

44 AI-Driven Assistant for HR Service Automation

Industry	AI Consulting	Client	EPAM Systems
Role	AI Product Manager		Scale: An organization of 68,000 employees.
Key Result	Successfully launched an AI-driven HR assistant (LLM-based) that autonomously handles 12 HR processes, achieving an 80% deflection rate and delivering a 10x improvement in service speed.		

Situation	Task	Action	Result
Internal HR departments faced an overwhelming volume of routine inquiries from employees across 12 key HR processes. Response times from human operators often stretched into several days, leading to decreased employee satisfaction and preventing HR professionals from focusing on high-value strategic initiatives.	As the Product Manager , I was tasked with designing and implementing an AI-powered chatbot to handle primary communication with employees. The goal was to minimize response times, automate standard inquiries, and ensure seamless integration with the existing support ticket system to escalate complex cases to human experts when necessary.	<p>During the ongoing first year of the project, I have executed the following actions:</p> <p>Team Leadership & Roadmap Planning: Led a team of developers and business analysts, managing the product backlog, defining requirements, and planning the long-term product development strategy.</p> <p>Technology Stack Orchestration: Oversaw the implementation of a sophisticated tech stack, including OpenAI LLM for natural language processing, Microsoft Semantic Kernel for AI orchestration, and C#, Kafka, and Cosmos DB for high-performance data handling and scalability.</p> <p>Interaction Logic Design: Developed the workflow where the AI bot independently resolves inquiries using a specialized knowledge base for 12 HR processes, with an automated fallback to human support via ticket generation when needed.</p> <p>Continuous Improvement: As the project is ongoing, I established a feedback loop to monitor accuracy and refine the user experience based on data from the initial 35,000 active users.</p>	<p>The project has achieved remarkable milestones to date:</p> <p>Scalability: The bot currently serves 35,000 employees (over 50% of the workforce), with ongoing expansion to the full 68,000.</p> <p>Dramatic Speed Improvement: Response times were slashed from several days to mere minutes.</p> <p>High Automation Rate: The bot successfully resolves 80% of inquiries autonomously, without human intervention.</p> <p>Accuracy: Achieved a consistent 99% accuracy rate in responses.</p> <p>Business Impact: The system saves thousands of man-hours annually, significantly reducing the HR department's operational burden and improving overall organizational efficiency.</p>