

AI Assistant for Internal Knowledge Management

KPCS Consulting Case Study

EXECUTIVE SUMMARY:

This case study demonstrates how a national hotel chain with a significant position in the domestic EU market transformed its internal knowledge management with an AI-powered assistant developed by KPCS Consulting. The project delivered a fully functional AI chatbot working exclusively with the Client's Knowledge Base, enabling employees to find information about events, services, and programs within seconds instead of minutes. Deployed in the Client's Azure environment with full data control, the solution provides transparent answers with source references, analytics dashboards for identifying knowledge gaps, and a modular architecture ready for future expansion to customer-facing channels.

KEY DELIVERED OUTCOMES:

- **98% faster GO / NO GO decisions** – complex RFPs evaluated in minutes instead of hours, accelerating pipeline velocity
- **80% reduction in total proposal preparation time** – approximately 26 hours saved per proposal, redeploying senior expertise toward higher-impact initiatives
- **Scope estimation reduced from multiple days to approximately one hour** – dramatically improving responsiveness and execution confidence
- **30% increase in proposal throughput without additional headcount** – enabling scalable growth without margin erosion
- **100% structured requirement validation** – AI-driven compliance verification reducing oversight risk and costly rework
- **Material annual efficiency gains** – tens of thousands of hours reclaimed across sales and delivery functions

1. Client Overview

The Client is a national hotel chain with a significant position in the domestic EU market, operating a network of hotels across the country. The company offers a wide portfolio of services, including accommodation, wellness & spa, gastronomy, conference facilities, and event organization. With a growing volume of information in its internal Knowledge Base and increasing guest demands for

quick and accurate answers, the Client sought a way to make the corporate knowledge base more efficiently accessible to employees.

- Number of employees: Over 1,000 hospitality professionals across the hotel network
- Geographic scope: 20 hotels in the most attractive destinations in the EU country
- Motto: "Going above and beyond for guest comfort."

2. Business Challenge

Before the project, the organization faced structural constraints in its commercial execution model:

- **Leadership bandwidth consumed by repetitive qualification work** – senior architects and consultants were spending high-value time on manual RFP analysis and scoping instead of strategic revenue-generating activities
- **Revenue velocity constrained by slow decision cycles** – GO / NO GO and scope validation required hours of manual review, delaying pipeline movement and reducing responsiveness
- **Cross-functional friction in proposal preparation** – heavy coordination between sales, delivery, and architecture teams limited throughput and created execution bottlenecks
- **Inconsistent governance and proposal quality** – manual interpretation of requirements increased risk of oversight, misalignment, and rework
- **Growth tied directly to headcount expansion** – increasing proposal volume required adding personnel, compressing margins and limiting scalable expansion

3. Objectives

- Build a fully functional AI assistant working exclusively with data from the corporate Knowledge Base
- Enable employees to get answers about events, services, and programs within seconds
- Ensure answer transparency – every response should include sources and links to the KB
- Deploy the solution in the Client's secure Azure environment with full data control
- Provide analytical tools for identifying frequently asked questions and Knowledge Base gaps
- Prepare a modular architecture for future expansion toward customers and additional data sources

4. Solution Delivered

KPCS Consulting delivered the project in two main phases with an emphasis on gradual validation and iterative improvement:

Phase 1 – Proof of Concept (PoC):

- AI assistant focused on hotel events, deployed to the Client's Azure environment
- Standalone web app + JavaScript widget for integration into existing applications
- CI/CD pipeline setup, full source code handover, team training, and 30-day support

Phase 2 – MVP (Minimum Viable Product):

- Expansion to the entire Knowledge Base (FAQ, wellness, F&B, discovery, extras, offers)
- Advanced AI technologies (Langchain/LangGraph, vector search, multi-source reasoning)
- Analytics dashboard with query insights and recommendations
- Persistent conversation history and user roles

Key technical components:

- Azure App Service, Azure OpenAI, Azure SQL Database
- Integration with the Client's Knowledge Base API
- Contextual conversation management with confidence scoring and source transparency

5. Results & Business Outcomes

Metric	Before	After
Time to get an answer	3-5 minutes (manual search)	Under 30 seconds
Information consistency	Inconsistent	100% – single source of truth
Knowledge Base coverage	Manual access	Fully indexed by AI
Query analytics overview	None	Real-time dashboard
Readiness for customer deployment	Not ready	Fully tested internally

The AI assistant deployment transformed how the Client's employees work with corporate information. Receptionists now answer guest questions about events and programs **within seconds instead of minutes**. The marketing and sales team has **instant access to offer comparisons across hotels**. IT and management gained valuable analytics insights, revealing Knowledge Base gaps and

the most common topics of inquiry, enabling proactive addition of missing information before deploying the solution to customers.

6. Key Delivered Outcomes

- **98% faster GO / NO GO decisions** – complex RFPs evaluated in minutes instead of hours, accelerating pipeline velocity
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7. Validation

- Validated by: IT Management and Operations Directors
- Prepared by: KPCS Consulting – AI & Cloud Practice
- Duration: 14 weeks (6 weeks PoC + 8 weeks MVP)
- Year: 2025
- Client: A national hotel chain with a significant position in the domestic EU market

8. Next Steps & Contact

KPCS helps hospitality and service organizations unlock the value of their knowledge bases through AI-powered solutions, enabling faster information access, improved employee efficiency, and better guest experiences.

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