



Automating Legal & Regulatory Compliance

What if AI could help you identify legal risks before they lead to fines or operational shutdowns?

A leading energy company was managing a complex landscape of permits and regulatory obligations across multiple teams and eight operating plants. Bluetab implemented a **Generative AI solution to automate document analysis**, monitoring, and end-to-end traceability, improving operational efficiency, reducing compliance risk, and driving adoption across the organization.



Business Outcomes



OPERATIONS

- Reduced the time spent reviewing and contextualizing documents by 85%.
- Enabled real-time, 360° visibility into the status of permits and regulatory obligations.
- Reduced the administrative burden on specialist teams, allowing them to focus on higher-value work.
- Achieved high accuracy in document abstraction, measured through retrieval metrics.



. SUSTAINABILITY / EFFICIENCY / RELIABILITY

- Significantly reduced exposure to regulatory penalties and operational shutdowns.
- Improved dependency tracking through a hierarchical document structure.
- Established a deterministic workflow with human validation across capture, audit, and final approval.
- Automated metadata processing across multiple document formats, including PDF and Excel.



BUSINESS

- Projected a 35% reduction in financial risk across 50 monitored documents.
- Estimated preventive value of USD 10,000 per critical permit.
- Set an explicit goal of reducing fines to virtually zero.
- Drove organization-wide adoption through co-creation, executive sponsors, and change ambassadors.



Implementation Timeline

Active since 2025, including the development of the data lake and Center of Excellence.



Client Profile

An **energy company focused on electricity generation and natural gas**, undergoing a technology modernization program following a recent acquisition.



Challenges

DOCUMENT VOLUME & COMPLEXITY

- Documents **containing signatures, tables, diagrams, and specialized terminology.**
- **Varying validity periods and frequent regulatory changes.**

OPERATIONAL

- Specialist **teams spending excessive time on administrative work.**
- Fragmented information with **limited traceability and unclear ownership.**
- **Manual processes prone to human error, increasing the risk of non-compliance.**

CRITICAL RISKS

- **Potential multimillion-dollar fines** from a single unmet regulatory obligation.
- **Risk of temporary or permanent operational shutdowns.**
- Significant **reputational and financial exposure.**

ORGANIZATIONAL

- **Resistance to change among users** accustomed to established manual processes.
- **Lack of 360° visibility** for audits and accountability.
- **Complex dependencies across parent, child, and grandchild documents.**



Situation

- **Eight operating plants subject to international, national, state, and municipal permitting requirements.**
- **Documents with validity periods** ranging from six months to several decades.
- Legal, environmental, and commercial **teams operating in a decentralized model.**
- **Tracking managed through notebooks, Excel, email, and SharePoint.**
- **No real-time visibility** and a heavy reliance on manual communication.



Solution

Bluetab **developed a Generative AI platform for legal and regulatory compliance on the client's Azure Databricks infrastructure.** The platform automates the reading, analysis, extraction, and tracking of regulatory obligations, combining **advanced AI capabilities with a user-centered adoption approach.**

KEY COMPONENTS

- **RAG architecture** combining information retrieval with natural-language generation.
- **GPT models for embeddings and Anthropic cloud models** for conversational interactions.
- **Multi-format processing across PDF and Excel files**, extracting signatures, reference numbers, dates, and responsible parties.
- **Tree-based document hierarchies** to manage parent and child licenses and their dependencies.
- **Azure AI Search as the vector search layer** and **Cosmos DB** for unstructured data storage.
- **Clearly defined roles across data capture, audit, and final validation.**
- **Design Thinking workshops to co-create** the solution with end users.
- **An adoption strategy supported by executive sponsors, change ambassadors, and a dedicated identity** selected by users.

EXPANDING INTO FINANCIAL DOCUMENTATION

The same platform **is already being used to process bank guarantees, financing agreements, indentures, and secured bond issuances.** This demonstrates its potential beyond legal compliance, evolving into a cross-functional engine for document analysis.

READY TO TURN YOUR NEXT CHALLENGE INTO A SUCCESS STORY? LET'S TALK.

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