

# HRIS Phase 1 Detailed Implementation Guide

## Step 1: Requirements Gathering & Use Case Validation

### Activities:

- Conduct stakeholder interviews (HR, IT, employees/managers).
- Document current processes (Employee onboarding, Leave management).
- Define user roles & permissions clearly (HR Admin, ESS, MSS).
- Validate and finalize MVP scope.
- Identify AI automation opportunities (Chatbot, document auto-tagging).

### Deliverables:

- Business Requirements Document (BRD).
- User Journey Maps & Personas.
- Use Case Catalog (Employee, Leave scenarios).
- Stakeholder Matrix.
- AI Feasibility Notes.
- Tooling & Infrastructure Checklist.

## Step 2: Data Modeling & Azure Infrastructure Setup

### Activities:

- Define data structures clearly (Employee & Leave).
- Setup Azure SQL Database (schema creation clearly defined).
- Configure Azure Active Directory (RBAC roles, Single Sign-On).
- Setup Azure Storage (backup and retention policies clearly).
- Implement Azure security configurations (encryption, firewall).

### Deliverables:

- ER Diagrams (Employee, Leave).
- SQL Scripts for table creation.
- Azure Infrastructure Setup Guide.

## Step 3: Core Microservices & SharePoint Structure Setup

### Activities:

- Develop Employee and Leave microservices using .NET Core 8.
- Containerize services using Docker and deploy on Azure Kubernetes Service (AKS).
- Configure SharePoint libraries (Employee documents, Leave requests).
- Setup AI-powered auto-tagging of SharePoint documents.

Deliverables:

- Microservices source code (REST APIs).
- Dockerfiles and AKS deployment YAML scripts.
- REST API documentation (Swagger).
- SharePoint configuration instructions.

## **Step 4: Frontend, Workflow & Authentication**

Activities:

- Develop Power Apps Canvas App for Employee Self-Service (ESS Portal).
- Integrate REST APIs (Employee, Leave services).
- Automate leave workflows using Power Automate.
- Configure Azure Active Directory for secure authentication and RBAC.

Deliverables:

- Power Apps Canvas App (.msapp file).
- Power Automate workflow configurations (.zip).
- Azure AD Authentication & RBAC Configuration Guide.

## **Step 5: HR Chatbot Integration (Azure OpenAI & Power Virtual Agents)**

Activities:

- Setup Azure OpenAI and integrate with Power Virtual Agents.
- Develop chatbot conversations for leave queries and FAQs.
- Integrate chatbot with backend APIs for dynamic responses.
- Train chatbot with datasets and perform rigorous testing.

Deliverables:

- Azure OpenAI & Power Virtual Agents Configuration Guide.
- Detailed chatbot conversation flows.
- Training datasets (JSON, CSV).
- API integration guides and scripts.

## **Step 6: Testing, Documentation & Go-live**

Activities:

- Conduct unit tests (xUnit/NUnit) on microservices.
- Perform Integration testing across all components.
- Execute User Acceptance Testing (UAT) clearly with pilot groups.
- Prepare comprehensive documentation for technical architecture, user guides, operational manuals.

- Deploy solution to production and configure monitoring using Azure Monitor.

Deliverables:

- Testing Reports (Unit, Integration, UAT).
- Technical Architecture Document.
- User Manuals (HR Admin, Employees, Managers).
- Operational Manuals (backup, recovery, support procedures).
- Go-live checklist and readiness document.
- Monitoring & Support Plan.