

## **1.Introduction**

This document focuses on the domain of an Employee Portal web application designed to allow information sharing and discussion within FDM. It serves as a global platform to keep FDM staff and consultants informed about the latest company news and allows staff to help with queries they may have. This document describes the information that has been gathered through conducting research and analysing domain about how having a web Employee portal is useful and improves workflow. '85% of companies have an Intranet or employee portal of some kind, and 75% say it's important' [1], this implies that FDM's implementation of an employee portal would be crucial.

### **The problems**

FDM is a global organisation with centres from various countries such as the UK, Germany, Hong Kong etc. This means that communication will be challenging especially between centres therefore having a global application such as the employee portal which provides information is crucial for FDM to function adequately. Through conducting secondary research, a communication barrier at the workplace case study resulted in showing that both verbal and non - verbal communications at the workplace played big roles in ensuring the smooth flow of the company [2] furthermore, 17% of employees would recommend firing their CEO based on how the company communicates to its employees [3]. In addition to this communication barriers negatively affect the growth of the company [2] which could negatively affect FDM wanting to 'hire in volume' to their three programmes.

FDM has over 5000 employees and is continuously increasing, therefore having a reliable application is needed. The current form of communication that happens within the FDM could be done through third party services such as emailing. The reliability of these third-party services come into question in terms of the data security and uptime and downtime of the communication service. Expanding on the security, data leaks can lead to sensitive company information and employee information being revealed. "With an estimated 2.39 million cases of cybercrime impacting UK businesses in the last 12 months [4], these statistics underpin the need for FDM to assert control over their data."

### **The solution**

Our proposed solution will solve these problems as the employee portal will act as a global communication hub to allow employees to navigate through necessary information without the need to look through emails. New workplace communication statistics show 60.8% of respondents ignore emails in the workplace. Nearly half (47.7%) of respondents said receiving fewer emails at work would help to increase their job satisfaction [5]. This promotes a consistent flow of information and ensures employees receive updates and announcements uniformly by reducing the risk of any misunderstandings or miscommunications.

The employee portal can help reduce email overload by improving the focus of communications within the portal. This would in turn reduce reliance on email for internal updates, allowing employees to focus on their tasks without the distraction of constant email notifications. Email overload can result in missed messages, but the portal aims to resolve this by providing better

organization and categorization of communications, improving overall efficiency. Open communication through forums and collaboration spaces can enable employees to share ideas and insights as well as provide feedback in an accessible way. This allows for promoting knowledge-sharing which facilitates the exchange of information, best practices, and solutions amongst team members, which would enhance collaboration. Furthermore, having the employee portal will allow them to have full control over all their employee's data, therefore it could decrease the risk of data leaks.

## **2.Personas and Users**

Employees use the portal to engage and perform in several tasks and procedures within the FDM Employee Portal. The portal caters to three programs: Graduate, Returner, Ex-Forces programmes which are designed to recruit and develop talent across different career stages. The portal allows users to perform a wide array of self-service tasks such as booking annual leave and updating personal information.

Primary Users:

Employees:

- Graduates:
- Achieved a bachelors in a tech related field
- Strong communication skills
- Passionate about a career in IT
- Must be eligible to work in the UK

Returners:

- Excellent communication
- Strong problem solving
- Strong organisation skills
- Proficiency in Microsoft Office applications such as Excel
- Ability to work under pressure
- Passionate about technology

Ex-forces:

- Strong organisation skills
- Strong problem solving skills
- Passionate about technology
- Ability to work under pressure
- Excellent interpersonal skills

Secondary users:

Internal staff:

- Responsible for HR related tasks, employee management within the employee portal.
- They need to be able to manage recruitment and add employees to the system.
- Responsible for debugging errors

Typical Internal Staff:

- Strong understanding of FDM HR policies
- Proficient working with tools for employee management and recruitment processes
- Good software skills
- Abide to data policies and regulations
- Strong skills in web development

Consultants:

- Responsible for providing services to clients on specific engaging project related activities.
- Ability to engage with employees/clients effectively
- Responsible for allocating projects to employees

Typical Consultant:

- Must be flexible and able to adapt to evolving client requirements
- Focuses on understanding and meeting the needs of clients and employees
- Proficiency working with tools for project reporting, timesheet, and expense management
- Understand dynamics of client communication

Trainers:

- Focuses on skill development and training of employees.
- Tracks employee progress and provides feedback and useful e-learning resources.

Typical Trainer:

- Strong ability to teach and facilitate learning
- Proficient in using FDM portal for skill development tasks
- Ability to engage with and be compassionate with employees

### **3. Environment**

The platform FDM uses for its current application could be from any company/provider. We assumed that FDM currently does not utilise an existing application; or a platform to support any applications. As a result, we will create an employee portal based on a web application environment. The employee portal is a site that enables employees to complete self-service tasks. The site is expected to be people-oriented, so to be able to understand the requirements, we analysed the competing software such as Workday to extract the benefits and drawbacks. The disadvantages of Workday include functionality issues. Such as disappearing end dates in reports makes the platform unsuitable for this task.

The employee portal was chosen to be developed on a web-based platform. The logical reasoning behind this decision is accessibility. Any device with a stable internet connection and a web browser can access the web application. In 2016, 90% of all US Adults (aged 18 and above) had access to the internet [6]. Suggesting that most employees should have little to no difficulty when connecting to the internet. FDM employee consultants are based on-site with clients, indicating that the application should not be restricted to a single location. A broad range of devices (tablets, laptops, smartphones) can interact with the application from different locations, advocating flexibility. The number of people who own a smartphone in 2023 is 4.3 billion [7], implying most employees will have access to the application.

Furthermore, the application includes support for cross-platform compatibility. Encouraging access through various operating systems which have a browser, such as Windows, Linux, and iOS and Android.

Moreover, a web application platform was selected to provide centralised data management. This allows the data to be more consistent, whilst eliminating data redundancy. The employee portal consists of extensive personal information, the platform ensures there will be no data duplication and the data are up to date. Additionally, centralised data management improves security. The data can be protected by using methods such as encryption, authentication, and authorisation. Promoting the platform to be more secure when storing and using personal data.

Another factor that influenced the decision was the lack of installation. Users can directly access the application through a browser (typically preinstalled on a device), resulting in fewer tasks needed for access. It is particularly crucial to support the older demographic, as they represent the fastest growing segment of the population in America [8] or users that face technological difficulties. Consequently, this enhances the user experience.

User experience and real-time collaboration played the final factor when choosing the web application. Across the different devices and browsers, the application is created to be responsive and engaging to use. Enabling users to do their self-service tasks effortlessly on any device without complications. Web based application supports collaboration and sharing, which is essential for an employee portal. A reactive web application ensures all users access and share data in real time providing instant feedback. Contributing to a dynamic and engaging experience. The application operating in real-time also allows straightforward maintenance, due to updates and bug fixes performed on the server. All users will receive the latest version, elevating user experience due to new features or more optimised performance.

#### **4. Tasks and Procedures**

Key Tasks for Each User:

Graduates:

- Training Enrollment: Use the portal to enrol in the necessary training programs as part of the Recruit, Train, Deployment model.

#### Returns:

- Re-orientation: Access resources to get up to speed with the current company standards and technologies.
- Schedule Management: Manage and update their new work schedule and availability for projects.

#### Ex-Forces:

- Skill Conversion: Utilise the portal to identify how their skills from the forces can be translated into the corporate environment.
- Career Development: Plan their career path within FDM through the portal.

#### Consultants:

- Client Reporting: Report on their project progress and communicate with FDM while placed with clients.
- TimeSheets Submission: Submit their timesheets for the projects they are working on.
- Expense Reporting: Manage and report any work-related expenses.

#### Internal Staff:

- Add employee to system: enables the addition of new employees to the system, ensuring they have access to necessary resources and tools for their role.
- Recruitment/Employment Management: Internal staff like HR can manage the recruitment process through the portal by posting job openings, reviewing applications, and scheduling interviews.
- Approve Annual Leave: The management and approval of employee annual leave requests. Staff can submit their leave requests through the portal, which can then be reviewed and approved by the appropriate personnel, ensuring a smooth process for managing time off.

#### Trainer:

- Personal Development Tasks: Assign training to employees and track compliance.
- Track Employee Progress: Monitor and report on employee progress through training programs.
- Skillset Improvement: Provide resources for employees to improve their skills, including e-learning modules.
- Feedback Collection: Gather and analyse feedback on training sessions for continuous improvement.

#### Shared Tasks Across Personas(Employees):

- Project Selection: Select preferred projects or assignments within their region or globally.
- Self-Service Updates: All employees can update personal information without HR intervention.
- Leave Management: Book and manage annual leave directly through the portal.
- Logging in/Registering: Every user must be able to securely login and register on the employee portal.

- Communication Tools: Use the portal to communicate with other employees, HR, or management.
- Notify on updates: Stay updated with any internal updates and HR process changes through an internal newsfeed or notification system.
- Helpdesk/Support: Access to a chatbot or helpdesk for quick resolution of common issues or questions

## **5.Competing Software**

### 1. SAP

SAP[9] Employee Self-Service (ESS) is an integral component of SAP's Enterprise Portal technology that allows employees by offering them direct access to their personal data and company information. This platform is designed to showcase a variety of human resources processes, allowing for a more efficient workflow within Organisations.

### 2. Workday HCM

Workday[10] HCM's employee portal serves as a universal solution that allows employees to update their personal information, view and manage their compensation and benefits, and handle absence requests with ease. The portal also allows for career planning and progression, with access to learning and development resources tailored to individual growth objectives. Workday's user-friendly interface and mobile accessibility ensure that employees have the flexibility to manage their HR needs it anytime.

### 3. Oracle HCM Cloud

Oracle HCM Cloud[11] offers an employee portal and self-service framework that enables staff to manage a range of tasks independently. From updating personal information and accessing payroll records to enrolling in benefits and submitting time-off requests, this platform puts control into the hands of employees. With user-friendly design and mobile access, Oracle HCM Cloud ensures that these tools are easily accessible, providing a seamless and efficient experience for managing work-life needs.

	SAP	Workday	Oracle HCM Cloud
Key Functionality Points:	-Employees easily can update their address, bank details, and	- Includes modules for recruitment, compensation, benefits, time, and	- Employees can access personal data, benefits information, and HR

	<p>emergency contact information.</p> <ul style="list-style-type: none"> <li>- Employees can manage their personal shift plans, time accounts, and view time balances.</li> <li>- Employees can view their payroll data.</li> <li>- Employees have greater control over their data and HR processes.</li> <li>- Centralised access to a wide array of data and functionalities.</li> </ul>	<p>attendance, learning management</p> <ul style="list-style-type: none"> <li>- Management of time-off requests and absences through an employee self-service portal.</li> <li>- Allows for the customisation of workflows and business processes to suit unique organisational needs</li> <li>- Offers mobile applications for iOS and Android devices, enhancing accessibility for users on-the-go.</li> </ul>	<p>services without HR intervention.</p> <ul style="list-style-type: none"> <li>- Provides time tracking, labour scheduling, and absence management.</li> <li>- Includes recruiting, learning, performance management, and career planning tools.</li> </ul>
Pros:	<p><b>Autonomy:</b> Employees have greater control over their data and HR processes.</p> <p><b>Efficiency:</b> Reduces HR's administrative load by allocating routine tasks to employees.</p> <p><b>Accessibility:</b> Centralised access to a wide array of data and functionalities.</p> <p><b>Integration:</b> Works hand in hand with other SAP roles for comprehensive functionality.</p>	<p><b>User Experience:</b> The software has a logical layout and flow, contributing to a user-friendly experience.</p> <p><b>Integration:</b> Workday's seamless integration with career pages simplifies the recruiting process for many organisations.</p> <p><b>Mobility:</b> With mobile apps available, Workday HCM provides flexibility and convenience to its users.</p>	<p><b>Comprehensive:</b> Users often praise its high functionality that covers nearly all aspects of HR management.</p> <p><b>Analytics and Reporting:</b> Strong analytical tools help organisations make data-driven decisions.</p> <p><b>Integration:</b> Generally, integrates well with other Oracle Cloud services, offering a unified platform for business operations.</p>
Cons:	<p><b>Complexity:</b> The number of functions can be overwhelming, requiring a steeper</p>	<p><b>Usability Issues:</b> Some users experience minor annoyances with functionality, like</p>	<p><b>Complexity:</b> Some users find the software complex and not as intuitive, which can lead to a</p>

	<p>learning curve.</p> <p>Dependence on SAP Infrastructure: Best suited for organisations already invested in SAP's systems.</p> <p>Customisation and Tailoring: While it offers considerable customisation, this can be a complex process requiring SAP expertise.</p>	<p>disappearing end dates in time reports.</p> <p>Support Challenges: The process of recovering login credentials can be difficult, requiring intervention from the company's HR department.</p> <p>Complex Reporting: Creating reports can be difficult for users, indicating a potential need for more intuitive reporting tools.</p>	<p>longer learning curve.</p> <p>Cost: The cost of Oracle HCM Cloud can be high, making it less accessible for smaller organisations.</p> <p>Customer Support: As with many large software providers, some users report that customer service can be slow or less helpful than desired.</p>
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## Conclusion

In conclusion, while the competing software solutions like SAP, Oracle HCM Cloud, and Workday offer robust platforms for managing various HR functions, they often come with complexities and a one-size-fits-all approach that may not fully align with the unique operational dynamics of FDM. These systems excel in offering extensive functionalities, but they can fall short in providing the personalised service that is increasingly necessary for a diverse and evolving workforce. By integrating advanced features with an emphasis on user-friendly design and efficient functionality, the FDM Employee Portal aims to address these gaps, ensuring a seamless, efficient, and flexible platform that accommodates for the specific preferences and constraints of its users.



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classDiagram
    class Employee
    class Training
    class Project
    class Graduates
    class Ex-Forces
    class SupportDesk
    class Login
    class Annual Leave
    class E-learning resources
    class Skill Development Task
    class Feedback
    class EmployeeProgress
    class Internal Staff
    class Consultant
    class Client
    class Time Sheets
    class Expense Report
    class PersonalInfo
    class Communicate
    class Returns
    class Schedule
    class Resources
    class Program
    class Recruitment
    class Employee to System
    class Skill conversion
    class Career Development

    Employee <|-- Internal Staff
    Employee <|-- Consultant
    Employee <|-- Trainer
    Employee <|-- SupportDesk
    Employee <|-- Login
    Employee <|-- Annual Leave
    Employee <|-- E-learning resources
    Employee <|-- Skill Development Task
    Employee <|-- Feedback
    Employee <|-- EmployeeProgress
    Employee <|-- Employee to System

    Training --> Graduates : enrolls
    Project --> Graduates : selects
    Graduates --> Employee : 
    Ex-Forces --> Employee : 
    SupportDesk --> Employee : access
    Login --> Employee : can
    Annual Leave --> Employee : books
    E-learning resources --> Employee : provides
    Skill Development Task --> Trainer : assigns
    Feedback --> Trainer : provides
    EmployeeProgress --> Trainer : tracks
    Internal Staff --> Employee : enrolls
    Internal Staff --> Employee : adds
    Internal Staff --> Employee : manages
    Internal Staff --> Employee : can
    Consultant --> Employee : submits
    Consultant --> Employee : manage
    Client --> Consultant : interacts
    Time Sheets --> Consultant : submits
    Expense Report --> Consultant : submits
    PersonalInfo --> Employee : updates
    Communicate --> Employee : can
    Returns --> Employee : 
    Schedule --> Returns : manages
    Resources --> Returns : access
    Program --> Internal Staff : enrolls
    Recruitment --> Internal Staff : manages
    Employee to System --> Internal Staff : adds
    Skill conversion --> Ex-Forces : utilises
    Career Development --> Ex-Forces : plans
  
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