Project plan

Project: Customer Support by Performance Analysis

Company: Waste Vision

Place, date: Enschede, 1st September 2025

Drawn up by: Jesse Masselink

Version: 0.1

[Title page]

The same as the front page, but more info.

Place, date:	Hengelo, 1-9-2025		
Drawn by:	Project group		
	Jesse Masselink	503042	503042@student.saxion.nl
Version number:	[0.1]: *Initial Draft*		
Clients:	Waste Vision		
Collin Engels			
Oleksii Samiliak			

Table of Contents

I. Abbreviations

AI	Artificial Intelligence
LLM	Large Language Model

1 Introduction

1.1 Background

WasteVision is an innovative Dutch company focused on developing sustainable solutions for waste management. It provides technologies and systems that help businesses and municipalities efficiently collect, process, and analyse their waste streams. By combining advanced software and hardware, WasteVision optimizes waste management processes, reduces costs, and minimizes environmental impact. The company promotes circular economic principles by offering smart, tailor-made solutions that transform waste streams into valuable resources.

The company is structured into three business units:

- **Container Care**: The hardware division responsible for implementing, cleaning, maintaining, repairing, and inspecting customer containers.
- **BData**: An external ICT and cybersecurity partner that manages WasteVision' s network systems.
- **Connect & Control**: The software division focused on designing, implementing, maintaining, and continuously improving the WasteVision Suite. This platform provides customers with clear insights into all available information, such as access systems, sensors, and logistical tools like Route Vision.

This project will be carried out within the Connect & Control division, specifically within the Products, Software Development team. The focus is on analysing customer support data and leveraging performance analysis to improve insights and communication with customers.

It will represent a new concept for WasteVision, driven by the company's curiosity about the possibilities of Artificial Intelligence (AI) and the ambition to remain at the top of the market. It is not a continuation of previous work, but an independent initiative. Although other projects are active in parallel on related themes, there are no direct correlations with this assignment. But together these initiatives contribute to innovating the company and ultimately strengthen Waste Vision's position as the industry leader in innovative digital waste management in the Netherlands.

1.2 Purpose of the Assignment

This project addresses the growing demand for more efficient and proactive customer support. By analysing the customer's performance data such as container emptying behaviour, cluster usage, and user access patterns, WasteVision aims to provide the customers with useful insights into the system performance.

The main assignment for this project is to develop a proof of concept that:

- Automatically analyses container and cluster data,
- Implements anomaly detection to identify irregularities,
- Generates performance scores for the key system components,
- Connects the data to a Large Language Model (LLM), which enables customers to interactively gain insights into the systems performance via chatting with a bot.

For a more detailed overview of the assignment, see appendix A: Opdracht 3: Klantondersteuning door middel van performanceanalyses.

1.3 Methodological approach

As for the methodology, the Waterfall approach will be applied. Which means that each phase is completed and reviewed before moving on to the next. This method was deliberately chosen because it provides clarity, works best with thorough documentation and ensures that decisions are formally evaluated before progressing, things that Waste Vision takes very seriously. It also ensures a clear structure and traceability throughout the project.

Weekly check-ins with the product manager, Collin Engels, architect, Oleksii Samiliak, and daily technical support from software engineer, Billo Diallo, will provide continuous guidance and quality monitoring throughout the course of this 20-week project.

1.4 Stakeholders

The project is part of Waste Vision's internal innovation goal and does not involve any external stakeholders. Inside the company, several colleagues from the Connect & Control, Products division are identified as stakeholders due to their interest in the outcomes of this project:

- **Paul Wierstra:** Head of Product,
- **Rick Zwoferink:** Product Manager,
- **Folkert Hogenraad:** Team Lead Software,
- **Leonie Sijtsma:** Software Developer.

These stakeholders are only observers. They will not take an active role in the execution of the project but are interested in the progress and results.

1.5 Report outline

This report is structured as follows:

- **Chapter 2:** Project Objectives: defining main and sub goals, and the desired results.
- **Chapter 3:** Project Activities: activities and phases needed to achieve the objectives.
- **Chapter 4:** Project Boundaries: scope, conditions, and exclusions.
- **Chapter 5:** Products: overview of intermediate and final deliverables.
- **Chapter 6:** Quality Assurance: measures to ensure the reliability of outcomes.
- **Chapter 7:** Project Organization: roles, responsibilities, and communication structure.
- **Chapter 8:** Planning: Gantt chart and milestones.
- **Chapter 9:** Costs and Benefits: overview of resources, potential costs, and benefits.
- **Chapter 10:** Risk Analysis: identification and mitigation of project risks.

2 Project Objectives

2.1 Reason for the Project

The project is being carried out to strengthen Waste Vision's innovative position by exploring the possibilities of AI to automate performance insights and customer contact. AI technologies are now easier to implement than in the past, creating opportunities to expand functionality within the WasteVision Suite and improve customer support. This aligns with the company's strategic ambition to remain a market leader in digital waste management.

2.2 Main Objective

The main objective of this project is to develop a proof of concept that demonstrates how AI can be applied to execute performance analysis and anomaly detection on client data. The results of these analyses will be presented to clients in a visualized, categorical, and easily interpretable overview, making system performance transparent and actionable. In addition, it will include the possibility of interacting with an AI-powered chatbot, enabling clients to request and explore performance insights through natural language queries.

This proof of concept will validate the technical feasibility and added value of integrating AI-driven analysis within Waste Vision's software ecosystem.

2.3 Sub-Objectives

To achieve the mail objective, the following sub-objectives are defined, based on the assignment description form appendix A: Opdracht 3: Klantondersteuning door middel van performanceanalyses.

1. **Data Analysis**
    a. Analyse the container and cluster emptying behaviour
    b. Analyse disposal behaviour per access card on the allowlist.
    c. Categorize all system components.
    d. Define criteria to distinguish between well-performing and poorly performing components.
2. **AI-driven Analysis**
    a. Implement anomaly detection to automatically identify irregularities.
    b. Assign performance scores to containers, clusters, and access cards.
    c. Develop a prototype connection with a Large Language Model (LLM) to allow interactive exploration of performance data.
3. **User Interaction and Reporting**
    a. Enable customers to gain insights into poorly performing components via a chat interface.
    b. Provide clear overviews of performance per object (container, cluster, card) to support decision-making.
    c. Document the development process and results in a final report.

2.4 SMART Objectives

In order to make sure that the project proceeds as planned, the objectives have been formulated according to the SMART framework and must be achieved by meeting the following criteria:

- **Specific**: The project will deliver a proof of concept that analyses waste management data, detects anomalies, assigns performance scores, and provides interactive insights through an LLM interface.
- **Measurable**: Success is measured by the completion of the proof of concept, the ability to generate performance insights, and the demonstration of interactive user queries via chat.
- **Acceptable**: The project fits within Waste Vision's innovation goals and is supported by stakeholders in the Connect & Control division.
- **Realistic**: With access to test data, cloud infrastructure, and GPU capacity if required, the project scope is achievable within the planned timeframe.
- **Time-bound**: The project will be executed over a period of 20 weeks, with intermediate deliverables like concepts, evaluations, and stakeholder presentations leading up to the final proof of concept and report.

2.5 Results

The expected result of the project is a working proof of concept that consists of:

- Performance analysis of containers, clusters, and allowlist access cards.
- Anomaly detection and automated performance indication scoring.
- A prototype LLM model for performance exploration trough user interaction.
- A final report that documents all processes, research, choices and outcomes during the project.
- A final presentation of the results for the stakeholders.

By achieving these objectives, the project will contribute to Waste Vision's mission of remaining an industry leader through innovation, providing customers with smarter and more proactive support.

3 Project Activities

Since this project will follow the Waterfall methodology, the work is divided into sequential phases. Each phase emphasizes research, development, testing and review. This ensures that the results from chapter 2 are validated before moving to the next phase. The activities listed below are structured according to the phases of the Waterfall methodology. For each activity, a short description is provided of what the activity is and what the result should be.

3.1 Phase 1: Preparation and Orientation

- **Set up Documentation Environment:** Create a secure cloud environment for storing all project documentation.
- **Develop Project Plan:** Study the assignment description, conduct stakeholder meetings, and draft a project plan that translates the project's intentions and scope into a realistic framework.
- **Arrange Access to Required Resources:** Make arrangements to gain access to the cloud (Azure), test datasets of clients, GPU capacity.
- **Review Database:** With support from a software developer, investigate Waste Vision's software ecosystem, container data, and access systems, and summarize findings in a short report.

3.2 Phase 2: Research and Analysis

- **Conduct Literature Research:** Study existing research and technologies related to AI-driven performance analysis, anomaly detection, and LLM integration.
- **Perform Data Analysis:** Analyse container emptying data, cluster behaviour, and allowlist access data, including assessments of data quality, completeness, and preprocessing requirements.
- **Define performance Criteria:** Based on the data analysis, establish clear criteria for distinguishing well-performing and poorly performing components.
- **Concept Design:** Create multiple conceptual frameworks for categorization, scoring, and AI integration.
- **Choose Concept:** Consult with stakeholders to evaluate the concepts and select the most promising design.

3.3 Phase 3: Design

- **Elaborate Design:** Develop the chosen concept into a detailed technical design.
- **Select Technical Specifications:** Research potential methods and technologies, and specify the most suitable ones for the design.
- **Design Data Pipelines:** Define data collection, preprocessing, analysis, and visualization workflows.
- **Design performance Scoring System:** Create a structured approach for scoring containers, clusters, and access cards.
- **Design user Interface Concepts:** Draft multiple concepts for a front-end interface to present AI-powered results to end users.
- **Choose Design:** Review the design options with stakeholders and agree on the most appropriate solution.

3.4 Phase 4: Development

- **Implement Preprocessing Scripts:** Develop scripts to handle data preprocessing efficiently and accurately.
- **Develop Anomaly Detection Algorithms:** Develop algorithms capable of detecting irregularities in the data.
- **Build Scoring Mechanism:** Implement the system for scoring containers, clusters, and access cards.
- **Create Front-end Overview:** Develop the front-end visualization of the anomaly detection and scoring mechanism.
- **Integrate Prototype LLM:** Create a LLM that works on the test data and integrate it into the application.
- **Document Development Process:** Document all steps of implementation and development for traceability.

3.5 Phase 5: Testing and Validation

- **Test Preprocessing Scripts:** Verify that preprocessing functions accurately and reliably, and refine where needed.
- **Test Anomaly Detection:** Assess the accuracy and reliability of anomaly detection algorithms and make improvements where necessary.
- **Validate Scoring System:** Compare performance scoring results against stakeholder expectations.
- **Test Chatbot Functionality:** Evaluate the chatbot's ability to meet user requirements.
- **Review Results with Stakeholders:** Present results to stakeholders and update the system based on feedback.

3.6 Phase 6: Reporting and Delivery

- **Prepare Technical Report:** Document the complete process, covering research, design, development, testing, and outcomes.
- **Stakeholder Presentation:** Present results and demonstrate the proof of concept to stakeholders.
- **Proof of Concept:** Deliver the final proof of concept in line with the agreed requirements.
- **Conduct Reflection:** Evaluate the project, reflecting on successes, challenges, and recommendations for improvement.

4 Project Boundaries

4.1 Scope

To make sure the project stays within its limits and does not encounter unnecessary obstacles during execution, clear project boundaries are formulated. These boundaries describe what is included in the project scope, as well as what is explicitly excluded. By defining these limits trough the MoSCoW method, the project can stay focused on its main objectives and deliver the intended results within the available time of 20 weeks and resources.

Must have:

- Gaining access and analysing container, cluster and access card data.
- Designing and implementing anomaly detection algorithms.
- Developing a scoring mechanism for performance evaluation.
- Creating visualized and categorized overviews of the performance data.
- Prototyping an AI chatbot that provides performance insights interactively.
- Documenting all research, designs and development work.
- Delivering a technical report, proof of concept and giving a final presentation to all stakeholders.

Should have:

- Multiple concept designs for categorization, scoring and user interface.
- Validation of scoring and anomaly detection results as stakeholder's expectations.
- User friendly visualization formats for end users.
- Bi-weekly feedback sessions to discuss intermediate results.

Could have:

- Extended chatbot capabilities like providing follow up questions or support multiple languages.
- Advanced data visualization beyond the basic prototype.
- Exploration of multiple anomaly detection algorithms for comparison.

Won't have:

- A full-scale production implementation of the proof of concept into Waste Vision's software suite.
- Implementation of advanced security systems like SOC2.
- Development of full-scale front-end applications beyond the prototype level.
- Performing tests with live customers.

4.2 Preconditions

In order to make the project feasible, several pre-conditions must be fulfilled. These conditions relate to the resources, access rights, and support that are required to carry out the activities described in the project plan. Without meeting the following requirements, the project cannot be executed effectively or deliver the expected results.

- **Laptop Access:** Continuous access to a reliable laptop that meets the technical requirements for development and data analysis.
- **Azure Access**: Access to Waste Vision's Azure cloud environment to store, process, and analyse data in a secure and scalable way.
- **GPU Capacity:** For training and running AI models, sufficient GPU resources must be available.
- **Test Data:** The project depends on the availability of high-quality test data from one of Waste Vision's customers. Proper approvals must be in place to use this data.
- **Daily Available Support**: A software engineer must be available on a daily basis as the first point of contact for technical questions and troubleshooting.
- **Bi-weekly Meetings with Clients:** Regular meetings with the product manager and architect every two weeks are required to provide updates, gather feedback, and ensure the project remains aligned with stakeholder expectations.

5 Products

The products and deliverables of this project are directly linked to the previously defined activities. Each activity produces a concrete result, which can be used to check whether the activity has been successfully completed. If the product meets its requirements, the activity is finished.

Phase 1: Preparation and orientation

- **Access to sources:** Verified access to Azure cloud, GPU capacity (if required), and client test datasets.
- **Project Plan:** A document that explains the background, objectives, scope, and approach of the project. It sets clear expectations and describes how the project will be carried out.
- **Database Review:** A short report that summarises Waste Vision's software ecosystem and databases.

Phase 2: Research and Analysis

- **Literature Review:** A report that summarizes the findings of researching different performance analysis methods, anomaly detection algorithms, and LLM models.
- **Data Analysis Report:** A report that describes the characteristics and useability of the container, cluster and access card data.
- **Performance Criteria:** A clear definition of measurable performance criteria for good and bad performing components.
- **Concept Designs:** Multiple proposals for categorization, scoring and AI integration frameworks.
- **Selected Concept:** A documented decision of the chosen concept with the stakeholders.

Phase 3: Design

- **Technical Design:** A detailed description of the technical requirements of the chosen concept, including the systems architecture and workflows.
- **Technology Specification List:** A listed overview of all selected methods, models and technologies.
- **Data Pipeline Design:** A thought-out data pipeline design which describes preprocessing, analysis, visualization and LLM feedback.
- **Performance Scoring System Design:** A designed model for organizing scoring containers, clusters and access cards.
- **UI Concepts:** Draft designs of user interface options for presenting results to end users.
- **Final Approved Design:** The selected and stakeholder-approved design for development.

Phase 4: Development

- **Preprocessing Scripts:** Functional scripts that prepare raw data for analysis.
- **Anomaly Detection Algorithms:** Working algorithms that detect irregularities in the data.
- **Performance Scoring Mechanism:** An implemented system that assigns scores to containers, clusters, and cards.
- **Front-End Prototype:** A visual overview that displays anomalies and performance scores.
- **Prototype LLM Chatbot:** A functional connection with an LLM that allows interactive exploration of results.
- **Development Documentation:** A record of all implementation steps and technical choices.

Phase 5: Testing and Validation

- **Test Report: Preprocessing:** Results of testing preprocessing scripts, with adjustments if required.
- **Test Report: Anomaly Detection:** Results of testing anomaly detection algorithms, including validation of accuracy.
- **Validation Report: Scoring System:** Comparison of scoring results against expectations and stakeholder feedback.
- **Chatbot Test Report:** Evaluation of chatbot functionality and compliance with requirements.
- Stakeholder Feedback Report – A summary of review meetings and applied improvements.

Phase 6: Reporting and Delivery

- **Technical Report:** A detailed report that describes the technical aspects of the project, including the research, design choices, development steps, and testing results. This report also contains the developed code, explanations of algorithms, and recommendations for future improvements.
- **Proof of Concept:** A working demonstration of the application that shows how AI can be used for performance analysis and anomaly detection. It will provide a prototype with clear, categorized, and visualized insights into system performance, and allows the user to interact with an AI chatbot for further exploration.
- **Stakeholder Presentation:** A presentation for stakeholders that summarizes the project in a clear and accessible way. It will highlight the most important findings, demonstrate the proof of concept, and provide recommendations.
- **Project Reflection:** A written reflection on the project, highlighting successes, challenges, and lessons learned.

6 Quality assurance

The quality of this project is mainly kept by using a clear working method, asking for feedback often, and documenting in detail. Because this project covers a standalone proof of concept, it does not have to follow all of Waste Vision's strict quality rules. Instead, the focus is on making sure that the final product is working as requested, every step and decision is well documented and that results are checked together with the client and stakeholders.

6.1 Methods and Documentation

The project follows the Waterfall method, which means working step by step in different phases. Each phase delivers something concrete, like a small report, a design, or a working prototype. All steps, actions, and choices will be written down clearly. Waste Vision is very good at working further with documented results, so if everything is recorded well, the quality is seen as good.

6.2 Feedback Loops

Quality is also checked through regular contact with the client. There will be weekly meetings with the product manager and architect, and daily support from a software engineer for technical questions. Every two weeks, results will be shown to the client where they can give feedback and approve the work before the next step starts.

6.3 Testing and Validation

Finally, the project will include a phase of testing and validation. Here, the scripts, the anomaly detection, the scoring system, and the chatbot will be tested to see if they work as expected. Only after testing and stakeholder approval will the results be finished and ready to deliver.

7 Project organization

7.1 Organisation

The project is carried out by one Applied Computer Science student, who will dedicate 40 hours per week to the project.

- **Project Leader**: Jesse Masselink
    - Phone: +31629829734
    - Email: 503042@student.saxion.nl / jesse.masselink@wastevision.com

7.2 Information

The project is carried out by one Applied Computer Science student, Jesse Masselink, who acts as both project leader and executor. He works full-time (40 hours per week) and is responsible for all activities, documentation, and delivery of the results.

7.2.1 Stakeholders

- **Jesse Masselink**: Project leader and executor. Responsible for carrying out all project activities and reporting progress.
- **Collin Engels**: Product Manager and client. Provides feedback on results and ensures the project aligns with Waste Vision's goals.
- **Oleksii Samiliak**: Software Architect and client. Gives feedback on designs and technical implementation.
- **Billo Diallo**: Team Lead Software. Available for daily technical support.
- **Folkert Hogenraad**: Team Lead Software. Observer, interested in results.
- **Paul Wierstra**: Head of Product. Observer, interested in results.
- **Leonie Sijtsma**: Software Developer. Observer, interested in results.

7.2.2 Communication Plan

Bi-weekly meetings with Collin Engels and Oleksii Samiliak to discuss progress, problems, and results. Daily communication with Billo Diallo for technical support. Online communication is regulated trough Microsoft Teams, or for big requests Email is more appropriate.

7.2.3 Accountability and Reporting

- Jesse will keep a time registration in Excel, recording daily work hours and activities.
- Weekly progress updates will be shared during meetings with Collin and Oleksii.
- Documents relative to progress updates will be shared before the meetings for early review.
- No separate weekly reports from team members are needed, since Jesse is the only executor.

7.2.4 Archiving

All documents, reports, and code will be archived in the designated cloud environment. Waste Vision's data will be stored in the company's OneDrive, and Saxion deliverables will also be saved in Jesse's personal OneDrive for study purposes.

8 Planning

For a complete overview of the planning, see appendix B: Gantt Chart Customer Support by Performance Analysis.

9 Costs and benefits

Since this project is a proof of concept, no exact budget or financial overview has been made. The costs are limited to resources that are required during the research and development process, while the benefits are mainly the potential future value if the results are eventually implemented in Waste Vision's software.

9.1 Costs

The costs of this project are minimal and mainly consist of:

- **Laptop and desk use**: The student will use a laptop and a desk from Waste Vision during the project.
- **Possible AI licenses**: If needed, licenses may have to be arranged for AI models or tools.
- **GPU capacity**: In case of heavy AI processing, additional GPU computing power may be required in the cloud.

Other than these items, no direct financial costs are expected, as the project is carried out by one student and supported with existing company resources.

9.2 Benefits

The main benefit of this project lies in the added value for Waste Vision. If the proof of concept shows promising results, the methods and solutions developed here can later be integrated into the Waste Vision Suite. This would provide customers with smarter insights and strengthen Waste Vision's position as an innovative market leader.

Because this project is still at the stage of a proof of concept, it is too early to define any exact financial benefits. The long-term value will depend on whether the results are implemented into the actual software products of Waste Vision. The project does add value by exploring AI opportunities and by creating knowledge that can guide future developments.

10 Risk analysis

For a complete overview of the risk analysis, see appendix C: Risk analysis.

Bibliography

Grit, R. (2010). *Project managment.* Noordhoff Uitgevers.

Appendix A: Opdracht 3: Klantondersteuning door middel van performanceanalyses

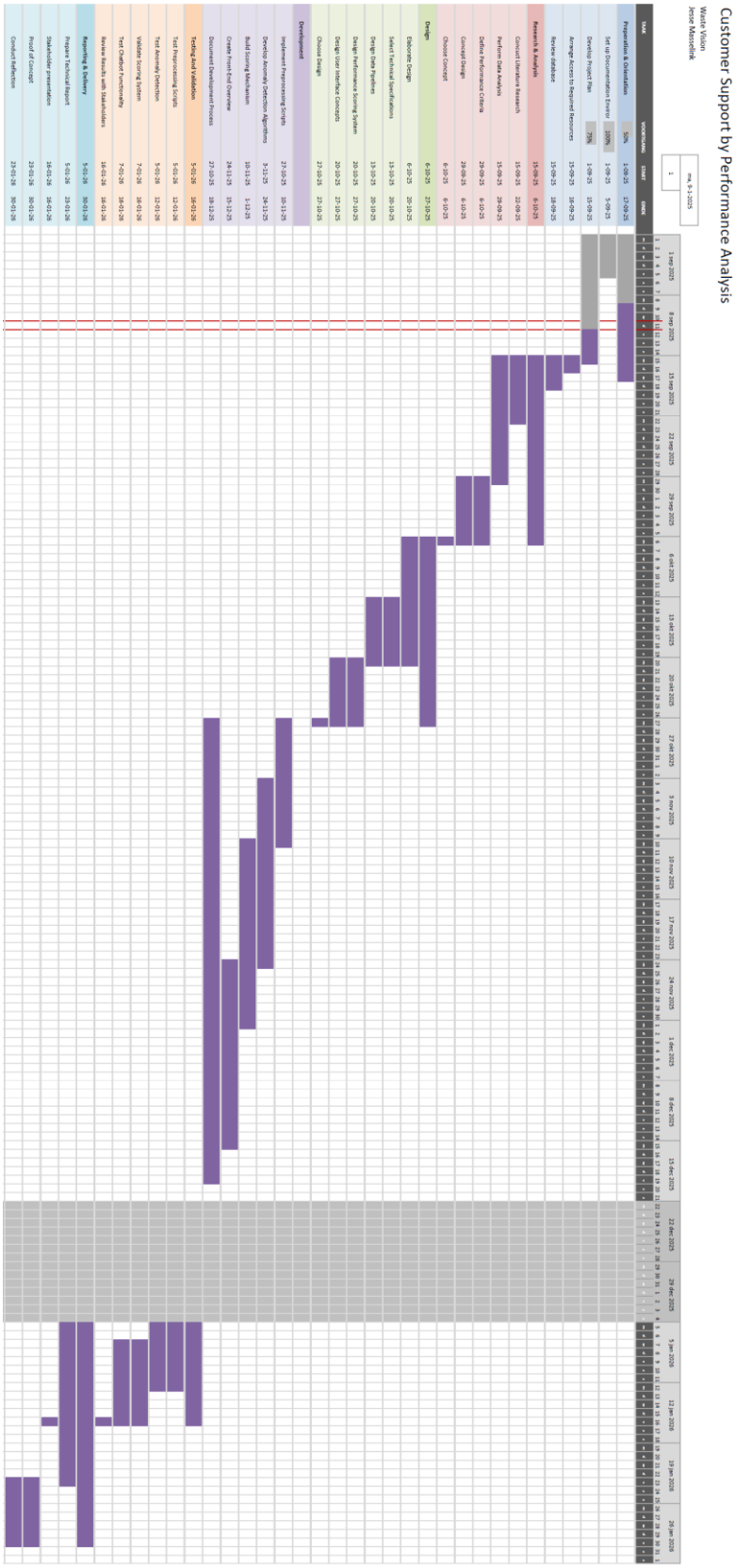
Opdracht 3: Klantondersteuning door middel van performanceanalyses

- **Data-inventarisatie**:
  - Analyseer het stort en ledigingsgedrag van containers en clusters
  - Analyseer het stortgedrag per kaart op een allowlist
  - Maak categorieën voor alle onderdelen
  - Bepaal wanneer iets goed en wanneer het slecht presteert
- **AI-gerichte benadering**:
  - Werk met anomaly detection voor het herkennen van afwijkingen
  - Geef elke container, cluster en kaart automatisch performance cijfers
  - Koppel de data aan een LLM en laat gebruikers interactief alles onderzoeken
- **Resultaten**:
  - Een gebruiker kan doormiddel van chatten inzicht krijgen in slecht presterende onderdelen in hun gebied.
  - Bij het bekijken van een of meerdere objecten (kaart, container, cluster) ziet een gebruiker direct de performance en kan hierop slecht presterende objecten herkennen (dit hoeft niet ingebouwd te zijn in de applicatie)
  - Presentatie aan stakeholders

Randvoorwaarden en begeleiding

- **Periode**: minimaal 5 maanden, flexibel in overleg.
- **Fulltime**: (denk eerlijk gezegd dat het hier over de uitkomst moet gaan)
- **Begeleiding**:
  - Dagelijkse aanspreekpunt: Software engineer (voor technische vragen).
  - Wekelijkse check-in met product manager en architect.
- **Verwachtingen**:
  - Zelfstandig (thuis) werken met wekelijkse online updates. Het zou leuk zijn als de stagair een aantal keer op kantoor aanwezig is.
  - Tijdige communicatie over blockers en benodigde extra data.
  - Bereidheid om vragen te stellen: zo ben jij sneller productief, wij verwachten dat je kritisch nadenkt (denk aan data-kwaliteit, evt businessdoelen en KPIs handig voor klanten).
- **Budget/omgeving**:
  - Toegang tot onze cloudomgeving (Azure).
  - Eventueel GPU-capaciteit (voor het draaien van een model, in overleg).
  - Beschikking over testdata van een Nederlandse gemeenten of afvalinzamelaar. (hier moeten we goedkeuring voor hebben)

Appendix B: Gantt chart Customer Support by Performance Analysis



Appendix C Risk analysis

Risico-analyse

Risico-analyse	**Print**
Klantondersteuning door middel van performanceanalyses	*11-9-2025*

Bij een risicopercentage > 50%, dient het project niet in deze vorm worden uitgevoerd.

Categorie	Risico	Waarde *	Factor **	Zwaarte **	Risicotot.
Tijdsfactor		↓maak keuze↓			
1	Geschatte looptijd van het project	3 - 6 maanden	1	4	4
2	Kent het project en definitieve deadline	Ja	2	4	8
3	Is de tijd voldoende om project te realiseren	Voldoende	1	4	4
Complexiteit van het project		↓maak keuze↓			
4	Aantal functionele deelgebieden dat betrokken is	2	1	4	4
5	Aantal functionele deelgebieden dat gebruik gaat maken van de resultaten	2-3	1	2	2
6	Gaat het om een aanpassing of een nieuw project	Geheel nieuw	3	5	15
7	In hoeverre zullen bestaande verantwoordelijkheden moeten wijzigen	Minimaal	1	5	5
8	Zijn er andere projecten afhankelijk van dit project	Nee	0	5	0
9	Wat zal de houding zijn van de gebruikers	Geïnteresseerd	1	5	5
10	Zijn er deelprojecten, is de voortgang afhankelijk van de coordinatie hiertussen	Nee	1	3	3
De projectgroep		↓maak keuze↓			
11	Welke medewerkers werken aan het project mee	Voorn. interne	0	4	0
12	Wat is het geografische spreiding van de projecten	1	0	2	0
13	Aantal projectleden dat op piektijden > 80% betrokken is	1-5	0	5	0
14	Verhouding materiedeskundigen tov projectdeskundigen	Goed	0	5	0
15	Nemen gebruikers deel aan de projectgroep	In beperkte mate	3	3	9
De projectleiding		↓maak keuze↓			
16	Is de projectleiding materiedeskundig	Redelijk deskundig	2	3	6
17	Hoe deskundig is de projectleiding mbt de projectplanning	Redelijk deskundig	2	3	6
18	Hoeveel ervaring heeft de projectleider met projecten als deze	Weinig ervaring	3	3	9
19	Hoe deskundig zijn de adviseurs op het te onderzoeken gebied	Redelijk deskundig	1	5	5
20	Hoe deskundig zijn de materiedeskundigen op het te onderzoeken gebied	Redelijk deskundig	1	5	5
21	Hoe betrokken zijn de verantwoordelijke lijnmanagers bij het project	Redelijk betrokken	2	5	10
22	Is de kans groot dat de samenstelling van de projectgroep wijzigt tijdens het project	Kleine kans	0	5	0
23	Worden door de projectgroep standaardmethoden gebruikt	Ja, een aantal	2	4	8

Categorie	Risico	Waarde *	Factor **	Zwaarte **	Risicotot.
Duidelijkheid van het project		↓maak keuze↓			
24	Zijn probleem en doelstelling voldoende bekend bij alle projectleden	Ja, iedereen	0	5	0
25	Is het onderzoeksgebied nauwkeurig vastgelegd	Ja	0	5	0
26	Is er voldoende afbakening met andere projecten	Voldoende	0	4	0
27	Is er voldoende tijd gepland voor afstemming en besluitvorming	Redelijk	1	4	4
28	Zijn de randvoorwaarden duidelijk	De meeste wel	1	4	4
29	Werken de randvoorwaarden beperkend genoeg	Redelijk	2	5	10
			Totaal		**126**
			Risicopercentage ***		**29%**

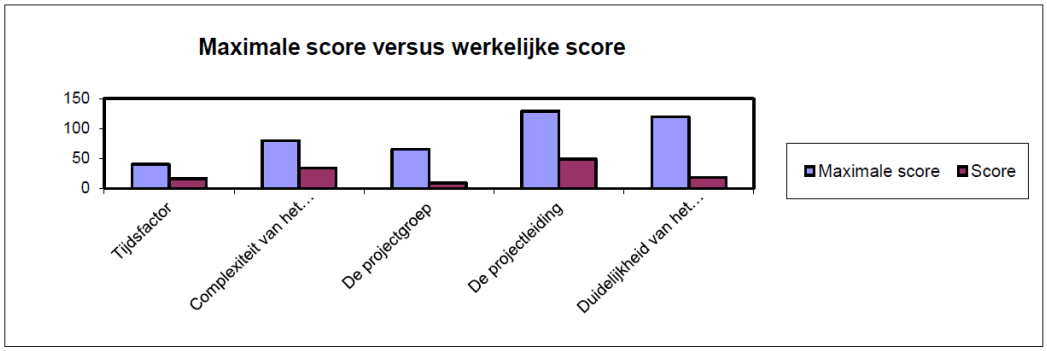
Opmerking: Dit model geeft slechts een zeer grove indicatie van risico's
Paragraaf 3.12 in het boek geeft een degelijker methode analyse van Risico's tijdens een project

** Waarde gekozen door projectleider.*
*** Hoogte factor en waarde staan vast.*
**** Risicopercentage is de totaalscore gedeeld door 433 (maximale score) maal 100.*

Let op: dit is slechts een indicatie

Aangezien het risico-percentage een totaalbeeld geeft, kan het zijn dat een bepaalde categorie wel voor een hoog risico zorgt. Hieronder een specificatie per categorie om eventuele verbeterpunten zichtbaar te maken.

Categorie (met maximale score versus werkelijke score)				
Tijdsfactor	Maximaal	40	Score	16
Complexiteit van het project	Maximaal	80	Score	34
De projectgroep	Maximaal	65	Score	9
De projectleiding	Maximaal	129	Score	49
Duidelijkheid van het project	Maximaal	119	Score	18



Conclusie: Het project kent enkele risico's, maar deze zijn niet van zo erg dat zij het starten of uitvoeren van het project in de weg staan. Het project kan zonder belemmeringen van start gaan. Wel is het belangrijk om tijdens de uitvoering rekening te houden met mogelijke problemen die kunnen ontstaan. Hiervoor zijn al maatregelen getroffen, zoals regelmatige feedbackmomenten met de opdrachtgevers en de mogelijkheid om dagelijks terug te vallen op technische ondersteuning.