesses to track and analyze payroll expenses. Key components of a payroll cost summary may include.

- Net Payments to your employees - The actual amount you paid your employees

- Taxes paid to the government

- Pre tax deductions like NPS, VPF, ESI

- Deductions from employees
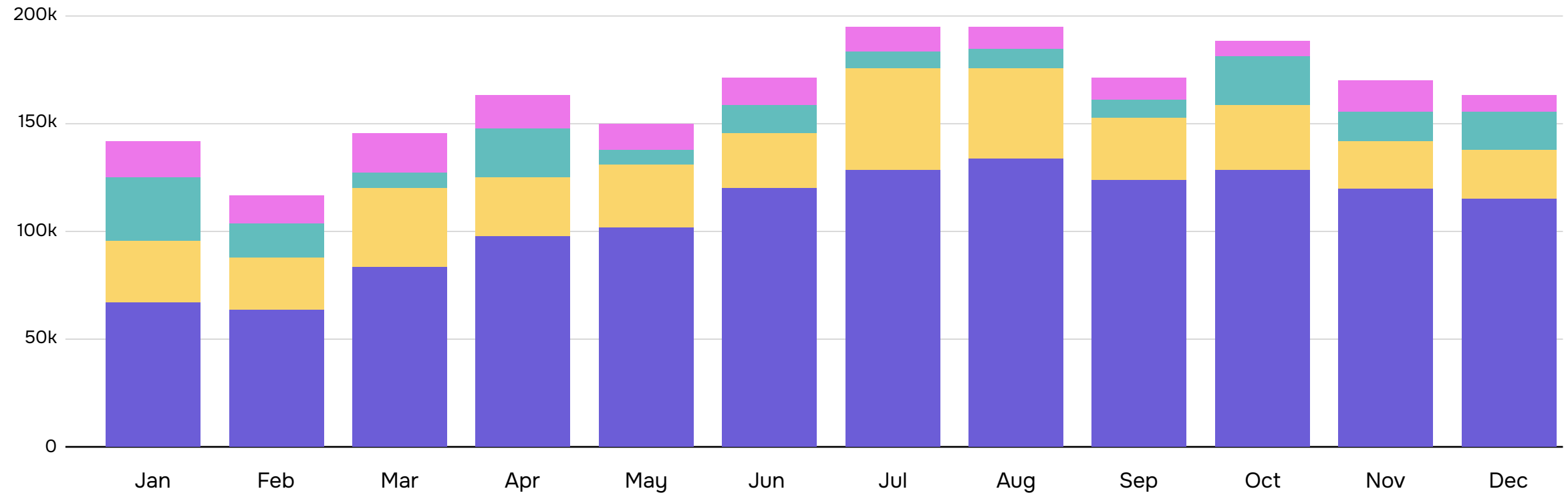
# Deduction Report

The deduction report, often found on your payroll dashboard, provides a detailed breakdown of the various deductions withheld from an employees' gross pay. Common deductions included in this report may vary depending on factors such as company policies, employee benefits, and legal requirements, but they often include EPF, ESI, TDS, etc. This report helps employees understand the breakdown of their earnings and deductions and ensures transparency in payroll processing. Additionally, it assists employers and payroll administrators in accurately calculating payroll taxes, complying with legal requirements, and managing employee benefits effectively.

Deduction reports provide valuable insights into labor costs, benefit expenses, and other payroll-related expenditures. Employers can use this information for budgeting purposes, forecasting future payroll expenses, and making strategic decisions about compensation and benefits.

Sample Deduction Report Dashboard

View Details

EPF
₹ 11,97,638.00

View Details

ESI
₹ 65,505.00

View Details

TDS
₹ 9,16,551.00

# Tax Declaration Report

The Tax declaration report offers essential insights into the tax declaration process. It provides a clear overview of the status of employees' tax declarations, indicating how many employees have submitted their declarations and how many are pending. Additionally, it indicates the number of declarations verified and those remaining to be verified by the payroll team.

Moreover, the report can also highlight the total declared amount that has been verified, facilitating accurate tax calculations and financial planning. With this information, organizations can effectively prioritize tasks, address any outstanding declarations, and ensure compliance with tax regulations.

## Sample Tax Declaration Report Dashboard

Select Financial Year   2024-2025

**Verified IT Declaration Total**
₹ 25,000.00
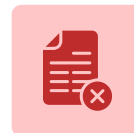
**Unverified IT Declaration Total**
₹ 95,000.00

**Total Employees**
03

| Employee Name | Employee Code | Batch | Verified IT Declaration Total (₹) | Unverified IT Declaration Total (₹) |
|---|---|---|---|---|
| Piyush | TI002 | Full Time | 0.00 | 35,000.00 |
| Vihaan | TI124 | Full Time | 25,000.00 | 0.00 |
| Pavan | TI243 | Full Time | 0.00 | 60,000.00 |

# 04 Expense Management

The expense management module of your HRMS platform allows your employees to submit their expenses. The platform records the expenses and categorizes them to provide you with a holistic view of your overall expenditure.

## Expense Reports

As we said earlier, expense reports are categorized views of your company's expense transactions. The categories can be travel, accommodation, food, or any other, depending on the nature of your business. These reports visualize the outflow of money for different purposes. Such a breakdown helps you in efficient budgeting and prevents you from overspending as well. A detailed analysis can spot loopholes in the reimbursement policies, resulting in better policy formation. Many strategic decisions can also be taken based on expense reports to optimize your organization's bottom line.
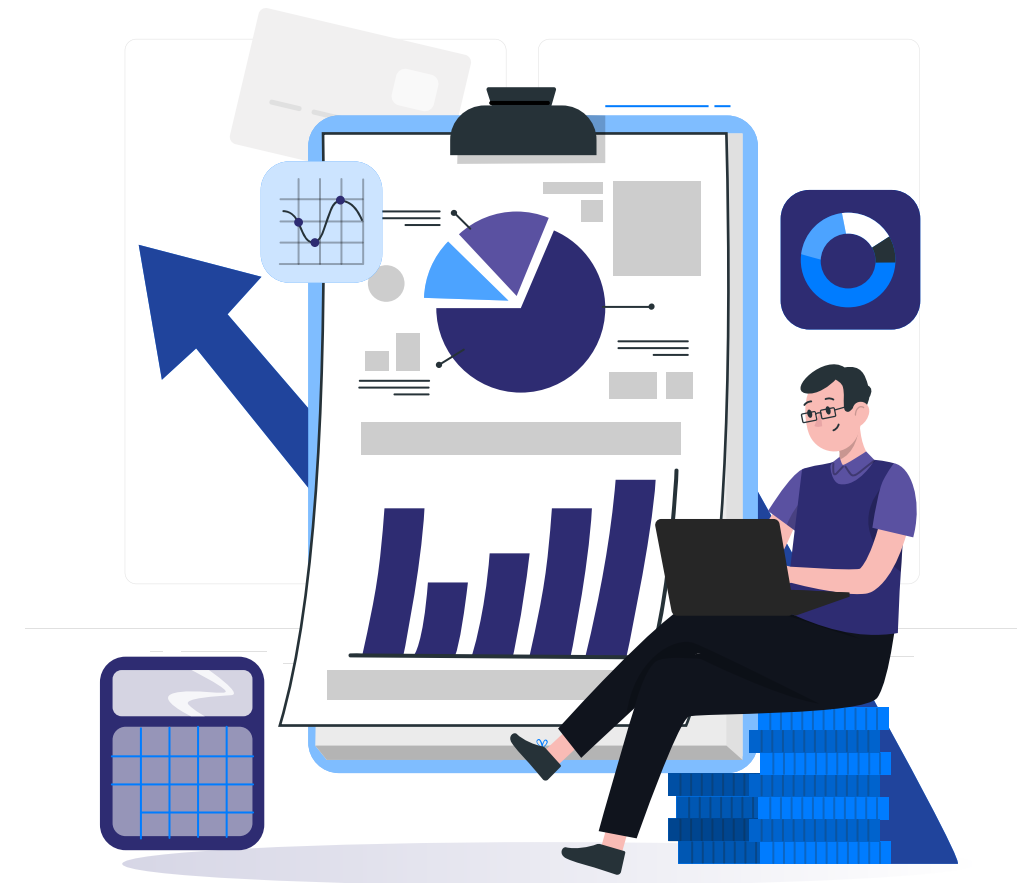
# Sample Expense Management Report Dashboard

**₹ 2.13 Lac**
Overall Air Travel Spend

**₹ 67,255**
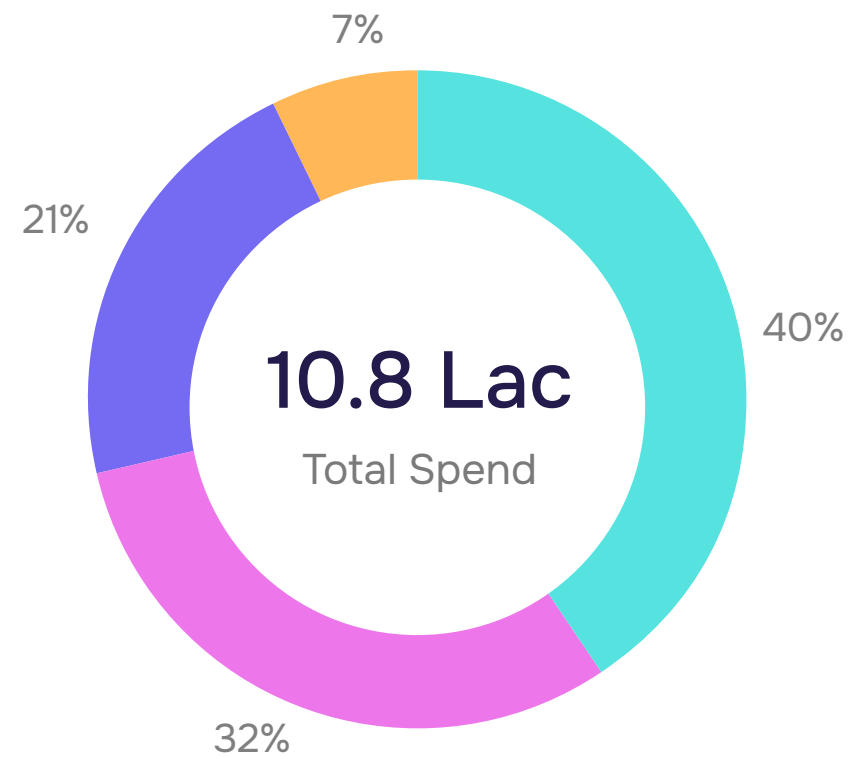Overall Cab Travel Spend

**₹ 5.05 Lac**
Overall Train Travel Spend

**₹ 3.02 Lac**
Overall Hotel Spend

## Monthly Expenses - Category

7%
21%
40%
32%

**10.8 Lac**
Total Spend

- Train Travel Spend
- Hotel Spend
- Air Travel Spend
- Cab Travel Spend

## Monthly Spend Analysis - Department

Categories: IT/Admin, Sales/Marketing, Technology, Payroll/Finance, HR/Recruiter

Y-axis: 0, 10 K, 15 k, 20 K, 25 K, 30 K, 35 K, 40 K

## Monthly Claim Status

Y-axis: Total Number — 0, 3, 6, 9, 12, 15
X-axis: Days — 1 - 10, 11 - 20, 21 - 31

- Pending at Manager
- Pending at HR
- Pending at Finance
- Rejected
- Total Claimed

15
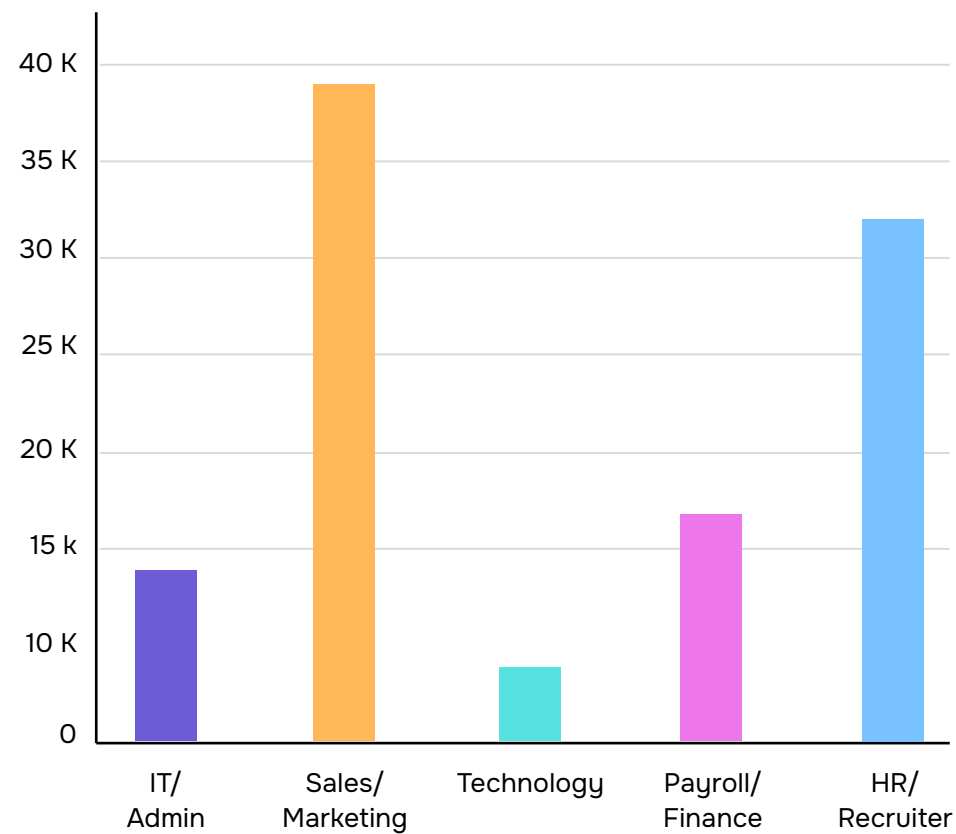
# 05 Performance Management

You can have two types of reports in your HRMS platform at the performance management stage
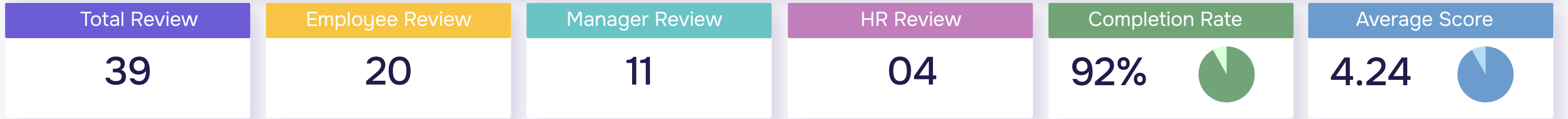
- Reports on the status of your performance appraisal process.

- The performance assessment of your entire workforce.
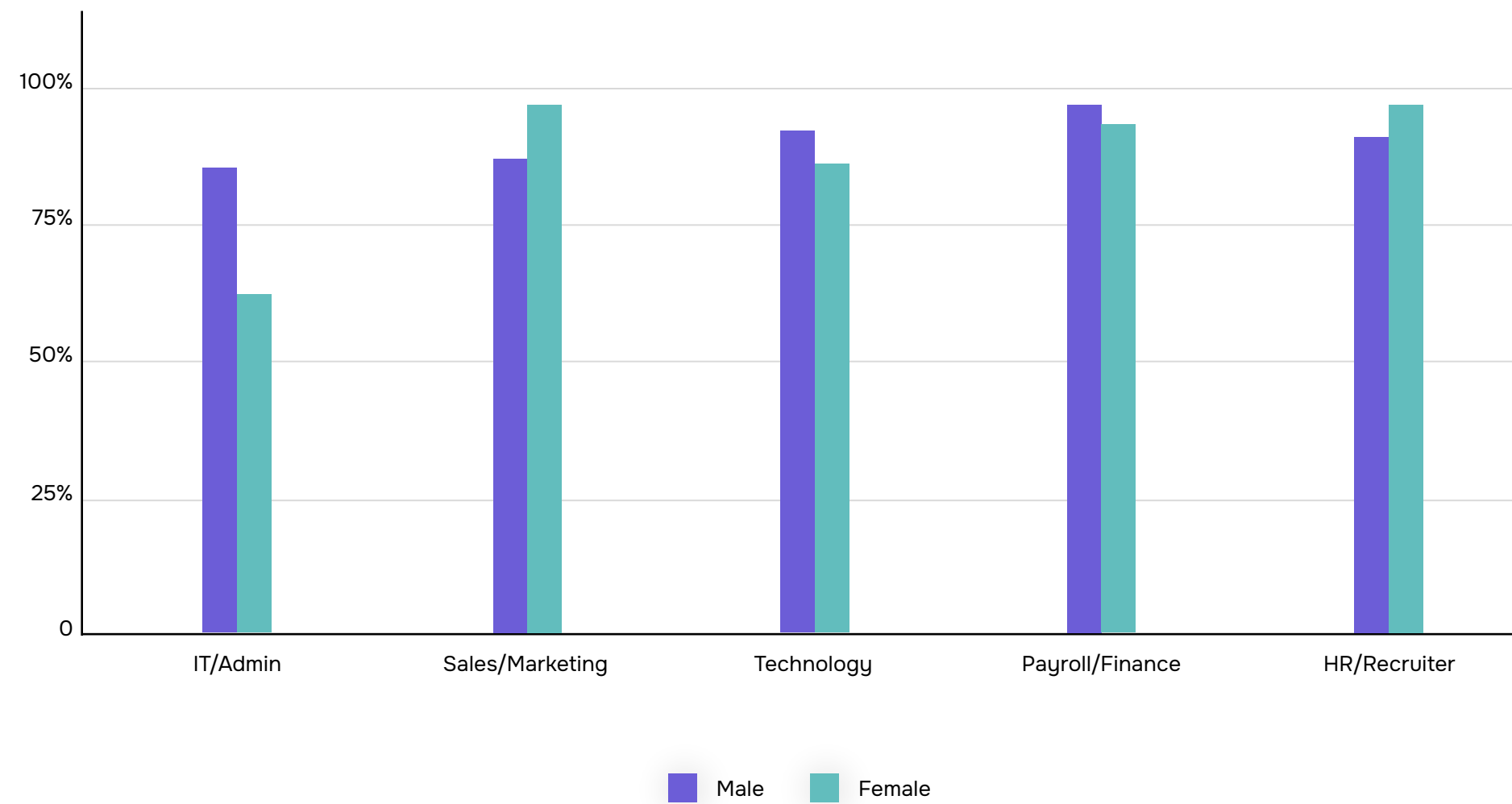
## ◣ Performance Appraisal Status

The status of your performance management process shows the progress of performance appraisals within your organization. By tracking how many employees have completed their appraisals and how many are yet to do so, you understand the overall pace of performance management implementation.This information helps send timely reminders to remaining employees, encouraging them to complete their appraisals promptly.
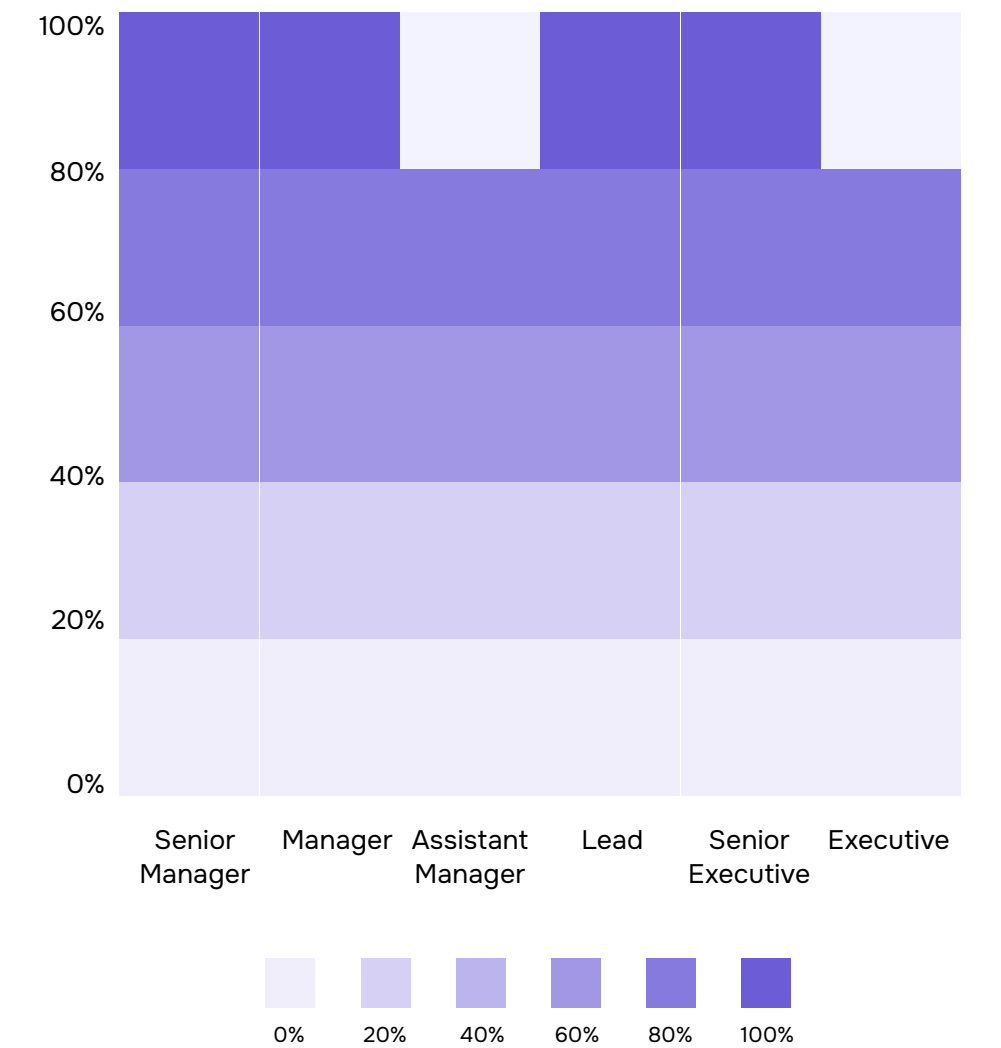
# Sample Performance Report Dashboard

| Total Review | Employee Review | Manager Review | HR Review | Completion Rate | Average Score |
|---|---|---|---|---|---|
| 39 | 20 | 11 | 04 | 92% | 4.24 |

## Performance by Department

100%
75%
50%
25%
0

IT/Admin — Sales/Marketing — Technology — Payroll/Finance — HR/Recruiter

Male   Female

## Performance by Position

100%
80%
60%
40%
20%
0%

Senior Manager — Manager — Assistant Manager — Lead — Senior Executive — Executive

0%   20%   40%   60%   80%   100%

# Performance Assessment of Your Workforce

The PMS module of your HRMS platform can also provide insights into the overall performance of the workforce. Through features such as the 9-box grid matrix or other evaluation frameworks, HRMS platforms can offer a clear picture of how employees are performing collectively.
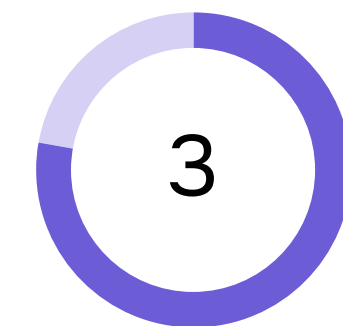
It categorizes employees based on various performance indicators, providing a visual representation of talent distribution and alignment with organizational goals. By utilizing the data generated by the PMS, organizations can identify trends, assess skill gaps, and make informed decisions about talent development and resource allocation

## Sample Individual Annual Performance Assessment Dashboard



Excellent

Good

Acceptable

Unsatisfactory

Quater 1          Quater 2          Quater 3          Quater 4
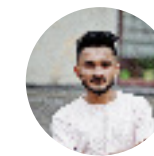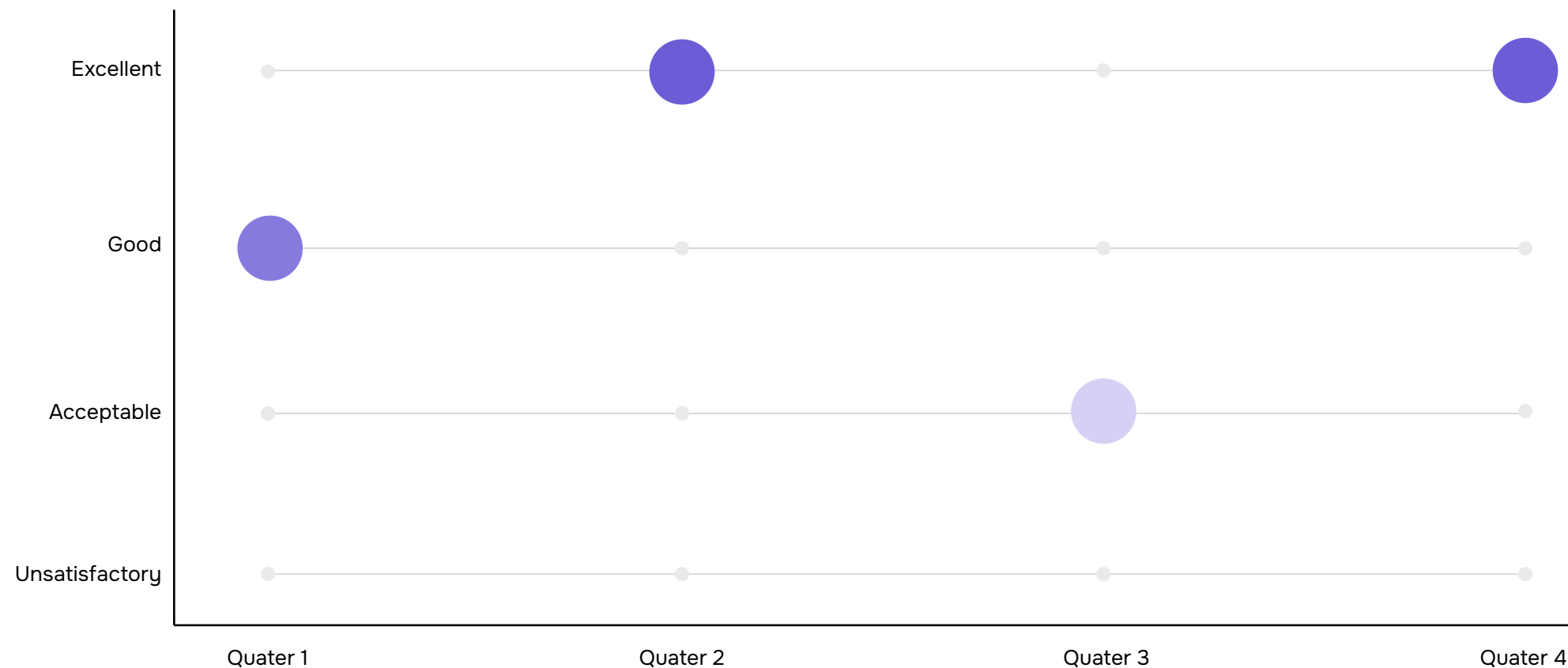
### Piyush Kumar
Senior Executive - Inside sales

**3**

Overall Rating in
Annual FY 2023-24

Final Rating: Good

# 06 Exit Management

Data collection at the exit stage happens mainly during two processes

- Exit Formalities
- Exit Interviews

During exit formalities, HR professionals utilize the HRMS platform to generate and track exit checklists, which outline essential steps such as returning company assets, completing exit interviews, and providing feedback. Additionally, the platform enables HR personnel to monitor the progress of each offboarding task, send automated reminders to both employees and relevant stakeholders, and compile comprehensive reports for auditing purposes

Data collected during exit interviews helps with strategic decision-making. These interviews provide valuable insights into the reasons behind employee departures, offering a deeper understanding of workplace dynamics and potential areas for improvement. For instance, if multiple departing employees cite a lack of career advancement opportunities as a primary reason for leaving during exit interviews, HR and management can reevaluate their talent development programs and succession planning strategies. By addressing these concerns, organizations can enhance employee retention, foster a more positive workplace culture, and ultimately drive long-term organizational success.

# Sample Employee Separation Report Dashboard

**Total Exit**
324
View Details

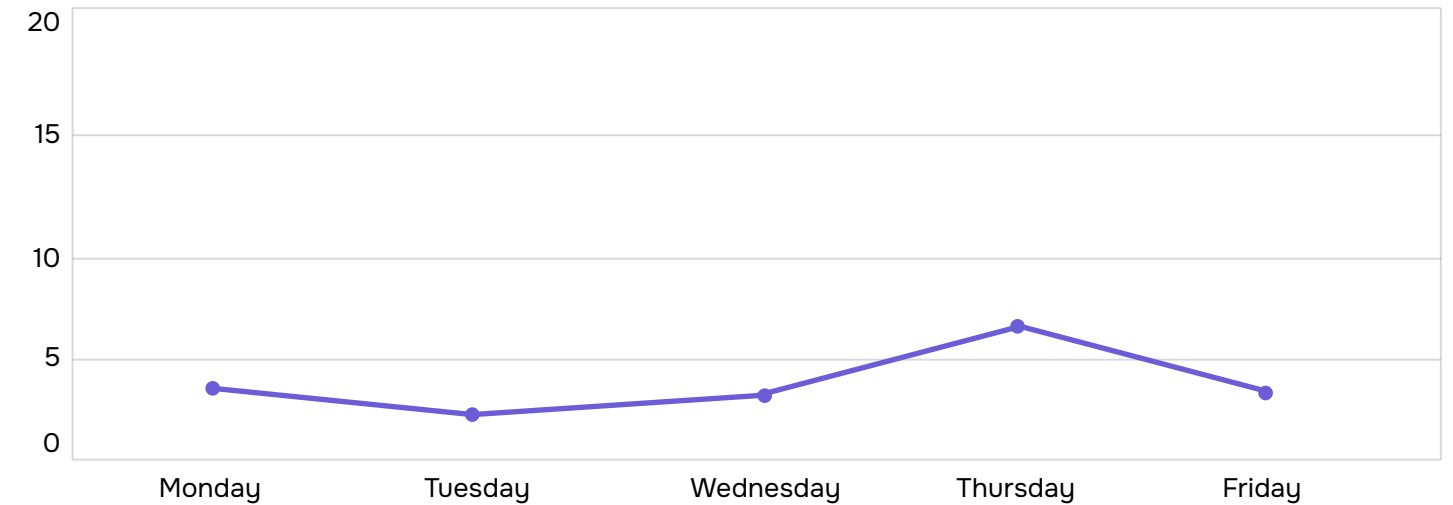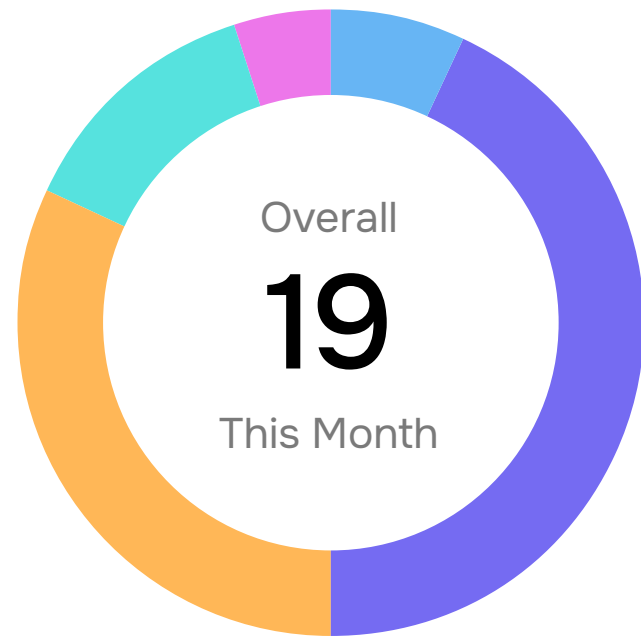**Survey completed**
07
View Details

**Notice Period**
12
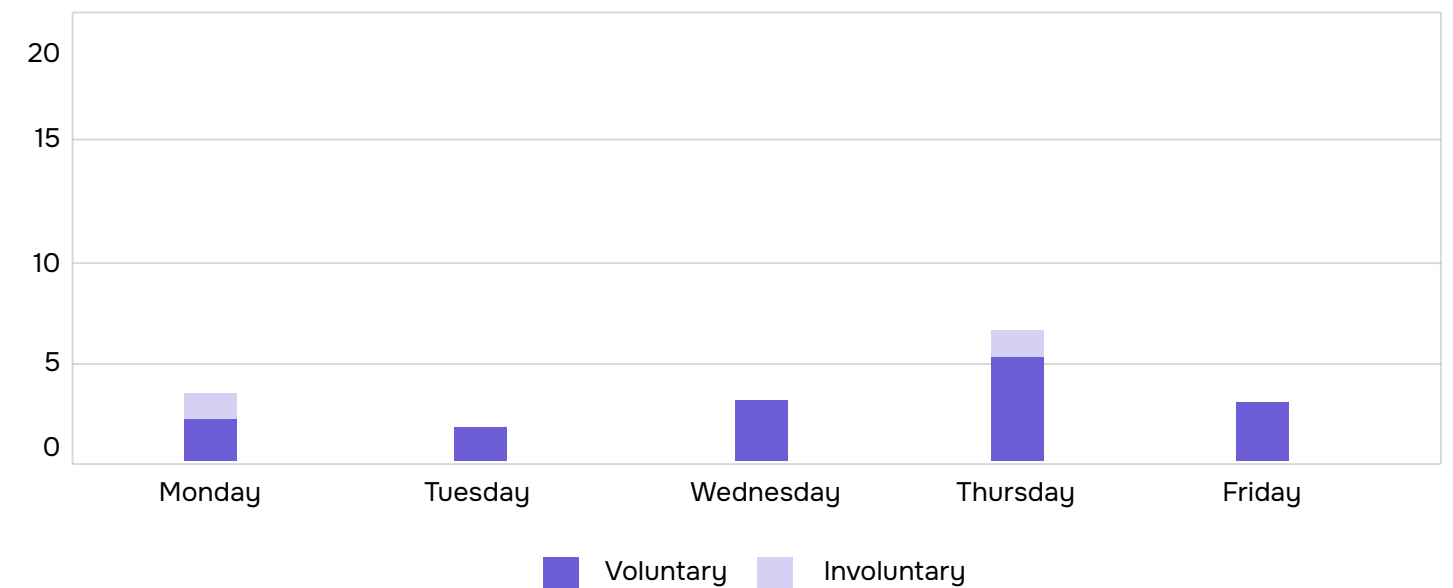View Details

## Employee Exit Report

Week | **Month** | Year



## Employee Exit Reason



Overall
**19**
This Month

| ● Personal / Family Circumstances | **7%** |
| ● Better opportunity | **43%** |
| ● Work-life balance | **32%** |
| ● Career change | **13%** |
| ● Relocation | **5%** |

## Employee Exit Type - Voluntary and Involuntary

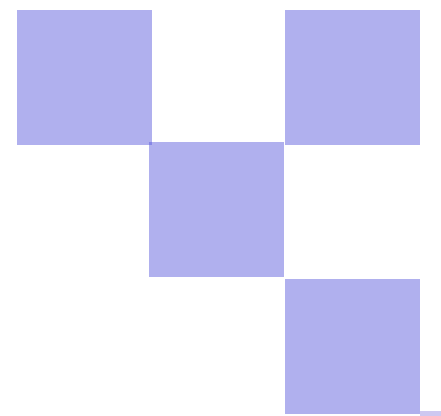Week | **Month** | Year



■ Voluntary    ■ Involuntary

20

**Traditional vs Data-Driven HR**

While traditional HR methods often rely on subjective assessments and standardized processes, data-driven HR management harnesses the power of advanced analytics to drive strategic decision-making and optimize workforce performance.

By leveraging data insights, organizations can gain a deeper understanding of their employees, identify trends, and proactively address issues before they escalate. This shift towards data-driven approaches not only enhances efficiency but also fosters a culture of continuous improvement and innovation within the HR function.

The table below tries to distinguish the two approaches in a detailed manner. You'll notice that the data-driven approach is more empirical, objective, and proactive; whereas the traditional approach is more intuitive, subjective, and reactive. This is why the data-driven approach delivers better results than the traditional approach.

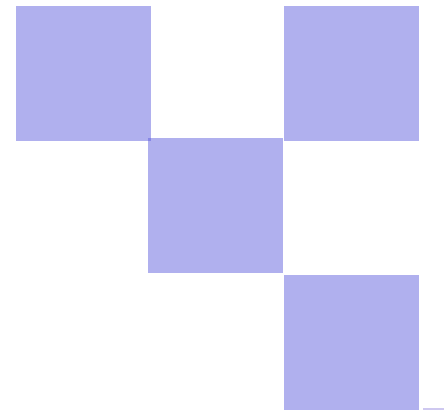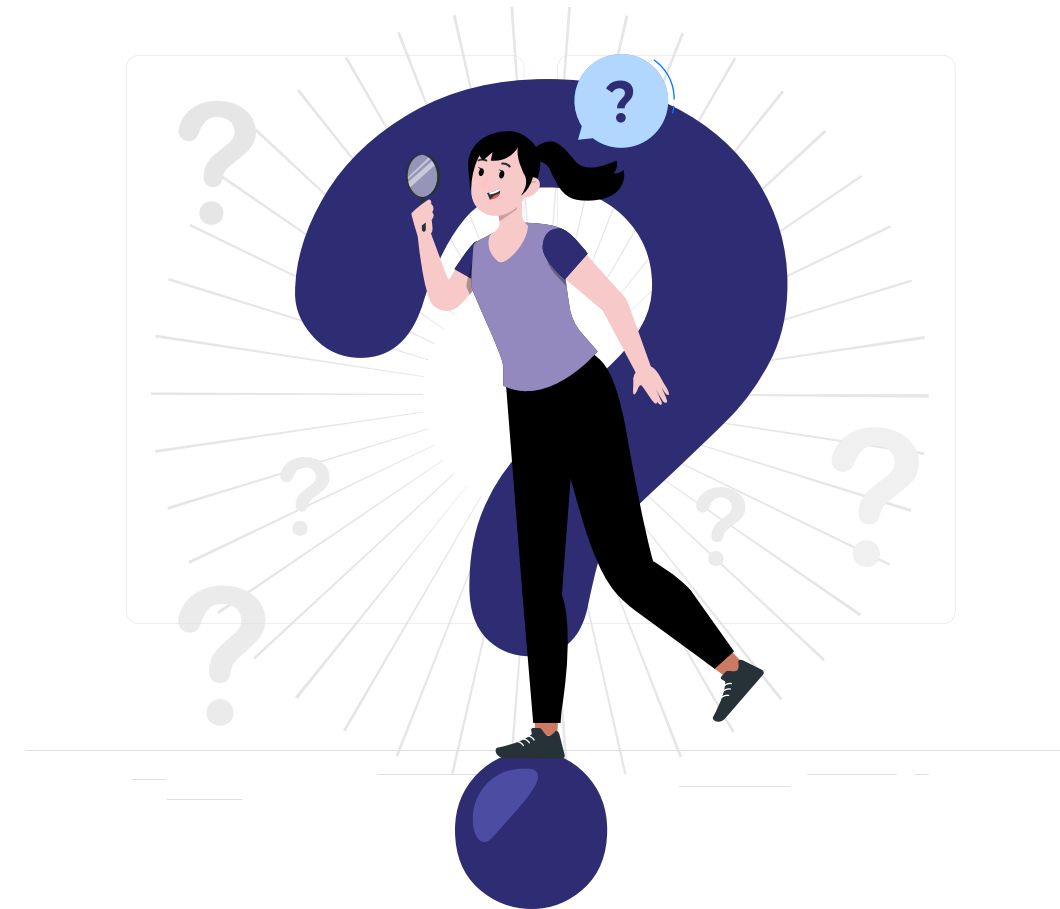Let's have a closer look at the differences between the two approaches

| | Data-Driven Approach | Traditional Approach |
|---|---|---|
| Decision-Making | Relies on empirical evidence and insights derived from data analysis. | Relies on intuition, past experiences, and anecdotal evidence. |
| Evidence-Based Practices | Utilizes data analytics to identify patterns, trends, and correlations, enabling evidence-based HR practices. | Relies on subjective assessments and traditional HR practices without leveraging data-driven insights. |
| Strategic Planning | Emphasizes strategic workforce planning, talent management, and performance optimization based on data-driven insights. | Tends to focus more on reactive HR activities such as administrative tasks and compliance without a strategic focus. |
| Employee Engagement and Retention | Proactively monitors employee engagement, analyzes factors influencing retention, and implements targeted interventions based on data insights. | May overlook employee engagement issues and rely on generic retention strategies without considering individualized needs or underlying causes. |
| Recruitment and Hiring | Utilizes data analytics to optimize recruitment processes, identify top talent sources, and improve candidate selection based on performance data. | Relies on traditional recruitment methods, such as job postings and referrals, without leveraging data to assess recruitment effectiveness or candidate quality. |
| Performance Management and Development | Tracks and analyzes key performance indicators (KPIs), identifies performance trends, and uses data to tailor training and development initiatives. | Relies on subjective performance evaluations and standardized training programs without leveraging data insights to customize development plans. |

# What's Next?

Adopting a data-driven approach in HR management offers numerous benefits for companies seeking to enhance their workforce effectiveness and organizational performance. By leveraging data analytics, organizations can gain valuable insights into employee behaviors, trends, and preferences, enabling them to make more informed decisions and implement targeted interventions to improve employee engagement, retention, and productivity.

Additionally, data-driven HR management enables organizations to identify talent gaps, optimize recruitment processes, and align workforce strategies with business objectives more effectively. Leveraging technology and HRMS platforms further streamlines this process, providing organizations with the tools and capabilities needed to collect, analyze, and act upon HR data efficiently and at scale. With technology-enabled data-driven HR management, companies can unlock the full potential of their workforce and drive sustainable growth in today's competitive business landscape.

# Data-Driven HCM

Leveraging Analytics for Strategic Decision-Making

TeamLease
HCM

🌐 www.teamleasehcm.ai