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certe assuradeuren
verbindt kennis en kunde

Internship Report

Minor

BSc Data Science & Society

Academic Year 2025-2026
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Standardized Data-Driven Reporting for Insurance Advisors

Design and implementation of an automated Business Intelligence reporting solution at Certe assuradeuren

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Preface

During my time with the Data Science & Society programme, I have been introduced to a wide range of topics, including data analysis, data visualization, machine learning, governance and regulation of innovation, and applying data science in both societal and business contexts. Together, these courses provided a strong foundation for understanding how data can be used responsibly and effectively to support decision-making. Over time, I became particularly interested in the practical side of data analysis, especially in transforming data into clear insights through dashboards and visual reports.

This interest was further developed through courses such as *Visualising Data*, where the focus was placed on design choices, clarity, and communicating insights to diverse audiences. Alongside the programme, I started following online courses in my own time related to business intelligence and data visualization, as this was an area I wanted to explore in more depth. These experiences made me realize that I wanted an internship that would allow me to work hands-on with BI tools and real organizational data.

Finding an internship was initially challenging. I had to start searching for a September 2025 internship already around November 2024, which limited the available options, and I also set a practical constraint of finding a position within approximately two hours of travel from Meppel. After some difficulty, I contacted an internship mediation agency, Stagemax, which helped me get in touch with Certe assuradeuren. This led to an introductory meeting with Mohamed, my internship supervisor, at their office in Coevorden.

During this conversation, we discussed both my interests and the organization's needs. Certe was in the process of improving and standardizing its reporting for insurance advisors, which closely aligned with my interest in Business Intelligence and data visualization. After this

meeting, I was offered the internship position. The internship assignment was further refined during the first weeks of the internship, resulting in a project focused on developing a standardized, automated reporting solution using Qlik Sense and Mail & Deploy. This internship provided an opportunity to apply knowledge from the programme in a practical setting, while further developing my technical, analytical, and communicative skills.

Table of Contents

Preface **2**

Table of Contents **4**

Introduction **5**

Description of the Internship Organisation **6**

Internship Assignment & Tasks **7**

Results & Output **11**

Evaluation **15**

Learning Outcomes 15

Contributions to the Company 17

Value of the Programme 17

Reflection and Future Development 18

References **20**

Appendices **21**

Appendix A. Internship Plan 21

Appendix B. Internship Logbook 21

Appendix C. First Page of Standardized Report 25

Appendix D. Second Page of Standardized Report 26

Appendix E. Third Page of Standardized Report 27

Appendix F. Mail & Deploy Task 28

Appendix G. Part of Mail & Deploy Logbook 29

Introduction

My internship at Certe assuradeuren took place from September 2025 until January 2026 and lasted five months. Certe assuradeuren operates in the insurance domain and supports affiliated insurance advisors through data-driven insights and reporting. During my internship, I worked on the design and development of a standardized, data-driven reporting solution aimed at supporting both internal decision-making and external communication with advisors.

The assignment involved analysing data from multiple sources, designing clear and interpretable visualizations, and automating report distribution using Business Intelligence tools such as Qlik Sense and Mail & Deploy. The goal was to create a scalable reporting framework that could be automatically personalized for individual advisors while remaining manageable for the organization.

This report describes the internship assignment, the development process, and the final reporting solution, and reflects on the learning outcomes and professional growth achieved during the internship.

Description of the Internship Organisation

Certe assuradeuren (formerly Assuradeurengilde B.V.) is a full-service insurance provider operating within the Dutch insurance market. The organization supports independent insurance advisors by offering a comprehensive back-office infrastructure, access to a broad portfolio of insurance products, and IT solutions that reduce complexity in i.e. claims management (*Certe assuradeuren; Voor consumenten, 2026.*).

Certe acts as an authorized agent on behalf of multiple insurers, meaning Certe is legally permitted to take out, amend, and manage insurance policies and claims. This setup allows affiliated advisors to offer customized insurance solutions under their own brand name, while benefiting from Certe's insurer network and operational support (*Certe assuradeuren; Wat is een volmachtbedrijf?, 2026*). As a result, advisors can focus on their customer relationships and advisory work without being burdened by administrative and technical processes.

Certe assuradeuren is headquartered in Coevorden and primarily operates within the northern and eastern regions of the Netherlands. In recent years, the organization has experienced significant growth, which has driven a stronger focus on data-driven decision-making. Data and reporting play an increasingly important role in supporting both strategic and operational decisions, reflecting Certe's broader ambition to improve efficiency, transparency, and scalability through the effective use of data.

Internship Assignment & Tasks

The internship assignment was closely linked to the organisation's shift towards more data-driven decision-making. Its main goal was to design and develop a standardised, data-driven reporting solution that supports both internal decision-making and external communication with affiliated insurance advisors. The focus lay on improving insight, consistency, and automation, while ensuring the solution remains scalable and applicable to a diverse group of advisors.

The core objective was to create a single, generic reporting framework that could be automatically tailored to individual advisors. Instead of developing multiple separate reports, one standard report was designed to be dynamically filtered and periodically distributed. This approach allows advisors to receive personalised insights into their portfolio, production, and claims performance, while keeping the reporting structure centralised and manageable for the organisation.

To achieve this objective, a set of interrelated tasks was defined and carried out throughout the internship. A first step consisted of understanding and structuring the underlying data. Multiple data sources were involved, including production, policy history, financial results, and claims data. These sources differ in structure, coverage, and available dimensions, which required careful analysis to determine how they could be combined in a consistent way. One of the main challenges was that not all advisors appeared in every data source. To prevent incomplete or misleading reports, the claims dataset, which contains the smallest amount of advisor numbers, was used as a starting point. From this set, a cross-reference was made with the other sources to determine which advisor numbers were present across all required datasets. This

approach ensured that only advisors with complete and consistent data were included in the final reporting cycle.

In parallel, I developed practical skills in the platforms used for the assignment, primarily Qlik Sense and Mail & Deploy. Both platforms were new to me at the start of the internship. Qlik Sense was used to build the data model, define measures and dimensions, and design the visualizations (*Das, 2023*). Meanwhile Mail & Deploy was responsible for automating the generation and distribution of the reports (*'What Is Mail & Deploy?', 2026*). With support from the external partner HippoLine, I explored how these tools interact, especially how dynamic filters and expressions in Qlik Sense behave once reports are rendered and distributed in Mail & Deploy. This required extensive testing, and expressions that work correctly in an interactive dashboard can behave differently when executed in a task.

Another important part of the assignment involved translating business requirements into meaningful performance indicators and visualisations. In close collaboration with colleagues, I identified which metrics were most relevant for advisors and how these should be interpreted in practice. Examples include year-to-date production figures, portfolio development over time, and comparisons with previous years. For each KPI, I first clarified the underlying business question it needed to answer, before determining how it could be calculated and visualised clearly. This process required careful consideration of the available data sources, as not all metrics were consistently defined or available across datasets. In some cases, this meant prioritising one data source over another or simplifying a measure to maintain consistency across advisors.

When designing the visualisations, I focused on selecting chart types that matched both the nature of the data and the way advisors typically review information. For example, production development was visualised using line charts to emphasise trends over time, while

portfolio composition and year-over-year comparisons were presented using bar charts to make differences immediately visible. During this process, I adjusted axes, labels, time ranges, and aggregation levels to ensure that the visualisations were intuitive and easy to interpret for non-technical users. These design choices were guided by how advisors would use the report in practice, such as quickly identifying developments or using figures as a basis for discussion during meetings.

Based on these insights, the report itself was designed and refined. This included decisions regarding layout, color usage, typography, and visual hierarchy to ensure that report remains easy to read. The design process was highly iterative. Feedback from stakeholders often led to adjustments in both the visual design and the underlying logic. Technical limitations within Qlik Sense and Mail & Deploy also influenced certain design choices. For example, I did not have the autonomy to change the color scheme of Qlik Sense visualisations and had to design the report in a Word environment within Mail & Deploy. Therefore, the process required much compromise between visual preference and functional reliability.

A substantial technical challenge within the assignment was the implementation of dynamic filtering logic. Each report needed to be filtered to exactly one advisor without manual intervention. This was achieved through a combination of dynamic dimensions and measures in Qlik Sense, together with cycle tasks in Mail & Deploy that iterate over agent numbers. Careful configuration was required to ensure that filters were applied consistently across all visualizations and data sources (*Souza & Sd, 2016*). During this phase, several operational issues were encountered, such as session-related errors and rendering timeouts when running larger cycles. These issues required troubleshooting in collaboration with system administrators and led to adjustments in testing strategy and task configuration.

```
Python
=If(Jaar * 100 + Maand >= Year(AddMonths(Today(), -17)) * 100 +
Month(AddMonths(Today(), -17)),
   Jaar & '-' & Num(Maand, '00'))
```

Figure 1. Simple example of Dynamic Coding for a Qlik Sense Dimension

The final phase of the practical assignment focused on setting up and validating the Mail & Deploy environment. A task was configured to run through a cycle of multiple advisors, generate personalized reports, and distribute them via e-mail. Extensive validation was performed by comparing outputs across different advisors and time periods to ensure consistency. This included checking numerical results, validating titles and labels, and confirming that reports would be sent to the correct recipients. Through this process, the reporting solution was refined into a stable and reusable framework that can continue to be used and further developed after the internship.

Once both the report and the distribution environment were fully set up, attention shifted to knowledge transfer and continuity after the internship. Through documentation and handover meetings, I ensured that Certe employees retained access to the report, the Mail & Deploy tasks, and the underlying logic. Agreements were made on post-internship use, such as the ability to retrieve reports for specific advisors on request, for example to support advisor meetings. While these processes will be managed internally going forward, the monthly advisor distribution task is already prepared and ready for use.

Results & Output

The final outcome of the internship consists of three closely connected components: the standardised report, the Mail & Deploy distribution environment, and the transfer of knowledge to ensure continued use. Together, these form a complete and reusable reporting solution.

The report itself is built in Qlik Sense and designed to be generic, while still allowing for advisor-specific filtering and interpretation. At the time of completion, the solution is technically capable of being distributed to over 200 affiliated advisors.

The standardized report consists of three pages and includes a total of thirteen visualizations. Each page focuses on a specific theme, moving from general portfolio and production insights to claim performance, and finally, relationship-level analysis.

Page 1: Production and Portfolio Overview

The first page (see Appendix C) provides a high-level overview of an advisor's production and portfolio development across different time periods. It is intended to give immediate insight into how the portfolio is evolving and how current performance compares to previous periods.

At the left side of the page, KPI cards summarize the most important figures. These include production for the current year, production for the previous year, the total number of relationships, and the total number of active policies. The production KPIs reflect the cumulative in- and outflow values for the respective year up to the most recent available month. The relationship and policy KPIs show the total counts at the latest point in time, offering a snapshot of the current portfolio size.

On the right side of the KPIs, at the top of the page, a line chart visualizes monthly production over a rolling period of eighteen months. This makes it possible to identify trends, seasonal effects, and recent changes in production performance. In the early months of a new year, the latest value in this chart corresponds directly with the current-year production KPI. As the year progresses, the KPI continues to accumulate, while the line chart provides month-by-month context.

The second line chart shows policy density over the last five years. Policy density represents the average number of active policies per relationship and is calculated as the total number of policies divided by the total number of relationships (as the KPIs highlight). Several advisors and internal stakeholders indicated that this metric is particularly valuable, as it provides insight into portfolio depth rather than just portfolio size.

The final visualization of the first page is the portfolio position chart. This bar chart compares the net annual premium of the current year with that of the previous year on a monthly basis. Because the report dynamically reflects the current point in time, only months that have already occurred in the current year display comparison values. This allows advisors to easily see whether their portfolio position is ahead of or behind last year, without introducing misleading future data.

A short glossary is included on this page to clarify key terms and calculations used throughout the report, ensuring that the visualizations remain accessible to advisors with varying levels of data familiarity.

Page 2: Claims Performance and Risk Indicators

The second page (see Appendix D) focuses on claims-related performance and risk indicators. Its purpose is to help advisors understand not only how many claims occur, but also their financial impact and development over time.

The claims overview chart displays three key metrics across the last six years: the number of claims, the average claim amount, and the claim frequency. Presenting these metrics together allows advisors to distinguish between changes driven by claim volume and changes driven by claim severity.

Additional visualizations provide more detailed insight into the composition of claims. A treemap shows the top claim types based on total claim amount for the current year. This makes it easy to identify which types of claims contribute most to overall losses. A separate chart highlights the largest individual claims from the current year, offering insight into exceptional or high-impact cases.

The page also includes a visualization of the loss ratio (SRvp) over recent years. This indicator helps advisors assess the balance between premium income and claims costs. Color coding is applied consistently to signal whether performance falls within a healthy range, requires attention, or is insufficient.

Page 3: Relationship-Level Analysis

The third page (Appendix E) shifts focus from portfolio-wide metrics to relationship-level analysis. It highlights which clients contribute most to claims activity and provides context for discussions with both business and private customers.

Two bar charts display the top business relationships and top private relationships based

on the number of claims in the current year. These visualizations only include relationships that have reported claims, making them particularly useful for identifying clients that may require follow-up or risk management discussions.

In contrast, a pie chart on this page shows the overall distribution of business versus private relationships based on all active policies, regardless of claim activity. This distinction is important, as it places the claim-focused charts in context and prevents misinterpretation of data. A short explanatory text accompanies the pages to clarify these visualizations and to guide advisors in interpreting the results correctly.

Mail & Deploy Environment and Transfer of Knowledge

In addition to the report, a fully configured Mail & Deploy environment was delivered. This environment automates report generation and distribution and includes a task that cycles through advisors and applies the correct filters per recipient (see Appendix F). A task logbook was also maintained to track configuration changes and validation steps during development (see Appendix G).

Finally, the handover at the end of the internship ensured that both the Qlik Sense and Mail & Deploy environments remain accessible to Certe employees and the partner company HippoLine. This ensures that the report can be maintained, adjusted, or reused after the internship has ended. Agreements were also made regarding periodic checks to ensure the system continues to run reliably and that report distribution remains stable over time.

Evaluation

Learning Outcomes

At the start of the internship, several learning outcomes were defined to guide both the technical and professional development during the project (see Appendix A):

- Gained hands-on experience with business intelligence tools (e.g. Qlik Sense) to create dashboards and data reports.
- Developed advanced data analysis skills to support internal decision-making.
- Improved data visualization techniques to communicate findings effectively to non-technical stakeholders.
- Strengthened problem-solving and strategic thinking through real-world business applications.
- Gained experience in writing professional data-driven advisory reports for executive management.

As the internship was strongly centered around Business Intelligence (BI), I gained extensive hands-on experience with tools such as Qlik Sense and Mail & Deploy. Although I had some prior experience with Power BI, both of these tools were new to me at the start. Especially Qlik Sense required time and practice to fully understand, but through daily use, experimentation, and guidance, I gradually became more confident. Towards the end of the internship, I was able to create new visualizations, adjust measures, and configure Mail & Deploy tasks more efficiently and independently.

In addition to tool-specific skills, I developed stronger data analysis capabilities. I learned to work with multiple data sources, identify inconsistencies between them, and make informed

decisions about which data could be reliably used in a standardized report. This analytical work directly supported internal decision-making, as the report was designed to provide consistent and comparable insights for both advisors and internal stake-holders.

A key part of the internship was improving data visualization and communication. Throughout the development process, I continuously refined visualizations based on feedback, focusing on clarity, layout, and ease of interpretation for non-technical users. The dynamic nature of requests within the organization also strengthened my problem-solving skills. Requirements sometimes changed quickly, and I was occasionally asked to prepare insights on short notice for upcoming meetings, even before the standardized report was fully completed. These situations required flexibility, prioritization, and practical decision-making.

Although the final deliverable was mainly a dashboard-based reporting solution rather than a traditional written report, the internship still contributed to my ability to communicate data-driven insights in a professional advisory context. Explaining results, design choices, and limitations to stakeholders helped me develop skills that align with writing and presenting data-driven advice for management.

Beyond these predefined learning outcomes, the internship also contributed significantly to my personal development. As there was no dedicated data analytics team within the organization, collaboration often involved stakeholders with different backgrounds and limited availability. This made communication more challenging and required me to be proactive in planning meetings, asking clear questions, and seeking feedback when needed. These experiences strengthened my professional communication skills and increased my confidence in working independently within a complex organisational setting.

Contributions to the Company

During the internship, I contributed to a concrete business need within Certe assuradeuren. Existing dashboards in certain environments were no longer consistently accessible, which led to many questions from affiliated insurance advisors. At the same time, internal colleagues expressed the need for a reporting solution that was less dependent on IT environments such as internal apps or websites. The standardized report addresses this gap by providing a clear, accessible overview that can be easily requested, shared, and brought to meetings with advisors. By keeping the report concise and limited in length, it remains practical and easy to understand for its intended audience.

Value of the Programme

The internship is closely aligned with the Data Science & Society programme by combining technical data work with communication and decision support in a real organisational context. Throughout the internship, I applied and further developed skills related to data visualisation, reporting, and stakeholder-oriented analysis.

Courses such as *Visualising Data* and *Data Science V: Visual Rhetoric* directly supported my work on designing dashboards and automated reports. Concepts like visual hierarchy, clarity, and reducing information overload were applied when developing KPI cards and charts. The focus on visual rhetoric helped me think more critically about how insights are presented and interpreted by different audiences.

In addition, the *Field Project* and earlier group assignments provided a solid foundation in structuring projects, handling feedback, and communicating technical choices to non-technical

stakeholders. Overall, the programme offered the theoretical and practical tools needed to work independently on a complex reporting assignment within a professional environment.

Reflection and Future Development

The internship has been a valuable learning experience in which I worked on a technically challenging, end-to-end data project. I gained hands-on experience with the full data workflow: exploring and preparing data, building analyses and visualizations, and delivering a final automated reporting solution. This confirmed my interest in working with data analysis across the entire process, from raw data to a usable final product.

I was given a high level of autonomy throughout the internship, which strongly contributed to my problem-solving skills. I was responsible for making technical and design decisions, dealing with tool limitations, and responding to changing requirements. At the same time, collaboration with colleagues and external partners helped refine the solution and highlighted the importance of clear communication. As this was my first professional experience in a data-focused role, learning how to align expectations, explain choices, and handle frequent new requests was an important part of my development.

For future improvement of the work, the following points could be considered:

- Improving data consistency across source systems, making it easier to connect datasets and enabling richer and more flexible visualizations.
- Maintaining a clear and complete overview of which agents are missing from specific datasets, to reduce manual checks and ambiguity in reporting.

- Further optimizing measures and filtering logic to improve performance and scalability as the number of advisors grows.
- Expanding technical documentation to support easier maintenance and knowledge transfer to new team members.

Overall, the internship provided a strong practical foundation and helped translate academic knowledge into a real organizational setting, while further developing both my technical and professional skills.

References

Das, S. (2023, mei 6). Best practices in Qlik Sense. *Medium*. https://medium.com/@dassuparna148/best-practices-in-qlik-sense-dfb6a585ed75

Souza, M., & Sd, D. (2016). Mastering QlikView and Qlik Sense: A Comprehensive Guide to Data Visualization and Advanced Analysis. *ResearchGate*. https://www.researchgate.net/publication/396264428_Mastering_QlikView_and_Qlik_Sense_A_Comprehensive_Guide_to_Data_Visualization_and_Advanced_Analysis

Voor consumenten. (z.d.). *certe assuradeuren*. Geraadpleegd 9 februari 2026, van https://certe-assuradeuren.nl/voor-consumenten/

Wat is een volmachtbedrijf? (z.d.). *certe assuradeuren*. Geraadpleegd 9 februari 2026, van https://certe-assuradeuren.nl/documenten-en-voorwaarden/wat-is-een-volmachtbedrijf/

What is Mail & Deploy? (2026, januari 27). *Mail & Deploy*. https://www.mail-and-deploy.com/product/insight/

Appendices

Appendix A. Internship Plan

Form for Approval of Internship

- To be filled in digitally by the student in accordance with supervisor* of the internship.
- Digital copy (pdf) with signatures of the student and supervisor to be sent to the Exam Board (cf-examboard@rug.nl) asap, but **preferably no later than April 1st 2024**.
- Note that the remaining 15 ECTS of the minor space need to be approved as well, approval should be requested through this form.

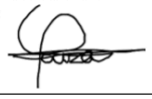
Student name	Faiza Omar Mohamed
Student number	S5607132
Name of internship	Business Intelligence towards data analysis and dashboarding
Amount of ECTS	20 EC
CF supervisor	Loes Bouman
Internship organisation (and location)	**Assuradeuren Gilde B.V.** Modem 22 7741 MJ Coevorden
Supervisor at internship company	Mohamed Bouyafa
Supervisor contact details	Email: mbouyafa@assuradeurengilde.nl Phone Number: +31 6 11062277

Justification

List the main topics of the internship.	During this internship, I will focus on dashboarding and data analysis to support strategic decision-making within the company. Key topics include: • Developing dashboards for different departments (Finance, Account Management, and Executive Board). • Visualizing and presenting data in a clear and accessible manner. • Working with the BI tool QlikSense to create automated reporting solutions. • Writing advisory reports based on data insights and providing strategic recommendations. • Collaborating with stakeholders to ensure that data-driven insights align with business needs.
Mention the learning outcomes that will be achieved after successful completion of the internship.	Upon successful completion of the internship, the student will have: • Gained hands-on experience with **business intelligence tools** (e.g., QlikSense) to create dashboards and data reports. • Developed advanced **data analysis** skills to support internal decision-making. • Improved **data visualization** techniques to communicate findings effectively to non-technical stakeholders. • Strengthened **problem-solving** and **strategic thinking** through real-world business applications. • Gained experience in writing professional **data-driven advisory reports** for executive management.
Specify why the internship adds to your DSS programme.	This internship is highly relevant to my Data Science & Society (DSS) programme because it integrates technical data analysis with real-world business applications. In particular, it allows me to: • Apply machine learning and statistical methods to business problems. • Work with big data tools and develop interactive dashboards, which are key components of DSS. • Gain experience in data-driven decision-making, a core theme in the programme. • Develop communication skills by presenting findings to stakeholders and advising on strategic improvements. • Experience how data science can influence corporate strategy.
Specify the ECTS and workload by giving an estimated time schedule of the internship where you describe the frequency and planned period of meetings with your CF supervisor and your internship supervisor. (Remember: 1 ECTS equals 28 hours of workload.)	The internship is worth 20 ECTS, equaling 560 hours of work. I will be working 32 hours per week, which brings the total to approximately 700 hours over 5 months (September 1 – February 1). Regarding meetings, I will provide regular updates to my CF supervisor and have a mid-term evaluation. There will also be a final meeting with both my CF supervisor and internship supervisor for the final assessment.
Describe the method of assessment and the assessment criteria.**	For the method of assessment and the assessment criteria, please refer to the internship manual and its evaluation report.

Signature of the student, who by signing additionally confirms to be aware of any further mandatory administrative steps to take after approval is received, as indicated on Brightspace

Name: Faiza Omar Mohamed *Date:* 20-03-2025
Signature:



Approval of the CF internship supervisor

Name: dr. Loes Bouman *Date:* 20-03-2025
Signature:

Approval of the Exam Board

Name: On behalf of BoEx: Hieke Hoekstra *Date:* 14/04/2025
Signature:

*Any CF teaching staff member can act as a supervisor.

** For archiving reasons, the internship supervisor has to send all relevant documentation concerning assessment (this form, the student's final report, the assessment form) to the Student Service Desk (cf-sec@rug.nl).

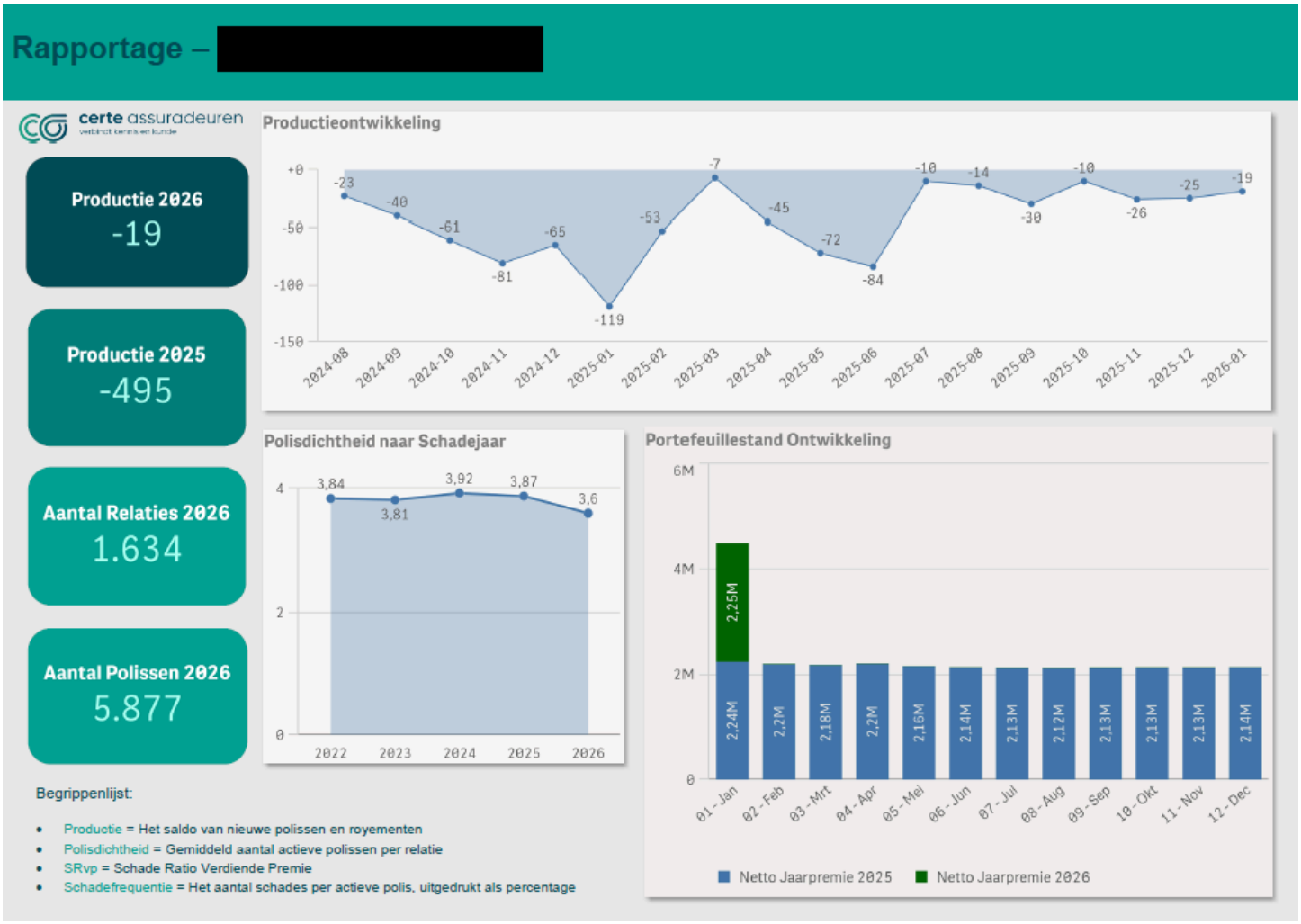
Appendix B. Internship Logbook

Week	Weekly Tasks
Week 1	• Introduction to Certe and team • Reviewed internship assignment and tools (Qlik, Mail & Deploy) • Explored existing Qlik dashboards and apps • Exported agent-level production data for analysis • Defined initial KPIs and reporting structure
Week 2	• Built first Qlik expressions and KPI cards • Practiced Set Analysis, modifiers, and formatting • Attempted Mail & Deploy datasource setup (auth issues) • Updated internship plan and deliverables • Defined external report scope
Week 3	• Improved visualizations and report concepts • Meeting with HippoLine (Mail & Deploy intro) • Connected multiple Qlik apps as datasources • Started Word template design in Mail & Deploy • Researched report layout and design in Word
Week 4	• Adjusted color schemes and layout choices • Built first full report page with KPIs and charts as practice • Added visualizations from multiple apps • Iterated on typography and layout • Collected feedback from company internship supervisor
Week 5	• Handled urgent ad-hoc report request • Translated vague business needs into KPIs • Built custom Mail & Deploy report under time pressure • Coordinated with Rene & Mohamed (internship supervisor) • Balanced ad-hoc work with internship assignment
Week 6	• Planned meetings with stakeholders • Created support tickets for Mail & Deploy auth issue • Follow-up planning for post-vacation meetings • Limited progress due to illness
Week 7	**Vacation**
Week 8	• Finalised first draft report design choices • Replanned feedback meetings after they cancelled it

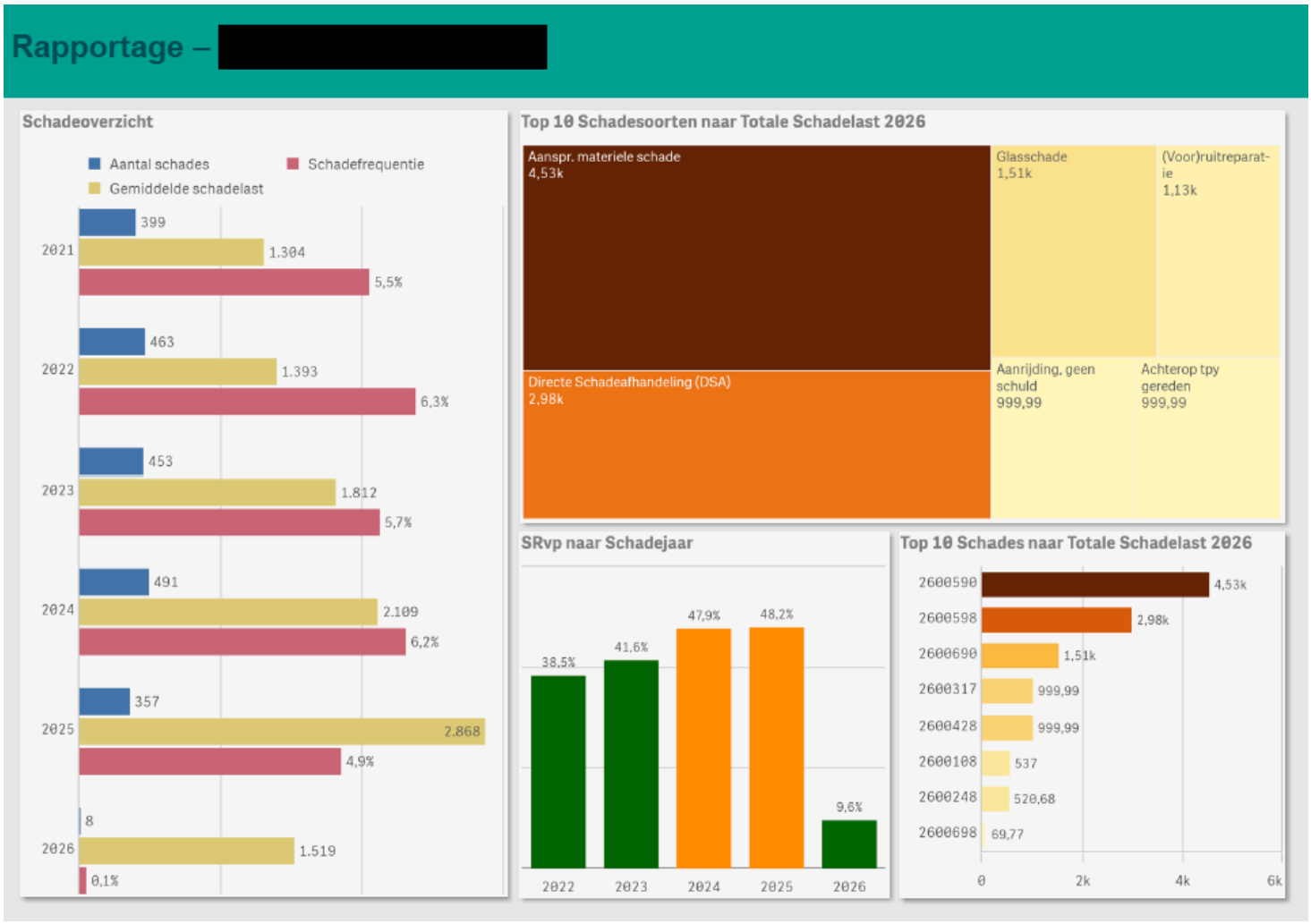
	● Started concept for internal report for company ● Defined questions for internal stakeholders
Week 9	● Feedback session with internship counselor ● Added dynamic dimensions ● Refined KPI focus and averages logic ● Explored a fixed average line across agents
Week 10	● Feedback meeting with Rene and Emiel ● Implemented major report revisions ● Reduced report to two core pages ● Improvised dynamic chart logic ● Advanced Mail & Deploy filter setup
Week 11	● Processed additional feedback via email ● Planned HippoLine support meeting ● Worked on dynamic visual behaviour ● Delay in meeting Mohamed
Week 12	● HippoLine meeting on datasource limitations ● Explored alternative Mail & Deploy setups ● Built backup reporting solution ● Alignment meeting with Mohamed
Week 13	● Processed new feedback from Rene and Emiel ● Added third report page and new claims visuals ● Built “frequent claims” graphs ● Added explanatory text boxes ● Interim evaluation with both internship supervisors
Week 14	● Double-checked all report visuals ● Created alternatives for edge cases per agent ● Continued Mail & Deploy task optimization ● Shared filtered report versions for review
Week 15	● Iterated on visuals and explanations ● Improved claims frequency logic ● Advanced Mail & Deploy task (multi-agent emails) ● Started writing internship report ● Meeting with uni internship supervisor on report structure
Week 16	● Finalised Mail & Deploy automation logic ● Validated report outputs per agent ● Completed internal report deployment

	● Continued writing internship report
Week 17	**Vacation**
Week 18	**Vacation**
Week 19	● Final checks on reports and automation ● Incorporated last feedback from stakeholders ● Continued writing and refining internship report
Week 20	● Final validation of Mail & Deploy tasks ● Documentation and knowledge transfer ● Worked on reflection and evaluation sections
Week 21	● Final handover and wrap-up ● Last feedback moments
Week 22	● Finalised internship report ● Meeting uni internship supervisor on progress internship report ● Final evaluation with both supervisors ● Completion of internship

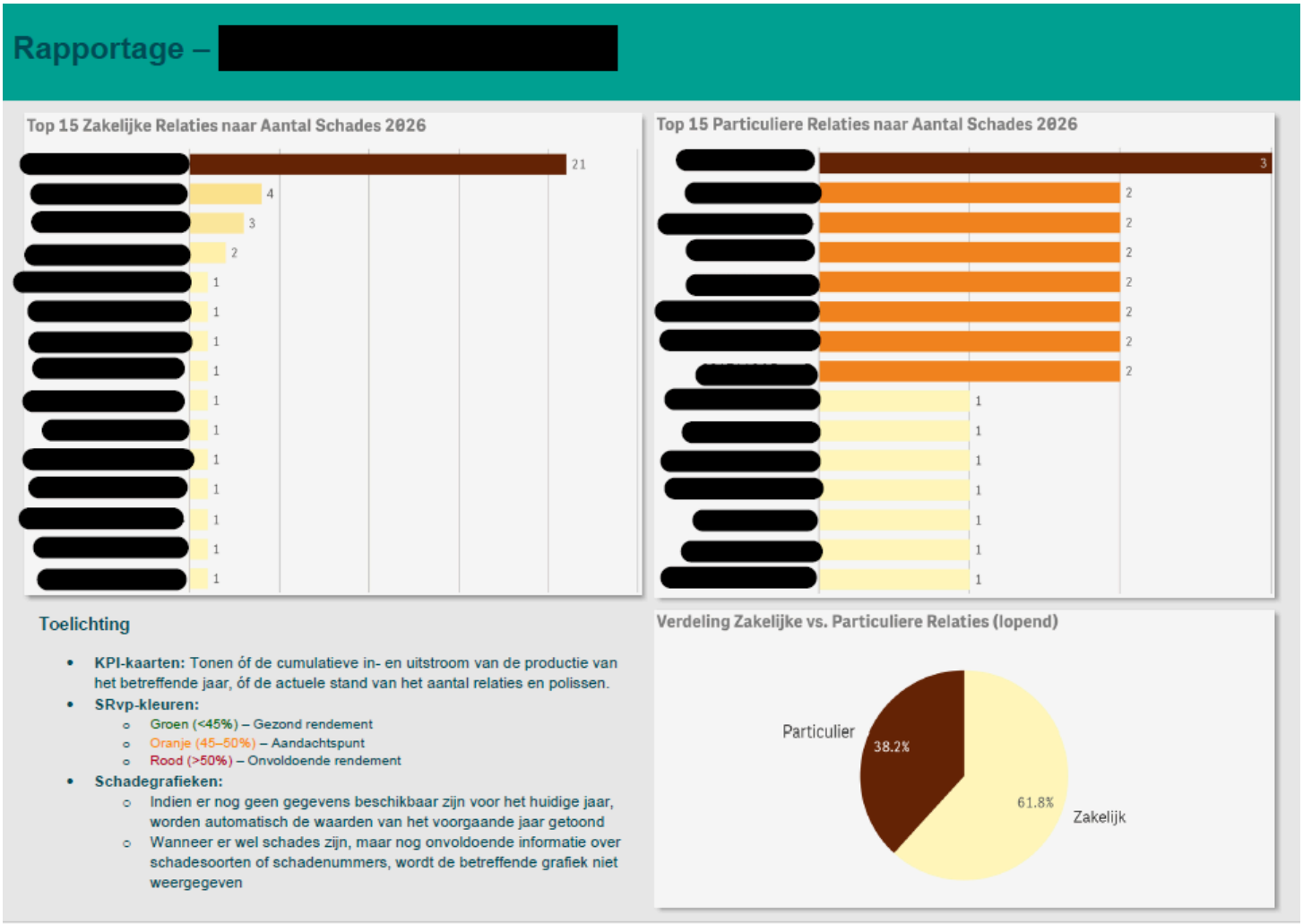
Appendix C. First Page of Standardized Report



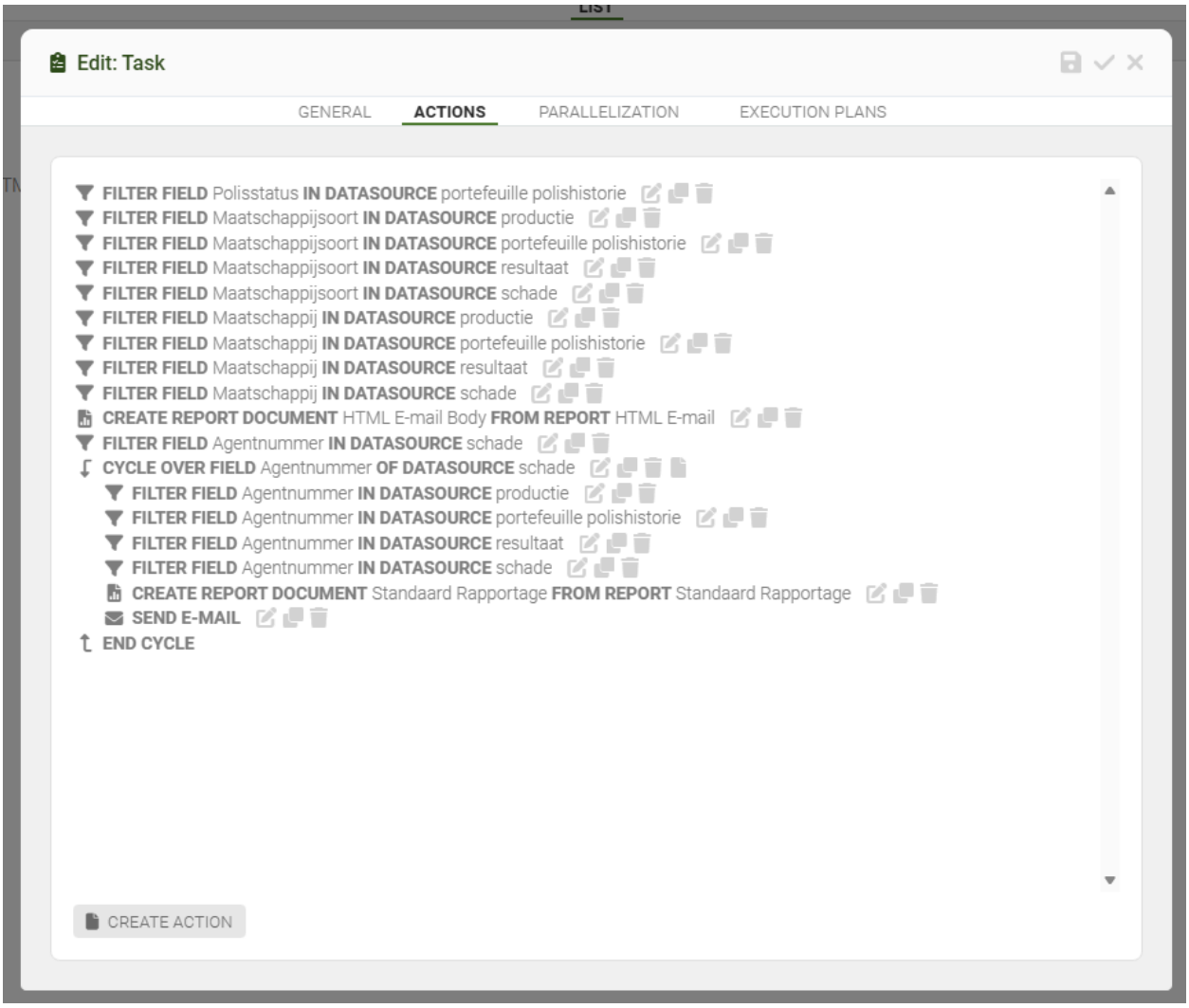
Appendix D. Second Page of Standardized Report



Appendix E. Third Page of Standardized Report



Appendix F. Mail & Deploy Task



Appendix G. Part of Mail & Deploy Logbook

2026-01-27 09:02:11	Information	**FINISHED FILTERING FIELD IN DATASOURCE**	FILTER X001 Dienstverlening X004 Abonnement X005 Abonnement X498 Percentageverdeling
2026-01-27 09:02:11	Information	**FILTERING FIELD** Maatschappij **IN DATASOURCE** schade	
2026-01-27 09:02:12	Information	**FINISHED FILTERING FIELD IN DATASOURCE**	FILTER X001 Dienstverlening X004 Abonnement X005 Abonnement X498 Percentageverdeling
2026-01-27 09:02:12	Information	**FILTERING FIELD** Agentnummer **IN DATASOURCE** schade	
2026-01-27 09:02:14	Information	**FINISHED FILTERING FIELD IN DATASOURCE**	FILTER 9998 99999 70 750 329 12 97 147 199 268 288 329 365 211 290 150
2026-01-27 09:02:14	Information	**CYCLE OVER FIELD** Agentnummer **IN DATASOURCE** schade	
2026-01-27 09:02:15	Information	**PROCESSING CYCLE VALUE** *222*	
2026-01-27 09:02:15	Information	**FILTERING FIELD** Agentnummer **IN DATASOURCE** productie	
2026-01-27 09:02:16	Information	**FINISHED FILTERING FIELD IN DATASOURCE**	FILTER 222
2026-01-27 09:02:16	Information	**FILTERING FIELD** Agentnummer **IN DATASOURCE** portefeuille polishistorie	
2026-01-27 09:02:16	Information	**FINISHED FILTERING FIELD IN DATASOURCE**	FILTER 222
2026-01-27 09:02:16	Information	**FILTERING FIELD** Agentnummer **IN DATASOURCE** resultaat	