Group 8 - AI Project Design & Execution

AI-Driven Employee Well-Being & Burnout Early-Warning System

Predictive Analytics + Generative AI for Proactive HR Intervention

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The Employee Burnout Crisis

Organizations Globally Face a $190B Annual Burnout Crisis with No Early Warning System

76%
Employee Burnout

Of employees experience burnout, but only 25% report it early.

$190B
Annual Cost

Lost productivity due to burnout across organizations annually.

$20K
Turnover Cost

Average cost to replace a single employee due to burnout.

6-12m
Detection Lag

Current HR systems detect issues months too late to act.

Why This Matters

By the time HR teams identify burnout, the employee has often already decided to leave. Prevention is impossible without predictive insights that can forecast risk 3-6 months in advance.

The Burnout Crisis at Customer

Organization-Specific Financial Impact & Operational Challenges

150	**$4.3M**	**$2.5M**	**$6.7M**
Employees Leaving Annually	**Annual Turnover Cost**	**Productivity Loss**	**Total Annual Burnout Cost**
15% Turnover	150 × $28.5K	5% Efficiency Impact	Turnover + Productivity

An organization of 1,000 employees with a 15% annual turnover rate is losing 150 employees per year, costing $4.3M in replacement and training costs, plus an additional $2.5M in lost productivity. Without proactive intervention, this crisis continues unchecked.

Why Current Solutions Fail

Traditional HR Analytics Cannot Predict or Prevent Burnout

Point-in-Time Assessment

Annual surveys miss emerging issues and provide no real-time visibility into employee well-being trends.

No Predictive Power

Systems report historical metrics without forecasting future risk. No ML-based models to identify patterns before they become crises.

No Actionable Insights

Reports show "what" happened (metrics) but not "why" it happened (root causes) or "what to do" about it (recommendations).

Additional Barriers

01 Data silos across performance, attendance, and survey systems.

02 Privacy concerns about surveillance-style monitoring.

03 Lack of natural language interfaces requiring data science expertise.

04 One-size-fits-all interventions that don't address individual or team-specific needs.

The Core Problem

Organizations need an intelligent, proactive, data-driven system that predicts burnout 3-6 months in advance, explains root causes in human terms, and recommends targeted, ethical interventions.

Competitive Landscape & Differentiation

How Our Solution Compares to Existing HR Analytics and Pulse Survey Tools

Traditional HR Analytics
Workday, Oracle, SAP SuccessFactors

✗ Reactive reporting only

✗ No predictive capability

✗ No natural language interface

✗ Generic insights, not actionable

✗ Requires data science expertise to use

✗ No policy integration

Pulse Survey Tools
Culture Amp, Glint, Peakon

✗ Point-in-time snapshots only

✗ Relies on self-reporting (bias)

✗ No integration with operational data

✗ No predictive capability

✗ High response burden on employees

✗ Limited actionability

Our Solution
AI-Driven Well-Being Platform

✓ **Predictive (3-6 months advance warning)**

✓ **Conversational AI interface**

✓ **Multi-source data integration**

✓ **Policy-grounded recommendations (RAG)**

✓ **Privacy-first design (aggregated insights)**

✓ **Explainable AI (why is risk high?)**

Key Competitive Advantages

Predictive vs Reactive: Identify at-risk employees 3-6 months before crisis, not after they leave

Explainable vs Black Box: Natural language explanations of "why" risk is high, building trust

Data-Driven vs Survey-Based: Combines operational data with behavioral signals, not just opinions

Policy-Aligned vs Generic: Recommendations grounded in organizational policies and culture

Key Features & Capabilities

Four Core Capabilities Deliver Proactive, Ethical, Scalable Well-Being Management

01 Early Warning System

Provides real-time burnout risk scoring across all employees on a 0-100 scale.

- Multi-factor risk analysis (workload, engagement, performance)
- Automated alerts when risk thresholds are exceeded
- Trend visualization and pattern recognition

02 Intelligent Insights Generator

Produces natural language summaries of well-being trends at team and department levels.

- Root cause analysis (e.g., overtime + engagement drop)
- Comparative analysis across teams and departments
- Personalized reports for executives, managers, and employees

03 Conversational HR Advisor

Offers a chat interface for HR professionals to query data naturally.

- Ask: "Which teams are at highest burnout risk?"
- Context-aware recommendations with policy citations
- "What-if" scenario exploration for intervention planning

04 Privacy-First Design

Aggregates insights at team levels with individual data visible only to authorized HR.

- Opt-in employee participation ensures transparency
- GDPR and CCPA compliance built-in
- Focus remains on well-being support, not surveillance

Our Solution Architecture

Predictive ML + Generative AI + RAG = Proactive, Explainable Employee Well-Being Platform

01   Predictive Machine Learning

Analyzes 30+ features (work patterns, performance, engagement) using Gradient Boosting. Generates burnout risk scores (0-100) with >85% accuracy, identifying patterns 3-6 months in advance.

02   Large Language Models

Powered by Azure OpenAI GPT-4. Converts complex ML predictions into human-readable insights and enables a conversational HR advisor interface that requires no data science expertise.

03   Retrieval-Augmented Generation

Connects AI insights to organizational policies. Retrieves relevant support programs (EAP, flexible work) and ensures recommendations align with company culture and compliance.
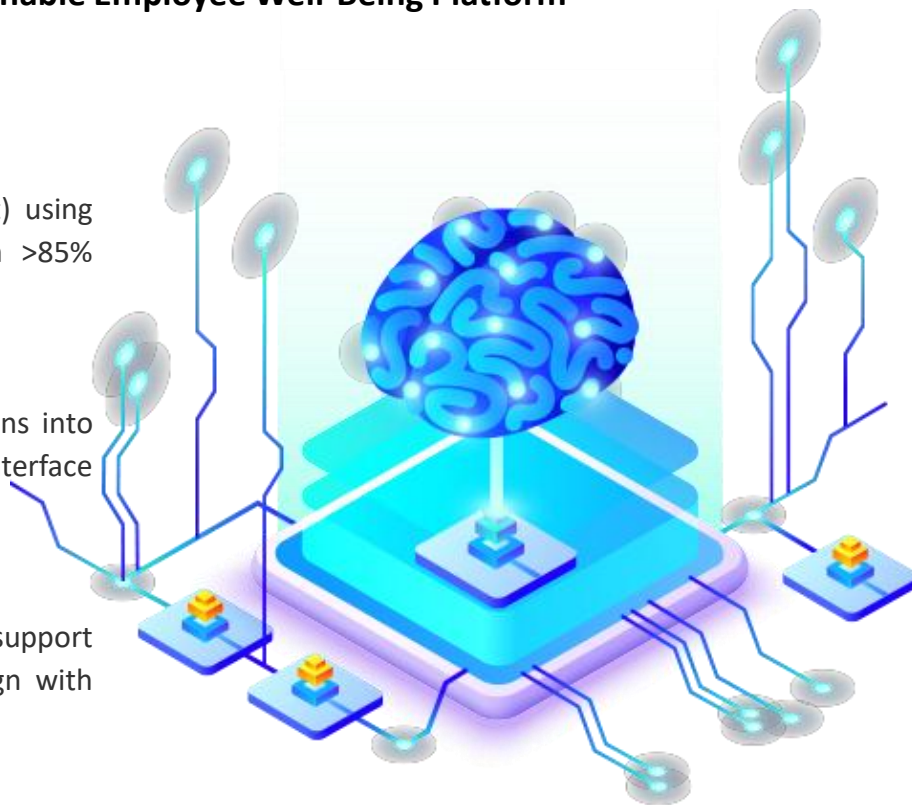
System Architecture Overview

Enterprise-Grade Azure Cloud Architecture with ML Ops & DevOps Best Practices

Application & User Interface
- **Web Frontend:** React.js, TypeScript, Material-UI
- **Mobile App:** React Native
- **Data Visualization:** D3.js
- **Hosting:** Azure App Service

API & Backend Services
- **API Gateway:** Azure API Management (Proxy)
- **Backend Framework:** FastAPI
- **Compute:** Azure Kubernetes Service (AKS), Azure Functions
- **Authentication:** Entra ID (SSO)

Data & AI Platform
- **AI/ML Services:** Azure Machine Learning, OpenAI GPT-4
- **Orchestration:** LangChain
- **Machine Learning Models:** Gradient Boosting, LSTM
- **Data Storage:** Azure SQL, Data Lake Gen2, Cosmos DB
- **Data Processing:** Azure Data Factory (ETL), Data Bricks
- **Search:** Cognitive Search (Vector)

Infrastructure & Operations
- **Security:** Azure Active Directory, Key Vault, Encryption
- **Infrastructure as Code:** Terraform
- **CI/CD & MLOps:** Azure DevOps
- **Serverless:** Azure Functions (Ad-hoc Jobs)
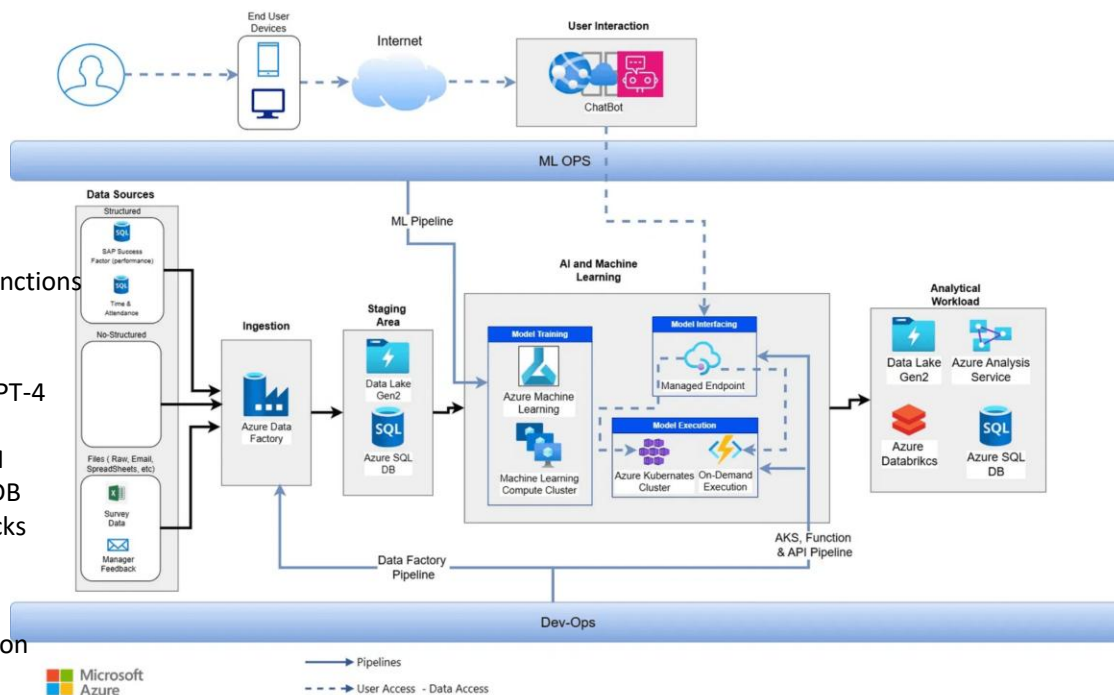
Data Flow & ML Pipeline

End-to-end Data Flow: From Raw HR Data to Actionable AI Insights

01 **Data Ingestion & Preparation**

Connects HR systems via Azure Data Factory to Data Lake. Transforms raw logs into structured Azure SQL records, Before storing to the SQL data will be cleans and optimized by Azure Databricks. Integrates performance, attendance, engagement, and feedback data for feature engineering.

02 **ML Model Training Pipeline**

Flows from Feature Store to Gradient Boosting training. Validates models against accuracy targets (>85%) before registry deployment. Includes monthly retraining and A/B testing for continuous improvement.

03 **RAG Pipeline for Policy Retrieval**

Processes HR policies through chunking (500 tokens) and embedding generation. Indexes vectors in Azure Cognitive Search to enable semantic retrieval of policy-compliant context for every insight.

04 **User Interaction Pipeline**

Receives queries via API Gateway. Orchestrates business logic combining ML predictions, LLM generation, and RAG retrieval. Synthesizes responses for delivery via dashboards and chat interfaces.

Machine Learning Models

Five Specialized ML Models Address Different Aspects of Employee Well-Being

Burnout Risk Prediction

Gradient Boosting Classifier

Generates risk scores (0-100) and identifies contributing factors 3-6 months before critical events.

Inputs: 30+ features (Work patterns, Performance, Engagement, Attendance, Communication volume)

Accuracy	>85%
Precision	>80%
Recall	>75%

Turnover Prediction — Random Forest

Predicts probability of employee leaving within 3-12 months to enable proactive retention interventions.

Time Series Forecasting — LSTM / Prophet

Forecasts well-being trends at team/department levels for 3-6 month capacity planning.

Anomaly Detection — Isolation Forest

Detects sudden behavior changes like collaboration drops or unusual absence patterns for immediate alerts.

Employee Segmentation — K-Means Clustering

Groups employees by risk profiles (e.g., "High Performer at Risk") for targeted intervention strategies.

LLM & Generative AI Integration

Generative AI Transforms Raw ML Predictions into Human-Readable, Actionable Insights

Conversational HR Advisor

Enables HR professionals to query complex data using natural language without needing data science expertise.

› "Which teams have the highest burnout risk?"
› "Why is Engineering's engagement dropping?"
› Context-aware recommendations with citations

Personalized Well-Being Reports

Auto-generates tailored reports for different organizational roles with appropriate detail levels.

› Executives: Strategic overview & trends
› Managers: Team-specific guidance
› Employees: Personal feedback & resources

Prompt Engineering Strategy

System prompts establish domain expertise and ethical boundaries.

› Focus on prevention rather than blame
› Dynamic context injection (Policies, Budget)
› Few-shot learning for consistent output format

System Output Example: Automated Insights

Subject: Team Alpha Well-Being Status

Date: October 24, 2025

CURRENT STATUS

Risk Level: **72/100 (HIGH)**

Trend: Increasing (+15% vs last month)

PRIMARY CONTRIBUTING FACTORS

1. Overtime hours increased by 35%
2. Engagement scores dropped by 22%
3. Q4 Project Deadline Pressure

RECOMMENDED ACTIONS

- Redistribute workload to Team Beta
- Schedule well-being check-in (Manager)
- Offer flexible work options (Policy HR-12)

RAG Implementation

Retrieval-Augmented Generation Ensures AI Recommendations Are Policy-Compliant

Knowledge Base Contents

• **HR Policies:** Work arrangements, leave policies, benefits.
• **Well-being Programs:** EAP details (24/7 counseling), mental health resources.
• **Specifics:** Mental Health Days (3 days/year), Flexible Work (Hybrid options).

Document Processing Pipeline

PDF/DOCX → Text Extraction → Chunking (500 tokens) → Embedding → Vector Store

Retrieval Strategy

Uses **Hybrid Search** combining semantic vector similarity with keyword search (BM25). Metadata filtering ensures context relevance (e.g., by department).

Example RAG Output

"Based on company policies, available support options include:
1. Employee Assistance Program (Policy HR-2023-045): 24/7 confidential counseling.
2. Flexible Work (Policy HR-2023-012): Hybrid work options with manager approval.
3. Mental Health Days (Policy HR-2023-089): 3 days/year, no documentation required."
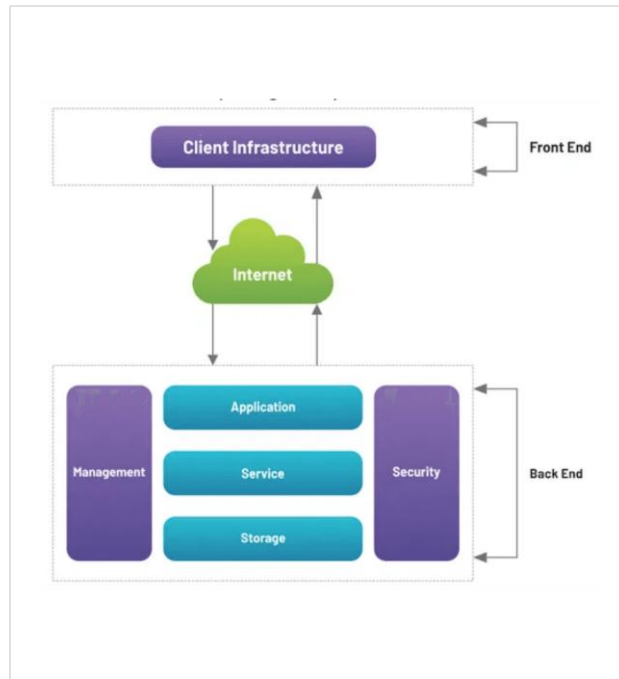
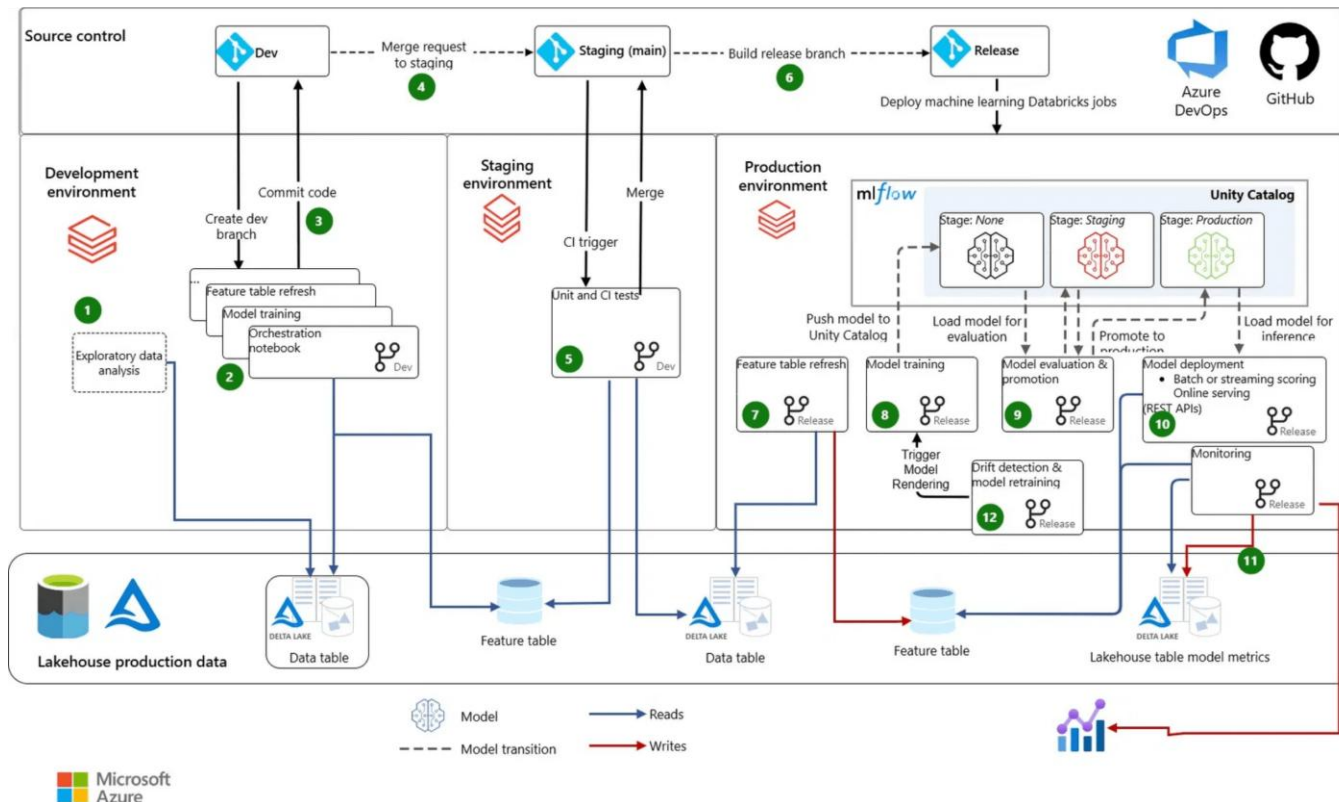Cloud Architecture supporting RAG Pipeline

Deployment Architecture

Cloud-Native Azure Architecture Balances Innovation, Security, Scalability

Why Azure Cloud?

- Scalability
- Security
- Cost Efficiency

Timeline Summary & Risk Management

52-Week Execution Roadmap & Mitigation Strategies

Execution Roadmap

Phase	Weeks	Key Deliverables
0. Assessment	1–4	Governance & Data Audit
1. Planning	5–10	Architecture Blueprint
2. Data & ML	11–22	Validated Models (>85%)
3. Integration	18–30	RAG & Backend APIs
4. Frontend	28–36	Dashboards & UI
5. Pilot & Rollout	37–52	Validation & Rollout Plan

Key Risks & Mitigation

1. Data Quality & Access

Mitigation: Early audit in Phase 0; Synthetic data generation for training; strict governance framework.

2. Model Accuracy (<85%)

Mitigation: Iterative feature engineering; Human-in-the-loop validation; Fallback to rule-based alerts.

3. Low User Adoption

Mitigation: Extensive UAT in Phase 4; Change management workshops; Pilot feedback loop.

Phase 0: Assessment & Readiness

Foundation for Success - Stakeholder Alignment, Governance & Data Validation

Objective

Establish a solid foundation by aligning stakeholders, defining governance, and validating data feasibility.

Key Activities

› Conduct stakeholder workshops to finalize business objectives, KPIs, and success metrics

› Establish comprehensive data governance and ethics framework (GDPR, CCPA)

› Map all existing HR data sources (Workday, SAP) and assess API availability

› Perform initial data quality assessment and bias evaluation across datasets

› Define initial burnout risk scoring framework with 30+ feature candidates

Key Milestones

✓ **Project Charter Sign-off**
Executive Approval

✓ **Data Governance Framework**
Documented & Approved

✓ **Readiness Assessment**
Data Quality Baseline

This foundational phase requires intensive cross-departmental coordination (HR, IT, Legal) to ensure the project starts with a clear mandate and strong governance. Rushing this creates technical debt and compliance risks.

Phase 1: Planning & Technical Design

Architecting the Enterprise Solution - Blueprint for Scalability & Security

Objective

Create a comprehensive technical blueprint for the entire solution, ensuring scalability, security, and maintainability.

Key Activities

› Design end-to-end enterprise solution architecture on Azure (AKS, Data Lake, ML Studio)

› Architect complete MLOps pipeline with CI/CD (Azure DevOps) and IaC (Terraform)

› Design data Lakehouse schema and centralized feature store architecture

Key Milestones

✅ **Solution Architecture Doc**
Technical Blueprint Sign-off

✅ **MLOps & CI/CD Blueprint**
Pipeline Design Ready

✅ **Security & Governance Plan**
Detailed Specifications

Designing a secure, scalable enterprise system requires meticulous planning and prototyping. This phase ensures long-term viability and prevents costly rework during development.

Phase 2: Data Foundation & ML Development

Building the Intelligence Layer - Data Pipelines & Predictive Models

Objective

Build robust data infrastructure and develop core predictive machine learning models with rigorous validation.

Key Activities

› Develop and populate feature store with 30+ validated, production-ready features

› Build and test robust data ingestion pipelines using Azure Data Factory with automated data cleaning and anonymization

› Train, tune, and validate multiple predictive models (Burnout Risk, Turnover Prediction) against accuracy (>85%) targets

› Implement experiment tracking (MLflow) for reproducibility and model versioning

› Establish automated model retraining framework to prevent model drift

Key Milestones

✓ **Functional Data Pipelines**
Automated Ingestion

✓ **Validated Models**
>85% Accuracy in Registry

✓ **Retraining Pipeline**
Drift Detection Deployed

This is the most data-intensive phase. It requires integrating disparate data sources, iterative feature engineering, and rigorous experimentation to build high-performing, unbiased ML models.

Phase 3: AI Integration & Backend

Connecting Intelligence to Action - RAG, LLM Integration & Secure APIs

Objective

Build the application backend, integrate ML models, and implement generative AI capabilities for explainability and actionability.

Key Activities

› Build RAG pipeline: ingest & chunk HR policies, generate embeddings, deploy Azure Cognitive Search
› Develop secure, scalable backend APIs (FastAPI) to serve model predictions and business logic
› Integrate Azure OpenAI (GPT-4) to generate human-readable insights and power the conversational HR advisor

Key Milestones

✔ **Deployed Backend APIs**
Production-ready & documented

✔ **Functional RAG Pipeline**
Policy-aware semantic search

This phase involves complex integration connecting ML models to a generative AI layer. Timeline accounts for prompt engineering, RAG tuning, API resilience testing, and security hardening.

Phase 4: Frontend & User Experience

Designing for Impact - Intuitive Dashboards & Role-Based Interfaces

Objective

Create an intuitive, insightful, and role-specific user interface for all target users (executives, managers, HR, employees).

Key Activities

› Develop primary dashboard UI (React/D3.js) with role-specific visualizations for executives, managers, and HR professionals
› Implement role-based access controls to ensure users only see authorized data
› Conduct multiple rounds of User Acceptance Testing (UAT) with target user groups to iterate and refine user experience
› Build conversational chat interface for the HR advisor with natural language query capabilities
› Develop mobile-responsive components for on-the-go access and cross-platform compatibility

Key Milestones

✓ **Completed & Tested UI for All Roles**
Fully Functional

✓ **Successful UAT Sign-off**
Business User Approval

✓ **Finalized UI Component Library**
Reusable Assets

Building a high-quality user experience is iterative. This timeline allows for development of complex components followed by user feedback cycles to ensure the final product is functional and valuable.

Phase 5: Deployment, Pilot & Validation

From Prototype to Impact - Controlled Rollout & Real-World Validation

Objective

Deploy the system in a controlled manner, validate real-world impact, and prepare for full enterprise rollout.

Key Activities

› Deploy solution to production with CI/CD, automated tests, rollback, security and load testing
› Launch controlled pilot (200 employees) and monitor system performance, model drift, and KPIs
› Collect quantitative & qualitative feedback to measure ROI and surface improvements
› Prepare training materials and enterprise rollout plan based on pilot learnings

Key Milestones

✓ **Successful Production Go-Live**
Pilot Group (200 Employees)

✓ **Pilot Validation & ROI Report**
Quantified Impact Analysis

✓ **Enterprise Rollout Plan**
Approved & Ready for Scale

A 4-month pilot provides meaningful usage data and stakeholder confidence to validate ROI before full-scale deployment.

Azure Bill of Quantities

Monthly Cost Breakdown (Azure Calculator – UAE Region)

SERVICE NAME	CONFIGURATION / SKU	QUANTITY	UNIT	TOTAL
COMPUTE SERVICE				
Azure Machine Learning Compute	Standard_D4s_v3 (4 vCPU, 16GB RAM)	1	Instance	350.99
Azure Kubernetes Service (AKS)	3 × Standard_D2s_v3 Nodes	3	Nodes	485.04
App Service Plan	Premium P1V2 (1 Core, 3GB)	1	Plan	156.22
Azure Function	Premium tier, Pay as you go	1	Plan	308.57
		Compute Services Subtotal		**1,300.82**
STORAGE SERVICES				
Data Lake Storage Gen2	Hot Tier (Pay-as-you-go)	500	GB	17.57
Azure Blob Storage	Standard Hot Tier	1000	GB	21.53
Azure SQL Database	Standard S2 (50 DTUs)	1	Database	971.43
		Storage Services Subtotal		**1,010.53**
AI & ML SERVICE				
Azure OpenAI	Tokens: Input 50M / Output 25M	1	Monthly	625.00
Azure AI Search	Standard Tier (S1)	1	Monthly	245.28
Azure Cognitive Services	Text Analytics, Language Understanding	1	Service	700.00
Azure Analysis Service	Standard S1 (Hours), 1 Instance(s), 730 Hours	1	Instance	1,481.90
		AI & ML Services Subtotal		**3,052.18**
NETWORKING & INTEGRATION				
API Management	Standard Tier (1 Unit)	1	Unit	700.00
Virtual Network	Standard (Pay-per-GB)	100	GB	64.00
		Networking & Integration Subtotal		**764.00**

Azure Bill of Quantities

Monthly Cost Breakdown (Azure Calculator – UAE Region)

SERVICE NAME	CONFIGURATION / SKU	QUANTITY	UNIT	TOTAL
MONITORING & SUPPORT				
Azure Monitor	Standard Monitoring	1	Service	118.00
Azure Support Plan	Standard Support	1	Plan	100.00
		Monitoring & Support Subtotal:		**218.00**
SECURITY & COMPLIANCE				
Azure Key Vault	Standard Tier (Operations)	1000	Operations	39.79
Azure Defender for Cloud	Standard Plan (Servers)	10	Servers	102.20
		Security & Compliance Subtotal:		**141.99**
		Total Monthly Cost:		**6,487.52**
		Annual Cost:		**77,850.24**

Resource Planning & Team Allocation

Resource Matrix with Hourly Rates, Allocation, and Team Composition per Phase

Role	Rate/ Hour	Phase 0	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Total Hrs	Cost (USD)
Project Manager	$ 80.00	0.5	0.5	0.5	0.3	0.5	1.0	1,416	$ 113,280.00
Solution Architect	$ 100.00	0.7	0.5	0.3	0.3	0.3	0.3	832	$ 81,200.00
Business Analyst	$ 90.00	0.7	1.0	0.3	0.1	0.0	0.0	548	$ 45,720.00
Azure Cloud Engineer	$ 70.00	0.5	0.7	0.3	0.1	0.1	0.0	480	$ 31,640.00
Data Governance / Privacy SME	$ 80.00	0.4	0.4	0.2	0.1	0.1	0.1	408	$ 31,360.00
Data Engineers (2x)	$ 80.00	0.3	2.0	1.0	0.6	0.4	0.3	1,656	$ 126,080.00
ML Engineers (2x)	$ 95.00	0.3	0.5	2.0	0.6	0.5	0.5	1,940	$ 182,400.00
LLM/RAG Specialist	$ 100.00	0.2	0.3	0.7	1.0	0.4	0.4	1,360	$ 134,800.00
Full-stack Developers (2x)	$ 95.00	0.0	0.3	0.5	2.0	2.0	0.5	2,392	$ 226,100.00
DevOps Engineer	$ 90.00	0.3	1.0	0.7	0.7	0.7	0.5	1,560	$ 136,800.00
QA/HR Domain Expert	$ 50.00	0.4	0.3	0.6	0.7	1.0	0.8	1,660	$ 82,400.00
Support Engineer	$ 50.00	0.0	0.0	0.0	0.0	0.2	0.6	456	$ 22,800.00
								Total:	**$ 1,214,580.00**

Cost Breakdown

Comprehensive Cost Analysis: PS, Infrastructure, and LLM/AI Services

Cost by Category

Professional Services (One Time)	$ 1,214,580.00
Cloud Services (Annual)	$ 77,850.24
Infrastructure, Support, Monitoring, Updates (Annual)	$475,000.00

Operations Cost

Position	Annual Salary
DevOps Engineer (1 FTE)	$95,000.00
ML Operations Specialist (1 FTE)	$85,000.00
Cloud Infrastructure Manager (1 FTE)	$100,000.00
Data Pipeline Engineer (1 FTE)	$95,000.00
System Administrator (0.5 FTE)	$40,000.00
Monitoring & Support (0.5 FTE)	$35,000.00
Contingency/Benefits (10%)	$25,000.00
TOTAL OPERATIONS SALARIES	**$475,000.00**

Financial Impact: Reduced Turnover Drives Strong ROI

Conservative Scenario (50% Effectiveness)

Year 1 Benefits

$2.57M

Reduced turnover through early burnout detection and intervention

Year 1 Investment

$1.76M

Professional services, cloud infrastructure, and operations

Net Year 1 Benefit

$797K

Immediate positive return on investment in the first year

45.1%

Year 1 ROI
Conservative estimate (50% effectiveness)

8.3 mo

Payback Period
System breaks even in 8 months

174.5%

3-Year ROI
Cumulative benefit over 3 years

Why Turnover Reduction Matters

The largest financial benefit comes from reduced employee turnover. By identifying burnout risk 3-6 months in advance, the system enables proactive interventions that prevent departures.

Calculation Basis

- 1,000 employees × $28,500 replacement cost
- 30% turnover reduction × 60% attribution
- 50% conservative effectiveness factor
- **Annual Benefit: $2.57M**

Team Contributions

Mahatma Ramoloko — Project Lead & Solution Architect

➢ Led the problem definition and framing aligned with global burnout research
➢ Built ROI model and financial justification
➢ Coordinated project plan, risk register, and governance strategy

Khaliq ur Rehman — ML & AI Integration Lead

➢ Developed ML model strategy (Gradient Boosting, Isolation Forest, LSTM)
➢ Created full Azure Architecture, ML pipeline flow, feature set, and prediction methodology
➢ Designed and documented RAG pipeline (chunking, embeddings, vector search)
➢ Produced example insights, prompt engineering strategy, and advisor logic

Ahmad Alshangiti — Backend & Data Engineering Lead

➢ Designed ingestion pipelines (Data Factory) and feature store schema
➢ Implemented API architecture blueprint, SSO integration, and data access flow
➢ Developed end-to-end data flow mapping and system component interactions
➢ Created risk management strategy and technical mitigation planning

Risk Management & Mitigation

Proactive Identification and Response Plans for Project Success

Technical Risks

Data Quality Issues

High × High = CRITICAL

Mitigation:
Month 1 data audit, synthetic data fallback, establish 80% quality threshold before model training

Model Performance Degradation

Medium × High

Mitigation:
Monthly retraining, drift detection, A/B testing, rollback procedures for failed updates

Integration Complexity

Medium × Medium

Mitigation:
Phased approach, pilot program, API-first design, extensive testing before production

Organizational Risks

Low User Adoption

High × CRITICAL

Mitigation:
User-centered design, extensive training, change champions, executive sponsorship, early wins

Privacy Concerns

Medium × CRITICAL

Mitigation:
Transparent communication, opt-in participation, aggregated insights only, legal review, ethics board

Resistance to AI

Medium × Medium

Mitigation:
Position as augmentation not replacement, showcase HR value-add, share success stories

Financial Risks

Budget Overruns

Medium × High

Mitigation:
15% contingency reserve, agile methodology, monthly cost tracking, scope management, vendor agreements

Delayed Benefits Realization

Medium × Medium

Mitigation:
Conservative projections, phased rollout, early pilot validation, quick wins in months 3-6

Model Inaccuracy

Medium × Medium

Mitigation:
Validation against >85% accuracy target, continuous monitoring, human-in-the-loop review process

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Critical Risk: Requires immediate attention and contingency planning   *Medium Risk:* Managed through standard project controls

References & Sources

Academic Papers, Industry Reports, and Technical Documentation

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IMPLEMENTATION NOTES

All statistical claims in this presentation are grounded in the above academic research and industry reports. Model accuracy targets (>85%) are based on published benchmarks from IBM Research and Microsoft Research. ROI projections use conservative assumptions aligned with Deloitte's findings on AI-driven well-being interventions.

Prototype, Cost and Sources

Prototype, Costing and ROI calculations are available at:

https://github.com/k4khaliq/AI-Project-Design-Execution