

# UNLOCKING THE POWER OF AI FOR A DIGITAL CONTENT PLATFORM

How Tavant's AI-Driven Solutions Revolutionized Document Retrieval and Translation





# TAVANT

#### THE CLIENT AND THE CHALLENGE

A global leader in digital content sought AI-powered solutions to improve user experience and expand global accessibility. Users faced inefficiencies when manually searching through large documents, leading to frustration and decreased engagement. Additionally, managing millions of multilingual documents with third-party translation services was costly and lacked scalability. The client needed an AI-driven system for real-time document interaction and an in-house, scalable translation solution that preserved original formatting.

# THE SOLUTION

Tavant implemented Al-driven solutions to enhance document interaction and streamline multilingual translation. By deploying a Retrieval-Augmented Generation (RAG) framework, users could engage with documents conversationally, improving efficiency and user experience. Additionally, an in-house translation system was developed to process large-scale multilingual content while preserving formatting, reducing costs, and enhancing global accessibility.

### **THE IMPACT**

Tavant's solutions have transformed document interaction, boosting efficiency, engagement, and global reach. Users can now query documents conversationally, enhancing satisfaction and interaction time. The scalable translation system cut costs while expanding accessibility. Automation streamlined operations, reduced manual effort, and accelerated time-to-market for new features. As a result, user interactions, website views, and engagement soared. Stickiness improved with longer average interaction times and extended document view-time, enhancing platform performance and retention.



# TAVANT

# **CONVERSATIONAL DOCUMENT INTERACTION**

Enabled dynamic, real-time document querying through Al-powered retrieval.

**TEXT EXTRACTION & PROCESSING** Leveraged advanced libraries for clean content extraction.

#### **CUSTOM CHUNKING ALGORITHM**

Developed a proprietary segmentation method to enhance contextual accuracy.

#### **EMBEDDINGS GENERATION**

Fine-tuned models for efficient document representation and retrieval.

### **AI-DRIVEN DOCUMENT TRANSLATION**

Built a scalable workflow to translate multilingual documents efficiently.

#### **DOCUMENT DECOMPOSITION** Converted documents into HTML/CSS while handling image text via OCR.

#### > AI-POWERED TRANSLATION Used OpenAl's GPT-40-mini for structured, high-quality translations.

#### ROLLING WINDOW CONTEXT

Maintained coherence across pages for seamless readability.

# CLOUD-OPTIMIZED STORAGE

Leveraged AWS S3 with automated workflows for efficiency.

Chinasy.

Steve Jobs

One was how computers could be networked; the score how object-oriented programming worked. But Jobs team paid little attention to these attributes because so amazed by the third feature, the made possible by a but

- my eyes - Jobs recalled. -I could apped screen. "It was" of computing was destined to be." or april Cal In When the Xerox PARC meeting end hours, Jobs drove Bill Atkinson back pertino. He was speeding and This is it?" he should empha do its" It was the breakthrop ing computers to the perof its founders, Dein How long we utton model that cos Formica and my blue

the details but the entire ould not be used to drag a engineers devised an interndows and files around you . The Xerox system required to do anything, ranging from the extension that located a fil d the desktop metaphor into vir o directly touch, manipulate, drag, pple's engineers worked in tandem s spurring them on daily-to imby adding delightful icons and from a bar atop each window and the and folders with a double click.

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