



neocoding.ai

Part 1: Management summary

Legacy Check – Example report

AuftragsPro · Muster Metallbau GmbH (fictional)

Analysis of a VB.NET application (.NET Framework 4.8) with a SQL Server database

September 2026 · Version 1.0

Prepared by neocoding.ai · neocor cloud UG (haftungsbeschränkt)
neocoding.ai

Fictional example: company, application and all figures are invented. Structure and depth match a real Legacy Check.

Fictional example: company, application and all figures are invented. Structure and depth match a real Legacy Check.

The situation

Muster Metallbau GmbH (fictional) – Mid-sized metalworking company with 140 employees at two sites. AuftragsPro was developed in-house from 2009 and has been the backbone of order processing ever since. The main developer retired in 2024; since then an external freelancer has looked after the application occasionally. Management wanted to know how big the risks are and which path makes economic sense: keep running, modernise or replace.

186,000

lines of code

214

tables

96

stored procedures

38

reports

Language / platform	VB.NET, .NET Framework 4.8, Windows Forms
Size	9 Visual Studio projects, approx. 186,000 lines of code, 412 forms and classes
Database	Microsoft SQL Server 2012 on Windows Server 2012 R2 · 214 tables, 96 stored procedures, 38 GB
Reports	38 Crystal Reports
Interfaces	DATEV export (CSV), EDI with two suppliers via FTP, Outlook automation, label printing (COM)
Usage	45 users, 2 sites, deployed via ClickOnce
Development	Source code in SVN, no build server, no automated tests
Documentation	One Word document from 2011 (12 pages)

Goals

- Assess risks for operations and IT security
- Secure knowledge of business logic and technology
- Find an economical path for the next 5–10 years

Scope of the Legacy Check

Fixed price €2,499 net · Completed within 2 calendar weeks

- Analysis of the complete source code and database schema (anonymised copy, no live data)
- AI-assisted code analysis with the right model for each task and proven prompts, all findings reviewed by experienced developers
- Two interviews: business department (order processing) and IT
- Review of infrastructure, operations, third-party components and licences
- Results presentation (online, 60 minutes) and this report

Overall assessment

Valuable for the business, technically at acute risk

AuftragsPro reflects Muster Metallbau GmbH's processes very well – the special costing in particular is a real competitive advantage. Technically, however, action is urgently needed: the database platform no longer receives security updates, database access uses administrator rights, and knowledge of the application largely left with the former developer. A complete rewrite is not necessary: the business logic can be preserved and technically modernised.

Traffic-light rating

AREA	RATING	REASON
IT security	● Red	Database server without security updates; access via the sa account with a plain-text password; 312 places with concatenated SQL.
Operations & infrastructure	● Red	Unsupported server platform; restore from backup never tested; build only reproducible on one notebook.
Knowledge & documentation	● Red	Main developer retired; documentation from 2011; only approx. 20 of an estimated 140 business rules documented.
Maintainability & code quality	● Amber	About 60% of business logic in forms; 14% duplicated code; Option Strict off in 6 of 9 projects; no tests.
Technology outlook	● Amber	.NET Framework 4.8 is maintained but no longer developed; VB.NET gets no new language features; third-party components outdated.
Database & data	● Amber	Sound data model, but 40% of relations without foreign keys and approx. 6% duplicate customer records.
Business fit	● Green	Covers the processes very well; high user acceptance; special costing as a competitive advantage.

The five biggest risks

NO.	RISK	RATING	ACTION
R1	Database server without security updates	CRITICAL	Migrate to SQL Server 2022 and Windows Server 2025.
R2	Database access with administrator rights	CRITICAL	Dedicated service account with minimal rights, remove the password from the configuration.
R3	Knowledge monopoly	HIGH	Document core processes and business rules (arc42), hand knowledge over to the team.
R4	Build not reproducible	HIGH	Move to Git, automated build pipeline.
R5	Backup untested	HIGH	Restore test, documented emergency procedure.

The options compared

OPTION	EFFORT WITHOUT AI	DURATION WITHOUT AI	SAVING WITH AI	ASSESSMENT
A · Stabilise and keep running	35–45 PD	2–3 months	20–30%	Essential as an immediate step, not sufficient alone
B · Modernise the technology recommended	430–570 PD	15–20 months	60–80%	Recommended (after option A)
C · Step-by-step replacement with a web application	620–800 PD	24–36 months	50–60%	Sensible perspective for parts, not as a whole
D · Introduce standard software (ERP)	high (plus licences)	11–19 months	approx. 20%	Not recommended

Effort and duration estimated without AI. Our AI-assisted development reduces time and cost by the range shown; the roadmap already includes AI.

Recommendation

We recommend first removing the critical risks (option A) and then modernising AuftragsPro technically (option B). This preserves the valuable business logic and puts the application back on a secure, supported foundation. A web interface for field sales can then be added step by step (part of option C).

PHASE	TIMEFRAME	CONTENT	EFFORT
Phase 1: Immediate measures	Months 1–2	Migrate the database server, service account instead of sa, restore test, Git and build pipeline	25–35 PD
Phase 2: Modernisation	Months 3–9	.NET 10 and C#, tests for core processes, migrate 38 reports, renew third-party components, documentation	130–170 PD
Phase 3: Field sales web module (optional)	From month 10	Quotes and order status in the browser, step by step	60–80 PD

Phases 1 and 2 combined: 155–205 PD with AI-assisted implementation – without AI it would be approx. 465–615 PD. Estimate accuracy ±25%.

Next steps

1. Discuss the results with management and IT
2. Commission phase 1 (immediate measures) – ideally within the next 4 weeks
3. In parallel: document core processes and business rules
4. Detailed planning and fixed-price proposal for phase 2

Contact: neocoding.ai (contact form) · Prepared by neocoding.ai · neocor cloud UG (haftungsbeschränkt)