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DIGITALIZATION OF LEAVE AND ATTENDENCE MANAGEMENT THROUGH ERP AT AEROSPACE DESIGN & INNOVATION CENTER (ADIC)

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The success in carrying out this project is all up to the Almighty Allah and the guidance and blessings that allowed the project to finish successfully.

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Lastly, we owe a lot to our family because they have been a source of great motivation, patience, and prayers to us during our academic life.

AEROSPACE DESIGN AND INNOVATION CENTRE

NATIONAL AEROSPACE SCIENCE AND TECHNOLOGY PARK

PROJECT COMPLETION CERTIFICATE

This is to certify that the project reported entitled:

"Digitalization of Leave and Attendance Management through ERP at ADIC"

has been successfully completed by the following students

- **Zainab Khurram** (01-221242-016)
- **Haris Hussain Kiyani** (01-321242-008)

This project was conducted at **Aerospace Design & Innovation Centre (ADIC)** under the guidance and support of our team. The students have completed the work regarding our problem before the completion of deadline.

The work submitted is bonafide record of their efforts during their time with us and reflects their commitment to performance excellence and growth.

We appreciate their contribution and wish them success in their future endeavors.

08 December, 2025

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EXECUTIVE SUMMARY

The project will look at the design, development, and implementation of the ERP-based Leave Management and Attendance Management systems at the Aerospace Design and Innovation Centre (ADIC). Before this research, critical HR processes at ADIC were based on a manual and paper-based system, which led to administrative inefficiency, inaccuracy of the data, and delayed approval, as well as insufficient visibility for managers. These are the main HR processes to be digitalized and automated through the implementation of bespoke modules in the current ERP system used by ADIC.

The project was able to determine the key operational gaps in the current system using observations, questionnaires, stakeholder interviews, and requirement analysis. Consequently, the applications were developed on the basis of these findings to have a modular architecture that provides role-based access control to make sure that policies are complied with, data is secure, and the organization is aligned. The systems put in place automated leave application procedures, approval lines, attendance tracking, and real-time reporting, and ensured that there was integration of leave and attendance information.

User acceptance testing, phased deployment, and system testing ensured that there was an improvement in data accuracy, transparency, processing time, and administrative efficiency. This implementation was extremely helpful in reducing the workload of HR staff members and increasing the decision-making opportunities of the management, depending on real-time dashboards and standard reporting. Although there were challenges that were encountered in the beginning in regards to user adaptation and change management, the final results were encouraging.

The project shows that effective ERP improvements would make remarkable improvements to the HR operational effectiveness within technology-driven organizations. It also offers a platform for future ERP growth, such as payroll and performance management modules, which will help to achieve long-term organizational sustainability and strategic HR change at ADIC.

CHAPTER 1: INTRODUCTION

1.1 Overview of Aerospace Design & Innovation Centre (ADIC)

The Aerospace Design and Innovation Centre (ADIC) is an organization that was formed as a strategy-driven technological organization designed to enhance the national capacity in the engineering of aerospace, cyber technologies, as well as information technology. The Centre serves as the centre of advanced research, system design, applied engineering solutions, and technological innovation, making it an important partner to the defense and industrial development programs. The mandate of ADIC focuses on innovation, aircraft-level accuracy in engineering, and merging of state-of-the-art technologies to facilitate complicated and mission-based projects.

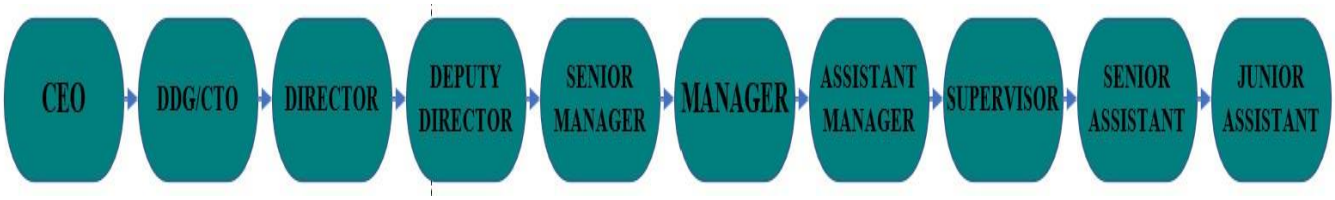
ADIC has a highly specialized environment, where the teams of engineers, researchers, system analysts, and technical experts can work on high-value and time-sensitive projects. This type of working environment needs to have well-organized organizational operations, clear governance systems, and effective administrative support systems to maintain accuracy, accountability, and excellence of performance. In this regard, strong internal systems are needed to be able to control technical operations and organizational resources.

Human Resource Management (HRM) is a key component of ADIC because of the technicality of its people and the project-based format of the work. The management of talented professionals would be based on the correct workforce data, adherence to organizational policy, and the provision of management with the decision-making support in time. High productivity of the workforce, tracking of the availability of the employees, compliance with the policies, and long-term organizational planning require effective HR operations, accordingly.

Despite ADIC having an Enterprise Resource Planning (ERP) system to operate with the different functions of the organization, some important HR modules, namely Leave Management and Attendance Management, were not developed and implemented during the time of this project. Consequently, the HR functions concerning employee attendance and leave tracking remained dependent on manual and semi-manual methods. This gap reduced the effectiveness of the ERP system and posed a problem in the adoption of complete digital integration of HR functions.

ADIC follows a structured hierarchical system to ensure clear reporting lines and efficient decision-making. The hierarchy is as follows:

- **Chief Executive Officer (CEO)** – Responsible for overall strategic direction and management of the organization.
- **Deputy Director General (DDG)** – Assists the CEO in overseeing the organization and monitors departmental compliance and performance.
- **Director** – Manages specific departments and reports to the DDG.
- **Deputy Director** – Supports the Director in departmental operations and ensures policy compliance.
- **Senior Manager** – Oversees high-level operational tasks and reports to the Deputy Director.
- **Manager** – Manages departmental activities and supervises team performance under the Senior Manager.
- **Assistant Manager** – Handles daily departmental tasks and supports the Manager.
- S**upervisor** – Oversees staff and ensures tasks are executed as instructed.
- **Senior Assistant** – Performs administrative tasks with more experience and responsibility than Junior Assistants.
- **Junior Assistant** – Handles routine administrative work and provides general support within the department.



1.2 Project Background and Relevance

The approved project proposal is based on the digitalization and automation of the processes of leave and attendance management at ADIC, based on the creation and implementation of ERP-based modules. Before the onset of this project, leave applications were done manually by use of a physical paper-based form, which employees used to present to their respective

supervisors and forward them to the HR Directorate, where they maintained records. In the same manner, attendance of employees was done manually using paper registers at the department levels and subsequently unified and forwarded to the HR to be processed further.

1.3 Problem Statement

There was a conventional way of operations as there were multiple operational problems and they stood out, such as a lot of paperwork and slowness in approvals, duplication of efforts and lack of consistency in employee records. The old-fashioned approach of managing attendance and leaves provided more chances of human error, as well as less accurate data, and made the process of accessing historical data a time-consuming and inefficient one. Additionally, the lack of real-time data restricted the ability of HR to develop reports in time, track trends, and aid informed decision-making by the managers.

The manual HR practices are becoming less compatible with the operational efficiency and organizational agility in a modern organizational setting, especially in one that uses highly technological practices like ADIC. Digital systems are important in modern organizations to facilitate workflow, improve transparency, and allow data-driven management. Therefore, the elaboration of Leave and Attendance Management modules in the current ERP system of ADIC is topical and the one that is required to mitigate operational gaps in the current system and facilitate the overall digital transformation processes in this organization.

1.4 Project Objectives

The objectives of the project are mentioned as below:

- **To digitalized and automate** the leave and attendance management process at ADIC through ERP-based modules
- **To enhance accuracy, transparency and real-time visibility** of employee leave and attendance data for effective managerial decision-making.
- **To reduce administrative workload and ensure policy compliance** by implementing standardize, role-based approval workflows.

1.5 Strategic Importance and Business Context

The strategic value of this project is that it has a direct contribution towards operational excellence, administrative transparency, and adherence to organizational policies at ADIC. The adoption of leave and attendance modules based on ERP will facilitate the real-time data capture, the centralization of the records, and the automatic generation of reports; thus, the workload on the administrative personnel will be greatly decreased, and the number of administrators needing to be involved in the data input will be minimized.

On the business side, a digital HR system improves the accuracy of data, works on internal controls, and governance by providing standard procedures in each department. With access to the correct record of attendance and leave data, the management can track the availability of the workforce, determine trends in productivity, and make sound decisions regarding project planning and resource allocation. Also, self-service functions like online leave applications and attendance checks can improve the user experience, decrease the reliance on HR, and make employees feel more satisfied in general.

This project is in line with best practices in the global industry, where companies are moving away from fragmented and manual HR practices in favor of integrated ERP-based practices. These systems are scalable, sustainable, and cost-effective in the long run, and help in filling the requirement of compliance with institutional policies and regulatory requirements. In the context of the ADIC business, the project is aligned with the strategic goal of the organization to use technology to enhance its operations internally and improve its standing as an institution that is modern and based on innovation.

CHAPTER 2: PROBLEM DEFINITION AND REQUIREMENT ANALYSIS

2.1 Introduction to the Problem Context

The human resource information systems (HRIS) play an important role in organizational efficiency, accuracy, and transparency. Manual administrative processes may create inefficiencies and other operational problems in technology-based organizations, especially research and innovation-oriented ones.

One of the enterprises that had deployed an Enterprise Resource Planning (ERP) system is the Aerospace Design and Innovation Centre (ADIC); nonetheless, the first impression of our group was that some of the essential HR functions, including leave and attendance management, were still being done manually. This dependence on manual work led to delays, accuracy and further burden to the HR staff.

We worked with the organization with the help of the representative of the HR Directorate, Mr. Daniyal Ahmad, Assistant Manager HR. Based on the observations performed during the visit, we suggested that the leave and the attendance management functions be completely digitalized within the ERP framework.

In order to have a clear picture of the current challenges, we undertook questionnaires to the concerned stakeholders. Follow-up questionnaires were conducted following the introduction of the ERP-based leave and attendance modules to assess the effectiveness of the systems and to receive information about the usability, precision, and general performance.

2.2 Problem Identification

2.2.1 Existing Leave Management Practices

In ADIC, the system of leave management was formerly performed manually, using paper-based forms. They had to use manual methods of filling leave application forms and handing them over to their immediate supervisors to be processed. Upon approval, these forms were availed to

the HR Directorate, which would then store them and subsequently use them as a reference whenever a record was to be kept or a report made. This was not automated and involved several physical points of contact that prolonged approvals and relied more on manual follow-ups.

Lack of an electronic tracking system meant that the employees could not see much of the status of their leave applications and their leftover leave balances. Consequently, the misconceptions and conflicts connected to leave entitlements were frequent, which impacted the satisfaction of the employees and their confidence in HR-related procedures.

2.2.2 Current Attendance Management Practices

Each of the departments took attendance at ADIC using paper sheets manually. Employee presence, lateness, or absence was marked daily by attendance officers or other designated people. These sheets were subsequently brought together and forwarded to HR, where they could be verified and stored. The absence of a standardized digital format resulted in discrepancies in the attendance recording practices in the various departments.

The problems of manual attendance records included errors like not being filled in registers, wrong marks, and loss or damage of registers. In addition to that, the timeliness of attendance information being submitted late restricted the ability of HR to track punctuality and absenteeism in real-time.

2.2.3 Inefficiencies in Operations and Administration

This manual nature of the leave and attendance administration became a major burden on the administration. To compile and verify data and generate reports manually, the HR staff had to spend a lot of time. The processes that are carried out by the HR team use resources that could be used on such strategic efforts as talent development, performance management, and employee engagement.

Moreover, there was no integration of all systems, and the records in the departments and HR were not consistent. These inefficiencies negatively impacted the overall productivity of the organization.

2.2.4 Discrepancies in Data, Transparency and Compliance

The manual systems were very challenging to the accuracy and transparency of data. The lack of reliability in the data entry, loss of documents, and the inconsistency of records format made it challenging to maintain reliable HR information. Moreover, there was no system to test and validate compliance with the company and leave regulations and with attendance, as it is not automated.

Audit and governance-wise wise this absence of centralized digital records restricted traceability and accountability, and the organization was prone to compliance risks.

2.3 Impact of the Problem on Management and Decision-Making

2.3.1 The absence of Real-Time Information

The manual system did not allow the management to have real-time information about the attendance and leaves of the employees. The decision-makers could not track the trends of absenteeism, detect the gaps in resources, and schedule the project timeline. Such constraints had direct impacts on operational planning and performance in an organization like ADIC, which is project-based.

2.3.2 Scanty Analytical and Reporting Practices

Lack of digital data limited capability of the organization to carry out HR analytics. Creating comparative reports, trend analysis, or departmental summaries entailed a lot of manual work and was not, in most cases, organized because of time constraints. As a result, the decisions taken by HR are mostly reactive and not data-driven.

2.4 Organizational Needs Assessment

2.4.1 Digital Transformation is required in HR Operations.

The results of the questionnaires and observations pointed to the fact that the organization is in need of digital transformation in HR operations. Employees and Directors reported the

necessity of a faster, more open, and standardized system which would allow performing daily HR tasks without using too much paperwork.

2.4.2. Need to have a centralized and integrated system.

ADIC needed an in-place system that would act as one point of leave and attendance information. It was found necessary to integrate it with the current ERP infrastructure to guarantee the compatibility of the system with the existing system, scalability, and compatibility with the payroll and performance management modules in the future.

2.5 System Requirements Analysis

2.5.1 Functional Requirements

The proposed system needed to:

- Do away with paper-based processes
- Automate the process of leave application, approval, and record maintenance
- Real-time attendance data capture and storage
- Create auto reports and dashboards
- Provision of employee self-service features

2.5.2 Non-Functional Requirements

Non-functional requirements were:

- Data security and role-based access control
- Reliability of the systems and accuracy of data
- Easy-to-use interface design
- Scalability in order to promote organizational growth
- Internal HR policies and governance standards

2.6 Managerial and Analytical Tools employed

2.6.1 SWOT Analysis

The SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis helped to analyze the internal capabilities of ADIC and the external environment in the context of the proposed ERP-based solution.

Strengths were that the company had an existing ERP infrastructure, management was highly supportive of the digital efforts, and the team was technically competent and able to scale to the new systems. The above strengths gave the firm a strong base to use when implementing digital HR modules.

Weaknesses were mainly linked to manual HR processes, data that is poorly managed, and the administrative strain that is imposed on HR staff. Such weaknesses were the direct causes of the inefficiency in the operations and the necessity to automate the system.

The areas of digital transformation, HR analytics, and system integration were found to have **opportunities**. The adoption of leave and attendance modules based on ERP provided the possibilities of advanced reporting, data-driven decision-making, and integration with the payroll and performance management systems in the future.

Threats were there may be employee resistance to change, data migration concerns, and the risk of early implementation problems. Such risks supported the significance of change management and user training.

2.6.2 Root Cause Analysis

The lack of specific ERP leave and attendance modules was revealed as the main reason for inefficiency by the root cause analysis. This shortcoming necessitated the use of manual documentation, resulting in mistakes, time wastage, and reduced visibility.

2.6.3 Requirement Mapping

The HR policies, approval hierarchies, and rules of compliance were systematically transformed into functional system requirements. This has ensured that the proposed ERP solution clearly reflected the institutional policies and helped in the same implementation across the departments.

2.7 Connection of the Problem Definition and Project Objectives

The project goals and system design were directly based on the clearly defined problems and structured analysis of the requirements. The alignment of the needs in the organization with the technological capabilities under the project assures that the leave and attendance management modules proposed as based on ERP, cater to the inefficiencies in the operations of the organization as well as the strategic HR objectives of ADIC.

CHAPTER 3: DESIGN AND IMPLEMENTATION

3.1 Introduction to System Design and Implementation

After the discovery of inefficiencies in operations and analysis of requirements, as in the previous chapter, this chapter offers an ERP-based Leave Management and Attendance Management system design and implementation at the Aerospace Design and Innovation Centre (ADIC). The main idea behind this project was to transform the disjointed, manual, paper-based HR operations to a centralized, automated, and policy-based online solution that improves operational effectiveness, accuracy, transparency, and managerial control.

The system design was made to closely coincide with the organizational structure, HR policies, and approvals hierarchies of ADIC. The specific focus was on making the data secure, implementing role-based access control, and scalability of the system to accommodate future growth and integration with other ERP modules like payroll and performance management.

3.2 System Design Overview

3.2.1 Architectural Design and Technology Framework

The system was designed to be compatible, reliable, and flexible, and therefore, the main programming language and relational database management system were PHP and MySQL, respectively. The reason behind using PHP was its strength, ease of maintenance, and compatibility with web-based ERP applications, and MySQL offered a secure and scalable platform of structured data storage and retrieval. HTML, CSS, and JavaScript were used to develop user-friendly interfaces. Role-based access control (RBAC) was implemented to ensure data security and authorization and Built-in dashboards and automated reports were designed for managerial and HR use.

The system architecture is flexible in nature, which means that the Leave Management System (LMS) and Attendance Management System (AMS) can be used as separate but completely integrated ERP modules. Such flexibility implies that it will be possible to make

improvements (additional enhancements), upgrade the system, and integrate without breaking the current operations.

3.2.2 Migration process and preparation of data.

Before the implementation of the system, the records of employee leaves were being handled in Excel spreadsheets. These records were used to enable the initiation of the leave balances in the new system. It was a thorough preparation process of data that was done to guarantee accuracy and completeness. This was done through data cleaning, validation, and validation with the HR Directorate.

The data was subsequently moved to the LMS database through organized queries after validation. This would be to ensure that the balances of the leave of each employee were captured at the system go-live. Migration of historical data was a key requirement to the continuity, employee trust, and system credibility.

3.2.3 Design of Role-Based Access Control and Security

Role-based access control model was adopted to design the system in such a manner that it provides data confidentiality, integrity, and accountability. All users are given a role according to their position in the organization, which defines the degree of access to the system and functional authority. Such a design eliminates unauthorized access, minimizes potential manipulation of data, and ensures that the decision-making authority is within the organizational policy.

3.3 Leave Management System (LMS)

3.3.1 Overview of the Leave Management System

The Leave Management System (LMS) has been created to completely digitalize the leave cycle, such as the application, receiving, tracking, editing, cancelling and storing of leave. The system provides close compliance with the HR policies of ADIC and provides employees, management, and HR administrators with real-time access to information regarding leaves.

THE LOGIN PORTAL

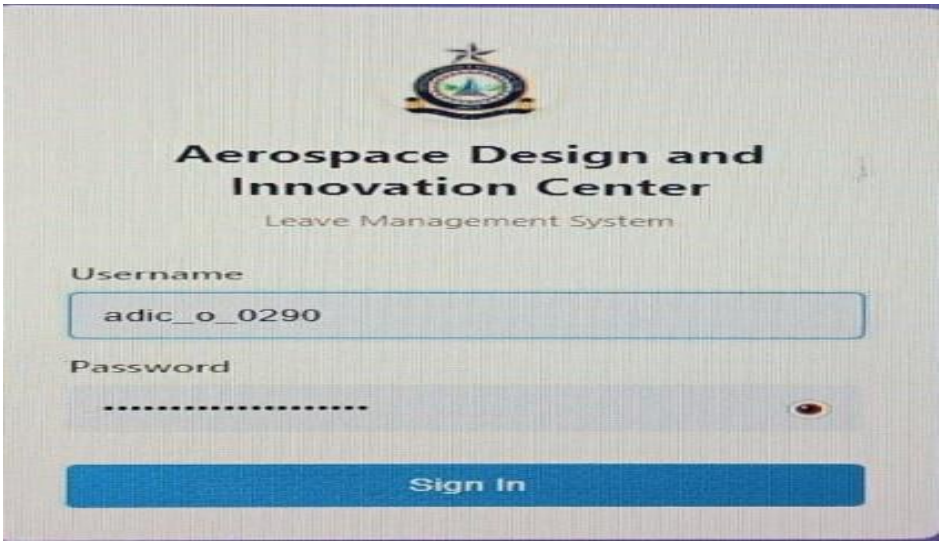


Figure 1: Login Portal

LEAVE FORM

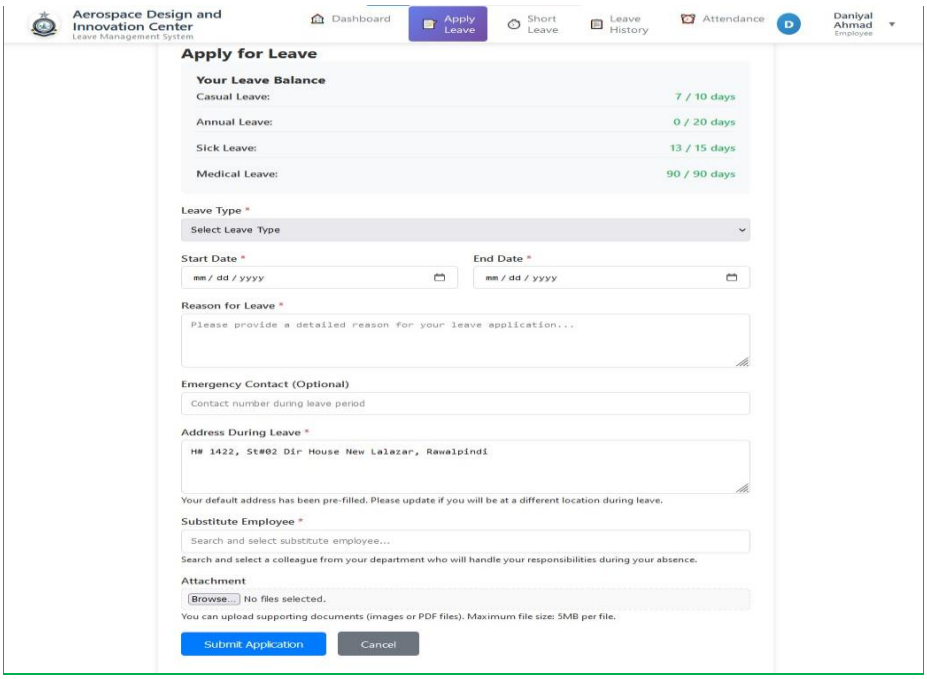


Figure 2: Leave Form

SHORT LEAVE FORM

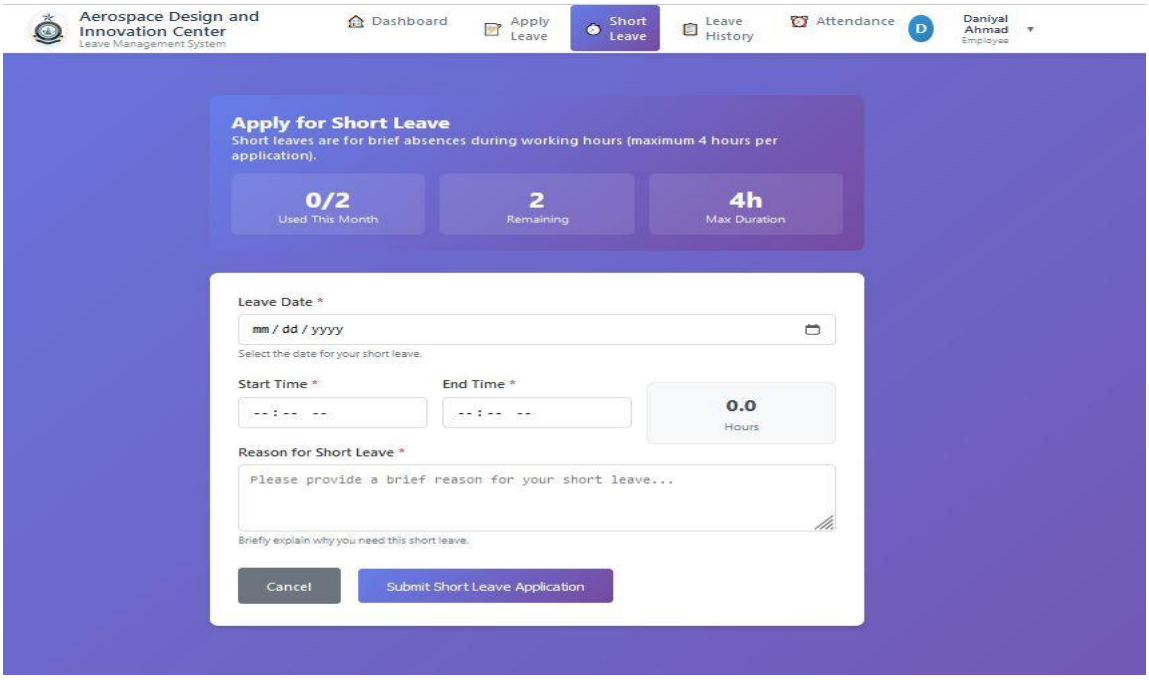


Figure 3: Short Leave Form

LEAVE HISTORY

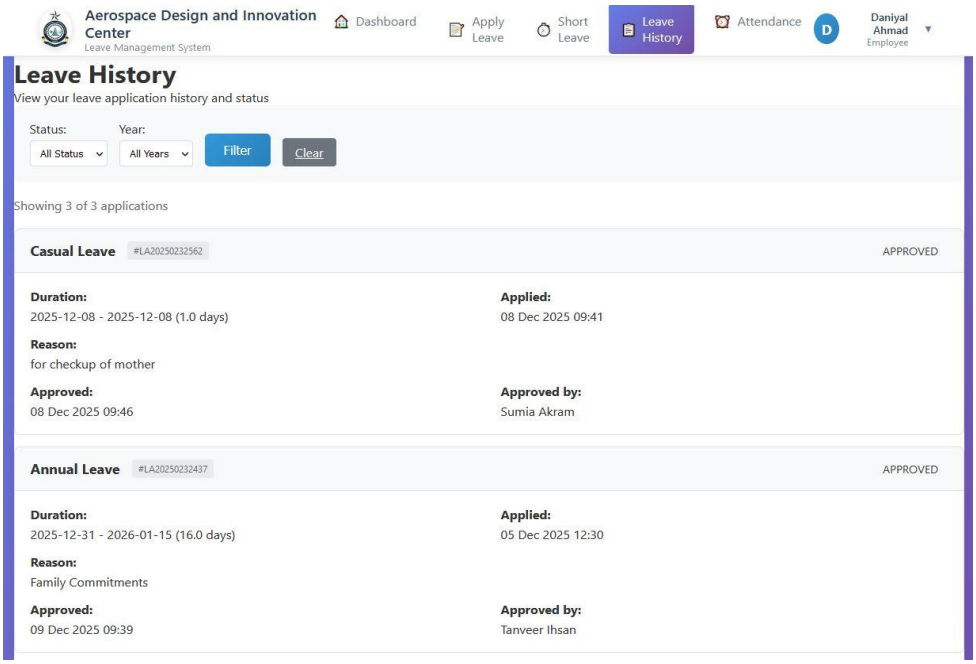


Figure 4: Leave History

3.3.2 Employee Portal (Self-Service Module)

Employee Portal is a self-service portal that aims to increase transparency and lessen HR dependency. Depending on the approved leave structure adopted by ADIC, each employee can see their leave account, which comprises:

- 20 Annual Leaves
- 10 Casual Leaves
- 90 Medical Leaves
- 15 Sick Leaves
- 30 EX-Pakistan Leaves
- 90 Maternity Leaves
- 30 Unpaid Leaves
- 2 Short Leaves.

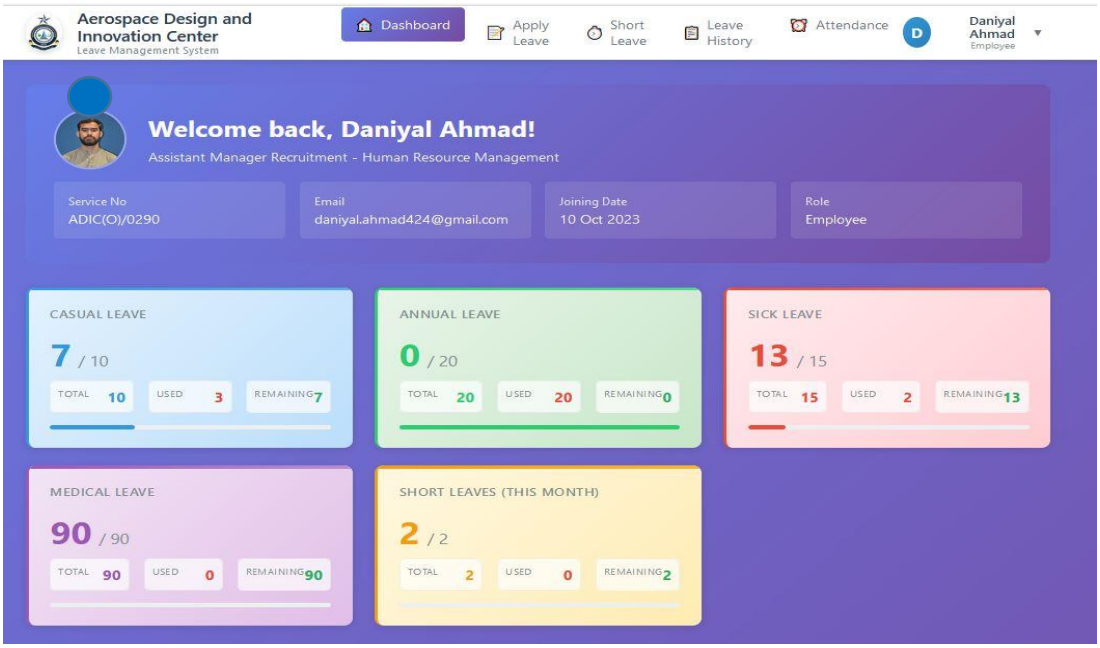


Figure 5: Employee LMS Dashboard

The employees can use the portal to apply for different types of leaves, upload necessary supporting documents where needed, monitor application status, and view their full leave history.

The Important Features of the Employee LMS Interface

- Dashboard with the leave balances and the status of the application.
- Apply Leave and Apply Short Leave modules.
- Quit History with accepted, declined, and canceled records.
- Currently, the profile is the employee information profile.

CEO Portal

The CEO Portal gives an organization-wide perspective of the use of leaves and the availability of the workforce. It depicts consolidated dashboards that provide summaries of departments, trends of leaves, and metrics of policy compliance. This portal facilitates those decisions that are at a high level, and also ensures that there is an oversight of the leaves that need top-level approval authority.

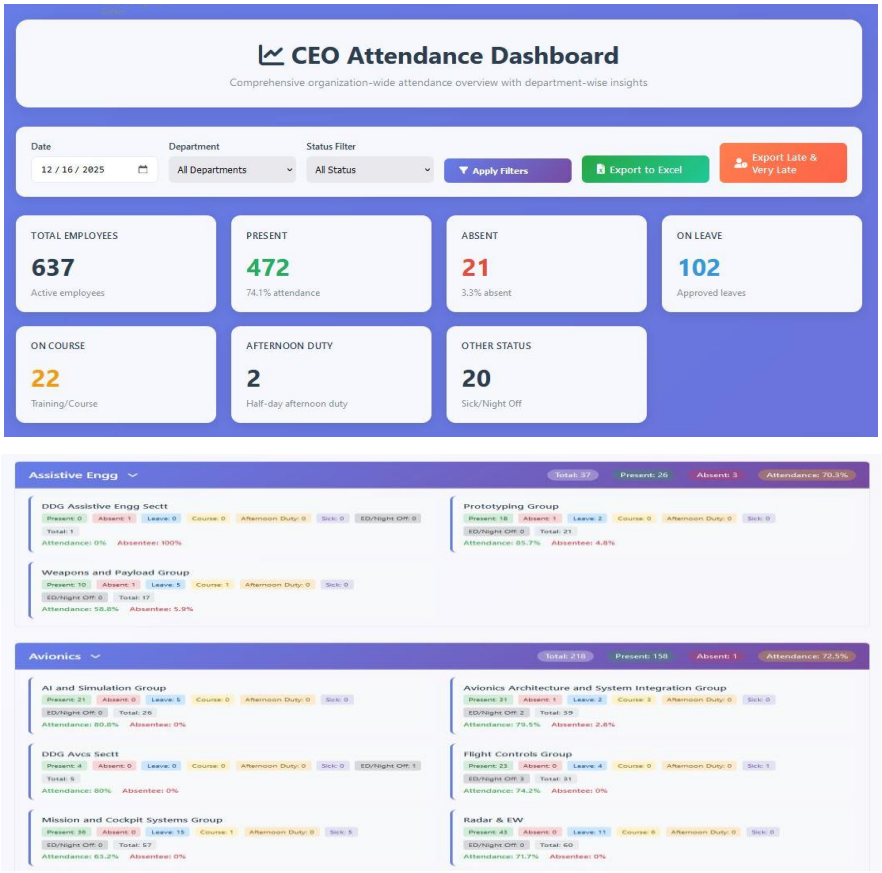


Figure 6: CEO LMS Dashboard

DDG / CTO Portal

The DDG/CTO Portal allows the top management to track the leave and attendance data in their jurisdictions. They can see personal leave balances and also departmental summaries and this is through great control and approvals within the limits of delegated authority.

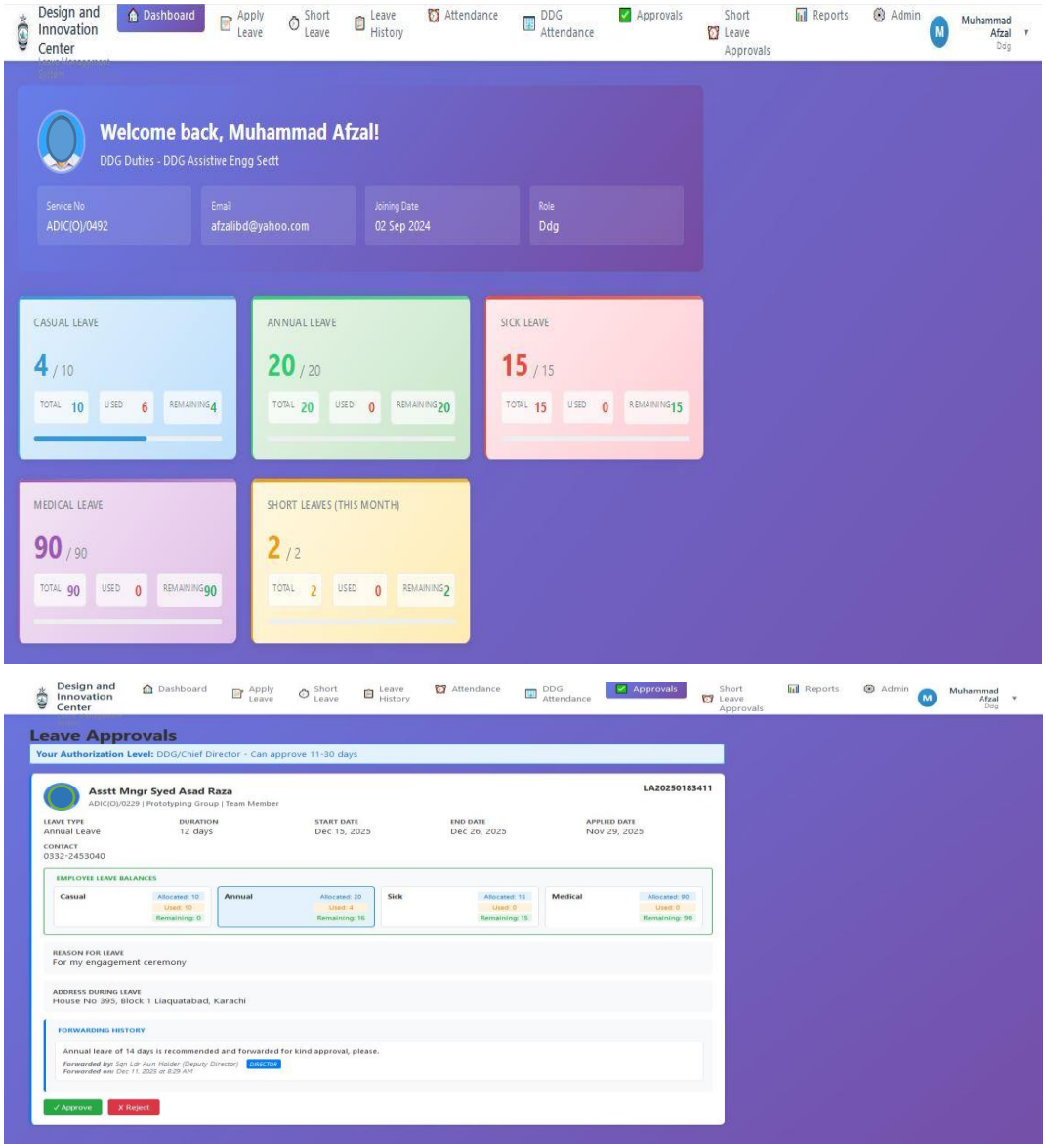


Figure 7: DDG LMS Dashboard

Director Portal

The Director Portal is for operational supervision. The directors can check leave applications, leave balance, and leave history of the employees who report directly to them. Through the system, directors can grant casual and annual leaves within specified limits and short leaves that will not disrupt the operations but will minimize delays in processing leave requests.

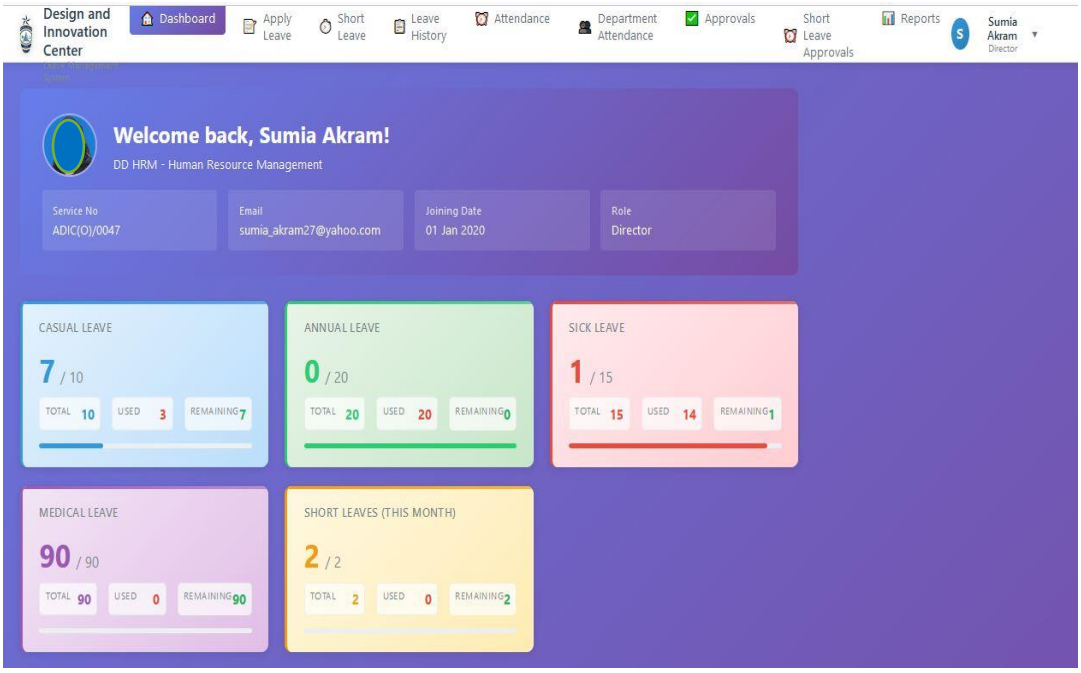


Figure 8: Director LMS Dashboard

HR Admin Portal

HR Admin portal provides full administration authority. HR Administrator can set the leave count, correct the errors, and change the leave type. HR Administrator can cancel the approved leaves. This level of control shows data accuracy, policy compliance, and consistency across the organization.

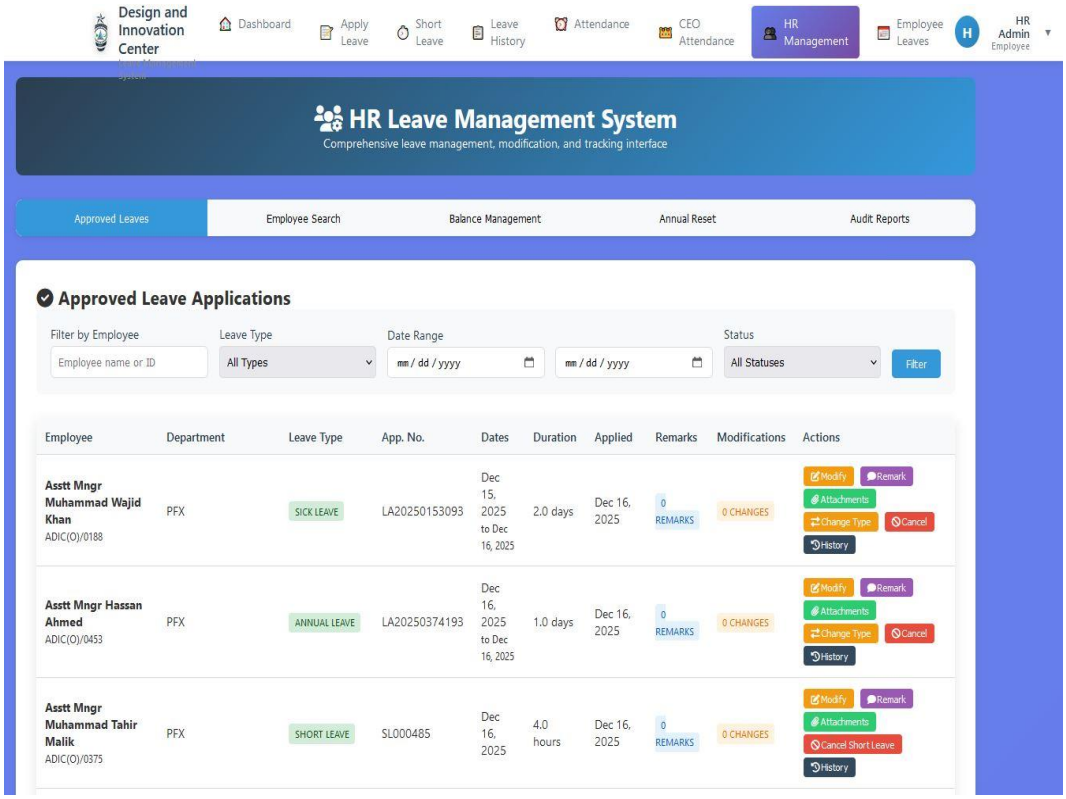


Figure 9: HR Admin LMS Portal

3.3.3 Leave Application Rules and Approval Workflow

The LMS integrates the HR policies of ADIC in automated processes:

Casual and Annual Leave to be Applied with a two-day margin

- Director approval up to 10 days
- DDG/CTO approval up to 11–30 days
- CEO approval Above 30 days

Sick and Medical Leave can be applied within a week, and attachment is mandatory

- Sick Leave: DDG/CTO approval
- Medical Leave: CEO approval

Ex-Pakistan Leave should be applied 30 days before and documented and approved by the CEO

Maternity Leave to be availed under the specification organizational terms with the approval of the CEO.

Unpaid Leave to be applied only in the case of paid leave balances being depleted and with the permission of the CEO**.**

Short Leave should not be more than four hours, authorized by the Director.

- Two half-leaves are automatically converted to a full leave in a month.
- The Leave History module keeps all actions of leave, which provides a full audit trail.

3.4 Attendance Management System (AMS)

3.4.1 Overview of the Attendance Management System

The Attendance Management System (AMS) was installed to automate the manual attendance registers into an automated and ERP-built one. The system will provide proper time tracking, real-time monitoring, and uniform implementation of attendance control in different departments.

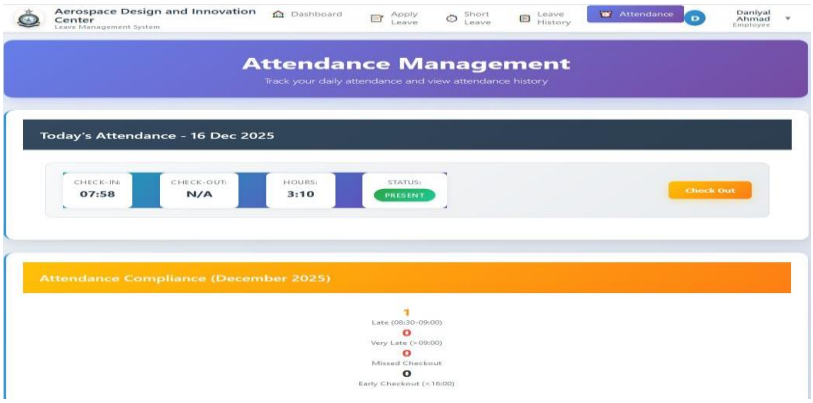


Figure 10: AMS Dashboard

3.4.2 Employee Attendance Recording Process

The employees also check in at the beginning of the working day and check out at the end of official working time. In ADIC, the normal working hours are between 8:30 AM and 4:00 PM. Check-in and check-out times are automatically recorded in the system, and the number of working hours per employee is computed.

3.4.3 Attendants Compliance Monitoring

The AMS automatically lists the late arrivals, early departures, absences, and approved leave days. The data on attendance is compared to the leave records to make sure that the attendance status is accurate, and manual adjustments and subjective evaluations are eliminated.

The status of attendance is considered according to set points of time. Those workers who report late after the time 8:30 AM are considered late. When an employee reports late (after 9:00 AM) the mark as very late will be deducted according to the organization's attendance policy. Moreover, when an employee arrives at the workplace after 12:00 PM, the short leave will be marked. The rules are used to provide consistency, transparency, and adherence to the attendance management policies of ADIC.

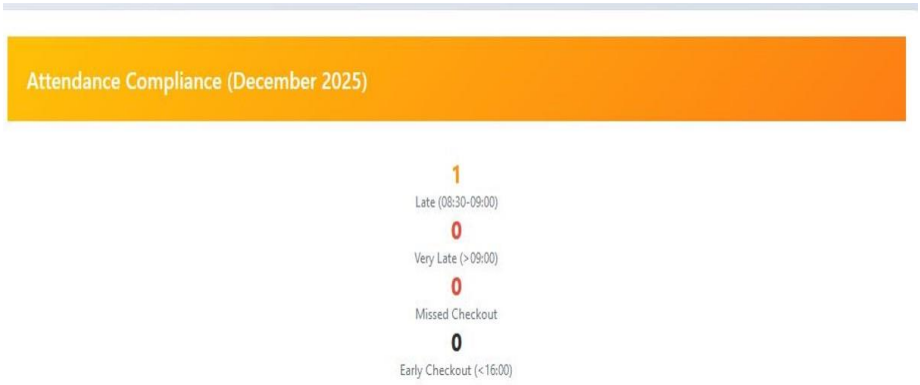


Figure 11: Attendance Compliance

3.4.4 Role-Based Attendance Dashboards

Employee Portal

The employee portal enables the staff to be able to see their daily attendance record. The employees will be able to check their check-in and check-out time, lateness, absence, and any leave adjusted against the attendance. This keeps the employees updated on the status of their attendance.

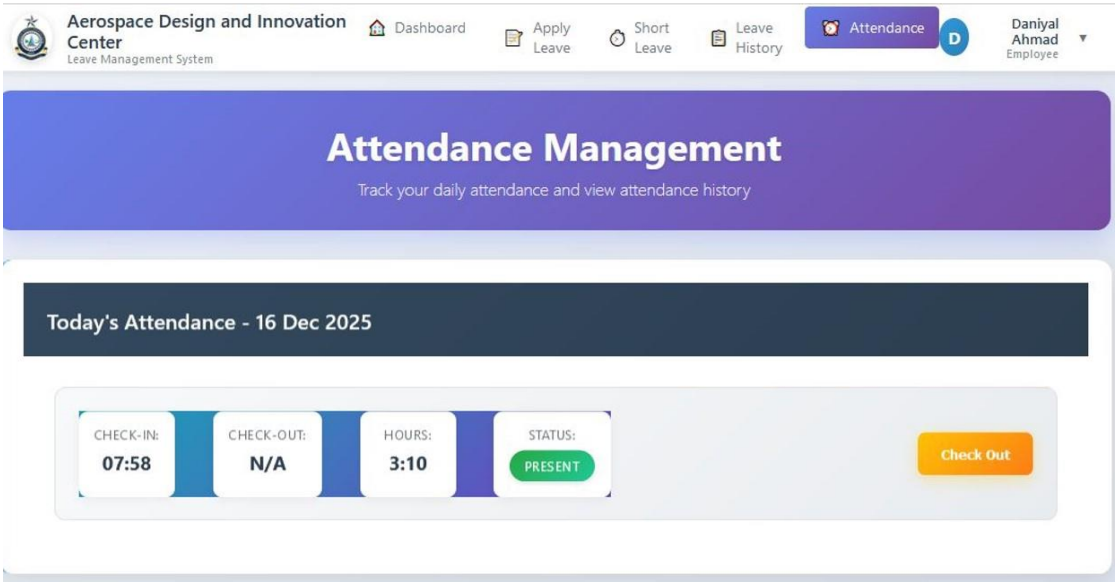


Figure 12: Employee AMS Dashboard

Director Portal

The director portal enables directors to monitor the attendance of employees who report directly to them. Directors can review attendance trends, late marks, and absences to ensure discipline and timely reporting within their teams.

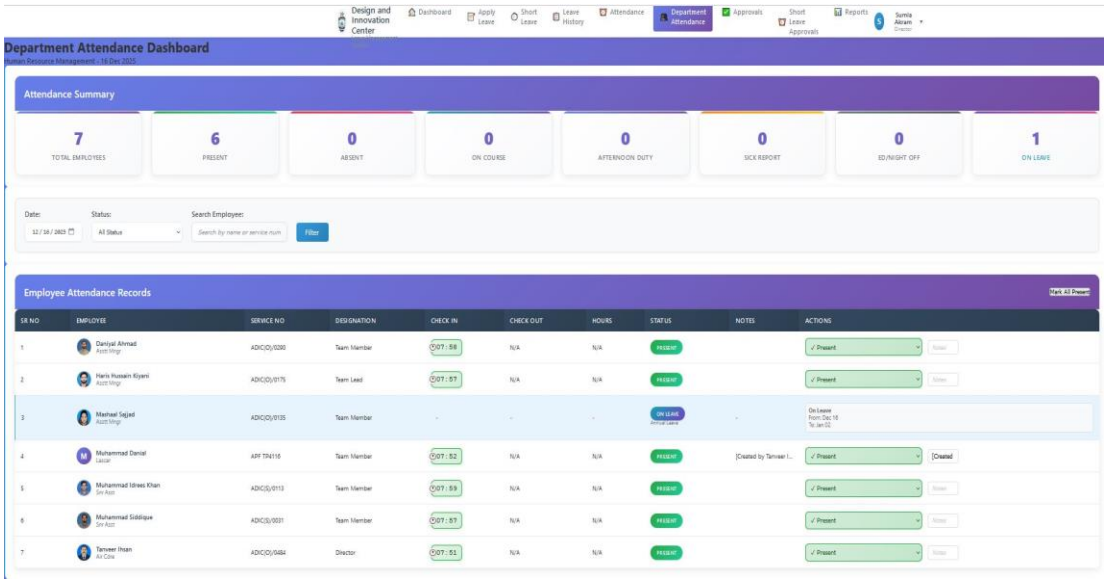


Figure 13: Director AMS Dashboard

DDG / CTO Portal

The DDG / CTO portal provides a departmental-level view of attendance data. They can access the attendance of the directors and their respective teams. It shows attendance analytics, compliance ratios, and overall punctuality of each department, helping senior management identify issues and improve workforce discipline.

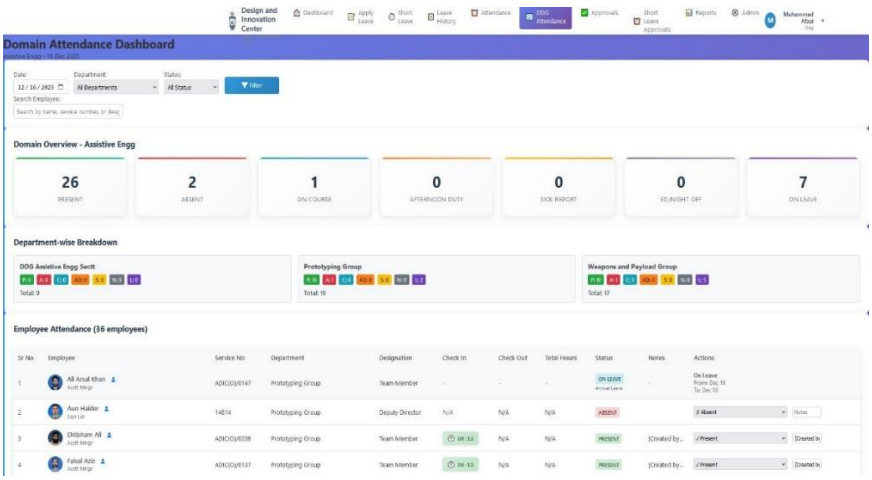


Figure 14: DDG AMS Portal

CEO Portal

The CEO portal offers a complete organization-wide overview of attendance. It presents summarized insights and key attendance indicators to support strategic decision-making at the top management level.

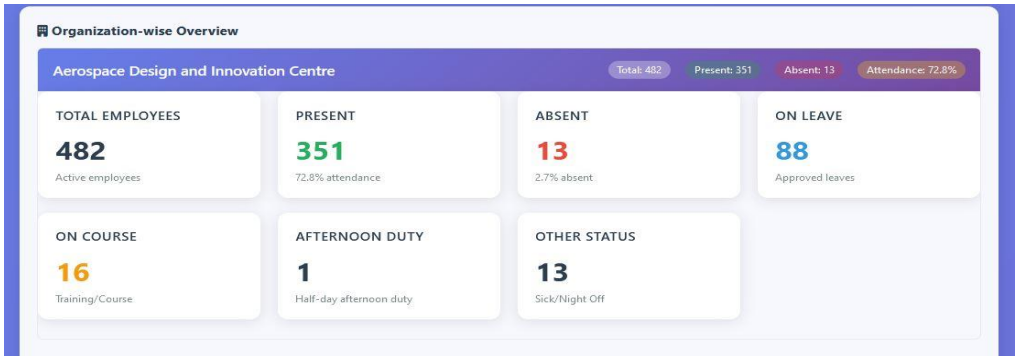


Figure 15: CEO AMS Portal

HR Admin Portal

The HR admin portal supports validation and management of attendance records. HR can generate reports, correct discrepancies, and maintain accurate attendance data. This portal is also designed to support future integration with the payroll system.

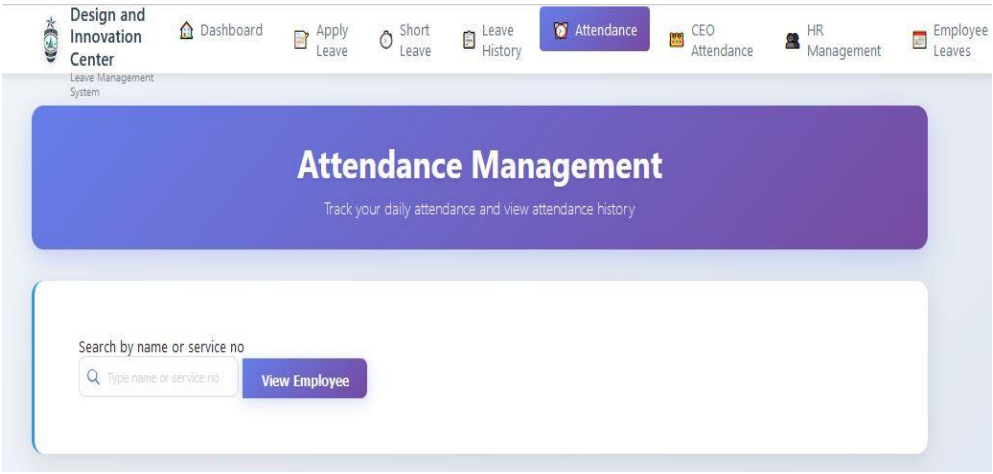


Figure 16: HR Admin AMS Portal

3.4.5 Monthly Attendance Statistics and Reporting

This system creates automatic monthly reports on attendance that give a tabular and detailed overview of the data concerning the attendance of employees. These reports enable good monitoring, documentation, and analysis of patterns of workforce attendance.

- **Total Working Days**

This is the summation of the official working days in any particular month, without taking the weekends and the specific public holidays. It is used to provide the foundation of attendance assessment and calculations of leave adjustment.

- **Days Present**

This means the number of days that an employee was at the workplace during the period that the report is being done. It is applied to evaluate the consistency of attendance and general availability of the workforce.

- **Late Arrivals**

This captures the rate of late reporting by the employees in accordance with the set attendance levels. The statistics are useful in the evaluation and implementation of the company's attendance policies on time.

- **Absences**

This is an indication of the days that the employee was not at work and has not taken any approved leave. It helps the management to single out the non-observance of regulations of attendants and to provide appropriate measures.

- **Approved Leave Days**

This is a reflection of the leave days that have been granted under the leave management system. The records of the attendance are systematically adapted to approved leaves according to organizational policies.

- **Total hours worked**

The total number of hours worked during the whole year, such as overtime hours and consistent hours. Total hours worked: total amount of hours worked in the entire year, including overtime hours and regular hours.

This is the total working hours that have been done in the month, and the average number of hours that employees have worked daily. These measurements help to analyze productivity and adhere to the norms of working hours.

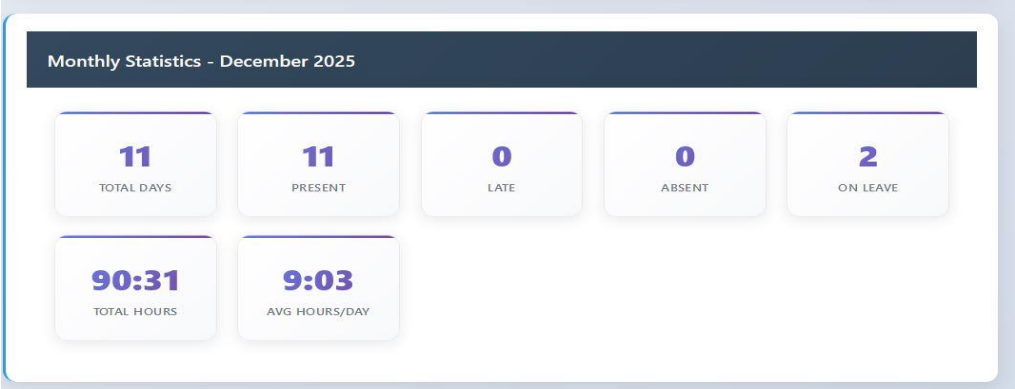


Figure 17: AMS Statics

The automated reports yet to be generated on attendance which will provide regulatory compliance, internal audit, and strategic workforce planning by providing the correct, consistent, and prompt availability of attendance information.

The Leave and attendance management systems that were implemented based on ERP enhanced the efficiency of operations, accuracy of data, transparency, and control on the part of the managers at ADIC. The system was also able to substitute manual processes with a digital solution, which was integrated and related to organizational policies and strategic goals. The design and implementation provided a good base on which to rely for ERP improvement and HR management that can be based on data.

CHAPTER 4: TESTING AND DEPLOYMENT

4.1 Introduction to System Testing and Deployment

The effective design and development of the ERP-based Leave Management System (LMS) and the Attendance Management System (AMS) were followed by the critical phases, which included system testing and deployment. The stage was necessary in order to make sure that the modules developed operated on the required basis and adhered to organizational policies, as well as satisfied the user expectations. Testing and deployment acted as a medium between the development of the system and full organizational adoption, as the systems would be tested and found to be reliable, accurate, and functional before being officially implemented.

In the Aerospace Design & Innovation Centre (ADIC), tests were done in a highly managed and organized way to confirm the functionality of the system, the problems that may arise in it, and the alterations that need to be applied. A phased deployment strategy was established to reduce the impact of change to operations, effectively manage change, and ensure that the change is accepted by the various departments.

4.2 System Testing Objectives

The main aim of the system tests was to ensure that the working of the ERP-based LMS and AMS was correct, efficient, and in compliance with the HR policies of ADIC. The following testing objectives were selected:

- Ensuring accuracy of calculation and update of leave balances
- Checking proper flow of leave requests through approval lines
- Checking on the time capture of attendance and computation of working hours
- Introduction of the accuracy and reliability of dashboards and reports
- Scouting the system usability problems and workflow loopholes
- Enabling the role-based access control and the data security

With the completion of these objectives, the organization was to minimize operational risks and ensure a successful transition process from manual to digital HR operations.

4.3 Methodology and Approach to Testing

4.3.1 Testing Techniques Used

At ADIC, system testing was conducted through demonstrations, trial runs, or small-scale deployment. This methodology made sure that the system was operational and user-friendly.

Demonstrations

The system was demonstrated live to the HR staff, directors, and senior management. Such sessions assisted in ensuring that all the features of the system were as per specification and that stakeholders were aware of how the system operated.

Trial Runs

The Officer-in-Chief (OPI) of the ERP of the HR department undertook trial runs in a controlled environment with the help of simulated data and a sample group of actual employee records. This enabled the system workflows of attendance tracking and leave adjustment to be tested without touching on the real operating records.

Limited Deployment

The system was adopted in a limited number of departments (System Layout group, Aerodynamics group, and Simulations group) to see how its performance would work in the actual working conditions. This served to determine issues that are practical, to receive user feedback, and to make the relevant improvements before organization-wide implementation.

Briefing Sessions

All employees were briefed on the use of the Leave Management System (LMS) and the Attendance Management System (AMS). Such sessions were required to make the employees aware of system procedures and to enable them to utilize it.

System interfaces and process flows were captured in the form of screenshots recorded during the testing to confirm functionality and reference material to be used during training and reporting.

4.3.2 Scope of Testing

The Leave Management System and the Attendance Management System were also tested at all levels of user access, such as employees, directors, DDG/CTO, CEO, and the HR administrator. The tests encompassed limited performance validation, user acceptance testing (UAT), and functional testing.

Functional Testing

The system was also subjected to functional tests to confirm that all the modules worked in the desired manner. As an illustration, the Leave Management System (LMS) was also tested regarding proper application of leaves, approval processes, and updates on records. On the same note, the Attendance Management System (AMS) was tested to ensure that it was able to record the check-ins, check-outs, late arrivals, short leaves, and approved leaves.

User Acceptance Testing (UAT)

User Acceptance Testing was done by employees of the system who were the HR staff, directors, and chosen employees of selected departments. They were engaged in actual activities during this stage, such as marking attendance, applying leave, and generating reports. The accurate execution of such tasks without mistakes was taken as evidence that the system was ready to be implemented successfully, following the requirements of end-users. The feedback gained on UAT was recorded and taken into account in making some small adjustments before complete implementation.

Limited Performance Validation

Minimal performance testing was done through trial runs and small-scale deployment. Real and simulated data on employees were used to test the system under normal workload conditions to make sure that the system was capable of accepting the expected attendance entries, and

the processing of leave without errors or delays. The correct calculation of working hours and leave changes was looked into as the evidence of the stable functioning of the system.

4.4 Testing of the Leave Management System

4.4.1 Accuracy Testing of Leave Balance

The verification of the accuracy of the leave balance was considered one of the most important points of LMS testing. Since the historical leave data had been transferred out of Excel records, it was necessary to make sure that the opening balances were reflected in the system. Test cases were designed to test the following actions:

- Check initial leave balances in various categories of leave
- Ensure automatic deduction of leaves days upon approval
- Affirm recovery of leave balances when rejected or canceled
- Modification of Leave types after the approval

HR staff balanced out the system-generated balances against the manual ones to ensure consistency and accuracy.

4.4.2 Approval Workflow and Routing Testing

The approval routing had been thoroughly tested to make sure that the leave applications conformed to the approval hierarchy of ADIC. Different types of leaves were formulated and these included short leaves, long-term leaves, medical leaves, and unpaid leaves. Testing confirmed the following activities:

- The leave requests were automatically directed to the approving authority.
- There was the imposition of approval limits, which were determined by the leave duration.
- Where necessary, mandatory attachments were necessary.

The inconsistencies identified during the testing were resolved by making workflow refinements.

4.4.3 Leave History and Audit Trail Validity

The module Leave History was also tested to ensure that a complete and accurate audit trail was maintained. Test cases confirmed that all activities involving leaves, such as applications, approvals, rejections, cancellations, and amendments, had time stamps and user identities. This feature was especially valuable in transparency, compliance, and future audit needs.

4.5 Attendance Management System Testing

4.5.1 Attendance Time Capture Validation

Testing of Attendance Management System (AMS) focused on validating the accuracy and reliability of employee Check-in and check-out times. Selected employees from designated departments recorded attendance under normal working conditions, allowing the system to evaluated in a realistic operational environment.

The testing assessed accurate time recording, automatic calculation of total working hours, and correct identification of late arrivals and early departures. Results showed that the system consistently captured attendance data without manual intervention, demonstrating reliable performance and readiness for broader implementation. Testing confirmed that:

- Accurate recording check-in and check-outs times
- Automatic calculation of total working hours
- Correct identification of late arrivals and early departures

Results indicated that the system accurately recorded attendance data without manual effort.

4.5.2 Attendance and Leave Integration Testing

Integration between LMS and AMS was tested to ensure that approved leave days were automatically reflected in attendance records. Employees on approved leave were correctly marked as “on leave,” preventing incorrect absence markings. This integration eliminated the need for manual attendance adjustments and ensured data consistency.

4.5.3 Dashboard and Report Accuracy Testing

The system includes role-based dashboards for employees, directors, HR, and senior management. Although reports at employee, departmental, and organizational levels are planned, they are not yet generated.

Once operational, HR administrators will verify that the data on dashboards and reports matches attendance and leave records to ensure accuracy and reliability.

4.6 User Acceptance Testing (UAT)

4.6.1 Employee Feedback and Familiarization

User acceptance testing involved employees from selected departments using the system for routine leave applications and attendance marking. Initial challenges were observed related to system familiarization, particularly for employees transitioning from manual processes.

To address this, guidance sessions and informal walkthroughs were conducted to explain the system features, workflows, and benefits. User feedback was actively collected and incorporated into minor interface and workflow improvements.

4.6.2 Management and HR Validation

Directors, DDG/CTO, and HR personnel participated in user testing to validate managerial functionalities such as approvals, monitoring dashboards, and administrative controls. Their feedback focused on reporting clarity, approval efficiency, and policy enforcement, leading to further refinements.

4.7 Challenges Identified During Testing

Several challenges were identified during the testing phase

- **User Resistance and Learning Curve:** Some employees were initially hesitant to adopt the new system due to unfamiliarity with digital processes.

- **Workflow Adjustments:** Minor workflow modifications were required to better. align system logic with actual operational practices.
- **Data Validation Issues:** Initial discrepancies in migrated data required reconciliation and correction.

These challenges were addressed through targeted training, system refinements, and HR-led guidance initiatives.

4.8 Deployment Strategy

4.8.1 Phased Deployment Approach

To ensure a smooth organizational transition, a phased deployment strategy was adopted. The system was first deployed in selected departments as part of a trial deployment. After successful validation and stabilization, deployment was gradually extended to all departments.

This approach minimized operational disruption, allowed early issue resolution, and built organizational confidence in the system.

4.8.2 Change Management and Support

HR played a central role in managing change during deployment. Support mechanisms included user guidance, policy clarifications, and ongoing assistance to address user concerns. This approach facilitated system acceptance and encouraged consistent usage.

4.9 Performance Measurement and Key Performance Indicators

To evaluate the effectiveness of the system, key performance indicators (KPIs) were defined and monitored. Initial performance assessments indicated significant improvements across all defined KPIs:

- Reduction in manual errors and discrepancies
- Decrease in leave processing and approval time

- Improved accuracy of attendance and leave records
- Increased user satisfaction and system adoption

4.10 Cost Feasibility Analysis

The cost feasibility of the ERP-based Leave Management and Attendance Management systems was highly favorable, as the entire development, testing, and deployment were carried out using ADIC's internal software development team. No external vendors or third-party software procurement was required for the development of these modules.

Since ADIC already possessed the necessary ERP infrastructure, servers, and technical expertise, the project incurred no additional financial cost in terms of software licensing or development outsourcing. The primary investment involved internal human resources, which were part of routine operational expenses.

CHAPTER 5: FUTURE ENHANCEMENTS AND ACTION PLAN

5.1 Introduction to Future Enhancements and Strategic Direction

The effective deployment of the Leave Management System (LMS) and Attendance Management System (AMS) based on ERP at the Aerospace Design & Innovation Centre (ADIC) has ensured great efficiency, accuracy, and transparency in HR activities. Nevertheless, ERP systems are dynamic and can be constantly improved to fit in new needs of organizations, the growth of the workforce, and technology.

The chapter contains suggested improvements in the current LMS and AMS modules in the future, according to the post-implementation observations, user feedback, and the best practices in Human Resource Information Systems (HRIS). Moreover, an action plan is introduced to help ADIC continue with the ERP integration and digital maturity. The proposed improvements are supposed to minimize administrative intervention, enhance user experience, enforce policies, as well as allow data-driven decision-making.

5.2 Future Improvements in The Leave Management System

5.2.1 Pre-Approval Cancellation of Employee Leave

The addition of employee-initiated leave cancellation of pending leave requests is one of the main improvements that can be proposed in the Leave Management System. As of today, when an employee has applied to take leave, any correction or cancellation of the leave can only be done administratively by HR, even before the approval of the leave. This addiction leads to more workload on the HR and unnecessary delay in routine administration work.

The flexibility of the system should be enhanced by enabling employees to cancel their leaves before approval, which would give them more control over their leave arrangements. This would also decrease the correction requests to the HR, and the HR staff would be able to concentrate on more strategic tasks. This functionality would strictly be limited to unapproved leave requests in terms of governance and controls to make sure that the managerial power and compliance with the policies are not harmed.

This improvement is in line with the current trends in self-service HR practices and employee freedom without organizational control.

5.2.2 Separate Tracking of Unpaid Leave and Absenteeism

Another important enhancement involves the clear separation and independent tracking of unpaid leave and absenteeism. While both result in non-working days, their organizational implications are fundamentally different. Approved unpaid leave is a policy-compliant action, whereas absenteeism represents unauthorized absence and may require disciplinary review.

Currently, overlap between unpaid leave records and absence markings can create ambiguity in reporting, evaluation, and compliance monitoring. By implementing separate tracking mechanisms, the system would distinctly classify:

- Approved unpaid leave (authorized and policy-compliant)
- Absenteeism (unauthorized absence)

This distinction would significantly improve data accuracy, transparency, and fairness in HR decision-making. It would also enable management to analyze absenteeism trends more effectively, identify departments or individuals with recurring attendance issues, and take corrective or preventive actions accordingly. Furthermore, accurate differentiation between unpaid leave and absenteeism is essential for performance evaluation, disciplinary processes, and future payroll integration.

5.2.3 Automated Notifications for Exhausted Leave Balances

A critical enhancement proposed for the LMS is the introduction of automated notification alerts when employees approach or exhaust their leave balances. These alerts would be triggered based on predefined thresholds and would notify both employees and HR administrators in real time. Automated notifications would serve multiple purposes:

- Prevent unauthorized or excessive leave applications
- Reduce disputes related to leave entitlement and balance calculations
- Enable proactive HR intervention and counseling

By keeping employees informed of their remaining leave balances, the system promotes transparency and accountability. For HR, such alerts reduce the need for manual monitoring and ensure consistent enforcement of leave policies. This enhancement also supports compliance with organizational rules and minimizes last-minute leave conflicts.

5.3 Future Improvements of the Attendance Management System

5.3.1 Undo Check-In Option of HR Administrators

Attendance errors may arise in the real world of operational settings as a result of accidental check-ins, system glitches, or network interruptions. To cope with those situations, it is suggested that an option of Undo Check-In or correction of the attendance should be available to the HR administrators.

This would enable authorized HR staff to make corrections to the attendance records in rare circumstances and still have a full audit trail of corrections. Role-based access control would be strict so that the actions performed by the designated HR administrators could be done only by this group of persons, and ensure that the attendance data would not be misused or manipulated by unauthorized persons.

The implementation of this improvement would increase employee confidence regarding the system, decrease the number of grievances based on discrepancies in attendance, and provide precise attendance data to be used in reporting and compliance.

5.3.2 Automatic Update of the attendance status on leave approval

Even though the existing system combines leave and attendance data, an additional improvement is also offered, allowing automatic update of the attendance status right after acceptance of the leave. This improvement is necessary so that after granting leave, the related attendance status is automatically updated with no delay or human intervention. This real-time synchronization would:

- Eliminate the necessity of reconciliation of attendance
- Avoid wrong absence records

- Enhance AMS-LMS integration

Automation of this type is critical in the correct reporting, monitoring compliance, and future processing of payroll. It also makes the attendance records in line and current across all levels of the organization.

5.4 ERP Expansion Action Plan in the long term

5.4.1 Payroll Management Module incorporation

The inclusion of a Payroll Management module as a part of the ERP of ADIC can be listed among the most important long-term recommendations. Digital payroll would use attendance and leave data that is presently available to automate the processing of salary, deductions, allowances, and increments. The major advantages of payroll integration are as follows:

- Less time in payroll processing
- Better compliance and accuracy
- Eradication of errors and manual computations
- Auditable and clear payroll reports

In connection with vetted attendance records and authorized leave data, ADIC can make sure that compensation is equitable and consistent. Such integration would also improve the coordination between the HR and the finance departments and aid in compliance with the regulations.

5.4.2 Procurement Management Module Development

The other strategic element of the long-term action plan is the establishment of the Procurement Management module. ADIC is a high-technology project-based organization where timely and transparent procurement is of the essence in terms of continuity in operations.

An electronic procurement system would streamline req approvals, vendor choice, purchase follow-ups, and records. The incorporation into the ERP system would guarantee:

- Clear and uniform procurement operations
- Budgetary control and monitoring
- Better audit preparedness and accountability

A module of this nature would lower paperwork, speed up the procurement process, and improve organizational governance.

5.4.3 Change Management and Capacity Building

Capacity building and constant change management are necessary to achieve the sustainability of the ERP in the long term. New modules and enhancements should be institutionalized through regular training sessions, user manuals, and system walkthroughs.

There should be continuous feedback systems that will capture the experience of the user and identify where it can be improved. Such a strategy guarantees that adoption rates are high, there are low levels of resistance to change, and the ERP investment has high returns.

5.4.4 Staged Development and Constant Improvement

Any further advancements and ERP extensions must be implemented in a gradual manner. The initial pilot of new modules, feedback, and gradual improvement of the system will decrease operational risk and make the system stable. Performance analysis and reviews of the system should be carried out to determine effectiveness and coordination with the organizational goals.

5.5 Strategic Implications of Future Improvements

The presented action plan and future improvements will be a great enhancement of the HR and administrative strengths of ADIC. The enriched LMS and AMS functionality will enhance the data accuracy, employee satisfaction, and compliance with the policies, and the ERP integration on a long-term basis will assist in strategic planning and the growth of the organization.

These measures will see ADIC change its transactional approach to an analytical and strategic HR role to facilitate effective decision-making and long-term institutional growth. This

chapter provided a detailed blueprint of how future improvements and long-term development of ERP at ADIC can be made.

The suggested changes in the Leave Management and the Attendance Management systems offer the current shortcomings of the systems and equip the organization to take the next step. The action plan is on a long-term basis and it focuses on the integration of systems, automation as well as continuous improvement so that ADIC would be up to date with best practices in digital HR management.

5.6 Implications of the Project

The implementation of ERP-based leave and attendance systems has several organizational implications. It strengthens HR governance, enhances transparency, and supports real-time managerial decision-making. The system enables standardized policy enforcement across departments and improves workforce discipline and accountability.

From a strategic perspective, the project supports ADIC's digital transformation goals and provides a strong foundation for advanced HR analytics, payroll integration, and performance management systems in the future.

5.7 Limitations of the Project

Despite its effectiveness, the project has certain limitations. The system currently depends on user compliance and accurate data entry, particularly during the early stages of adoption. Initial resistance to change and learning curves were observed among employees transitioning from manual processes.

Additionally, as technology continues to advance, the system will require periodic upgrades to remain compatible with emerging technologies, cybersecurity standards, and organizational growth. Integration with biometric devices, mobile applications, and AI-based analytics has not yet been implemented and remains an area for future enhancement.

CHAPTER 6: CONCLUSION

6.1 Introduction

The paper shows the final report of the project that was carried out at the Aerospace Design and Innovation Centre (ADIC) with the aim of digitalizing the process of managing leave and attendance using ERP solutions. The conclusion helps to sum up the general results of the project, assess the performance of the introduced systems, and consider the overall organizational and managerial implications of the project. It also outlines the main lessons acquired in the course of the project and explains how the adopted solution creates a long-term basis for further ERP growth at ADIC.

The conclusion can be seen as a critical commentary on how well-coordinated technological interventions can bring operational solutions to organizations and long-term organizational success, when the latter is adequately aligned with the organizational policies and human resource management practices.

6.2 Project Overview and Rationale

The project was launched as a reaction to the ongoing operational problems in the Human Resource department of ADIC, especially in the field of leave and attendance management. Though ADIC is operating in a very technical and innovative setup, it was using manual and paper-based systems to record attendance and file leave requests. The effect of these traditional practices was overloading of the administration, creation and creation of inconsistencies of the data, delay in approval, and the availability of workforce to the management.

The project was initiated to address shortcomings in the manual HR processes, and therefore, the design and execution of ERP-based Leave Management System (LMS) and Attendance Management System (AMS) modules. This was aimed at substituting the disjointed and fallible manual processes with a centralized, automated, and policy-based electronic solution.

The project was well planned so that it was reflected in the system in such a way that the structure and workflow of the system were in line with the organizational structure, HR policies, and approvals of ADIC hence guaranteeing the technical strength of the system and its relevance to operations.

6.3 Achievement of Project Objectives

The project had the task of automating practices in one of its main aims of minimizing the use of manual HR practices and maximizing operational efficiency instead. The given goal was met when ERP-based LMS and AMS modules were implemented, and routine HR processes became smoother without the unnecessary paperwork.

The Leave management system allowed employees to request leave electronically, check leave balances, monitor the status of approvals, and view full leave records. It had automated approval processes in such a way that leave requests made were forwarded to the relevant authority as the policies set by the organization dictated. Consequently, the delay in the approval process was minimized, and the transparency in processing the leave increased significantly.

On the same note, the Attendance Management System has also substituted the manual attendance registers with real-time attendance capturing and automated reporting. The system guaranteed the correct registration of the check-in and check-out durations, regulated the implementation of attendance regulations, and ensured smooth integration with the leave information. Such a combination reduced the gap between attendance and leave records and increased the quality of HR information.

On the whole, the project achieved the goal of reducing human error, administration workload, increasing the accuracy of the data, and transparency of HR operations at ADIC.

6.4 Implications on HR Processes and Organization Effectiveness

ERP-based leave and attendance management systems were implemented in ADIC, and their application had a significant positive effect on HR activities. Among the most prominent ones, there was a significant reduction in manual administrative work. HR employees who used to

spend a lot of time maintaining physical records, compiling data, and addressing discrepancies could invest more effort in strategic HR activities.

The presence of centralized and real-time data enhanced the communication between the departments and the HR with a better decision-making process and a more effective management of the workforce. The availability of employees, attendance, and the use of leaves became visible instantly to the managers and helped in better planning of projects and allocating resources.

In terms of organizing, the fact that the HR processes were more effective led to the overall effectiveness of organizational operations. HR data of the necessary accuracy and accessibility is the key to the productivity of the project and timely project completion, and in a project-based organization such as ADIC, timely access to a talented workforce is paramount.

6.5 Managerial Learning and Insights

This project has some valuable managerial implications, especially as far as the digitalization of HR and ERP implementation is concerned. Among the lessons learned is the need to match the organizational policies and structures with technological solutions. One of the main factors that contributed to the success of the implemented system is the fact that the HR rules, approval hierarchies, and compliance requirements were carefully mapped into the system workflows.

The other important learning outcome is associated with stakeholder engagement. Engaging the HR staff, managers, and employees in the project life cycle, in determining the requirements and in testing and deployment of the system, was beneficial in making sure that the system would solve actual operational requirements and that it would be accepted by the users. This helps surpass the realization that successful ERP implementation is not merely a technical process but a participatory organizational process.

Another important value that is emphasized in the project is the implementation strategy which is a gradual approach. The introduction of the system in phases and with user input facilitated the detection and correction of problems before they escalated and increased the risk of an operation, improving the stability of the system.

6.6 Change Management and System Familiarization Problems

Projects of digital transformation, the project faced some initial challenges associated with change management and familiarizing with the system. Old-fashioned employees needed time to adapt to the digital process, and certain resistance to change was noted at the initial implementation phases.

These difficulties were overcome by demonstrating the system, providing practical instructions, and ensuring support on the part of HR. As time progressed, the more that individuals were familiar with the system the higher the acceptance level and the level of regular use became. This experience demonstrates the relevance of effective change management strategies, such as communication, training, and leadership support, in making digital initiatives successful.

The project confirms the fact that technology may not be the only thing that can motivate organizational improvement; the acceptance of humans and behavioral adjustment is also essential.

6.7 Contribution to Strategic HR Management

In addition to the short-term effects of operational gains, the developed ERP-based system will be useful in achieving the long-term strategic HR goals of ADIC. The presence of the correct and timely data can allow HR and management to become more analytical and more active in managing the workforce.

Patterns of attendance, leave usage, and metrics of compliance can now be decoded to aid in making informed decisions, evaluating policies, as well as planning the workforce. The system also offers a solid base in terms of the integration of advanced HR functionalities in the future, including payroll automation, performance management, and HR analytics.

When ADIC shifts its focus to data-driven HR management that replaces transactional HR activities, this organization will be in a better position to promote organizational growth and strategic goals.

6.8 Organizational and Academic Significance of Project

Organizationally, this project shows how specific ERP improvements could greatly contribute to better governance, transparency, and efficiency of HR operations. The fact that the implementation of the LMS and AMS modules was successful reflects the importance of utilizing existing ERP infrastructure in order to overcome certain operational challenges.

Academically, the project indicates a practical implementation of HRM theories and concepts of information systems and change management. It helps bridge the disconnect between theory and practice in the organization and achieves the goals of an MBA final project. The project is also an excellent case study to learn how ERP systems can be used to digitalize HR in a technologically oriented organization.

6.9 Limitations and Future Development

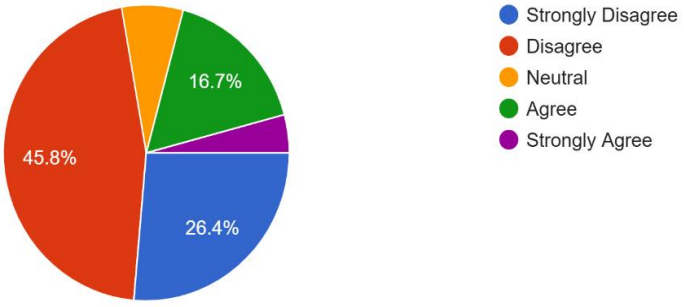
Regardless of the success, there are some limitations to the project. It had a narrow scope of leave and attendance management, but no payroll, performance management, or other HR modules. Also, the overall performance of the system and user satisfaction can never be deemed proper until a prolonged usage period. Such restrictions are a prospect for improvement and study in the future. The further development of the ERP system to encompass other modules and longitudinal research of the system's effects would further reinforce the HR capabilities of ADIC.

REFERENCES

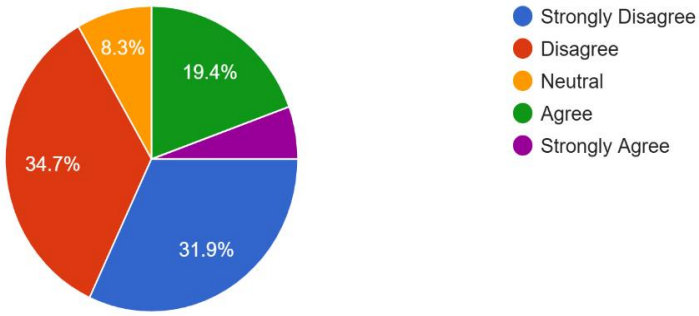
Pre-implementation Responses

Leave Management System Charts

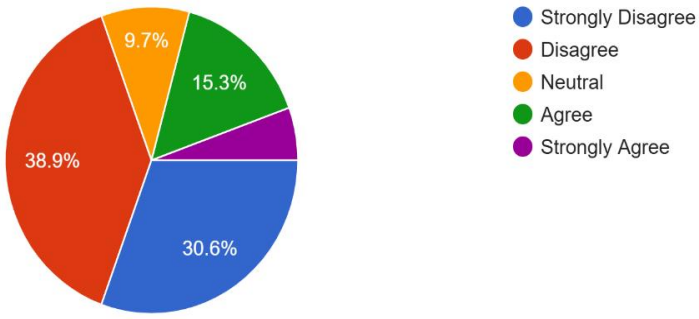
The leave process is easy to follow in the manual system.



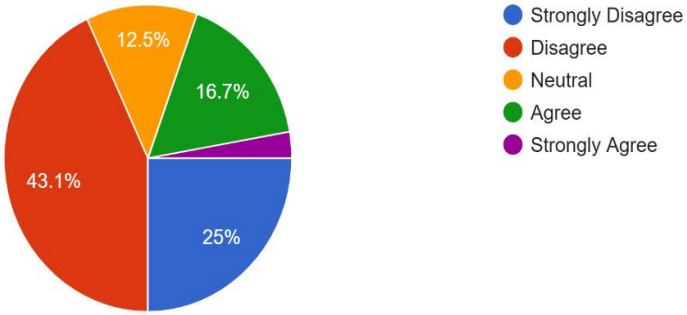
In the manual system, Leave approvals are handled promptly and on time.



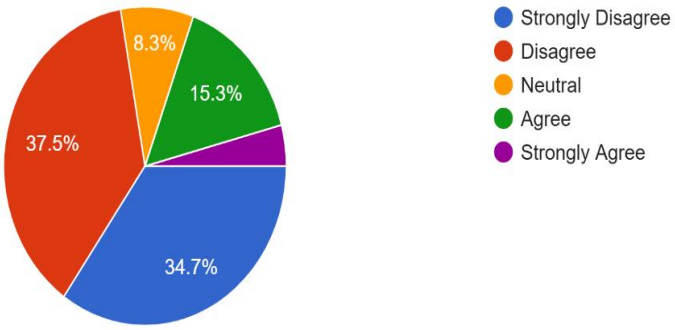
Leave balances are accurately maintained and easy to check in the manual records.



The manual leave process is reliable and minimizes errors.

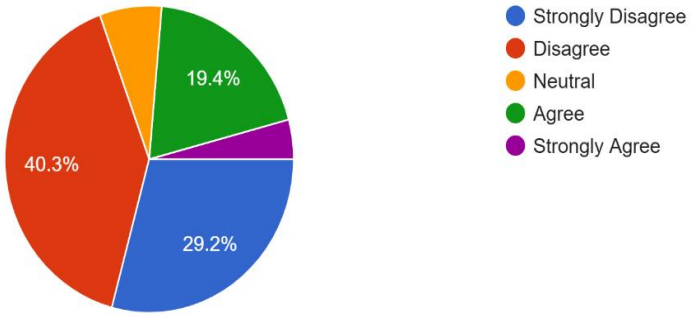


The leave process is efficient and not overly time-consuming in the manual system.

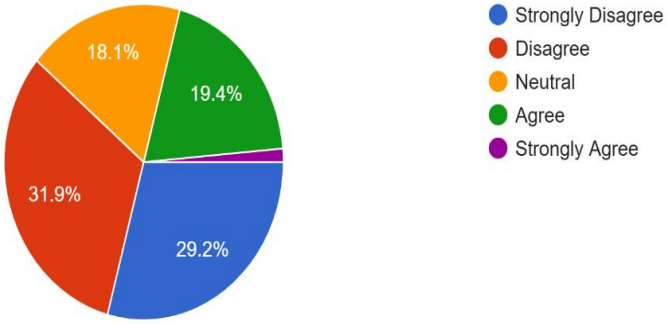


Attendance Management System Charts

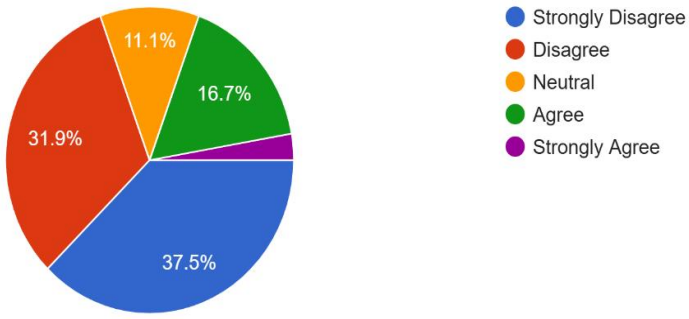
Marking attendance in the manual system is easy and convenient.



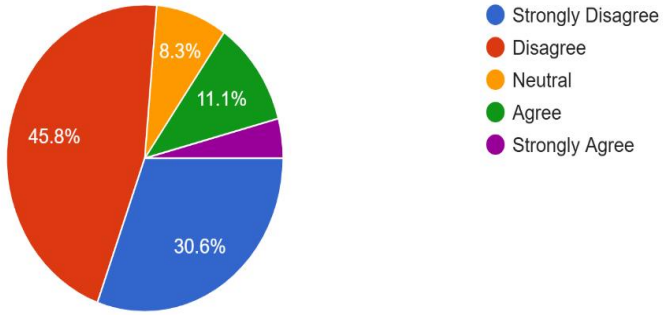
Attendance records in the manual process are maintained accurately.



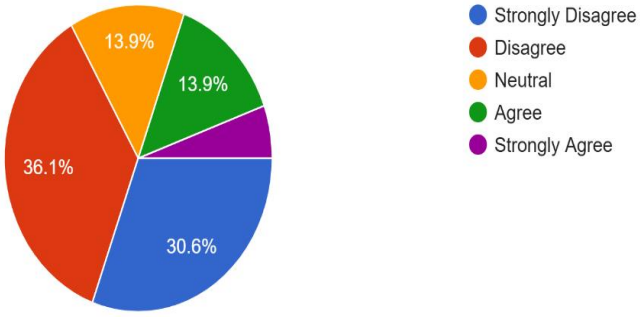
It is easy to check and track attendance using the manual records.



Late arrivals and absences are recorded correctly in the manual attendance process.



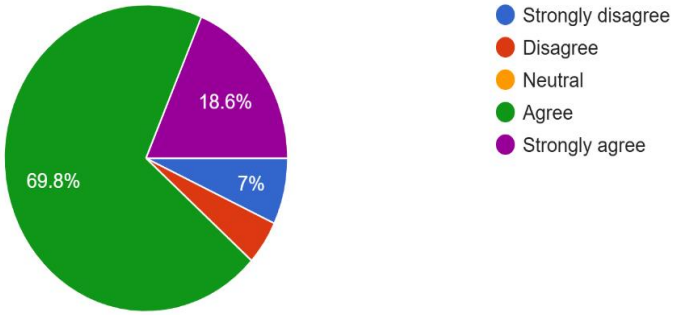
The attendance process is efficient and not overly time-consuming in the manual system.



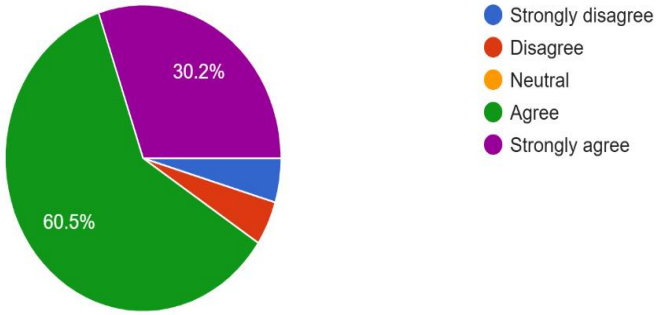
Post Implementation Responses

Leave Management System Charts

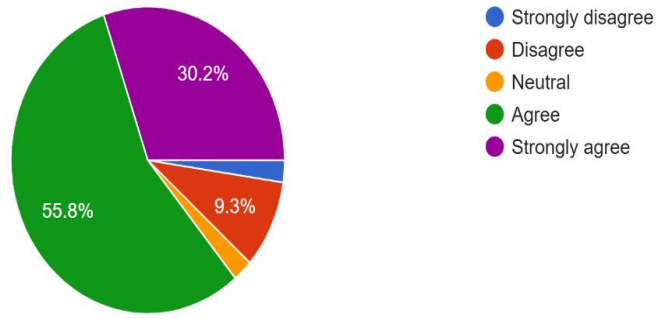
The ERP-based Leave Management System is easy to use.



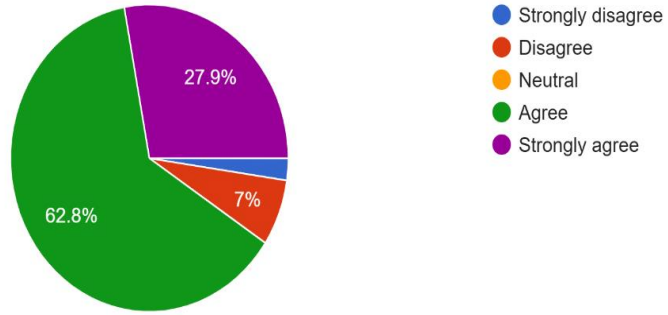
Leave applications and approvals are processed more quickly in Leave Management System



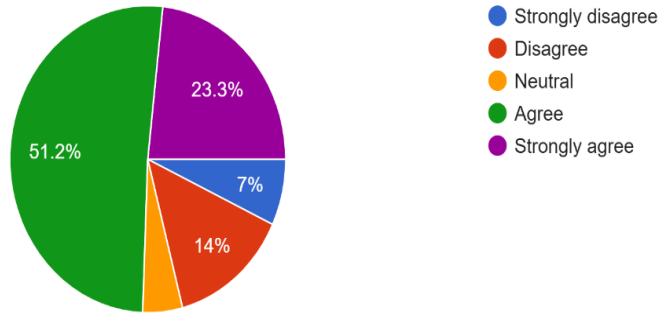
Leave balances are now accurate and easy to view in the system.



The Leave Management System provides clear visibility of leave status and history

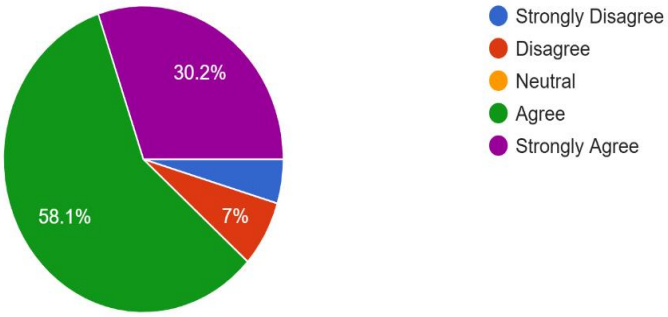


The Leave Management System allows leave requests to be easily reverted or modified when required

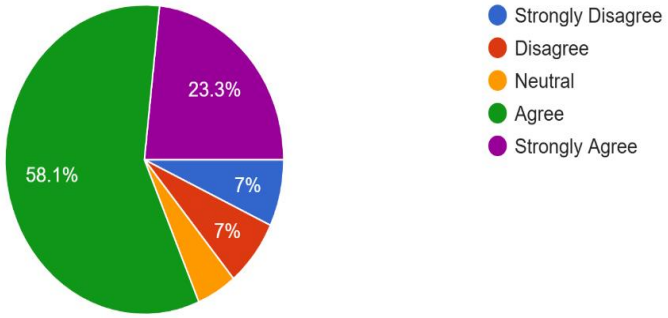


Attendance Management System Charts

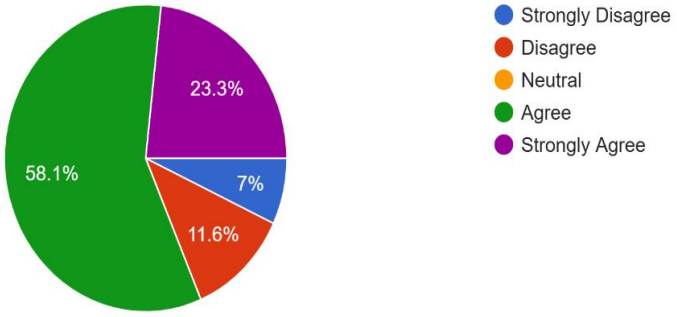
The ERP-based Attendance Management System records attendance accurately.



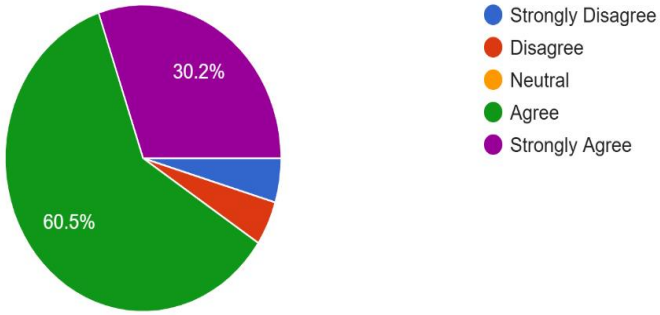
Checking daily attendance through the system is simple and convenient.



Late arrivals and absences are correctly reflected in the system.



Attendance records can be easily viewed and verified by employees.



Attendance data is updated accurately and in a timely manner.