OP FinReg Agent – Proof of Concept

Executive summary + PoC demo



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Why? – Synthetic Business Challenge

- The volume and complexity of ESG regulatory requirements are rising at an unprecedented pace.
- OP Financial Group's Compliance & Regulatory Affairs Team's ability to absorb and process incoming documentation is constrained, which slows decision-making and heightens the risk of errors.
- By leveraging **AI-enabled automation**, we can allocate our compliance resources more intelligently and **accelerate** the entire review process.

What? - Solution

OP FinReg Agent

- 1. Ingest Reports
 - Automatically receives incoming supervisory documents (e.g., interim reports)
- 2. Analyze & Benchmark
 - Parses the report's ESG-related sections
 - Compares findings against Fin-FSA ESG regulations and the EBA's ESG guidelines
- 3. Generate Actionable Feedback
 - Lists any ambiguities or conflicts found in the report
 - Proposes recommendations grounded in current regulatory requirements and bestpractice guidelines
 - -> Demo!

How?

- You can find the detailed process flow diagram in our project's GitHub repository:
- https://github.com/RaudelWeb/OP-FinReg-Agent

Projected Annual Impact – Production

- Time savings: ~2 000 hours/year → ~1.12 FTE (based on 1 789 h annual work time in Finland)
- Salary cost reduction: ≈ €110 000 saved (1.12 FTE at €99 282/year)
- Error-rework avoided: ~48 h saved (5 % manual error rate; AI cuts rework by 60 %)
- Regulatory fine prevention: Avoid one average ESG penalty (~€3 M / \$3.29 M)
- Non-compliance cost avoidance: Up to \$14.82 M per year
- Cycle acceleration: Review time halved (8 → 4 weeks), speeding decision-making

Core Assumptions

- Report volume: 200 ESG-related reports annually (4 quarterly + 16 adhoc)
- Manual review time: 20 h/report → with AI: 10 h/report
- Working hours: 1 789 h per FTE per year in Finland
- Salary basis: €99 282 / year gross (€48/h) for a Compliance Officer
- Error rate & rework: 5 % manual error → 10 reports × 8 h rework; AI delivers 60 % error reduction
- Regulatory penalty benchmark: Global average fine of \$3.29 M per ESG non-compliance incident (80 fines totalling \$263 M H1 2024)
- Non-compliance cost: Average \$14.82 M annual cost of non-compliance (Ponemon and Globalscape, 2017)

Investment

- Basic (GPT-3.5-Turbo): ≈\$1 008 /yr (288 M tokens @ \$0.002/1 K)
- Advanced (o3-mini): ≈\$1 584 /yr (288 M tokens @ \$1.10 input + \$4.40 output per 1 M)
- Azure Al Search (Std S1): \$245.28 /mo → ≈\$2 943 /yr
- Azure Blob Storage (100 GB Hot LRS): \$0.018 /GB·mo → ≈\$22 /yr; other Azure services negligible
- Total Annual Run Cost:
- Basic: ≈\$3 973 /yr
- Advanced: ≈\$4 549 /yr
- **Technical Investment**: €20 K–€60 K for PoC/MVP; €50 K–€500 K+ for full production
- **Key Assumptions**: 10 compliance users; 200 reports/yr; ~5 analyses/user·hr; ~3 000 tokens/analysis; 20 days/mo

PoC Development Focus Areas

Web Interface

• Build a user-friendly web UI for submitting reports, reviewing AI analyses, and managing workflows.

Expanded Indexing

• Ingest and index additional document types (e.g. regulatory filings, policy documents, historical reports).

Prompt Engineering & Validation

• Work closely with compliance stakeholders to iterate on prompt design and validate AI outputs against business requirements.

Finer-Grained Chunking

 Split documents into smaller units (e.g. by legal clause) and implement custom Azure Cognitive Search skills for precise retrieval.

Fine-Tuned Model Evaluation

• Assess the viability of a task-specific, fine-tuned LLM—particularly for large, stable corpora—to reduce inference costs.

Next Steps & Metrics

Define PoC success criteria (accuracy, throughput, user satisfaction) and establish a roadmap for scaling to production.

Thank you!



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