

UBTI's AI-driven Solution Cuts Project Review Time from Weeks to Minutes

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WHO WE ARE

“UB Technology Innovations is a Microsoft Power Platform delivery partner offering no/lowcode solutions, virtual bots, RPA, and data insights. We help clients on their digitalization journey by automating tasks, optimizing workflows, and providing a competitive edge through quick app deployment”

WHAT WE DO

- Compliance and Security
- Enhance Productivity
- Improve Time to Market
- Reduce Operational Costs
- Maximize Profits
- Customer Experience



THE CLIENT

The client is a renowned, government-owned energy and chemicals enterprise, operating across the full value chain, from upstream production to downstream refining, chemicals, and global distribution. They play a central role in national energy security while supporting international markets through their integrated operations. With a history spanning several decades, they manage complex, high-value programs related to infrastructure development, technology advancement, safety, and sustainability.



CHALLENGES

The client receives a high volume of internal project proposals related to infrastructure improvements, technology upgrades, safety initiatives, and operational enhancements. These projects are submitted by different departments and are routed through SAP S/4HANA for financial review. Each proposal includes documents that explain why the project is needed, what work is planned, and the required budget. Financial Planners are responsible for reviewing these submissions and ensuring funds are allocated appropriately. As the number of projects increased, reviewing them became a challenge, leading to:

- Teams submitting similar projects without knowing about each other's work: Departments often worked independently and did not have visibility into past or parallel project submissions. As a result, multiple teams requested a budget for similar work but described it in different ways.
- High dependence on individual judgment and experience: Identifying duplicates and deciding how projects should be classified depended heavily on the planner's personal experience and memory of past proposals. This led to inconsistent outcomes across reviewers, made decisions harder to explain, and introduced gaps in standardization and audit readiness.



- Excessive manual effort to compare new proposals with past submissions: For every project, the financial planners had to open multiple SAP S/4HANA screens, download attachments, and read long documents just to understand the proposal. This process consumed significant time and delayed budget decisions, especially during peak submission periods.
- Limited ability to identify similarities beyond basic text matching: Existing checks relied on basic text matching. If two projects used different words to describe the same problem or process, the system could not identify them, allowing duplicate submissions to proceed undetected.
- Duplicate projects progressing too far in the review process: When duplicates were not identified early, they moved through multiple evaluation and approval stages. This consumed additional time, caused unnecessary rework, and delayed prioritization of high-value projects.



SOLUTION

Upon understanding the scale of projects within the client's organization, UBTI worked closely with stakeholders to design a solution to streamline the client's existing review process. The objective was to replace repetitive manual work with a system that streamlines the entire proposal review and approval process. At the heart of the AI project proposal review system is an ML-based pipeline built on the Cloudera Data Platform. This pipeline automatically handles project data end-to-end, without manual intervention:

- Automated project and document ingestion: As soon as a project is submitted in SAP S/4HANA, the AI automatically retrieves all project details and supporting documents. This includes titles, descriptions, scope notes, and attachments. Financial planners no longer need to manually search for files or switch between screens to collect this information.
- Context-based understanding of project intent: The AI processes both structured fields and unstructured documents. Instead of looking for exact words, it focuses on understanding what the project is about, such as the problem being addressed, the type of work planned, and the intent. This allows the system to interpret projects even when they are written differently.
- Early identification of duplicate projects: Each new project is compared against past submissions using meaning-based analysis. If the AI finds strong similarity with an existing project, it flags the submission as a potential duplicate.
- Filtering duplicates before budgeting begins: The projects identified as duplicates are highlighted early, before budgeting moves forward. This prevents duplicate evaluations and prevents financial planners from assigning funds to overlapping work. If a project is confirmed as unique, it automatically moves to the next stage of review.
- AI-driven categorization of unique projects: For projects that are not duplicates, the system assigns them to one of five predefined project categories, like Refining & Petrochemicals, Logistics & Supply Chain, etc. This categorization is based on the project's context and intent (not just keywords). A confidence score and explanation are provided so financial planners understand why a project was placed in a specific category.
- Planner review with complete transparency: Financial planners can review all the AI's recommendations for both duplication and categorization. They can accept the suggestion or adjust it if required. All decisions are recorded, ensuring traceability and justification during reviews or audits.



- Central storage using a vector database: All past and new project details are stored in the Milvus Vector DB, which helps the AI remember and compare projects.
- Continuous improvement through feedback: Feedback from financial planners is used to improve the system's accuracy. As more projects are reviewed, the AI becomes better at identifying overlaps and assigning categories.



OUTCOME

Through UBTI's expertise, our client's project review workflow shifted from a manual, time-consuming process to an AI project proposal review system. The change brought speed, accuracy, and consistency, making proposal evaluation strategic, traceable, and aligned with capital planning priorities:

- Dramatically reduced manual effort: AI automates right from proposal detail ingestion to project categorization, reducing financial planners' review time from 20-40 minutes per submission to just seconds, allowing teams to focus on higher-value decision-making.
- Consistent evaluation standards: Every proposal is assessed the same way, removing reliance on individual judgment and ensuring fairness and uniformity across all submissions.
- High scalability for peak workloads: Built on Cloudera Data Platform and Milvus vector search, the system can handle thousands of project submissions annually in real time, even during periods of high review volume.
- Stronger governance and compliance: Centralized storage, encryption, role-based access control (RBAC), and complete audit trails ensure all decisions are transparent, fully traceable, and aligned with the client's enterprise security standards.
- Smarter project review: Our AI system understands the intent and context of each proposal, so even if teams describe similar projects differently, duplicates are detected early.

Conclusion:

Earlier, the organization relied on manual reviews, individual experience, and basic text checks to evaluate an increasing number of project proposals, making it hard to spot overlaps early and maintain budgetary consistency. UBTI stepped in, worked closely with the teams, and introduced an AI-driven review system that reads projects as a Financial Planner would, intelligently compares them, and guides decisions with clear evidence. Today, duplicate projects are identified before budgets move forward, while unique projects are grouped consistently. Eventually, the teams now spend more time making decisions than searching for information. UB Technology Innovations, Inc. continues to support large, asset-heavy organizations with practical AI solutions that bring clarity and confidence to management.



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ABOUT US

UB Technology Innovations, Inc. (UBTI) is a leading global technology solution provider with over 3 decades of experience across all industries, specializing in Capital Markets (Asset Management), Logistics, and Healthcare. We are the preferred Microsoft Solutions Partner backed by a world-class team of Microsoft Certified experts with rich experience in Azure Cloud Platform and Data Analytics.



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