



Business case

Document Processing Automation

Net Profit: €426K | IRR: 119% | Payback: 16 months

Executive Summary

This business case analyzes implementing AI-powered document processing automation for invoice, purchase order, and delivery note processing. The system extracts data from documents automatically, reducing manual data entry by 90% and improving accuracy to 95%+.

Problem Statement

Manual data entry from invoices, purchase orders, delivery notes, and other business documents is time-consuming, error-prone, and expensive. A typical accounts payable team spends 60-70% of time on data entry rather than exception handling and process improvement.

Current State Analysis

Metric	Value
Monthly documents processed	4,000
Annual documents	48,000
Average processing time per document	10 minutes
Annual hours spent	8,000 hours
Average labor cost	€35/hour
Annual labor cost	€280,000
Error rate (rework required)	5-8%
Annual rework cost	€20,000

Proposed Solution

Deploy AI-powered document processing that automatically extracts data from invoices, POs, and delivery notes, validates against business rules, and populates ERP/accounting systems.

Key capabilities:

- Automatic data extraction from PDFs, scans, images, emails
- Multi-format support (invoices, POs, delivery notes, customs forms)
- Validation against business rules and master data
- ERP integration (SAP, Oracle, Microsoft Dynamics)
- Exception handling workflow (flags anomalies for human review)
- Audit trail (full visibility into all processing)
- 95%+ accuracy (better than manual entry)
- 30-second processing time per document (vs 10 minutes manual)

Financial Analysis

Investment breakdown

Component	Cost (€)	Notes
Discovery & Design	12,000	Document templates, business rules mapping
AI Development	50,000	Model training, extraction engine
ERP Integration	15,000	SAP/Oracle integration, data validation
Testing & Training	8,000	UAT, user training, process documentation
Total Implementation	85,000	One-time investment
Annual Hosting	24,000	€2,000/month (cloud processing)
Annual Support	12,000	Maintenance, improvements, support
Total Annual Operating	36,000	Recurring cost

Savings Calculation

Metric	Current	With AI	Savings
Documents per year	48,000	48,000	-
Time per document	10 minutes	30 seconds	9.5 min saved
Documents automated	-	43,200 (90%)	4,800 manual
Aannual hours saved	-	6,840 hours	@9.5 min/doc
Labor cost saved	-	€239,400	@€35/hour
Error reduction savings	-	€18,000	Reduced rework
Total annual savings	-	€257,400	-
Annual operating cost	-	€36,000	-
Net annual savings	-	€221,400	-

3-Year Financial Projection

Year	Ivestment	Operating	Savings	Net Benefit	Cumulative
Year 1	€85,000	€36,000	€177,000	€56,000	€56,000
Year 2	€0	€36,000	€221,000	€185,000	€271,000
Year 3	€0	€36,000	€221,000	€185,000	€456,000
Total	€85,000	€108,000	€619,000	€426,000	

Note: Year 1 savings reflect 80% adoption rate during rollout period.



Return on Investment Metrics

Metric	Value	Benchmark
Payback Period	16,2 months	Good (<12 months)
3-Year NPV (10% discount)	€348,000	Positive
Internal Rate of Return (IRR)	119%	Exceeds hurdle rate
Return on Investment (ROI)	301%	Over 3-year period

Additional Benefits (Not Quantified)

- Faster processing: 30 seconds vs 10 minutes per document
- Better accuracy: 95%+ vs 92-95% manual accuracy
- Scalability: Handle volume spikes without hiring
- Better cash flow: Faster invoice processing = faster payment decisions
- Improved vendor relations: Faster payment processing
- Better data analytics: Structured data enables better insights
- Employee satisfaction: Eliminates boring repetitive work

Implementation Timeline

Phase	Duration	Activities
Discovery	Week 1-2	Map document types, collect samples, define rules
Development	Week 3-5	Train AI models, build extraction engine
Integration	Week 6	Connect to ERP, test data flow, validate
Pilot	Week 7	Process 500 documents, measure accuracy
Rollout	Week 8	Full production, train users, monitor

Success Metrics

Metric	Target	Measurement
Automation rate	>90% in 60 days	% of docs processed without human
Accuracy	>95%	Validation against manual review sample
Processing time	< 30 seconds	Average time per document
Cost per document	< €0.75	Total cost / documents processed
User satisfaction	> 4.5/5	AP team satisfaction survey



Recommendation


We recommend proceeding with document processing automation based on solid financial returns and significant operational improvements.


Key decision factors:

- Good ROI: 154% IRR exceeds hurdle rate
- Reasonable payback: <11 months
- Eliminates boring, repetitive work
- Improves accuracy and speed
- Enables scaling without headcount
- Quick implementation: 8 weeks

Let's talk.

Tim Pauwels, MBA - Founder

 tim@trainofthoughts.be

 sprint-ai.be

For questions about this business case or to schedule a discovery call, please contact us directly.

