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Developing a Centralized Reporting Plan for Customer Communication Channel to Drive Marketing Growth

Metropolia University of Applied Sciences

Master’s Degree

Degree Programme in Business Informatics

Master’s Thesis

26 April 2025

Creating business growth has been a big interest of mine for most of my career. It started with learning the ropes in marketing and gradually moving into more technical roles. For the past few years, I have been knee-deep in analytics and conversion optimization – areas that constantly push me to learn and grow. When I came across Metropolia's Master's program in Business Informatics, it felt like the perfect next step. And now, as I finalize my thesis with a head full of new learnings, I feel lucky and grateful for the journey.

First, I want to thank my employer and my supervisors, Anne and Tommi, for supporting my participation in this master's degree journey – even though it meant dedicating workdays to lectures. I also want to thank for the opportunity to do the thesis for the company, and for the chance to showcase my skills while developing new ones along the way. A very special thank-you to the whole stakeholder group that participated in the thesis by sharing their expert knowledge and time from their busy schedules – you know who you are!

Next, I want to thank my thesis instructors Kevin and Zinaida for all the valuable advice and suggestions for the thesis. You have given me with tools and insights I am sure to carry with me for a long time. I also want to thank my classmates for all the inspiring chats and sparring sessions – you were a big part of my school experience.

Last but not least, my biggest thank-you goes to my boyfriend Kalle. Thank you for your encouragement, support and patience – and for all the delicious meals you cooked up while I was buried in thesis work.

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April 26, 2025

Abstract

Author:	Sofia Härö
Title:	Developing a Centralized Reporting Plan for Customer Communication Channel to Drive Marketing Growth
Number of Pages:	87 pages + 3 appendices
Date:	26 April 2025
Degree:	Master of Engineering
Degree Programme:	Master's Degree Programme in Business Informatics
Instructor:	Kevin McIntire, Senior Lecturer

The objective of this thesis is to develop a centralized reporting plan for the case company's customer communication channel. It addresses a common business challenge: how to utilize marketing data effectively when it is scattered to multiple platforms. The thesis also discusses how to design reporting and dashboards that support data-driven decision-making and channel growth.

This thesis belongs to the realm of applied action research, using qualitative research methods. Data for the research was collected and analyzed from workshops, interviews and internal documentation. The strengths and weaknesses found in the current state analysis guided the selection of focus areas, which then helped to form the conceptual framework for the thesis. The framework consists of three key themes: centralized reporting, relevant KPIs and growth-focused dashboard design. The current state analysis, conceptual framework and the inputs from the case company guided the creation of the outcome.

The outcome of the thesis is a plan for centralized reporting for the case company's customer communication channel, that combines data from different platforms and visualizes growth opportunities in the channel. The plan consists of business requirements, data plan, reporting KPIs and dashboard wireframes. When implemented, the reporting plan will give the case company a clear view of the customer communication channel's performance, while making reporting, comparing results and finding growth opportunities easier. With centralized reporting, the case company can free time from manual data activities and grow the channel more strategically to bring more value to both the customers and the business.

Keywords: Data, Centralized reporting, Reporting plan, Dashboard, Marketing, BI, Business intelligence

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1 Introduction

Data is an integral part of marketing. Without data, marketers cannot determine the effect of their marketing activities and therefore make informed decisions. The challenge of today's marketing teams is not a lack of data, but instead the abundance of it that makes data management and reporting increasingly complex.

One of the main issues that drive that complexity is data fragmentation. When data is scattered among multiple platforms and data sources, it is challenging to get a comprehensive view. The siloed effect makes reporting time-consuming, inconsistent and in some cases impossible. This results to lack of transparency in marketing and missed opportunities for growth. These topics are frequently discussed in professional literature (Chen, 2024; Jaffery, 2024). The challenge is particularly visible in the more complex marketing channels, such is the customer communications channel. It produces large amounts of data in a short amount of time, uses different strategies and techniques at once with varying goals, and it is often difficult to attribute a customer action to a specific channel activity done. The more complex and important the channel, the more crucial clarity and efficiency in the reporting becomes.

This thesis focuses on developing a comprehensive reporting plan for the case company's customer communications channel, which is an important strategic channel for its low-cost and highly converting nature. The thesis also highlights the importance of centralizing reporting to gain transparency and efficiency in the reporting processes while uncovering growth opportunities in the channel.

1.1 Business Context

The case company of the thesis, Silmäasema, is the biggest eye care provider in Finland. They offer optical products and expert services, as well as surgeries relating to eye health. The company was founded in 1975 and has now over 150 stores, an online store and 18 private hospitals in Finland, as well as 10 stores in Estonia. Altogether, the company employs nearly 1500 people. For the last four to five years Silmäasema has almost doubled its revenue.

The company has an in-house marketing team that manages their marketing channels. They also use external consultants and digital agencies to ensure that their marketing stays fresh, high quality and reaches customers through all necessary channels. The company's marketing volume is kept high throughout the year, and measuring the results is an essential part of all marketing activities.

Providing excellent customer service and health expertise throughout the customer's lifetime is at the core of Silmäasema's strategy. Therefore, learning from their customers by measuring and optimizing customer activities are integral parts of the business.

1.2 Business Challenge, Objective and Outcome

The case company´s growth has required their marketing team and activities to grow with it. The expansion of marketing activities has required more platforms to be brought to the mix, which has divided the company's marketing processes between different platforms. The divisions bring efficiency to individual marketing activities, since the platforms allow more in-depth analytics, but create challenges when trying to measure marketing performance in more complex channels that utilize more than one platform.

One of the more complex channels to measure is the customer communication channel, which consists of email and SMS communication sent to the customer base. The channel itself is a low-cost and highly converting channel, which makes it crucial in the marketing channel mix. It is also a big part of improving customer loyalty and top-of-mind, which makes it strategically important for the company.

The company uses several platforms for their email and SMS send-outs, and since conversions are collected in yet another platform, it makes measuring marketing efficiency and results challenging. Due to the separated data, it currently requires a lot of manual work to figure out, for example, the full value and effect of a single email campaign, or to find growth opportunities in the channel. Because of the frequency and manual work needed, the campaigns cannot be analyzed fully, which means a lot of potential growth is left out on the table.

Accordingly, the objective of this thesis is *to develop a plan for centralized reporting for the customer communication channel that combines key data from multiple platforms and visualizes growth opportunities in the channel*. The outcome of the thesis is a centralized reporting plan.

The new way of reporting should enable a comprehensive view of the customer communication data for both managers and operational experts to use, that saves time, improves data-driven decision-making, creates transparency and enables growth in the channel.

1.3 Thesis Outline

The scope of the thesis is to develop a *reporting plan for the case company's customer communication channel* that includes business requirements, reporting KPIs, data plan and dashboard wireframes, which can then be used in creating centralized reporting for the channel. The thesis outcome supports the company's marketing team by bringing more transparency and insight into current customer communication activities.

The thesis is organized into seven sections. In the first section, the thesis topic and the case company is introduced. In the second section the research approach used, and the research design is presented. The section also includes an overview of how the data was collected for the thesis. The third section holds the current state analysis, that describes the case company's customer communication channel and its reporting processes. It also includes an analysis done based on the findings.

The fourth section walks through the existing knowledge and literature review used in the thesis. The fifth section describes the building of the proposal phase of the thesis and the sixth section the validation phase of the proposal. The seventh section summarizes the thesis.

2 Method and Material

This section describes the chosen research approach, research design, as well as data collection and analysis methods used in this thesis.

2.1 Research Approach

Research in general can be defined ‘as a process that is undertaken in a systematic way with a clear purpose, to find things out’ (Saunders, 2019: 40). Even though all research aims to discover something, there are different approaches and methods that govern how to get to that discovery.

Research can be divided into various research families, of which the most common ones are fundamental research, also known as basic research, and applied research. Fundamental research is more theoretical by nature. It aims to explain the why behind what is being researched and seeks to generalize the topic, providing a deep insight into it. Applied research tends to be more practically oriented. It often studies specific cases and aims to solve, correct or improve the topic. (International Network for Natural Sciences, n.d.). Additionally, research can be divided, for example, into field studies and desk studies. Desk study, also known as literature review, studies already existing information that can be found, for example, through books, statistics or scientific articles. Field studies on the other hand aims to collect information and data through their own investigations, for example, through interviews, experiments or focus groups. (Hovestad, 2024.)

On top of the divisions mentioned above, research can be divided into different approaches, the most widely used being qualitative, quantitative and mixed method approaches. The qualitative approach uses qualitative research methods and observational data, such as interviews or discussions, to understand the researched subject. It is exploratory in nature, which can lead to new ideas and theories. The quantitative approach relies on numerical analysis of the data that reflects the subject which is studied. It usually focuses on answering questions, such as how many or what percentage. The mixed-method approach combines both qualitative and quantitative methods. (Taherdoost, 2024.)

This thesis belongs to the realm of applied research, since its outcome aims to improve customer communication channel's reporting. It has a clear, practically orientated goal, which is custom to applied research. More precisely, this thesis can be categorized as applied action research, since 'it combines research and development parts which typically relate to continuous enhancement and improvement in organizations' (Kananen, 2013: 20). The research approach used in this thesis is a qualitative approach. The data behind the outcome is collected from workshops, interviews and internal documentation.

2.2 Research Design

Research design 'is a framework that includes the methods and procedures to collect, analyze, and interpret data' (Bouchrikam, 2024). In other words, it describes the steps needed to achieve the research goal and what kind of data or other resources are needed. Figure 1 illustrates the research design for this thesis.

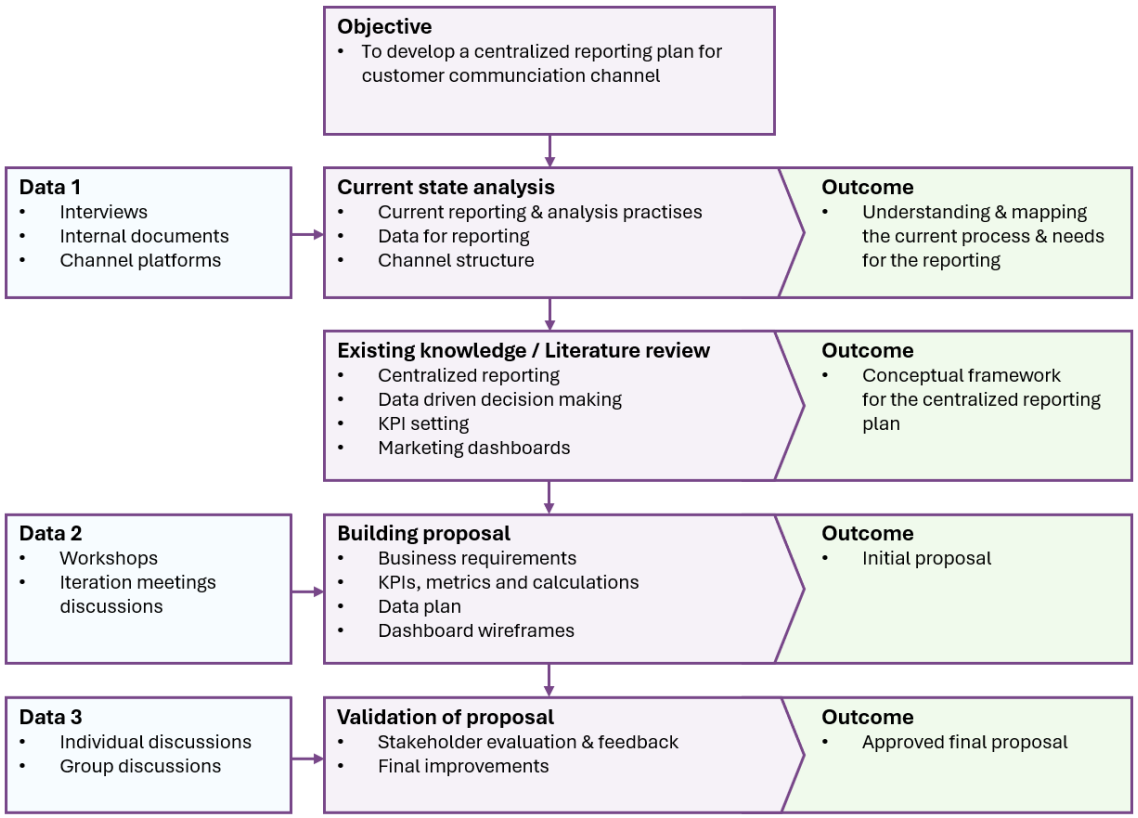


Figure 1. Research design for this thesis.

As seen from Figure 1, this thesis started with setting an objective of developing a centralized reporting plan for the case company's customer communication channel. It then moved to the current state analysis step, where understanding and mapping of the current process was gathered by using interviews, internal documents and channel platforms as data.

After the current state analysis, a literature and best practice review was done to explore centralized reporting, data driven decision making, KPI setting and marketing dashboards. The outcome of the step was a conceptual framework for building the reporting plan. This and the prior step helped to form a clear picture of how the channel reporting is currently done, what are the key weaknesses and strengths in it, and what are the best practices to follow in reaching the outcome of the thesis successfully.

In the next step, the initial proposal was created based on data gathered from workshops and discussions with the stakeholders. The initial proposal consisted of business requirements, KPIs, data plan and dashboard wireframes. The outcome of this step was the initial proposal for the centralized reporting plan. In the last step, the proposal was validated through stakeholder feedback. Individual as well as group discussions were held to shed light on the final improvements needed, so that the approved final proposal could be created.

2.3 Data Collection and Analysis

Data for this thesis was collected in three rounds. Each round represented a section of the thesis: the current state analysis, proposal and validation. Table 1 illustrates details of the three data collections used in the thesis.

Table 1. Overview of data collections 1-3 used in the thesis

	Participants/role	Data type	Topic description	Date, length	Documented as
	Data 1, Current state analysis				
1	Respondent: Operational marketer 1	Online interview	Interview about current reporting process based on respondents experience	November 2024, 60 min	Field notes
2	Respondent: Operational marketer 2	Online interview	Interview about current reporting process based on respondents experience	November 2024, 63 min	Field notes
3	Respondent: Operational marketer 3	Online interview	Interview about current reporting process based on respondents experience	November 2024, 45 min	Field notes
4	Respondent: Head of Marketing	Face-to-face interview	Interview about current reporting process based on respondents experience	November 2024, 45 min	Field notes
5	Respondent: Head of Digital	Online interview	Interview about current reporting process based on respondents experience	November 2024, 32 min	Field notes
6	Respondent: Marketing manager	Online interview	Interview about current reporting process based on respondents experience	November 2024, 40 min	Field notes
	Data 2, Proposal				
7	Participants: - Operational marketers 1-3	Workshop	Workshop about customer communication channel's message categories	December 2024, 120 min	Field notes
8	Respondent: Marketing automation consultant	Online discussion	Interview about data and process capabilities of the marketing automation system	January 2025, 55 min	Field notes
9	Respondent: SMS Platform administrator	Online discussion	Interview about data and process capabilities of the SMS platform	January 2025, 45 min	Field notes
10	Participants: - Operational marketers 1-3	Workshop	Workshop about customer communication channel's reporting structure and design	February 2025, 160 min	Pictures
11	Participants: - Operational marketer 2 - Head of Digital - Analyst - Analytics manager - ICT manager	Group discussion	Group discussion to determine what data sources can be used to gain access to the needed KPIs for the project.	February 2025, 60 min	Field notes
12	Participants: - Operational marketers 1-3 - Head of marketing - Head of digital	Workshop	Workshop about customer communication channel's report structure and design	March 2025, 180 min	Pictures

	Data 3, Validation				
13	Respondent: Operational marketer 1	Online discussion	Discussion about initial proposal mockups for the dashboard	March 2025, 50 min	Pictures
14	Respondent: Operational marketer 2	Online discussion	Discussion about initial proposal mockups for the dashboard	March 2025, 50 min	Pictures
15	Respondent: Operational marketer 3	Online discussion	Discussion about initial proposal mockups for the dashboard	March 2025, 50 min	Pictures
16	Respondent: Head of marketing	Online discussion	Discussion about initial proposal mockups for the dashboard	March 2025, 50 min	Pictures
17	Participants: - Operational marketers 1-3 - Head of marketing	Group discussion	Discussion and evaluation of the proposal	March 2025, 50 min	Pictures
18	Participants: - Operational marketers 1-3 - Head of marketing	Group discussion	Discussion and evaluation of the proposal	March 2025, 50 min	Pictures

As seen from Table 1, Data 1 is a collection of data related to the current state analysis of this thesis. The data was collected from interviews with the stakeholders working closely with the customer communication channel. Out of the six interview participants, three were involved with the operational running of the channel, and three were managerial level. Each participant was asked the same core questions, except for the operational marketers, who were asked extra questions that went more in-depth into the channel reporting process.

Interviews were a big part of the Data 1 collection. The interviews were conducted as semi-structured online and face-to-face interviews, that were recorded. The field notes were created based on the interview recordings. The interview questions can be found in Appendices 2 and 3.

Data 2 is a collection of data related to the proposal building phase of the thesis. The data was gathered from workshops with the stakeholders, group discussion with the analytics team, and from free-form online discussions with two platform experts. The workshops were held first with three operational marketers and later with two of the marketing managers included; the head of marketing and the head of digital. The data from this round included ideas, suggestions and business needs for the reporting plan.

With workshops and group discussions, a clear theme and intent was set, and the field notes were taken by hand while the discussion or workshop was ongoing. Workshops

and discussion outcomes, such as post-it note walls were documented digitally in a photograph or screenshot.

Data 3 is a collection of data relating to the validation of the thesis outcome. The data was collected from individual stakeholder discussions as well as group discussions where the initial proposal was discussed and evaluated. All stakeholders were present at the evaluation discussion.

This thesis also analyzed internal documentation that was used in the current state analysis phase, data 1 collection. As seen from Table 2, the documents included working files the marketers use to create channel reporting and finalized channel reports. All textual data was analyzed using thematic/content analysis.

Table 2. Internal documents used in the current state analysis, Data 1.

	Name of the document	Pages	Description
1	Working file for SMS send-outs	3	Manually kept Excel file that is used to summarize results from the SMS send-outs
2	Working file for email send-outs	2	Manually kept Excel file that is used to summarize results from the email send-outs
3	Monthly reports of the customer communication channel	31	Channel's monthly reporting gathered as PowerPoint presentation

As seen from the above tables, most of the data collection consisted of interviews or workshops with the stakeholders. The sessions helped to gain a comprehensive understanding of the customer communication channel, its reporting and what are the needed improvements to it. Next, the findings from data 1 are explored in Section 3 below.

3 Current State Analysis of the Customer Communication Channel Reporting

This section of the thesis presents the current state analysis of the case company's customer communication channel reporting. First, an overview of the current state analysis process is introduced. Second, the different aspects of the customer communication channel and its' reporting are explained. Third, the key findings from the current state analysis are listed. Lastly, the discovered strengths and weaknesses are pinpointed and summarized, and the focus areas for the thesis are introduced.

3.1 Overview of the Current State Analysis

The goal for the current state analysis was to examine the process for the current customer communication channel reporting in the case company, and to analyze what were the benefits and pain points of it. The current state analysis was done in five steps.

In step one, the data from one-to-one interviews were gathered and analyzed. The goal for this step was to find out how the stakeholders see the channel itself, its goals and its reporting practices. Six stakeholders were interviewed, of which three were operational marketers working day-to-day with the channel, and three were managerial level. This step served as the basis for the current state analysis, since it pinpointed what were the different areas in the reporting process that needed further research.

In the second step, data from the group discussions and workshops were analyzed to map out the precise process and structure of the channel. The workshops and discussions were held with the three operational marketers, since they were the most knowledgeable of the nuances of the current process. This step helped to form a picture of the whole channel, while also shedding light to what goes into creating the channel reports.

In step three, the different platforms used in the current channel reporting were investigated to figure out what data is present in what platform. In this step, the interview data from the three operational marketers as well as internal documents relating to data gathering were analyzed. This step added more in-depth data in to the previously done process mapping and channel structure.

In the fourth step, internal documents were reviewed. The step included going through channel reports and analyses, as well as working files used in the reporting. This step was taken to enrich the data and findings from previous steps and to see how the current reports reflected the descriptions of the reporting processes given by the stakeholders.

In step five, all the data from the different steps were organized and sorted based on topic groups. The data was then used to formulate key findings and to create a SWOT analysis that pinpointed the strengths and weaknesses of the channel reporting. Lastly, the focus areas for the thesis were selected based on current state analysis done.

3.2 Description of the Customer Communication Channel and Reporting

The customer communication channel is one of seven main marketing channels used in the case company: customer communication, search, programmatic, display, social media, TV and online video, and offline media, such as print and outdoor advertising. The channel consists of all email and SMS messages that are sent to existing customers, or those with marketing permission. The channel does not include direct mail send by post, or emails that are send via partner, such as S-ryhmä, to their own customer base.

The customer communication channel is an important part of the marketing channel mix, since compared to other channels, it is low-cost with a high conversion rate. The channel is also strategically important to the case company, since it provides direct one-way communication with their customers, and helps to support top-of-mind aswell as recurring sales.

The channel is considered challenging to report on, due to its complexity. The complexity comes from the high volume of the channel, different strategies and techniques used with varying goals, and the customer being able to convert in both online and in a physical store. This results in data being scattered to different platforms.

The goals for the customer communication channel are derived from the overall business strategy. The channel's main goals are to bring more value to the customer, improve top-of-mind and to create additional sales or service bookings.

In addition to the main goals, SMS marketing has its own subchannel specific goals, such as a certain percentage increase in conversions. Other subchannels do not have such measurable goals, but more top-level ones, such as overall message volume sent.

3.2.1 Channel Structure

The customer communication channel is divided into four subchannels: email marketing, SMS marketing, marketing automation and transactional messages. The channel structure is displayed in Figure 2 below.

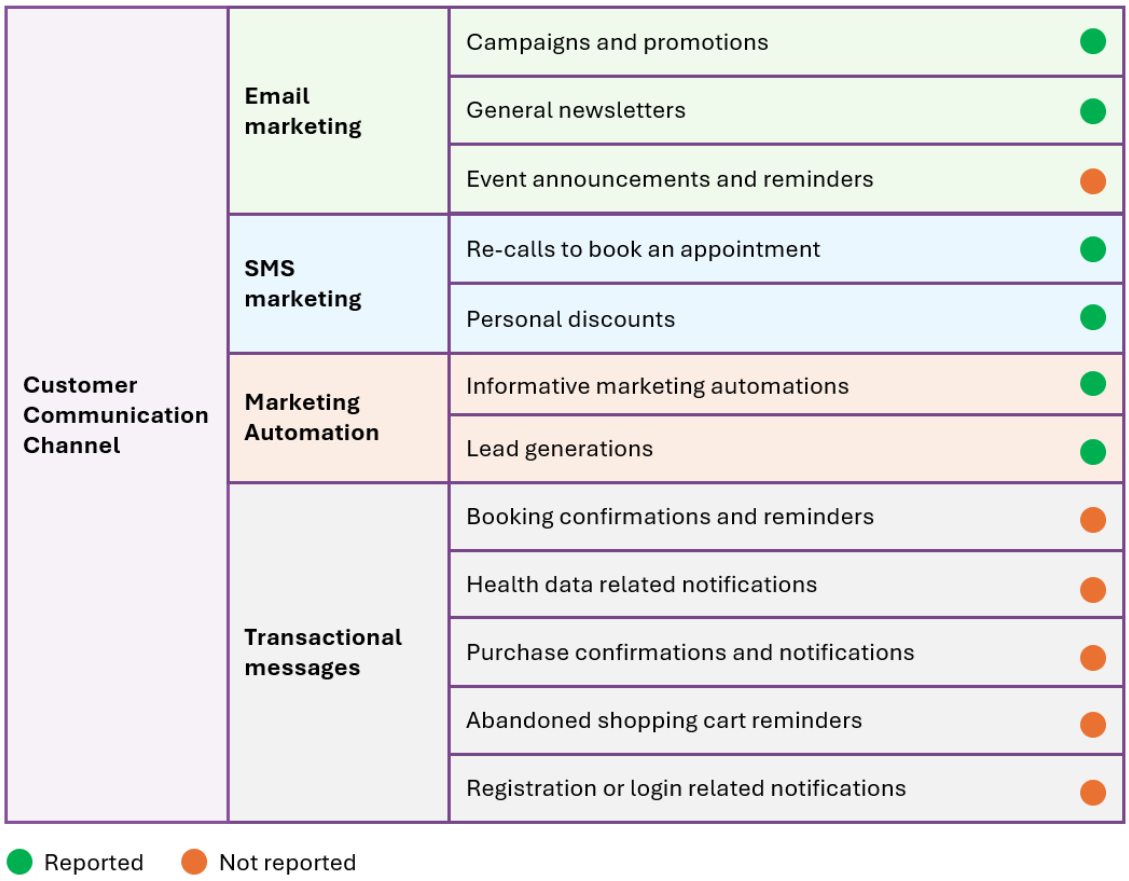


Figure 2. Structure of the customer communication channel in the case company

As seen from Figure 2, each subchannel consists of different message categories. Email marketing consists of campaign emails, newsletters and other manual send-outs. SMS marketing consists of customer re-calls, that are sent to customers who should book a new appointment with their doctor or optician, as well as personalized discounts. Marketing automation consists of automatic message flows that aim to deliver more information to customers and to cross-sell, as well as lead generation automations.

Transactional messages consist of different types of confirmations and notifications sent via email or SMS, that are triggered by a customer action, such as making a purchase, booking appointment or registering online.

Presently, only SMS marketing, marketing automation and parts of email marketing are reported on. Transactional messages are not part of the current reporting process, due to difficulties in attaining the data. Event related messages are also not reported on due to them not driving actual conversions.

3.2.2 Reporting and Channel Optimization

Currently, the customer communication channel is reported and optimized by three marketers that each focus on a separate subchannel: email marketing, SMS marketing and marketing automation. The highest volume subchannel, transactional messages, is not reported.

Each subchannel is reported by the marketer responsible, with a reporting template that is unique to them. The reporting relies heavily on manual processes, due to the data being scattered across several platforms. There is currently no overview report for the whole channel.

Optimization of the customer communication channel is seen challenging because of the scattered data. The marketers can see certain quality metrics from their sub channel performance, such as message open rates and click rates, however, since conversions are on other platforms the full impact of the message is hard to see. This has led two of the operational marketers to gather data manually to separate Excel files to gain a better overview and understanding of their subchannel, and to help with the channel optimization.

3.2.3 Data Sources

The data used for the customer communication channel reporting is currently scattered across five separate platforms. The platforms are website analytics, marketing automation, SMS, sales and bookings platforms. In addition to the platforms, some data is in manually kept Excel files by two of the operational marketers.

The data sources used in the subchannel reports presently, are illustrated in Figure 3 below. The lines represent manual data handling: gathering the data, processing the data and combining the data. The colors indicate what are the main data platforms or data sources for each report done.

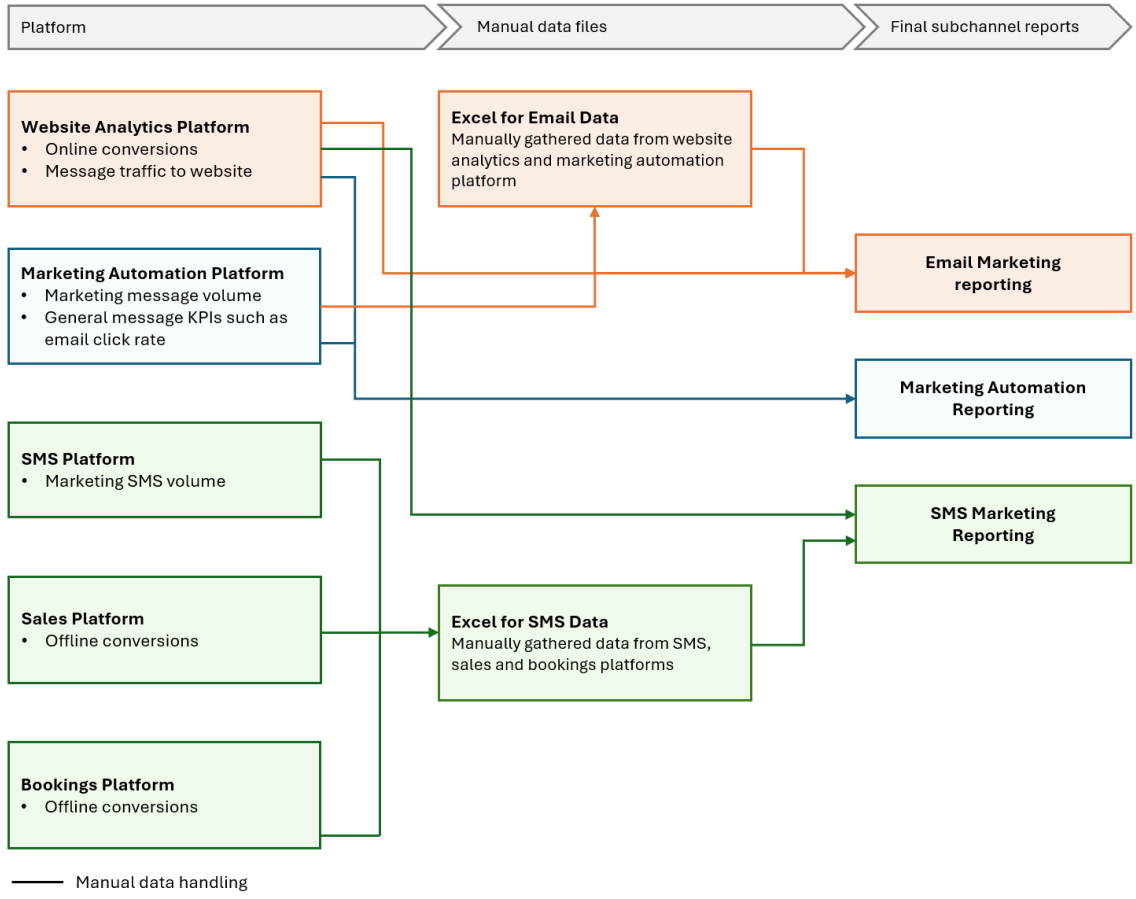


Figure 3. Data sources used in the channel's subchannel reports.

As seen from Figure 3, the marketing email report is done by combining data from the website analytics and marketing automation platforms, as well as partially from the separate Excel file. The marketing automation report is created by combining data from website analytics and marketing automation platforms. The marketing SMS report is formed by combining data from SMS, sales and bookings platforms, that then is processed in the separate Excel file.

3.2.4 Key Performance Indicators

The channel's main key performance indicators (KPI's) are tied to the case company's main conversions: booking an appointment and making a purchase. Customers can book an appointment or make a purchase either online or in a physical store. Additionally, customers can also book an appointment by calling the company's customer service. Related KPI's are conversion rate and revenue gained. Other regularly followed KPI's are message volume, message open and click rates, average purchase amount and the size of the customer contact base.

Currently, some KPIs differ in the subchannel reports. Both the marketing email and marketing automation reports use several email quality metrics, such as open rates rate, click rate and send-out volume, that are then tied to online conversions. These two reports do not have visibility into conversions done in the physical store locations. In contrast, the SMS report does not use quality metrics, only send-out volume, that is then tied to offline sales and booking conversions – mainly done in the physical stores. This report also has visibility into online conversions.

3.3 Analysis of the Customer Communication Channel Reporting

The following groups of findings were identified from the analysis of the case company's customer communication channel reporting and discussed under the below sub-sections. The findings were derived from Data 1, which consisted of stakeholder interviews, workshops and internal documentation, and categorized into the following groups.

3.3.1 Scattered Data Causes Manual Work

The most frequently raised issue in the stakeholder interviews was the amount of manual work and time that the reporting takes in a monthly basis. Since the data is scattered over several different platforms and, in some cases, also across separate Excel files, building the reports involves not only gathering the data manually but also doing manual calculations. Below is how one of the marketers described their monthly process.

> "I add the data to my reporting Excel manually from all the send-outs done. Total message volume I gather from the SMS platform. Total appointments from

> the bookings platform and total sales from the sales platform. Those I then cross-reference with the message audiences. The conversion rates are calculated in the Excel file. Nothing comes ready with the reporting. It's all manual." *(Operational marketer 2, 2024)*

All of the three operational marketers said that due to the manual work, the reporting takes approximately one workday per month to create. For three marketers in a year's time, it takes approximately 36 working days for just reporting.

> "The monthly overview report takes at least one day to make, sometimes even more. And after, I'm always left thinking that I'm still missing this and that data, but I don't have more time to spend on the reporting. Next month I'm in the same situation again." *(Operational marketer 1, 2024)*

Owing to the scattered data, two of the three operational marketers have found it easier to upkeep an external Excel file to where they manually gather data from the different platforms. Despite the extra work, this gives them visibility and a long-term overview of their own subchannels that is currently impossible to get in any other way.

> "The Excel I upkeep makes my work easier. It helps to see the overview of my send-outs and to compare them. It has made optimization easier." *(Operational marketer 3, 2024)*

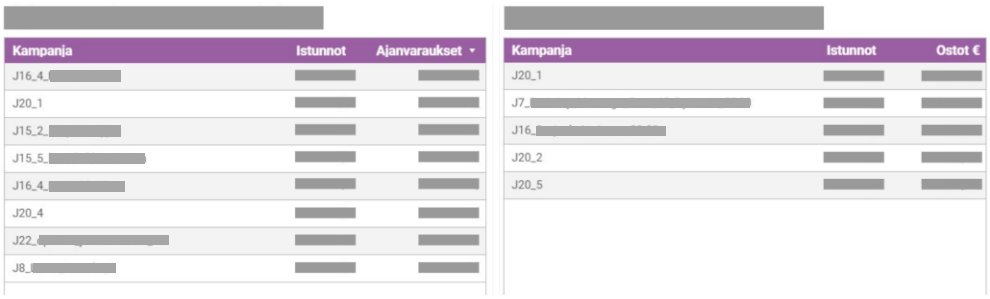
> "I have the Excel because the data is scattered to different platforms. There is no other place to see the data on this level. This setup works fine, but it is laboursome to upkeep. And of course, there is the possibility of mistakes, since all is done manually." *(Operational marketer 2, 2024)*

Even though the external Excel files appear to make the operational work and reporting easier, they add to the scattering of the data and create more manual actions in the reporting process. The more manual activities are part of the reporting, the more chance of mistakes and human error there are. The individual reporting practices and files also contribute directly to another problem, which is the lack of comparability.

3.3.2 Individual Reporting Practices Lack Comparability

The manual reporting of the customer communication channel has created different reporting practices between the subchannels. Due to this, each report looks different and even uses different logic or calculations to get to the same KPIs. Differences between the reports make comparing the subchannel performances challenging and, in some cases, impossible.

Figures 4 and 5 below show screenshots of two different subchannel reports, that both report the same thing, message performance. Figures have been edited to block out numbers at the request of the case company.



Kampanja	Istunnot	Ajanvaraukset
J16_4_		
J20_1		
J15_2_		
J15_5_		
J16_4_		
J20_4		
J22_		
J8_		

Kampanja	Istunnot	Ostot €
J20_1		
J7_		
J16_		
J20_2		
J20_5		

Figure 4. Reporting from marketer 1, that displays automation message performance (excerpts from internal documents).

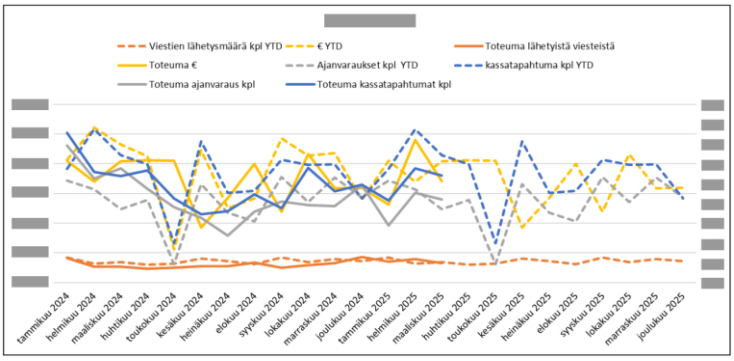


Figure 5. Reporting from marketer 2, that displays SMS message performance (excerpts from internal documents).

As seen from the above Figures 4 and 5, the visualization and data of the reports are very different, even though both marketers are displaying similar data. Comparing the subcategory performance effectively between the two reports would be very difficult and would require further manual work.

The reports also have logical differences between them. One example is the way conversion rates are calculated. One marketer calculates conversions by dividing offline conversions with the message's audience volume. Other marketers calculate it by dividing online conversions with the traffic the message accumulates to the company website. Even though both marketers report the same KPI - the conversion rate of a single message sent - it is not comparable due to differences in calculations.

Comparability was mentioned in the interviews as one of the main issues, especially among the marketing managers. Different reporting practices raised also questions about whether the right things were tracked.

> “It would be great if we could view the results in a comparable manner so that we could identify more cause-and-effect relationships.“ *(Head of marketing, 2024)*

> “If we track one subchannel in one way and another in a different way, do we get a complete picture, or is everyone just doing their own thing and tracking it in their own way? Consistency is missing.” *(Head of digital, 2024)*

Not being able to effectively compare the different subchannel performances directly affects another challenge with the reporting: not getting full visibility into the channel.

3.3.3 Siloed Reporting Prevents Full Visibility to the Channel Performance

The individual reporting practices, varied ways of calculating KPIs, and diverse ways of visualizing data, all contribute to the case company not being able to get a full overview of the customer communication channel. For the managers, the lack of an overview makes it difficult to report performance higher up, for example, to the executive level.

> “Every month before the executive team meeting, I read through the monthly reports the team has done. From the reports I gather highlights from all the different marketing channels to take to the meeting. Very rarely the highlights contain anything from the customer communication channel, because we can’t see the whole channel overview from anywhere.“ *(Head of marketing, 2024)*

For the operational marketers, the lack of an overview makes it challenging to spot, for example, what marketing action has caused good or bad results and therefore being able to learn from it.

> “I’d like all the data to be in one place for reporting, and for there to be one view showing how emails and SMSs are performing. I’d also want to see what has brought the best results overall — whether it's a specific newsletter, a campaign, or something else.” *(Operational marketer 1, 2024)*

Lack of a channel overview also makes prioritization challenging. If the channel cannot be examined as a whole, the case company might be left with channel black spots that are not addressed. When the big picture is missing, it is hard to see if what you are doing is creating the needed impact.

> “Sometimes I worry that when an expert creates a report, there’s no time left to look at the bigger picture. We might end up optimizing something that doesn’t contribute to growing the overall results.” *(Head of marketing, 2024)*

One of the issues that also contributes to the lack of visibility is that the transactional messages are currently not tracked or reported on. Transactional messages are estimated to account for approximately half of the whole channel volume. To gain a full understanding of the channel, transactional messages should also be reported on.

3.3.4 Current Reporting Setup Blocks Growth

The lack of an overview level in the channel reporting, as well as the scattered data, makes identifying growth areas in the channel difficult. Because of the lack of visibility into what to optimize, the case company might leave potential growth on the table. This was recognized by all the stakeholders that were interviewed. Here is what two of them had to say.

> “Without an overall picture, it is difficult to identify gaps or shortcomings in the customer communication channel. The overview exists only in the operational marketer’s minds.” *(Head of digital, 2024)*

> “One challenge in optimization is having to use so many different platforms just to see what needs to be optimized.” *(Operational marketer 1, 2024)*

Since the customer communication channel is strategically important to the company, being systematically able to grow and leverage the channel would be crucial. Without a reporting framework that takes that into consideration, that cannot be done.

3.4 Key Findings From the Customer Communication Channel Reporting

This section summarizes the results of the current state analysis. It pinpoints the strengths and weaknesses of the customer communication channel reporting and highlights the focus areas for development in this thesis.

3.4.1 Strengths and Weaknesses of the Customer Communication Channel Reporting

The strengths and weaknesses, as well as opportunities and threats, are presented in Figure 6 below.

Strengths	Weaknesses
• Stakeholders recognize strategic importance of the channel • Dedicated marketing team working on the channel • Most important KPIs are known and recognized by all stakeholders	• Manual processes take time from analysing the channel and other work • Lack of full visibility into the channel • Poor comparability due to inconsistent reporting practises • Goals are hard to set and lack of goals causes confusion in what to prioritize
Opportunities	**Threats**
• Potential growth in higher level of optimization • Better strategic decisions with higher visibility	• Growth left on the table • Manual processes can cause mistakes in reports • Hard to spot gaps or shortcomings in the channel

Figure 6. Results of the SWOT analysis of the current customer communication channel reporting and processes in the case company.

As seen from Figure 6 above, several strengths and weaknesses were identified in the channel reporting and processes.

The three strengths identified in the SWOT analysis relate to the channel's stakeholders, which are the marketing managers and operational marketers working with the channel. The main strength is that all stakeholders recognize the strategic impact of the channel and are therefore keen to improve it and utilize its full potential. This will make process changes easier, since the stakeholders are already motivated to move towards a more effective setup. Other identified strengths included that there is a dedicated team already working with the channel and that the most important KPIs are already known.

Two opportunities were discovered that relate to the channel potential. The first opportunity was the potential growth gained by higher level of optimization. Because the level of optimization so far has been quite minimal, it is likely, that there is a lot of potential growth yet to be gained from the channel. The second opportunity discovered was being able to make better strategic decisions when more visibility in the channel is gained. By developing channel overviews and gaining wider access to data, for example to the transactional messages, the company can see clearer what areas of the channel development to prioritize.

There were four weaknesses found, that mostly relate to the current technical setup of the channel and inefficient processes derived from it. The main weakness discovered is

the amount of manual work in creating and analysing the channel. Due to the scattering of the data, the operational marketers use a full working day every month in creating the monthly reporting and often there is no time left for a thorough analysis. Other weaknesses discovered were the lack of full visibility into the channel, poor comparability between subchannels and therefore difficultness to set channel goals.

In the threats discovered, there were two points relating to missed growth and one to the possibility of manual mistakes. Channel optimization and decision making were found to be difficult, due to the lack of full visibility into the channel. It makes discovering growth opportunities, as well as shortcomings, challenging, which can leave potential revenue to the table. Additionally, manual reporting practises can cause mistakes in the reporting, which overtime can lead the channel to a wrong direction.

3.4.2 Selected Focus Areas

Focus areas for the thesis were derived from the analysis' groups of findings and from the strengths and weaknesses identified. Selected focus areas are listed in Table 3 below.

Table 3. Selected focus areas for improvement (based on the current state analysis).

	Findings	**Focus area**	**Impact**
1	Scattered data causes manual work	Removal of manual work with centralized reporting	1. More time released for analysis and other work 2. Smaller chance for errors in reporting 3. Moving towards on-demand reporting
2	Individual reporting practices lack comparability	Unifying reporting processes with standardized dashboards and KPIs	1. Subchannels are comparable 2. Helps to streamline reporting processes 3. Creates data transparency
3	Siloed reporting prevents full visibility to the channel performance	Bringing all needed data to one place with centralized reporting and adding channel overviews to the dashboards	1. Easier to see the direction the channel is going 2. Helps to spot shortcomings and see trends 3. Goals will be easier to set
4	Current reporting setup blocks growth	Enable easier optimization with dashboards designed for data-driven decision-making	1. Helps to spot shortcomings and gaps 2. Makes continuous growth easier 3. Optimization routinized

As seen from Table 3, the four focus areas discovered relate to the findings from the analysis of the customer communication channel reporting. They were also designed to tackle the most critical weaknesses and threats found in the SWOT analysis.

The first finding was the amount of manual work that the scattered data causes in the current reporting setup. For the focus area, centralized reporting was suggested for the solution of the issue, since it helps to bring data to one central location, such as a dashboard. Having the data in one place reduces the amount of time used in manual gathering and processing of the data.

The second finding was the lack of comparability that was caused by different reporting practises. For the focus area, standardized dashboards and KPIs were suggested for the solution of the issue, since they make comparing channel data easier and more efficient.

The third finding was the lack of visibility into the channel due to reporting siloes. For the focus area, centralized reporting and adding channel overviews to the dashboards were suggested for the solution of the issue. With centralized reporting all channel data can be pulled to one view, which enables the creation of channel overviews.

The fourth finding was that the current reporting setup blocks channel growth. For the focus area, developing dashboards that are designed for data-driven decision-making were suggested for the solution of the issue. Having dashboards that are designed to help its users to find growth areas in the data and to answer their optimization questions makes the optimization process more streamlined.

The described four focus areas are explored in the following section based on the available knowledge and best practice gathered. The focus areas also guide the building of the proposal in Section 5.

4 Best Practice on Building Centralized Reporting for Email and SMS Channels

This section discusses the available knowledge and best practices in building centralized reporting for email and SMS marketing channels. The section topics reflect focus areas discovered in the previous current state analysis section.

The first part defines marketing and discusses what today's marketing landscape looks like, it then moves to describing the role of customer communication channels. The second part moves to define centralized reporting, the benefits and challenges in it, and the key elements to consider when building centralized reporting for marketing. Next, the third part dives into the theory of how to choose the right KPIs for the channel and after that, the fourth part discusses how to design a marketing dashboard for optimizing growth. Lastly, the section introduces the conceptual framework of the thesis.

4.1 Today's Marketing Landscape

Marketing can be defined as '(…) the process of identifying, anticipating, and satisfying customer needs and wants through the creation, promotion, and distribution of products and services', according to Feroz, Gohar and Sponder (2024). The main goals of marketing are to boost sales, increase revenue, and help business gain a larger market share. This is done by putting the right product or service in front of the customer at the right time, place and price. (Feroz et al. 2024). Furthermore, marketing can be divided into two categories based on the marketing channels used: traditional marketing and digital marketing. Traditional marketing utilizes traditional marketing channels, such as TV, magazines and direct mail. Digital marketing happens solely on digital channels and platforms, such as in social media, search engines or through email. (Duggal, 2025).

Both digital and traditional marketing have their place in the marketing strategy, since they both have their own strengths and share the same goals. This can be seen in customer lifecycle marketing, an approach that utilizes the whole spectrum of marketing channels to reach, attract and keep the customer. Customer lifecycle marketing supports customer acquisition and retention by planning and optimizing marketing activities throughout the customer lifecycle. (Chaffey, 2022a.) The lifecycle marketing model is illustrated below in Figure 7.

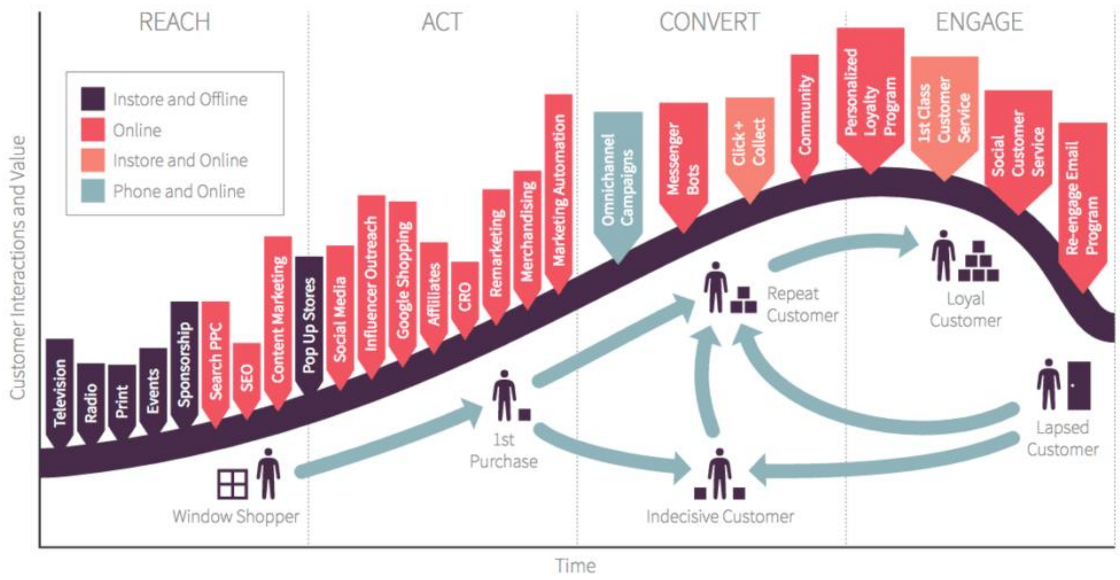


Figure 7. Retail example of lifecycle marketing (Chaffey, 2022b).

As seen from Figure 7, the customer lifecycle is divided into four phases; reach, act, convert and engage (RACE). The RACE framework uses a variety of marketing channels based on what fits best with the customer's current phase in the lifecycle and based on the channel's strengths. For example, TV is commonly used in the beginning of the customer lifecycle, in the reach phase, since it is good at reaching wide audiences and spreading awareness quickly. In the act phase, more tactical channels are used, such as social media or search engine marketing, that are designed to prompt action in the customer. In the convert and engage phases, more personal in-person channels are used, such as personalized email or customer service channels, which typically increases conversion rates and customer lifetime value. (Chaffey, 2022a).

Similar omnichannel strategy can be seen in the results of Gartner's study (2023), which was gathered from top 350 marketing leaders in the world. It asked what channels are used to support digital marketing strategy. Figure 8 below illustrates the findings of the Gartner study.

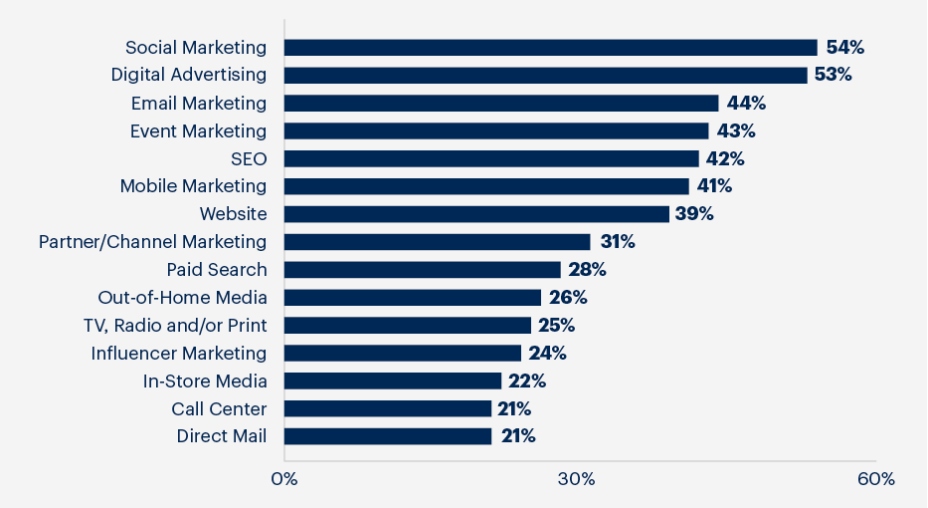


Figure 8. Top marketing channels used to support digital marketing strategy (Gartner, 2023)

As seen from Figure 8, the list of top 15 marketing channels that support digital marketing are not only digital but also include more traditional channels. This indicates that for a successful digital marketing strategy, marketers also need to utilize the more traditional channels in attracting and keeping their new customers. (Gartner, 2023).

The benefit of digital marketing channels is their measurability. Unlike traditional channels, digital marketing platforms often have in-build analytics to track and measure marketing activities. Marketing analytics has enabled marketers to be more data- and insight-driven than before and given them the tools to prove the effectiveness of their marketing activities and to justify the need for more resources. This has expanded the use of digital channels in marketing over time. The expansion of channels and the growing need for better analytics and digital tools has created an ever-expanding pool of marketing technologies (MarTech) for marketers to choose from. (Chaffey, 2022a) Figure 9 below illustrates the most common MarTech tools available for marketers today.

Figure 9. The MarTech Wheel of essential digital marketing tools (Chaffey, 2024).

The MarTech Wheel shows 30 categories of the most used marketing software, arranged into four groups that represent different phases in the customer lifecycle marketing model (RACE). Each of the 30 categories show five of the most popular MarTech platforms in the market, but outside of them, there are thousands of more options to choose from. (Chaffey, 2022a.) With omnichannel marketing, marketers typically need to use multiple MarTech platforms to ensure the effectiveness of their marketing actions. A big MarTech stack means more time used in managing the tools themselves and the marketing data that is stored in them. (Chaffey, 2024.)

Out of the 30 technology categories shown in the MarTech Wheel, nine relates directly to communication with customers, which highlights the importance of customer

communication channels in marketing. Customer communication also plays an important role in the latter phases of the RACE model, where the customer needs to be converted to make a purchase, and engaged to be a loyal, high-value customer.

4.1.1 Customer Communication Channel's Role in Marketing

In marketing, customer communication channels are the channels a company uses to communicate directly with their customers. These can be for example in-person interactions, webinars, phone calls, chats, SMSs, emails, social media messages or push notifications. (Chatfield, 2024.) The common denominator is that the communication is directed towards a single customer or based on a specific activity done by the customer. Utilizing these channels in marketing is often called retention marketing. Retention marketing aims to increase customer loyalty and lifetime value, improve customer insights and reduce retention. (Gale and Langford, 2024.) The communication channels used in retention marketing are always marketing led, and most commonly, easily trackable digital channels such as email or SMS.

Customer communication channels in marketing are an important part of the marketing channel mix. Since new customer acquisition is researched to be five to six times more expensive than selling to existing customers, the channels balance the cost structure of marketing (Silver, 2023.) Active communication with the customer also improves loyalty. A survey done 2021 revealed that 64 % of loyal customers are more likely to purchase more frequently and 31 % are willing to pay a higher price just to stay with the brand. (Chappel, Eizenman and Wilkie, 2022.)

Even though there are multiple customer communication channels used in marketing, this thesis focuses on email and SMS channels, since they are the ones that are used in the case company.

4.1.2 Email as a Marketing Channel

Email has been around as a marketing channel since 1978, when the first recorded mass email campaign was sent (Wozniak, 2018). Even though the channel is old, and many new digital marketing channels have emerged since then, email is still very popular amongst marketers. Based on a survey done in 2023, 87 % of marketing leaders said email marketing was essential to their business success, and 41 % of marketers stated

email being their most effective marketing channel (Litmus, 2023). The channel keeps its popularity due to its low cost and high conversion, which directly impacts return on investment (ROI). It is estimated that the average ROI for email marketing is $40 for every $1 spent (Porch Group Media, 2025). Compared to other marketing channels, the ROI of email is significantly higher, as Figure 10 below from Neil Patel (n.d.) shows.

Figure 10. Email ROI compared to other common marketing channels (Patel, n.d.).

One of email's main advantages is also its versatility. It can be used in information sharing, lead nurturing, promotions, message automation, surveys or driving traffic to the website. It is also a preferred form of communication for customers. In a study conducted in 2023, 80 % of customers preferred email over any other form of communication from brands. (Mailchimp, 2024.) Email has its challenges too. For example, companies need to have the customer's consent to send out marketing emails, which means new subscribers need to be earned. This creates challenges in growing and retaining the subscriber base. Planning and creating engaging email campaigns is also time consuming, so the channel is not particularly easy to get working. With its high volume, customers are getting more desensitized to email marketing, which can also lead to challenges with spam filters. (Duplino, 2024.)

Because of email's sizable revenue and ROI potential, it is an important channel for marketing. For those reasons, despite its challenges, it is worth investing time in. Tracking email KPIs, quality metrics and the size of the subscriber base are key, when trying to optimize the channel to gain its full potential.

4.1.3 SMS as a Marketing Channel

Text message marketing is a much newer concept than email, but it still has been around for a while. The first ever ad via SMS channel was sent in 2000 in Finland. And by 2002 SMS had already become a mass media worldwide. Since then, the channel has grown in volume and in impact, due to technological improvements in mobile phones and the mass adaptation of them by the public. (Kilic, 2018.)

SMS is called the fastest marketing channel available. It is estimated that 70 % of people open a new text message within five minutes of receiving it. It is also a very personal channel. Most people have their mobile phones next to them around the clock and it is usually the first thing that they check in the morning. Therefore, SMS is a good way to grab a customer's attention quickly. (Romis, 2022.) Just like with email, SMS channel also reaps high ROI. According to Text Request's State of Business Texting Report (2023), SMS marketing's average ROI was $71 for each 1$ spend. The report also stated that compared to email's average open rate of 32 %, SMS open rate was up to 98 %.

SMS is often paired with email or other customer communication channels to push results further. Adding SMS to an email campaign can increase purchases by 108 % per user, while also increasing buyer rate by 55 %, as the image from Braze (2024) below illustrates.

Figure 11. How SMS complements email to increase purchases (Braze, 2024).

As seen in Figure 11, SMS is a good companion to email since it encourages more conversions. Engaging customers with SMS marketing can be an effective tool also in increasing customer retention. According to Braze's s Global Customer Engagement

Review (2024) SMS had an 38 % uplift in the average length of customer relationship compared to other channels. The challenge of the SMS comes from the channel's personal nature. Customers are more likely to respond negatively to SMS marketing than to other types of marketing, since it can easily be considered intrusive. As Bourque (2023) states in an article written for Forbes, missteps in SMS marketing can cause a decline in brand trust or negatively impact customer loyalty and retention.

4.2 Centralized Reporting in Marketing

Marketers need to use several different marketing technologies and platforms to keep track of their marketing activities, as previously mentioned in Section 4.1 page 26. However, the scattering of marketing data is a challenge, as it makes reporting time-consuming because the data must be manually gathered from different platforms and consolidated into summarized results. Additionally, each marketing platform often reports performance differently, which means that marketers need to do additional manual calculations before the data is ready for reporting. Centralizing marketing data helps to solve these challenges by creating a single source of truth for marketing performance and streamlining reporting activities. (Dougherty, 2023.)

Centralized reporting is a structured data management and analysis approach that combines data from different sources into one centralized location to form a unified view on KPIs – a single source of truth. It offers many benefits for the organization. The opposite, a decentralized reporting, has data scattered to multiple sources, that then needs to be manually combined to create meaningful data. The latter approach often requires manual spreadsheets and laboursome data entry. (Cascade, 2024.) The differences between centralized and decentralized reporting are presented below in Figure 12.

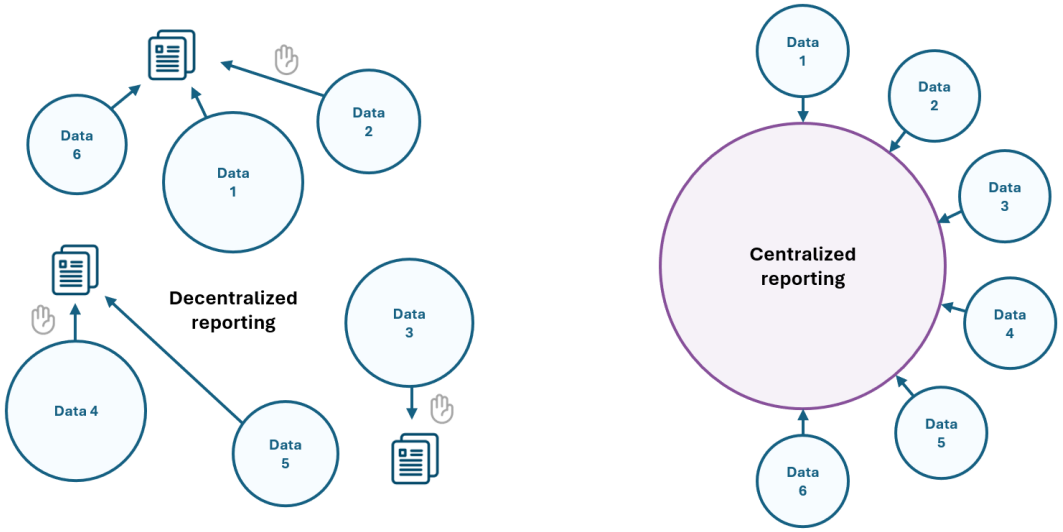


Figure 12. Centralized versus decentralized reporting (own work).

Figure 12 illustrates the need for manual activities when the data is decentralized, or scattered, without a linkage between the data sources. On centralized reporting, different data sources feed automatically into a single report without the need for manual calculations or other manual data handling. Centralizing reporting for marketing has many benefits, but it also comes with challenges that need to be considered before moving towards building centralized reporting system.

4.2.1 Benefits and Challenges in Centralized Reporting

There are many benefits for centralized reporting in marketing and one of the main ones is speed. Centralized reporting removes manual steps from the marketing reporting process by automating data collection, which means less time spent in manual gathering and combining of the data. With the time saved, it creates more room for data analysis and therefore, makes decision-making faster. (Cascade, 2024.) Centralizing also improves data integrity and data quality. Data integrity is improved since without manual data processes, the data sets are more consistent, and errors are minimized. Data quality is improved, since the data needs to be cleansed and standardized in the centralization process, which then produces accurate and more trustworthy data. (Jaffery, 2024.) The centralization process is discussed further in Section 4.2.2.

Centralization lessens reporting siloes and promotes teamwork among the marketers analysing the data. Since everyone is using the same source for their analysis, it is easier to spot causation, for example, between different marketing teams or activities. This also

promotes seeing the bigger picture, instead of just focusing on the specific area the marketer is responsible of, which creates higher quality analyses. (Jain, 2013.) In addition, centralizing data helps with data visibility and access. When data is pulled to one central location, analysts and managers are drawing conclusions and making their optimization decisions based on the same data and same predetermined KPIs. That helps to form more concise decisions that can be more easily justified. (Cascade, 2024.) One centralized location for the data also increases data transparency in the organization, since everyone can access the same data more easily.

There are not many challenges to be found in centralized reporting itself, but some can be seen when it comes to the centralization of data behind the reports. These challenges mainly relate to the building of the reports and data hygiene. For centralized reports to be effective, they need to serve the parties involved. Developing one centralized report for too many marketing teams or functions at once can become a report that does not serve anyone. For example, marketers working with content and marketers working with programmatic marketing can have fundamental differences in what their definition of a conversion is. (Starburst Data Inc, n.d.) Without taking these differences into consideration, it can cause wrong business decisions in the long run.

Centralizing reporting can also bring challenges with user resistance. Technological changes often require employees to adopt new skills or different ways of working, which can cause resistance. Adopting new ways of working can seem like more work at first, even though the new way of doing was developed to lessen it. Change can be seen disruptive for employees, no matter how good the solution or the intention behind it is. For change to go smoothly, efficient change management needs to be taken into consideration at the beginning of the project. (Norman, 2024.)

Additionally, issues combining data from multiple platforms to single source can cause technical challenges. For example, there might be discrepancies in how the data is stored in each platform, which can cause difficulties in creating a seamless integration. This can cause extra work and data processing to make sure that the data is consistent. Connecting multiple platforms can also cause performance issues, like longer loading times for the reports. (QuantHub, 2023.) The key steps to take into account when building centralized reporting successfully is discussed next.

4.2.2 Key Steps in Building Centralized Reporting for Marketing

There are four key steps that need to be considered when building centralized reporting for marketing for everything to go smoothly: moving, transforming, storing and sharing data. Moving data means moving the needed data from different sources under one location. Transforming data ensures that all the data from different sources use the same formatting. Storing data relates to selecting where the data is wanted to be stored. And finally, sharing data requires that the data is easily accessible to all needed stakeholders, usually through a dashboard. (Dougherty, 2023.)

The first three steps, moving, transforming and storing data, relate to data integration. 'Data integration is the process of combining data from multiple sources to assist businesses in (…) making educated decisions' (Bonnefoy, Chaize, Mansuy and Tazi, 2024).

Moving data can be done by using different methods such as batch processing, micro-batching, real-time processing or incremental processing, depending on the data needs. Batch processing gathers data and processes it in big batches at regular intervals and is suited for larger scale integration projects where data delays are not an issue. Micro-batching is similar to batch processing, but it gathers and processes data in more frequent intervals and in smaller batches, which is suited for projects that require minimal data delays but do not require real-time processing of data. Real-time processing gathers and processes data in real-time, and it is perfect for projects that require data to be processed and evaluated quickly without any data delays. Incremental processing is a good fit for projects that have extensive amounts of data, where only a small part of the data changes overtime. Instead of reprocessing everything, it only processes new or changed data, which makes it faster and more efficient. (Bonnefoy et al. 2024).

Transforming data is a critical part of data integration, since it takes raw data and converts it into a unified format. The process of transforming data requires data cleaning where errors, duplicates or inconsistencies are identified and fixed. It also includes data mapping, where data engineers map how data from the source system corresponds to data in the target system. Lastly, it requires code that does the transforming of the data. The code can be either generated internally or by using a third-party tool. After the steps are done and the code is applied to the raw data successfully, the transformed data needs to be reviewed and confirmed to meet the requirements. This is usually done by data analysts or end users. (Hayes and Downie, 2024.)

Storing data requires the organization to decide where the data is stored. The most used storage solutions are data warehouses, data lakes, object storage and lakehouses. Each storage type has its own benefits and limitations and are therefore suitable for different kinds of integration projects. Data warehouse stores structured data in an ordered way, that is efficient to use in search and analysis. It is usually selected for business intelligence and reporting projects, where quick access to large amounts of processed data is needed. Data lake is designed to store large amounts of unprocessed raw data until it is needed for analysis. They are usually selected when the organization requires different kinds of data storage for large amounts of data, as well as complex machine learning or analytics projects. Object storage stores unstructured or semi-structured data into the cloud, such as photos, videos or documents. It is a good fit for projects that need cost-effective, scalable and easy-to-access solutions for storing object-based data. Lakehouse is a combination of data warehouse and data lake. It has the efficiency of data warehouse, with the capacity for varied data as does the data lake. (Bonnefoy et al. 2024). The different storage solutions are compared in Figure 13 below.

Factor	Data Warehouse	Data Lake	Object Storage	Lakehouse
Data Type	Structured	All types	All types	All types
Performance	High	Moderate	Moderate	Moderate
Scalability	Moderate	High	High	High
Data Accessibility	SQL, BI tools	APIs, BI tools, SQL	APIs, BI tools if using FS abstraction interfaces or APIs	SQL, BI tools, APIs
Cost	Higher	Moderate	Low	Moderate

Figure 13. Data storage comparison (Bonnefoy et al. 2024).

The last key step in building centralized reporting in marketing is *sharing the data*, which typically means building a dashboard that is shared with all needed stakeholders. This step involves figuring out what are the stakeholder needs for the data, deciding what KPIs are required in the dashboard and what kind of visualization is needed to support

the stakeholder's decision-making. (Pauwels, 2014.) Finding the right KPIs and user-centered dashboard design are discussed in the upcoming Section 4.3. Aspects of data visualization are touched upon in Section 4.4.

4.3 KPIs for Growth

Key Performance Indicators (KPIs) are metrics that focus directly on organization's performance, such as marketing results, and are the most critical for its success. All metrics cannot be considered KPIs, since usually there are only a handful that are truly critical or key to success. (Parmenter, 2019.) Choosing the right KPIs is important because it helps to lead the organization and its teams, including marketing, in the right direction. Not setting organization wide KPIs can lead to a lack of focus and clarity. As Parmenter (2019) writes 'this lack of clarity means that often staff members will schedule their work based around their team's priorities rather than the priorities of the organization' (2019).

Growth KPIs are business' growth metrics that indicate if the organization is on the right trajectory. They differ from other KPIs due to their sole focus on reporting growth. They are more than just metrics – they are designed to communicate if the organization's growth efforts are creating the needed outcomes. As an example, when a regular KPI reports business revenue, a growth KPI reports the revenue growth rate. (Bridges, 2024.) In a marketing perspective, a standard KPI could track for example the number of email subscribers, where a growth KPI would measure the month-to-month increase in subscribers, giving an indication of growth.

4.3.1 Finding the Right KPIs in Marketing

KPIs are important, but finding the right metrics can be challenging. Whether you are trying to find the right KPIs to follow in marketing or at an organizational level, the same fundamentals apply. According to Croll and Yoskovitz (2013: 9), there are four rules that define a good metric. First, the metric should be comparative. Being able to compare a metric helps to understand which direction the business is moving towards. Second, the metric should be understandable. An easy-to-understand metric makes decision making and analysis easier, since the concept is clear to all. Third, the metric is a ratio or rate. Ratios are good metrics because they are easy to act upon and they are comparative by

nature. Fourth, the metric works as a behavior changer. Metric needs to be chosen so that it has potential to create change. If looking at a metric does not help to make a decision either way or to give an idea where you are at, it is not a good metric. (Croll and Yoskovitz, 2013: 70.)

Additionally, a good metric should be directly aligned with the organization's business model. The way revenue is created by the organization should determine what metrics are tracked. For example, if the organization is running an e-commerce business, there are different metrics that are important to them, compared to an organization that runs Software as a Service (SaaS) business or develops mobile applications that get revenue from in-app purchases. (Croll and Yoskovitz, 2013: 70.)

But not all metrics that are related to the organization's business model are equally important – some might even be unnecessary for the specific organization. Ellis and Brown (2017:91) introduce a concept of Fundamental Growth Equation that can determine what metrics matter most to the company. The formula combines all the key factors that drive the organization's growth. For example, for Ebay, the key factors could include number of sellers, buyers, listed items and transactions, which multiplied, would create a key metric called gross merchandise volume growth. All the factors in the equation are important, since together they form the key metric that drives the organization's growth. The example for Ebay's fundamental growth equation is illustrated in Figure 14 below.

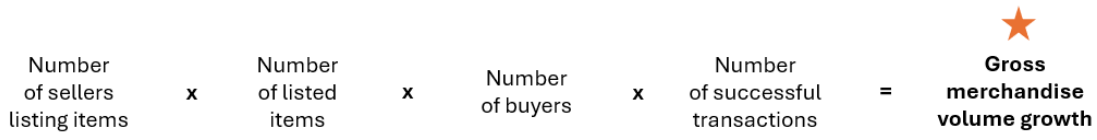


Figure 14. Example: Ebay's fundamental growth equation (Ellis and Brown, 2017:91).

Narrowing down what metrics are tracked helps to bring focus to the organization. Ellis and Brown even suggest that an organization should only have one key metric that is focused on at a time, a North Star (2017: 95). The North Star metric should represent what is the core value the organization brings to their customers. This metric should also be found from the Fundamental Growth Equation. In the Ebay example, their North Star could be the gross merchandise volume growth, since it measures both buyers and

sellers customer satisfaction, which is essential for Ebay's success (Ellis and Brown, 2017: 96.)

For marketing, aligning its main KPIs to the organization's main KPIs is always a good strategy, since it helps to ensure that marketing efforts are driving business success. It also helps different departments to understand marketing performance, since it is not viewed in isolation, but in the business context. (Kyllönen, 2025).

4.3.2 Main Metrics Used in Marketing

Marketing metrics are '(…) quantifiable measures used to evaluate the performance of marketing campaigns and assets' (Sapega, 2022). Marketing metrics can be divided into two categories: marketing KPIs and supporting metrics. Marketing KPIs are aligned directly to the organization's business objective and strategy, whereas supporting marketing metrics are more granular, providing the context of what is causing the results seen in the KPIs. For example, a marketing KPI could be the number of sales and the supporting metrics that affect it, could be advertising reach and advertising clicks. (Sapega, 2022.)

The most used KPIs in marketing relate to revenue, market share, costs, customer lifetime value and conversions. The most used supportive metrics relate to website performance, organic visibility, lead generation, marketing reach, as well as campaign and channel specific metrics. (Handley, 2025; Kyllönen, 2025; Sapega, 2022.) Marketing channel specific metrics differ slightly channel by channel, but there are some common metrics that are shared. These are conversion rates, click through rates, cost per acquisition, impressions and return on marketing investment (ROI). (Handley, 2025.)

Tracking channel specific marketing performance requires different metrics than tracking organization or marketing overall performance. The same frameworks and logic can still be used to narrow down what is important and what is not, but the metrics themselves need to be channel specific.

4.3.3 Defining Metrics for Email and SMS marketing

For both email and SMS channels, there are a handful of metrics that are typically the most important to track, and which can act as a starting point for performance tracking.

For email, Gunelius (2018: 186) lists the following metrics as the main metrics to use, as seen in Table 4.

Table 4. Main metrics for email (Gunelius 2018: 186).

	Metric	**Calculation**
1	Open rate (OR)	The number of messages opened is divided with the number of messages sent.
2	Clickthrough rate (CTR)	The number of messages clicked is divided by the number of messages opened.
3	Website traffic	The number of traffic email messages send to the website.
4	Conversion rate (CR)	The desired action divided by the number of emails sent.
5	Unsubscribe rate	The number of contacts who unsubscribed from the mailing list.
6	Bounce rate	The percentage of emails that did not get delivered.
7	List growth rate	The number of unsubscribes and bounces deducted from the number of new subscribers, which is divided by the number of email addresses on the mailing list.

Based on research done by Hubspot (Santiago, 2023), an overall ROI should also be added to the above list, which is calculated by total revenue divided by spend. ROI helps to show the true value created by the email channel. Even though SMS is its own unique channel with its unique tactics, SMS uses the same seven main metrics as email (Emotive, n.d.).

In addition to the most common metrics mentioned, a company should also focus on the main business metrics that drive the company performance. In the Ebay example, mentioned in Section 4.3.1, Ebay should also track email and SMS marketing's direct effect to their main KPI, the gross merchandise volume growth. (Ellis and Brown, 2017: 96.)

In summary, the selected KPIs drive the activity that is measured, so it is important to choose them carefully and to think how they align with business objectives. Choosing unimportant metrics to track can have a negative impact on performance, since it can side-track the organization's or team's focus.

4.4 Dashboards for Marketing Growth

Dashboard is a visual interface that showcases performance data in a summary fashion. They are usually linked to real-time data sources and are intended to be shared to promote decision making. Dashboards play an important role, since they convert cold data into easily accessible information, which can lead to business insight. They also help to integrate information from multiple touch points, which reduces time and effort, since users do not need to log into different analytics platforms or prepare data manually. (Rackley, 2015; Mokkup.ai, 2024.)

In marketing context, a dashboard is a performance management tool that visualizes marketing KPIs and metrics. It helps to let marketers see the big picture of their marketing activities and to improve on them. (Rackley, 2015.) Marketing dashboards can serve many purposes: they can summarize the overall marketing ROI, show website performance and traffic trends, or be used more specifically, for example to highlight the company's best performing keywords in search engines. However, dashboards should always have a specific purpose. (Van Mossevelde, 2025.)

Marketing dashboards can be divided into performance dashboards and status dashboards. Performance dashboards are designed to track long-term goals and main KPIs. They help marketing teams to see if they are progressing towards their marketing goals. Usually performance dashboards use growth KPIs (discussed in Section 4.3). Status dashboards monitor marketing activities and are designed for quick analysis and reactive decision-making. They help marketers to see if there are issues that require immediate attention and answer questions like "do I need to act now". Status dashboards can be role-specific aligned with specific marketer's responsibilities, area-specific showing status of a specific marketing channel, or entity-specific visualizing data for specific assets or campaigns. (Van Mossevelde, 2025.)

4.4.1 Designing a Dashboard for Data-Driven Decision-Making

Using a dashboard to make business decisions is data-driven decision-making in a nutshell. Stobierski (2019) sums up the term like this: 'Data-driven decision-making (…) is the process of using data to inform your decision-making process and validate a course of action before committing to it.'. Dashboard design involves both deciding what metrics and KPIs to bring to the dashboard as well as how the dashboard looks and

functions. (Ellis and Brown, 2017: 102.) The purpose of dashboard design is to help the user to make actionable decisions based on the data provided, which then helps the business or team move towards its goals.

A dashboard that is designed to boost data-driven decision making does not have static metrics, but actionable ones. For a good rule of thumb, Ellis and Brown state (2017: 106) that metrics should be presented as ratios rather than static numbers and they need to be accompanied by an indicator that shows if the number is above or below with past performance, trend or goal. This way of presenting the data prompts the user to see causations and meaning behind the numbers, which supports decision-making. (Ellis and Brown 2017: 106.) Another good tactic to boost decision-making is to design the dashboard elements to directly answer the main questions that the user has for the data. This approach requires thorough user research and user-centered development process, but it can differentiate a dashboard that just displays data and a dashboard that drives business growth. (Nguen, 2019.)

4.4.2 User-Centered Dashboard Design and Development

User-centered design is a highly user-focused way of designing and developing products. It helps product managers and designers to solve the user's problems by listening to the user's needs. (Wilkinson, 2024)

According to Allenspach (2022), a good dashboard is designed for its users in a way that supports their decision-making. Centering the development around something else, like data, chart type or specific functionality, often results in scenarios where dashboards are not being used, or the users revert to their previous routines of doing things. Therefore, it is important to start dashboard development by understanding the users and their problems first. (Allenspach, 2022.) Yet, understanding a user is more than just listening to their requests for the dashboard. Instead, it is important to get curious and ask questions to really understand the context. As Allenspach (2022) writes, 'by exploring the deeper layers of a request, we can better understand our users and put together a more robust and targeted solution than what was originally requested'.

According to Nguen (2019), questions to the user should target the user's goals, their context of use, their requirements for timeliness and interactivity, and their familiarity with data, metrics and industry terminologies (Nguen, 2019). This line of questioning helps to

dig deeper into the needs of the user and what kind of solution will help them the most. The user's goals usually fall into the following categories: strategic, operational and analytical. Strategic goals are about setting goals and tracking progress – executive reports usually fall into this category. Operational goals relate to monitoring real-time performance, which is usually done by the operational members of the team. Analytical goals aim to identify opportunities or investigate problems. In addition, a user can also have multiple goals for a dashboard, which also needs to be considered in the development. (Nguen, 2019.)

User's context of use helps to prioritize what is needed in the dashboard. As Nguen states, 'designing for a quick glance is very different from designing for deep analysis.' (2019). Usually, the context also reveals the requirements for timeliness and interactivity. If the user requires the dashboard for deep analysis, the dashboards need to include interactivity, for example, to drill into the data or look at it from different angles. When the user requires the dashboard to help them see quickly what is going on, the dashboard needs to focus on displaying only the key metrics as clearly as possible. (Nguen, 2019.)

For example, it is important to understand the user´s familiarity with data, metrics and industry terminologies. The user can be a data expert or have very limited data skills. Getting to the bottom of this helps to decide whether the dashboard needs explanations or guidance built in, or if the dashboard should display acronyms or spell them out. This understanding can be gained through questions or by observing the user when they are using an analytics tool. (Nguen, 2019.)

To ensure that the dashboard benefits its users, they should be part of the development from start to finish. Utilizing rapid prototyping, where users get to see and comment on the development in different stages, helps the project to be successful. It allows the developer to fine tune the dashboard throughout the development, without the fear of investing too much time and energy in the wrong direction. (Allenspach, 2022.)

4.4.3 Dashboard Interface Design

Dashboard interface consists of what the user sees when looking at a dashboard. Martins, Martins and Brandão (2022) identify three main guidelines for dashboard interface design: page organisation, colour and typography.

Page organisation has an important role in the design. It defines the optimal location of graphics and metrics, as well as how much data can be placed on the dashboard (Martins et al. 2022: 3). Figure 15 below displays the Gutenberg diagram, that shows the reading behaviour of the western user, and which can be used to guide where the most important data should be placed on a dashboard.

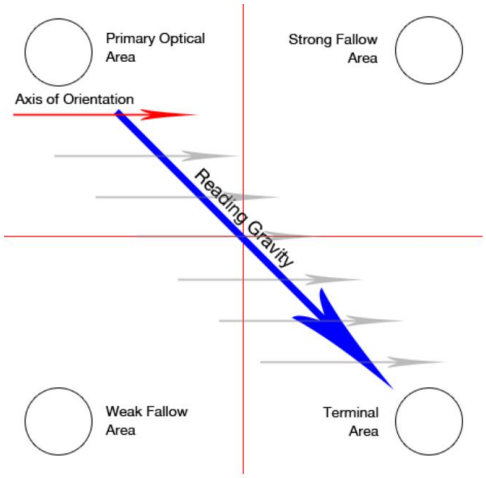


Figure 15. Gutenberg diagram (Martins et al. 2022: 5).

Figure 15 shows that the western user reads information from left to right and moves from top to bottom. Therefore, the most important data should be placed on top left of the dashboard and least important information to the lower right. Page organisation benefits from using a grid system to organise the elements in the dashboard. A grid system helps to align elements so that harmony and correlation are improved between the elements, and there are enough blank spaces to support readability. (Martins et al. 2022: 5.)

Colour should be used sparingly, so that a visual overload is avoided and correlation between elements are strengthened (Tableau, n.d). Colours should complement the data, not draw attention away from it. Figure 16 below shows a difference between using a harsh colour palette compared to a more harmonized one.

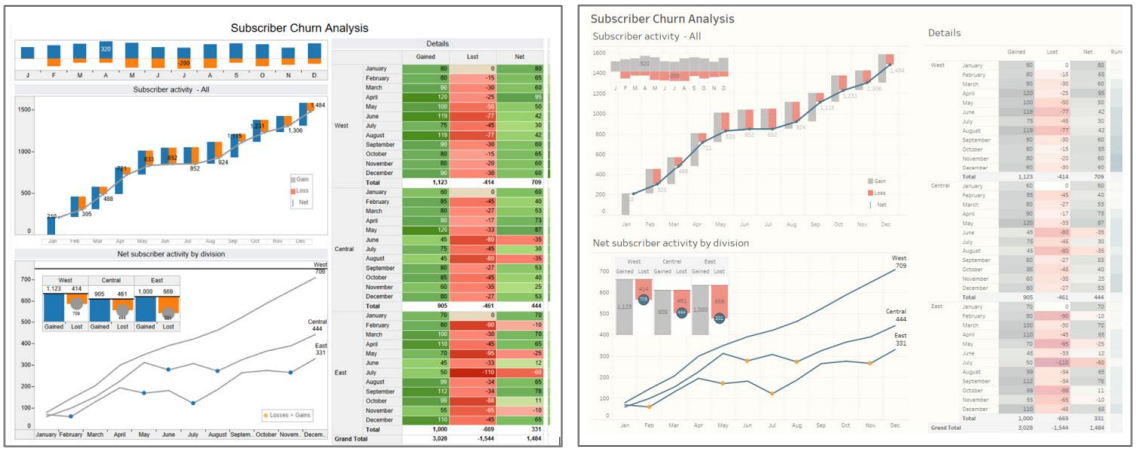


Figure 16. Difference with and without colour harmonization. (Tableau, n.d).

As can be seen from the above Figure 16, the harmonized colour palette in the second dashboard helps to tie in the relationship between the graphs on the right and the relating numbers on left. Abbott (2024) advices to always start the data visualization in black and white, and only at the end to add colour where you need it. This way the colour is used purposely. When adding colour to the dashboard, users with vision deficiencies should also be considered. Colour blindness affects the way colours are seen, and the biggest offender when it comes to colour palettes is the red, yellow and green palette. To create a colour palette that suits for most people, a more suitable palette should be used, in example the orange, grey and blue palette, which is much easier for the eye to detect – even with colour deficiencies.

Typography's role in dashboard interface design is to enhance readability and to guide the user to what is most important (Martins et al. 2022: 6). Byrne (2023) summarizes typography as '(…) the strategic use of type within a design to create visually appealing, legible and coherent text'. Typography's role in accessibility and readability is substantial. Poorly chosen fonts or font sizes can distract the viewer and make the design seem unsettling (Byrne, 2023.)

In addition to the three guidelines – page organisation, colour and typography – Gestalt principles should also be kept in mind. They are design principles that help the user see intuitively what elements belong in the same group. The principles are valuable when designing dashboards with large number of data elements. The grid system, mentioned earlier, uses the symmetry principle, where elements that are symmetrical to one another are often perceived to belong to the same group. Other principles include enclosure,

where grouped elements are in the same enclosed space; proximity, where elements are placed close to each other; and similarity, where elements of similar appearance indicate that they should be viewed as a group. (Abbott, 2024.)

4.4.4 Dashboard Planning Process

Developing a dashboard is a process that requires successful planning for it to be useful for the organization. Dashboard projects can start with lots of excitement and a motivated project team but end up with an outcome no one uses. There are many reasons why this can happen, but most often it is due to not taking enough time to plan the project and engage the stakeholders, but instead, rushing ahead to build the dashboard. Pauwels' four-step process for the planning phase of a dashboard project (2014) ensures that the project has enough organizational support and resources. The process is illustrated in Figure 17 below.

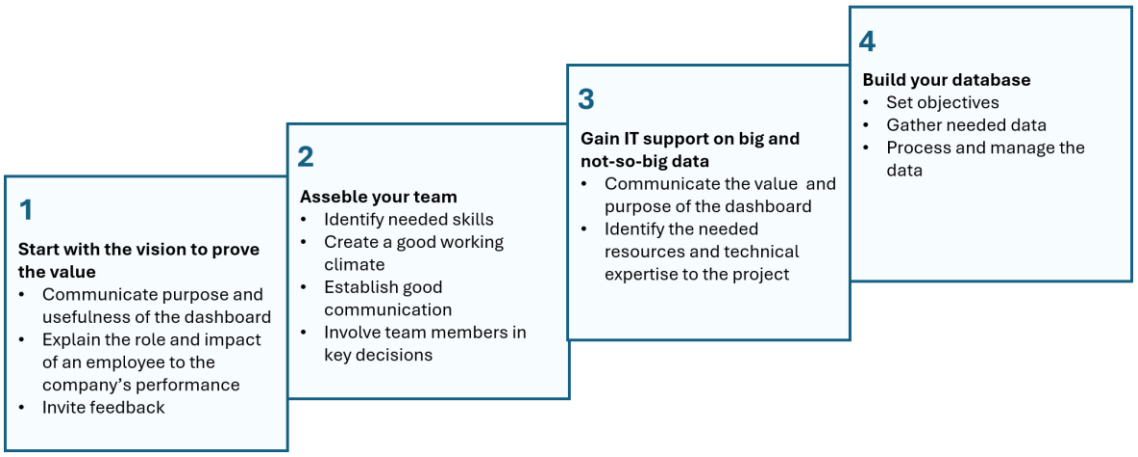


Figure 17. The planning phase of a dashboard project (Pauwels 2014).

As seen from Figure 17, Pauwels´ four-step process starts with a vision for the project. The first step combines attaching the organization's business strategy into the project outcome and communicating it to stakeholders effectively. Communicating the purpose and usefulness of the dashboard helps to get the management's support and employee engagement, which are key to a successful outcome. (Pauwels, 2014.) Keeping the vision as the strong focal point for all objectives throughout the lifespan of the project will improve the success rate of the project at hand. For smaller projects, the vision can be set by project management or a primary stakeholder, but with a larger scale project, it

needs to be agreed upon by the management and then make sure that all stakeholders are committed to it. (Banister-Hazama, Moreci and England, 2012).

The second step is to assemble a dashboard project team with all the skills needed to make the project happen and manage the team throughout the project. The team should consist of a diverse set of expertise, for example project manager, functional department experts and managers, business analyst and dashboard software expert. One team member can have several expertise, but the bigger the organization is, the more likely the expertise is divided into different individuals. (Pauwels, 2014.) To boost accountability in the project team, each member needs to understand the impact they have on the vision and on the individual project goals. When this understanding is there, the team members will be more engaged in the project and work more likely towards a good team environment. (Banister-Hazama et al. 2012).

In the third step the technical department is involved. In this step the dashboard's value and purpose is also communicated to the technical department that are responsible for the actual technical building of the dashboard. Having the tech team onboard helps to prioritize the project in the tech department's development roadmap, and to make sure that they are committed to seeing the project through. The outcome of this step is to attach all the necessary technical expertise and resources to the dashboard project. The last step of the planning phase is to build the database, which involves setting objectives that guide what data is needed, as well as gathering, processing and managing the data (Pauwels, 2014).

Taking time to plan the dashboard project will save time in the latter stages of the project. It helps with resource allocation, it brings clarity to the project team, it helps to bring cohesiveness to the data, and it creates an opportunity for receiving feedback in the important strategic decisions of the dashboard process. (Johston, 2021.) But even with good planning and project management, the dashboard can still face resistance from its users when it is launched. Resistance to change is common, but there are ways to tackle it when launching a dashboard.

4.4.5 How to Overcome Resistance When Launching a Dashboard

Resistance to change is common in organizations since it is part of human nature, even though change is a constant part of modern work-life. Resistance is rooted in the fear of

unknown, and it can show up as reluctance or refusal towards new circumstances or ways of doing this. (Spring, 2021.) As Pauwels (2014) puts it, ‘like any important change in your organization, dashboard implementation involves many people and processes, with many potential roadblocks along the way’. Pauwels describes four key points that can help lessen resistance towards new dashboards, as summarized in Table 5.

Table 5. Key points that help to reduce resistance towards new dashboards (Pauwels, 2014).

1	Decision makers need to trust the data behind the metrics to effectively adopt a new dashboard. This means the data and related measurements need to be error free and portray the key metrics for the business.
2	Dashboard users should know why the metrics were chosen and why they are relevant to their work. It is not enough to add data to a dashboard, it is essential to understand how it will benefit the organization and to communicate that to the users. Everyone involved should understand the context behind the metrics.
3	The dashboard should be specifically designed for the organization. The best way to present data varies between different companies. Therefore, it is important to consider business specific differences, instead of offering a one size fits all solution to a company.
4	Maintaining transparent communication with decision makers and operational workers involved with the dashboard throughout the implementation project. Transparency helps to design a dashboard that reflects the business needs accurately and to spot potential wrong goings along the way.

As seen from Table 5, in addition to creating a project outcome that works, listening and communicating are key aspects in reducing resistance. The users need to know about the changes as early as possible to avoid speculation. They also need to be educated about the value of the change and the direct impact the change will have on them. The timing of the change is also important, since implementing something new in a busy or unstable environment, almost always creates resistance. (Spring, 2021.) Even with all the preparation, it is impossible to avoid getting some resistance, especially when introducing a larger change that involves multiple people.

Preparing beforehand for positive and negative reactions is a good idea. All reactions can provide value to the project implementation process and should therefore be listened to carefully. Employees with positive reactions can be great allies in promoting the change to their colleagues, which can be a powerful positive force in the project. Employees with negative reactions should be listened to too, since they can provide valuable insight into what could be improved further. Those employees require a safe platform to speak out, and a project team that is open to criticism. Neutral reactions can

go in either positive or negative direction if not managed properly. Listening to concerns and boosting the benefits helps the neutral group of employees. (Counihan, 2021.)

In summary, developing a dashboard from the initial phases to launch requires thorough planning in every step. It starts by listening to the end-users thoroughly and understanding their individual needs for the dashboard. It requires careful planning from the start of the project to ensure the engagement and resources from the organization. It commands understanding of dashboard interfaces to be able to build something that is intuitive to use. And lastly, it requires change management to bring successfully into the day-to-day processes of the organization.

4.5 Conceptual Framework of This Thesis

The conceptual framework summarizes the selected best practices and elements of knowledge from available literature. The conceptual framework for this thesis is illustrated in Figure 18 below.

Figure 18. Conceptual framework of the thesis for developing centralized reporting (i.e. a dashboard) for this thesis.

As seen from Figure 18, the conceptual framework of the thesis is formed by four main topics: marketing and the customer communication channel, building centralized marketing reporting, finding the right KPIs, and developing a dashboard for marketing growth. Together these four topics form the best practice in developing centralized reporting for marketing growth.

The first topic introduces marketing and customer communication channel's role in it (Chaffey, 2022a; Chaffey 2022b; Chappel et al. 2022, and Feroz et al. 2024). The second topic describes the best practices in building centralized reporting, what are the benefits and challenges of it, and what are the key steps in building it (Bonnefoy et al. 2024; Cascade, 2024; Dougherty, 2023; Hayes and Downie, 2024; and Norman, 2024). The third topic highlights the theory of finding the right KPIs, as well as introduces the main metrics used in overall in marketing and more specifically in the email and SMS marketing channels (Croll and Yoskovitz, 2013; Ellis and Brown, 2017; Gunelius, 2018; Kyllönen, 2025; and Sapega, 2022). The fourth and final topic covers what is needed in developing a dashboard for marketing growth. It discusses how to design the dashboard to support data-driven decision-making, how to utilize user-centered design in the process, what should be taken into consideration in the dashboard interface design, as well as how the planning and launching of the dashboard project is done successfully (Allespach, 2022; Ellis and Brown, 2017; Martins et al. 2022; Nguen, 2019; Van Mossevelde, 2025; and Pauwels, 2014).

The findings from the current state analysis and the gathered theory from the existing knowledge will guide the proposal building phase in the upcoming Section 5.

5 Building Proposal for Centralized Reporting Plan for the Customer Communication Channel

This section presents the proposal for the centralized reporting plan for the customer communication channel. The building of the proposal combines findings from the current state analysis, the conceptual framework and input from co-creation with the stakeholders.

5.1 Overview of the Proposal Building Stage

This section presents the steps used in the proposal building phase of this thesis, which was co-created with the stakeholders. The proposal addresses the weaknesses that were discovered in the current state analysis, which were the amount of manual work needed, reporting siloes, difficultness to optimize the channel and the lack of overview in the channel reporting.

The weaknesses that were discovered from the current state analysis phase guided the selection of literature and the best practices that were discussed in Section 4. These topics formed the conceptual framework for the thesis, which was formed from the theory behind building centralized reporting, finding the right KPIs and designing a dashboard for growth. The current state analysis, conceptual framework and the suggestions from the stakeholders inspired the main elements of the proposal.

The proposal was built in five steps. First, field notes from Data 1 were re-examined to discover and document the initial suggestions the stakeholders had for the customer communication reporting.

Second, the initial suggestions were used as a basis for further discussions and workshops held with the stakeholders in the Data 2 collection round. Data 2 contained three workshops with the key stakeholders, aimed to discover what expectations and improvement ideas the stakeholders had for the new reporting. It also included two expert interviews, that focused on finding out the possibilities and limitations of the platforms where the reporting data is currently scattered to.

Third, data mapping was created to illustrate how the platforms and related data would form the new reporting, and what is the key data that would be used to combine data

sets between different platforms. This was done based on the stakeholder and expert interview field notes, as well as a group discussion with the stakeholders and the analytics team.

Fourth, the suggestions from Data 2 were formed into initial dashboard wireframes that served both the managerial level and the operational level marketers. The wireframes were built based on the stakeholder suggestions derived from the workshops held, as well as utilizing the conceptual framework presented earlier on the thesis.

Fifth, the Data 2 suggestions along with findings from the current state analysis and conceptual framework were combined into a business requirement for the channel dashboard. It, as well as reporting KPIs, data plan and dashboard wireframes formed the c*entralized reporting plan for the customer communication channel*, that was then presented to the stakeholders for evaluation.

5.2 Findings from Data 2

Data 2 focuses on identifying suggestions from the stakeholders. The key stakeholder suggestions are reported first in relation to the selected focus areas discovered in the current state analysis (CSA), followed by the input from literature and best practice in the form of conceptual framework (CF). Table 6 below shows the main inputs for the proposal.

Table 6. Key stakeholder suggestions (findings of Data 2) for Proposal building in relation to findings from the CSA (Data 1) and the conceptual framework.

	Key focus areas from CSA (Data 1)	**Inputs from conceptual framework** (CF)	**Suggestions from stakeholders for the Proposal, summary** (Data 2)	**Descriptions of the suggestions**
1	**Removal of manual work**	Combining data from different sources into one centralized location helps to reduce the need for manual data activities and processes (Cascade, 2024.)	The data needed should be in one central location.	All stakeholders, both managers and operational marketers, suggested that the data should be accessible from one central location. Operational marketers suggested that manual work should be minimized, so that they could spend more time analyzing the results to generate more findings to act upon.

2	**Unifying reporting processes**	Centralized reporting reduces reporting siloes and promotes teamwork (Cascade, 2024.)	Operational marketers should have the same reporting process.	All stakeholders suggested that channel reporting would be done in a similar way to support comparability, transparency and the big picture.
			Data should be easy to compare.	All stakeholders suggested that different reports should be comparable. The suggestion was to make the reports look as alike as possible and to use the same KPIs.
		Standardized KPIs helps to compare data between different reports and to unify reporting processes. (Ellis and Brown, 2017.)	KPIs should be the same throughout channel reporting.	Marketing managers suggested that everyone should agree on what different KPIs mean, which are most important and how they are calculated.
3	**Adding visibility to the whole channel's performance**	Data integration combines all needed data into single dashboard (Bonnefoy et al. 2024.), which can then be used to create comprehensive channel overviews. Dashboards help marketers to see the big picture of their marketing activities (Van Mossevelde, 2025.) User-centric dashboard development helps to determine what kind of context drives different dashboard views (Nguen, 2019.)	All channel data should be part of the reporting.	Marketing managers suggested that all messages, including transactional and automatic messages, should be included in the channel reporting. This would give a holistic view of the channel.
			Channel overview is needed.	Marketing managers suggested that an overview of the whole channel data is needed to see if the channel's performance is moving in the right direction. Operational marketers suggested that a view should be added that looks at their sub channel performance related to the whole channel. This would help them to understand the big picture.
4	**Enabling easier optimization**	Centralizing reporting improves data-driven decisions in an organization since it combines actionable information by useful correlations of data. (Dougherty, 2023.) Dashboards can be designed to boost data-driven decision-making, by how the metrics are formed and presented (Ellis and Brown, 2017, and Martins et al. 2022.) User-centric dashboard development ensures that the dashboard serves the user's goals and answers their questions for the data (Allenspach, 2022, and Nguen, 2019.)	Possibility to drill into the data.	All stakeholders suggested that the data could be drilled into in the reports. Having more interactable data helps to support optimization.
			Simple yet informative views to the data.	All stakeholders suggested that the views should be simple and provide just enough information for decision-making. The suggestion was to not add all data into one view but to design it in a way that is intuitive for them to use.
			Conversions should include online and offline conversion.	All stakeholders suggested that all conversions would be tracked, not just online ones.
			Segment related data	All stakeholders suggested that the channel needs segment data, such as age, to optimize customer communication activities further and move more towards personalization.

As seen from Table 6, the stakeholders were suggesting solutions to tackle the weaknesses found in the current state analysis of the customer communication channel reporting. The suggestions for each key focus area are discussed in the following paragraphs.

The first focus area relates to the removal of manual work. All stakeholders agreed that the most important improvement for the channel reporting relies in having the channel data in one central location. Having the data in one place helps with the other focus areas as well, but it is essential in reducing manual work, since most of it currently comes from gathering data from different platforms and processing it into a report. The operational marketers also emphasized that reducing manual work would grant them more time to use in analyzing and optimizing the channel.

The second focus area is unifying reporting processes. All stakeholders suggested that channel reporting needs to be done in a similar way since it would support transparency and comparability in the reporting. Stakeholders were also keen on getting rid of reporting silos that are currently present, since it makes channel analysis and seeing the big picture harder.

> "It’s important for the reporting to be unified so that everyone’s sections comes together, rather than staying in their own reporting silos. Currently, for example, if we look at how abandoned cart messages are performing, we only look at the messages and not the whole automation since those are in separate silos."*(Operational marketer 1, 2024)*

One of the key aspects that was also discussed relating to more unified processes was the standardizations of KPIs. This was deemed important, since without unified KPIs, comparing the channel’s subchannels would be impossible. The marketing managers suggested that everyone should agree which KPIs are most important, the meaning of the KPIs and how they are calculated. The whole stakeholder group was unanimous that the channel data needs to be comparable.

The third focus area relates to adding visibility to the whole channel’s performance. Marketing managers suggested that all messages relating to the customer communication channel need to be part of the channel reporting. Presently, transactional messages, like booking reminders and purchasing related automatic messages are not part of the channel reporting due to difficultness in accessing the data. Their suggestion

was to map out what messages should be present in the channel and to add them to the reporting plan.

> "It’s hard to get a comprehensive view of the channel. There are reports on specific areas, but no overall picture. For example, we should see whether text messages are being sent sufficiently to certain customer segments."*(Marketing manager 3, 2024)*

One of the big weaknesses discovered in the current state analysis was the lack of overviews of the whole channel. Marketing managers suggested that an overview of the whole channel data is needed, for them to see if the channel is moving in the right direction. Operational marketers also thought an overview would be useful. They wanted to see how their subchannels performance related to the whole channel, so that it would be easier to understand the big picture.

The fourth focus area is enabling easier optimization of the channel. This key area was discussed the most, since it relates directly to the ability to grow the channel, and it was found to be one of the areas that requires most development. All stakeholders agreed that the dashboard should be designed in a way that it looks simple yet informative – data-crowding was to be avoided. They also suggested that channel optimization would be easier and the views simpler, if some of the less important data could be under a drill-down, instead of it being static or always on show.

> "Key metrics should be visible in one place with the ability to drill down. I’d also like to see trends, not just a snapshot of a specific moment." *(Head of marketing, 2024)*

All stakeholders agreed in wanting to see segment data in the dashboards, so that they could get more insight into their customers and therefore be able to optimize their channel send-outs better.

> "We want to know which customer group is reacting or what kind of customers they are. Therefore, we need segment data, such as age or background."*(Head of marketing, 2024)*

Bringing conversions into the reporting was also discussed with regards to optimization, since it is a crucial data point in seeing how the channel performs. In the current reporting some operational marketers look at only offline conversions and some only online conversions. All stakeholders agreed that they should add both offline and online conversions into the new dashboard to gain a more holistic view.

All the above-mentioned suggestions and the related best practices from literature were part in shaping the initial proposal.

5.3 Initial Proposal

The initial proposal for the *centralized reporting plan for the customer communication channel* contained four parts: business requirements, reporting KPIs, a data plan and dashboard wireframes. Each part is discussed in more detail in the below subsections.

5.3.1 Business Requirements for the Centralized report

Based on the inputs mentioned earlier, business requirements for the reporting were identified as follows. Business requirements define the stakeholder's need for centralized reporting, what value would be gained from it, and what are the standards it needs to fulfil to be considered successful. The requirements are listed below in Table 7.

Table 7. Business requirements for centralized reporting for customer communication channel.

Business Requirements for the Centralized Reporting for Customer Communication Channel			
	Business need	**Description/Standards**	**Value**
1	**Centralization**	The dashboard should combine all email and SMS related data to one place	Reducing manual work needed for gathering and processing data.
2	**Views**	The dashboard should have different views to accommodate both marketing managers and operational marketers. There should be an overview of the channel and a more detailed view that allows comparing message performance and drilling down into the data. It should also include a view to explore segment-related data.	Getting a holistic view into the channel. Being able to report and optimize message performance efficiently.
3	**Metrics**	At minimum, the dashboard should display message quality metrics, such as open rate, click rate, unsubscribe rate, as well as conversion metrics, such as conversion rate and total conversion value. In addition, message volume is needed.	Ability to see the most common message metrics and business critical conversion metrics in the same view, to be able to report and optimize message performance.

4	**Data granularity**	Users should be able to easily view metrics at weekly, monthly, quarterly and yearly levels, as well as be able to determine their own custom date range. Users should be able to drill down from message categories into singular messages sent. Users should be able to drill down total conversions into singular conversion, such as specific service bookings.	Seeing data at different levels of detail enables the creation of thorough, insightful reporting.
5	**Comparability**	Data needs to be comparable through different subchannels. Users should be able to compare performance between channels, message categories and campaigns. Users should be able to compare performance based on conversion location, such as online or store location.	Comparability of data enables a solid understanding of different subchannels and their performance. Being able to create comparisons in the dashboards helps to make better optimization decisions and spot possible growth areas from the data.
6	**Data refresh frequency**	The dashboard should refresh data at a minimum every 24 hours.	Fresh data enables faster decision-making based on the data.
7	**Data retention**	The data should be accessible in the dashboard for a minimum of 3 years.	Analyzing channel data trends helps to see if the channel is moving in the right direction.

As seen from Table 7 above, business needs were grouped into seven themes: centralization, views, metrics, data granularity, comparability, data refresh frequency and data retention.

The first theme, centralization, forms the basis in the business requirements – the reporting should centralize all email and SMS related data. The data is needed for complete customer communication channel reporting and analysis, and therefore reduce manual work related to the data.

Different views should be utilized in the reporting to accommodate both the manager and operational level. Minimum requirements for the reporting are an overview to the whole channel, operational view for drilling down into message specific performance, and a view that explores segments relating to the channel.

For metrics, the reporting should display conversions, channel volume, as well as metrics relating to message quality. Combining business critical conversion metrics, such as conversion rate, and message quality metrics, such as open or click rates, supports marketers in reporting and optimizing the channel performance.

Requirements for data granularity help optimization by offering marketers different levels of detail for looking at the data. The reporting should allow data viewing in multiple time windows and with a custom date range, as well as enabling drilling down from top level data, such as message categories, into more granular level data, such as specific messages sent.

Comparability requirements make sure that the reports are built in a way where manual data processing is no longer needed. Data should be comparable between different views, and marketers should be able compare data for example between different channels, campaigns or message categories directly in the reporting views.

Data refresh frequency ensures that the data seen in the reports is recent enough. The minimum requirement for the data freshness is 24 hours. Data retention on the other hand ensures that the reports have enough data for seeing trends and analyzing if the channel's performance is moving in the right direction. At a minimum, the data should be accessible for three years.

The business requirements guided the selection of the KPIs, data plan and eventually the dashboard wireframes created for the proposal.

5.3.2 Reporting KPIs for the Centralized Report

The second piece of the proposal is the list of reporting KPIs. This list shows what KPIs to bring to the dashboard and how they should be calculated. Additionally, it also served as a standardization of KPIs for the customer communication channel. The KPIs were formed by combining the case company's channel goals, metrics that the stakeholders wanted to keep from the present reporting practices, workshop discussions and literature best practices. List of the proposed KPIs is presented in Table 8 below.

Table 8. KPIs and related calculations for the customer communication channel reporting

KPIs and calculations for the dashboard			
	KPI	**Description**	**Calculation**
1	**Avg. Messages per Customer**	Average number of messages received per customer during a selected time period	Total messages / Number of customers who received messages

2	**Click Rate (%)**	Percentage of customers who clicked the message, relative to the number of messages sent	(Messages clicked / Messages sent) * 100
3	**Clicks (pcs)**	Number of customers who clicked the message	-
4	**Conversion Rate (%)**	Percentage of recipients who converted, relative to the number of messages sent	(Conversions / Messages sent) * 100
5	**Conversion Value (€)**	Total value generated by conversions (purchase value or service booking value)	-
6	**Conversions (pcs)**	Number of customers who converted (e.g. booking or purchase) within 30 days of receiving the message (one purchase = one conversion)	-
7	**Marketing Opt-Out Rate (%)**	Percentage of recipients who unsubscribed from marketing, relative to the number of messages sent	(Opt-outs / Messages sent) * 100
8	**Messages Sent**	Total number of messages sent (each message name is unique)	-
9	**Open Rate (%)**	Percentage of recipients who opened the message, relative to the number of messages sent	(Messages opened / Messages sent) * 100
10	**Opens (pcs)**	Number of customers who opened the message	-

As seen from Table 8, the KPI list was kept short, sticking only to the most important message quality and conversion metrics. It was important to the stakeholders that there would only be relevant KPIs in the dashboard, to promote efficient and clear reporting, and to avoid data-crowding. The channel conversion metrics included conversion rate, conversion value and number of conversions. The channel quality metrics included average number of messages received per customer and total messages sent. The message quality metrics included number of clicks and click rate, number of opens and open rate, as well as marketing opt-out rate.

5.3.3 Data Plan for the Centralized reporting

The third piece of the proposal is the data plan for the centralized reporting. Its purpose is to map what data is needed for the KPIs selected, from what platforms they can be

attained from and what would be used as key data that combines data between the different platforms.

When collecting Data 2, it was discovered that online sales data, which is presently gathered to the reporting from the web analytics platform, and email data, which is gathered from the marketing automation platform, are already integrated into the case company's customer data platform. This allows both data sources to be obtained from the same location.

It was also noticed that the SMS platform, used for the current reporting, did not allow stable enough integration between the platform and the case company's data warehouse. In a related discussion with the stakeholders, it was decided that all SMS send-outs would be moved from the SMS platform to the marketing automation platform. By making the change, the case company can gain more data on the SMS send-outs than before, unify processes and make the channel data less scattered. The change also removed the need to build a new integration, since the marketing automation platform data already flows to the customer data platform.

Due to the above-mentioned, all data needed for the centralized reporting can be gathered from three platforms, instead of the original five, from where the data is currently manually gathered for the reporting. Additionally, interviews with the platform experts revealed that the marketing automation and the customer data platforms have limited data retention. For the dashboard to fill the business requirements presented earlier, the data would instead be gathered into the case company's data warehouse where data is kept for the required time. The proposed data plan is illustrated in Figure 19 below.

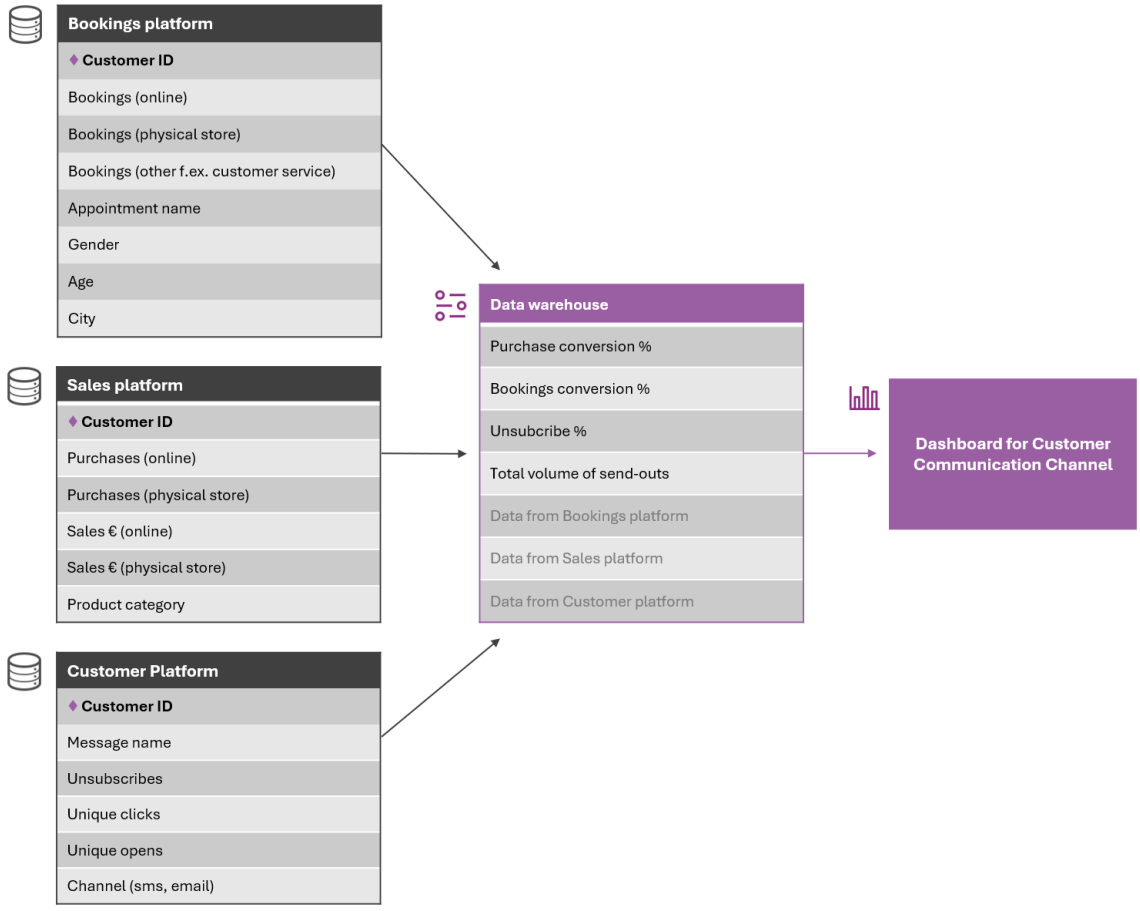


Figure 19. Data plan for centralized report for the channel.

As seen from Figure 19, the data for the customer communication channel dashboard can be obtained from three platforms: bookings, sales and customer. The platforms are represented in the black-colored tables. The data is combined by using a customer ID that is present in each platform. It is then taken into the case company's data warehouse, represented in the purple-colored table, where further calculations and parsing are done to the data, to get all the metrics needed for the dashboard.

The proposed data plan changes the current reporting process for the channel fundamentally, which is illustrated in Figure 20 below. (The current reporting process can be found in Section 3.2.4 in Figure 3).

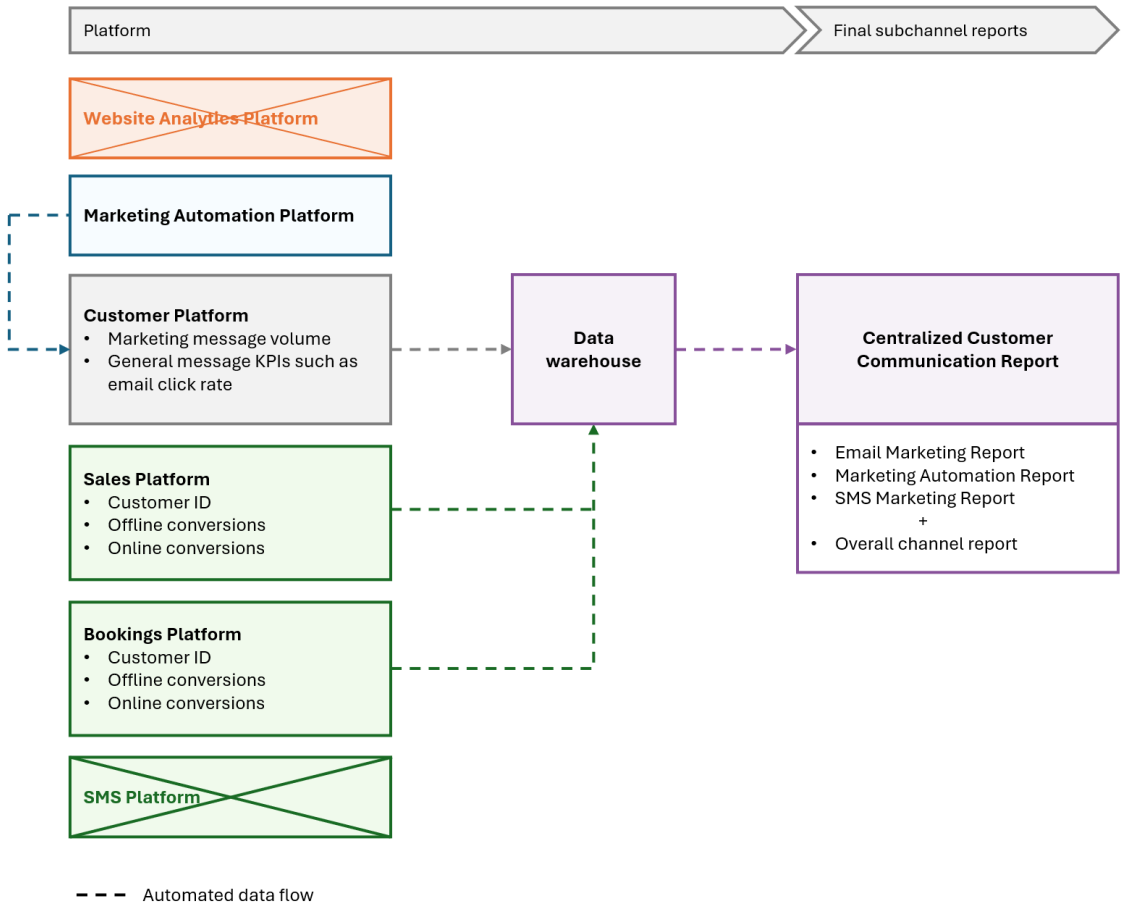


Figure 20. The proposed report creation process for centralized report.

As seen from Figure 20, the proposed data plan enables automated data flow from different platforms to the data warehouse, which then pushes the data to the centralized customer communication report. Currently all the data that is acquired for the reporting is gathered and processed manually. In the centralized report, data handling is no longer needed, and the marketers can focus their time on channel analysis instead.

5.3.4 Dashboard Wireframes

The fourth piece of the initial proposal includes the dashboard wireframes. The wireframes work as a blueprint for building the dashboard. They illustrate the needed structure for the dashboard views, including view specific filters, data visualizations and KPIs. The styling, such as colors and fonts, is not taken into consideration on the wireframes, since those will come from the case company's current report styles.

The wireframes were built based on Data 2 that was gathered from workshops, literature best practices and based on the other pieces of the proposal introduced earlier. They consist of four views that are introduced below: manager overview, operational view, conversion-based view and a segment view. Figure 21 below shows the manager's overview.

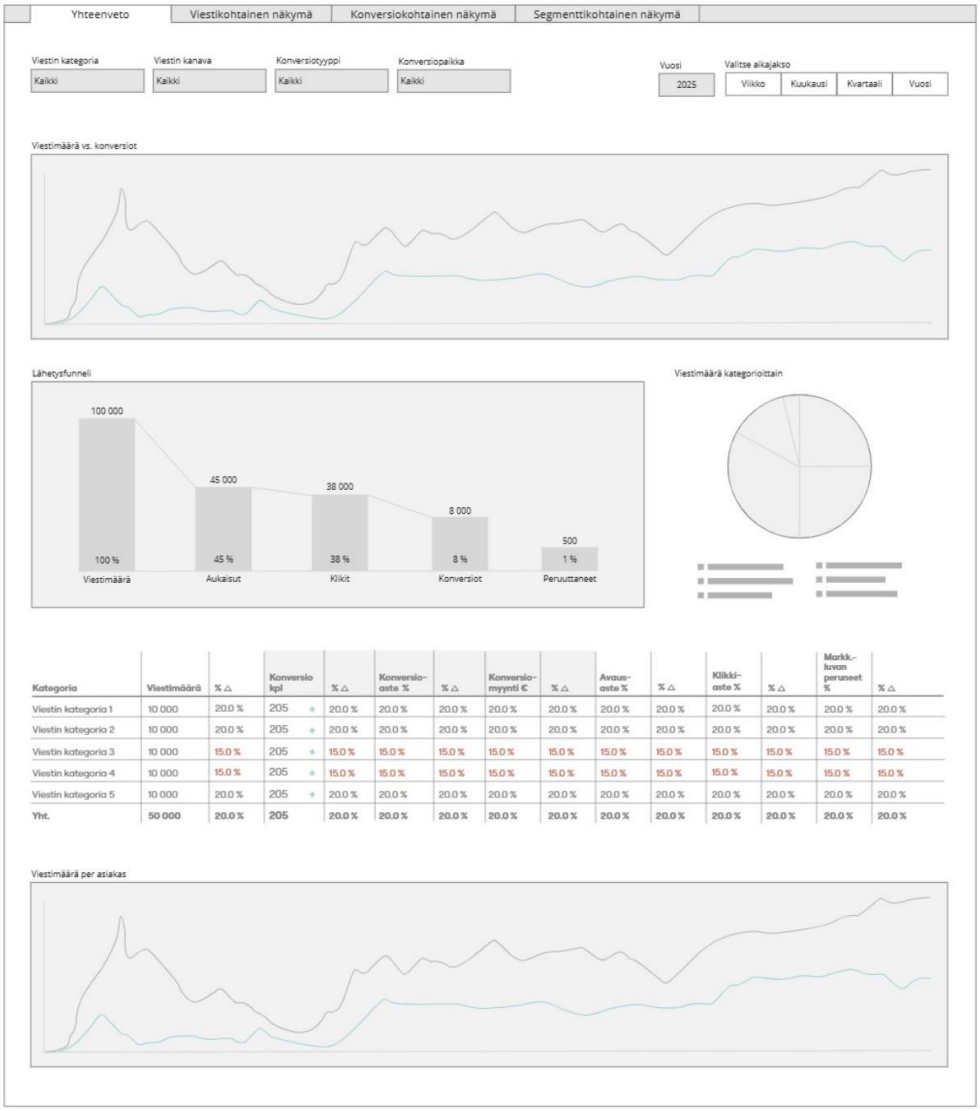


Figure 21. Dashboard wireframe of the manager overview.

As seen from Figure 21 above, the manager overview is a simple view with limited number of filters. Its purpose is to answer top-level questions about the customer communication channel, such as: what is the relationship between messages and conversions, how has the most important channel KPIs developed through time and what is the overall message volume of the channel.

The filters selected for the view support the manager's needed level for detail. For example, the filters stay on the top-level of message and conversion categorization, instead of drilling into specific named conversions or singular messages sent. This support examining the channel as a whole and creating an overview into the channel performance. Figure 22 below shows the second view, which is the operational view.

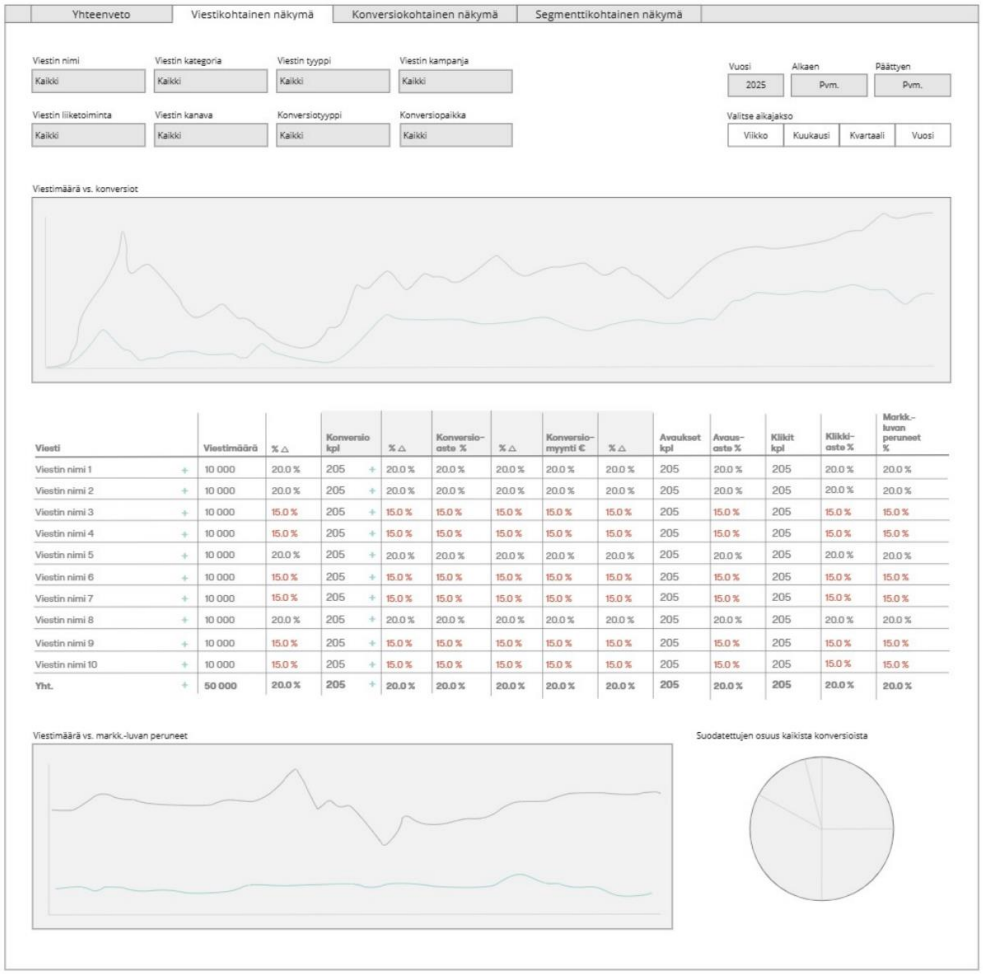


Figure 22. Dashboard wireframe of the operational view.

As seen from Figure 22, the operational view has more filters and more numerical data in it compared to the manager overview. Its purpose is to drill down into operational level of the channel data to create subchannel specific reporting and analysis. The view answers more granular questions, such as: what is the relationship between messages and conversions in a specific subchannel or campaign, how has the most important message KPIs developed through time in a specific message subchannel, category or channel, how does a specific campaign compare to previous campaigns of the same topic or type, what is the message volume of a specific subchannel, message category

or message, what kind of conversions were made from a specific campaign or message sent.

The filters selected for the view support the operational marketer's needed level for detail. Unlike the manager overview, the operational view enables marketers to drill down into message or conversion specifics. It also helps the marketer to look at their selected subchannel from different angles, to find growth opportunities and to create insightful analysis. Figure 23 below shows the third view, which is the conversion-based view.

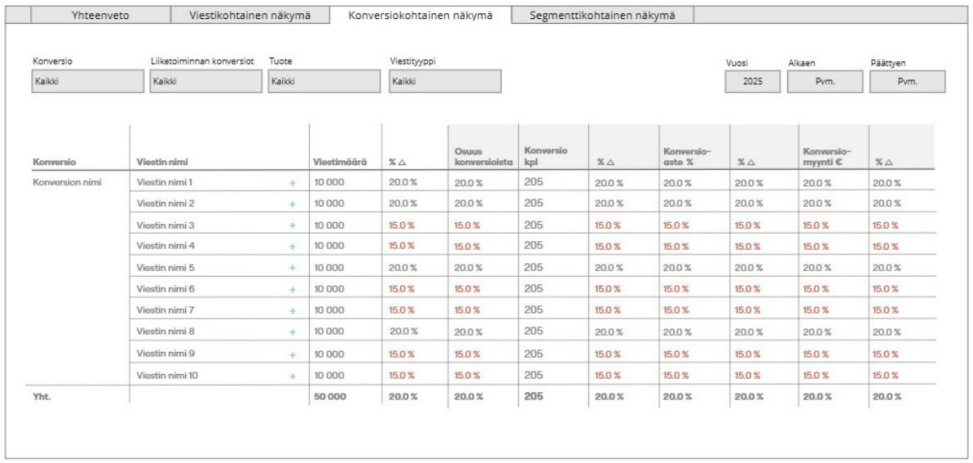


Figure 23. Dashboard wireframe of the conversion-based view.

As seen from Figure 23, the conversion-based view is simple view that focuses on numerical data. Its purpose is to present the channel data from the conversion point of view, instead of message point of view. The view answers questions such as: what messages have brought the most or the least number of specific conversions, what percentage of conversions has a specific message or campaign brought.

This view helps the managers and operational level marketers to examine the data from the end-result point of view. It offers insight into which messages are the ones that bring most conversions, and which are not. It helps to identify growth potential and to optimize processes, by for example, eliminating ineffective messages from the campaigns. Figure 24 shows the fourth view, which is the segment view.

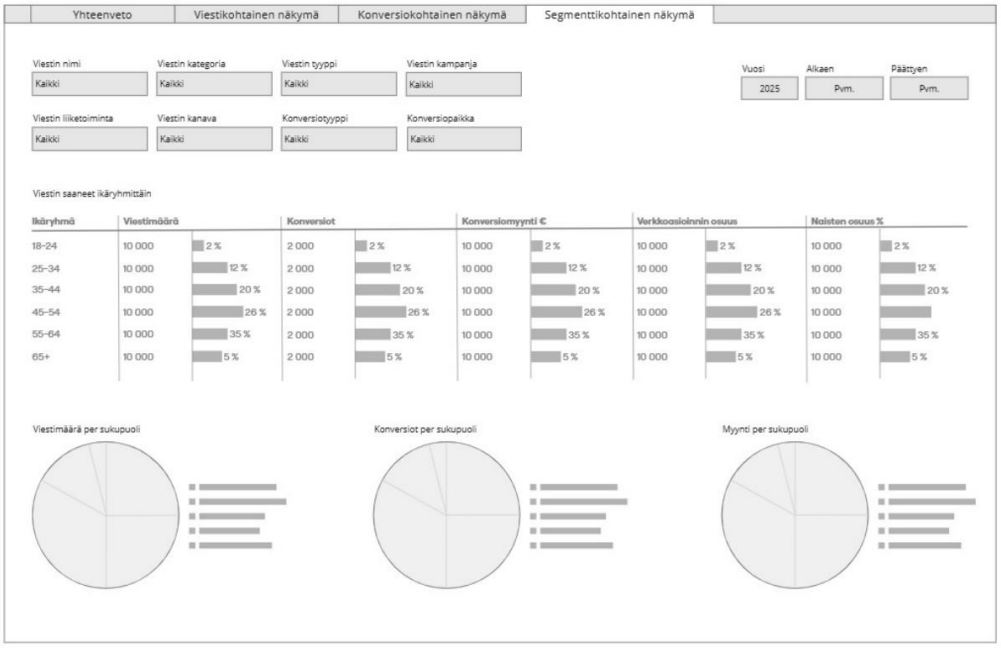


Figure 24. Dashboard wireframe of the segment view.

As seen from Figure 24, the segment view consists of mainly data visualizations. Its purpose is to bring insights into how different segments react to different messages. The view answers questions such as: how different segments are converting and is there a difference in conversion value, how many messages different segments get and is it aligned with the channel goals, how much of the message volume, conversions or revenue does each segment represent.

The filters selected for the view are the same as in the operational view, since it allows the marketers to examine the data in more granular level. The view also allows top-level data examination, therefore benefitting both manager and operational level marketers.

5.3.4.1 Message Categorization for the Dashboard

To support the manager overview and to provide insight into the channel, a message categorization is proposed with the dashboard views.

In the current channel structure, messages are categorized based on operational marketers' areas of responsibility: email marketing, SMS marketing and marketing automation. (The current channel structure can be found in Section 3.2.2 in Table 3). Additionally, there is also a category for transactional messages which is not actively

followed through reporting. The challenge with the categorization is that it does not necessarily bring insight into what is going on in the channel, instead its more of an echo of the siloed reporting approach currently in use.

A new categorization was co-created with the stakeholders to provide more insights into the channel. The proposed message categorization is presented in Figure 25 below.

Figure 25. A new message categorization.

As seen from Figure 25, the message categorization consists of five categories: campaign, re-call, benefit, transaction and consideration. Instead of categorizing the messages based on operational marketer's subchannels, the new categorization groups messages in content and goal related themes. The new categorization enables the manager to see if a certain message theme is under or over presented, as well as differences in how they convert. It also gives the operational marketer a top-level view on messages, that could result into actionable insight if discrepancies are discovered.

5.3.4.2 Message Naming Convention

To better manage the number and level of filters in the dashboard, also a message naming convention is also proposed with the dashboard views. The naming convention enables content categorization of the messages that can be then turned into filters in the dashboard by parsing the message name into content parameters. It also unifies the naming of the messages which helps analysing the data in the dashboard. The naming convention is illustrated in Figure 26 below.

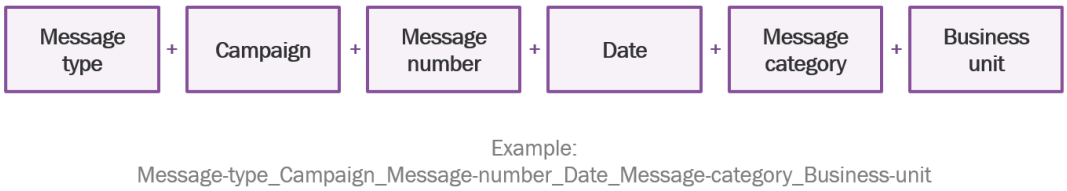


Figure 26. A new naming convention for the customer communication channel messages.

As seen from Figure 26, the naming convention consists of six parameters: message type, campaign, message number, date, message category and business unit. Out of the six parameters, four is used for filtering the dashboard and two are used to give the operational marketers additional detail on the contents of the message sent. The parameters used in the filters are message type, campaign, message category and business unit. The other two parameters mainly offer extra detail to the operational marketers about the message sent. The parameters are arranged in an order that reflects the most useful information for the operational marketers. This way a specific message is easier to identify, which helps in the reporting and analysis process.

As seen from the example in Figure 22, the message parameters are combined using underscore when creating the name for the message. The underscore is used to separate different parameters from each other, which allows the message name to be parsed into content parameters in the data warehouse. The content parameters can then be used as filters on the dashboard.

5.4 Summary of the Initial Proposal

The initial proposal is a collection of four parts that forms a plan for centralized reporting for the customer communication channel. The proposal was created to solve the main weaknesses in the case company's current reporting process while utilizing the conceptual framework formed from the industry best practises. The summary of the initial proposal is shown in Figure 27.

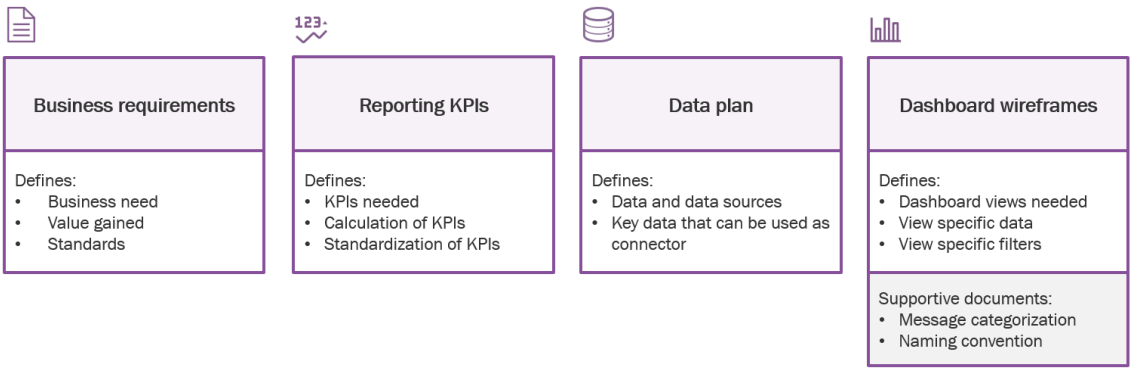


Figure 27. Summary of the Initial proposal.

As seen from Figure 27, the initial proposal contains (1) business requirements for the customer communication channel's centralized reporting, (2) reporting KPIs, (3) the data plan, and (4) the dashboard wireframes. The dashboard wireframes also included supporting documents relating to message naming convention and message categorization.

The initial proposal was presented to the case company. The results of the validation of the proposed centralized reporting plan for customer communication channel are presented in the following Section 6.

6 Validation of the Proposal

This section reports on the validation of the initial proposal presented in Section 5 and the final proposal developed based on feedback from the stakeholders. The section starts by introducing the validation process, then moves to reporting the developments to the proposal, and at the end presents the final proposal.

6.1 Overview of the Validation Stage

In this section, the validation process is presented. The purpose of the validation phase was to evaluate the initial proposal presented in Section 5, gather feedback and improvement ideas from the stakeholders, and to utilize them in the finalized proposal.

The validation was done in three steps; the first step in the validation process was individual discussions with the stakeholders. In the individual discussions, the dashboard wireframes from the initial proposal were presented, the related naming convention and message categories were introduced, and the stakeholder's feedback and improvement ideas were documented. The goal for the individual discussions were to gain a thorough understanding if the dashboards would serve the stakeholders and dive into each respondent's specific needs, which would have been difficult to do in a group setting.

Second, group discussions were held with the stakeholders that participated in the first step. In the group discussions, the dashboard wireframes and the related naming convention were presented again, but this time accompanied with a list of improvements derived from the individual discussions. The final improvements were then agreed upon by the stakeholder group. In the first and second step, the stakeholders included in the validation process, were three operational marketers working with the customer communication channel, the head of marketing, and a data analyst, who will do the technical implementation of the dashboards.

In the third step, the initial proposal was improved based on Data 3, which was formed from the individual and group level discussions with the stakeholders. The outcome was the final proposal.

6.2 Developments to the Initial Proposal from Data 3

Findings from Data 3 consists of feedback and improvements received to the initial proposal. The feedback was gathered from three operational marketers, the head of marketing, and a data analyst, who will do the technical implementation of the dashboards. The operational marketers evaluated the dashboard wireframes based on how the dashboards would work in the subchannel reporting, and if they would reduce manual work as intended. The head of marketing evaluated the dashboards wireframes based on how the dashboards would bring more top-level visibility into the customer communication channel. The data analyst evaluated the whole proposed plan and if it would work from a technical perspective.

The initial business requirements and data plan was evaluated positively with no additional improvements needed. The stakeholders concluded that the above-mentioned parts of the proposal were clear and consisted of the information that was agreed upon in the workshops and discussions preceding the initial proposal building phase. The reporting KPIs, the dashboard wireframes and the accompanying naming convention received further improvements from the stakeholder group. The improvements and the development done are presented and discussed topically below.

6.2.1 Developments to the Reporting KPIs

The reporting KPIs were evaluated and discussed especially with the stakeholders who will be responsible for the technical implementation of the dashboards. The feedback and the development to the reporting KPIs are listed in Table 9 below.

Table 9. Expert feedback (findings of Data 3) for reporting KPIs.

	KPI	Parts commented in Validation	Description of the feedback	Development to the reporting KPIs
1	**Marketing Opt-out Rate %**	What counts as a message related Marketing Opt-out needs to be defined more clearly	According to the analyst, the window when the message is received and when the opt-out happens, needs to be defined more clearly. If the opt-out window is too long, there can be an overspill on several messages.	More detailed description added to the KPI table.

2	**Conversion**	What counts as a message Conversion needs to be defined more precisely	According to the analyst, a message conversion needs to be defined: what counts as a conversion, what is the conversion window and how conversions in situations where customer has received more than one message prior to converting.	More detailed description added to the KPI table.

As seen from Table 9, both KPIs required further defining to provide more clarity when the KPI calculations are done for the dashboard. First, the marketing opt-outs were discussed. The feedback pointed out that an opt-out window is needed to avoid overspill between different messages.

> "Let's say the opt-out window is 30 days. If a customer receives three messages within those 30 days and opt-outs from the last one, all three messages are considered opted out from."*(Data Analyst, 2025)*

The example emphasized that an opt-out window is needed, and it should not be too long. The KPI was re-defined with the stakeholder group to only include customers who opt out of marketing within 7 days of receiving a message. This way the opt-out overspill between messages is minimized, even though the opt-out attribution would not be 100 % valid.

Second, message conversions were discussed. Just like with the opt-outs, what counts as a message conversion needs to be defined more precisely. The conversion window that was suggested in the initial proposal was validated (30 days), but some additional definitions needed to be added.

> "What will happen if a customer receives three messages from the same campaign within the 30-day time period and converts only from the last one? Have all the messages converted, has each message been attributed 33 % of a conversion or how it should be calculated? "*(Data Analyst, 2025)*

The conversion definition was discussed with the stakeholder group, who agreed to the following: conversion is a purchase or booking action that a customer can do independently. It was also agreed that if there are multiple messages that have arrived within the same conversion window, each message will be attributed to an equal part of the conversion. Table 10 below shows the updated definitions for conversions and opt-outs.

Table 10. Updated KPIs and calculations for the channel reporting

KPIs and calculations for the dashboard			
	KPI	**Description**	**Calculation**
6	**Conversions (pcs)**	Number of customers who converted (independent booking or purchase) within 30 days of receiving the message. In case of multiple messages in the same conversion window, each message is attributed equal part of the conversion.	-
7	**Marketing Opt-Out Rate (%)**	Percentage of recipients who unsubscribed from marketing, relative to the number of messages sent	(Opt-outs / Messages sent) * 100

6.2.2 Developments to the Dashboard Wireframes

The dashboard wireframes were evaluated and discussed with three operational marketers, the head of marketing and the data analyst. Overall, the dashboard wireframes received good feedback from the stakeholders, and it was considered that the proposed dashboards would reduce the amount of manual reporting work substantially and help with the customer communication channel optimization. The dashboard wireframes received also suggestions for improvements, which are listed in Table 11 below with the developments included.

Table 11. Stakeholder and expert feedback (findings of Data 3) for the dashboard wireframes.

	Dashboard wireframe views	**Parts commented in Validation**	**Description of the feedback**	**Development to the dashboard wireframes**
1	**All views**	Placement of filters that relate only to graphs.	According to the analyst, it would be clearer if the filters that relate to graphs would be adjacent to the graph it controls, instead of in the top section of the view.	Graph related filters were moved above the graph they control in all views.
		Additional filter: Time period	According to the head of marketing, it would be beneficial to look at data from last 12 or 24 months, instead of only year-to-date (YTD).	An additional filter for time period was added to all views with possible selections of YTD, 12 months and 24 months.
2	**Manager overview**	Graph displaying average number of messages received per customer.	According to two of the operational marketers, the graph was not considered useful. It was not clear	The graph was enriched by adding opt-outs to the visualization. Additionally, the graph was removed from the

			what marketing decision could be derived from it. The head of marketing suggested the graph to be placed in the operational view, since it would be more beneficial in that context.	management overview and placed to the operational view.
3	**Operational view**	Default message level displayed in the KPI table	According to one of the operational marketers, it would make more sense if the level from which message KPIs were looked at would be 'campaign' instead of 'message name'.	Message level changed from 'message name' to 'campaign' in the data table.
4	**Conversion-based view**	Additional filter: Business Unit Conversions	According to the operational marketers, an additional filter is needed to be able to filter conversions based on the business unit the conversions belong to.	New filter for business unit conversion were added to the conversion view.
		Additional filter: Message Level	According to the operational marketers, additional control is needed to be able to control from what level the KPIs are looked at. F.ex. is it message name, message category or campaign.	New control for message level were added to the conversion view.
5	**Segment view**	Additional filters: Message Language and Conversion Name	One of the operational marketers suggested an additional language filter to be added, so it would be possible to see data from messages based on the message's language. The head of marketing suggested that an additional filter for specific conversion is added, so that the data could be looked at more granularly and it would allow for better optimization decisions.	Additional filter for message language added. Additional filter for conversion name added.
		Regional data visualized	The head of marketing suggested that the segment view should also include data from how messages perform based on region. The operational marketers felt that it would help them make better regional	Data table added about regional data, which follows the same logic as the table for age group in the initial proposal.

			optimizations to the messages.	
		Pie charts for age groups	One of the operational marketers suggested that pie charts would be added about age groups, not only about gender. This would make seeing what works for different age groups easier.	Pie chart for age groups added
6	**Additional view: Planning tool**	A new view: Planning tool	The operational marketers wanted a view where they could plan message volume, conversions and conversion value.	A new view added that shows channel data and compares it to volume, conversion and conversion value metrics the user inputs into the view.

As seen from Table 11, the improvements related mostly to filters and data visualizations. In addition, a completely new view was also suggested to serve as a planning tool for the channel. First, for “all views” the stakeholders gave two improvements: position of graph related filters and additional filters for time period. Second, in the manager overview, the stakeholders hoped that one of the graphs was to be moved to the operational view and to be enriched with additional data. The developments done are illustrated in Figure 28 below.

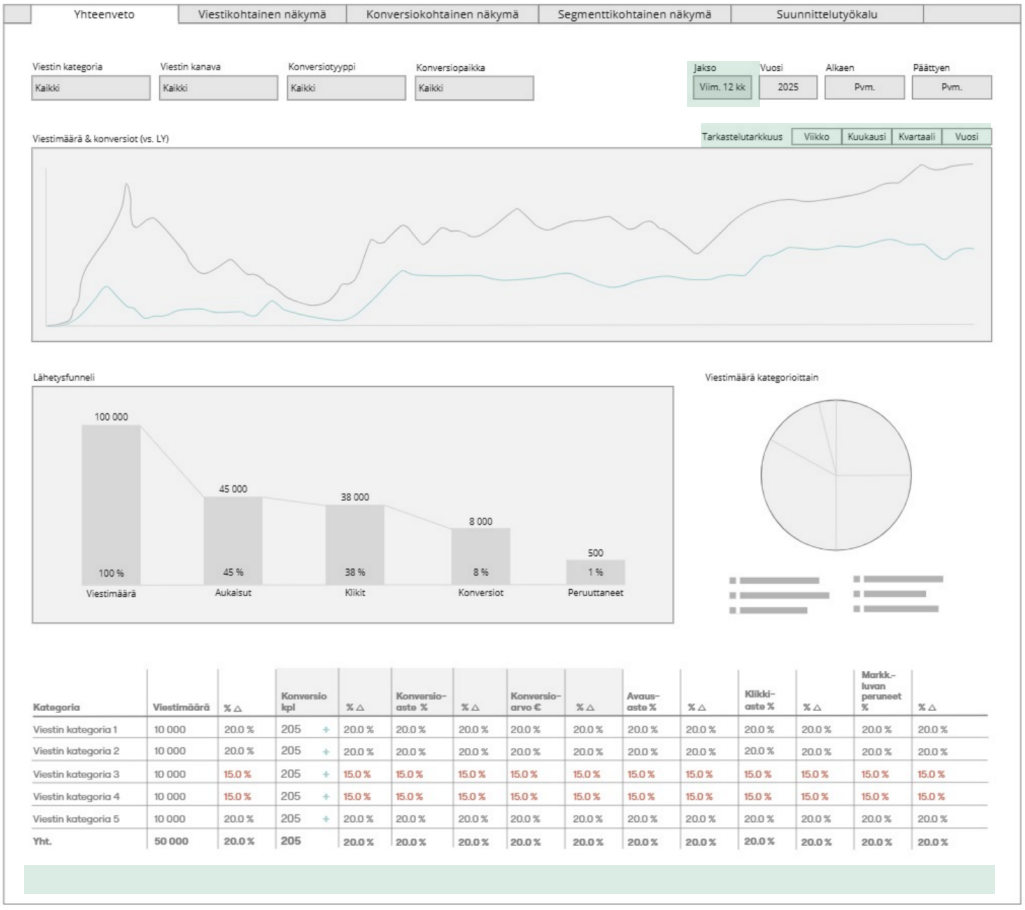


Figure 28. Developments related to the “all views” and the manager overview.

Highlighted green in Figure 28 are the developments that were made to all views and the manager overview. The two highlighted areas on top of the wireframe relate to changes done to all views. An additional filter for time period was added to all views with possible selections of year-to-date (YTD), 12 months and 24 months. The placement of graph related filters were moved from the top of the views to above the graphs they control. The highlighted area at the bottom of the wireframe indicates the removed graph from the manager view. Originally the graph displayed average number of messages received per customer compared to previous year same period. The stakeholder group suggested that it would be to the operational view and enriched with additional data to make data-oriented decision-making easier.

Third, the operational view received one suggestion from the stakeholder group, regarding the default message level displayed in the KPI table. In addition, one graph, described in above paragraph, was moved from the manager overview to the operational view. The developments made to the operational view are illustrated in Figure 29 below.

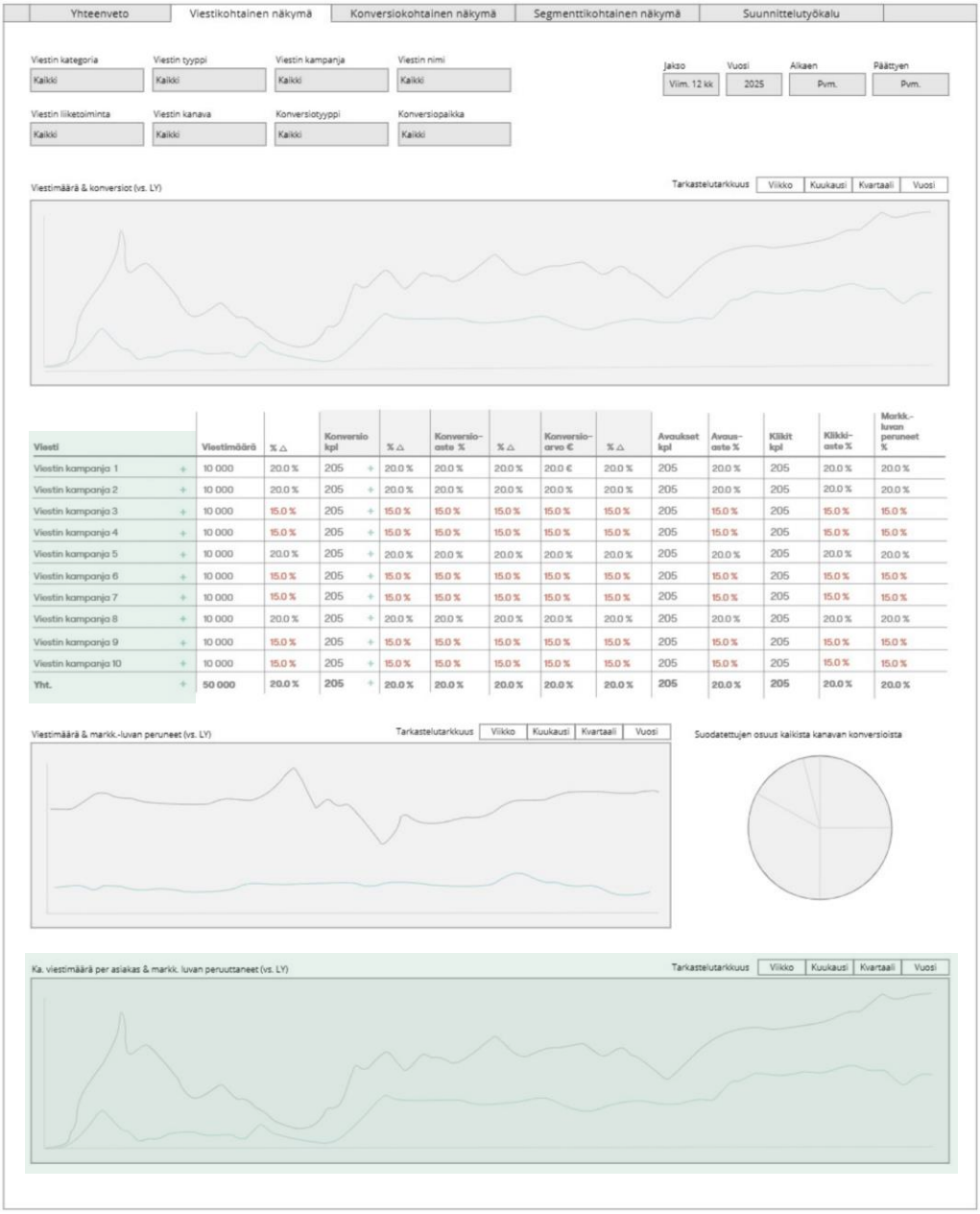


Figure 29. Developments made to the operational view.

Highlighted green in Figure 29 are the developments that were made to operational view. Originally, the default message level at the first column of the KPI table was message name. The operational marketers suggested it would make more sense to look at the data from a campaign level instead and have the opportunity to drill down to specific messages. The development was done as suggested.

The highlighted graph at the bottom was moved from the manager overview to the operational view. Originally the graph displayed the average number of messages

received per customer, but based on the suggestions given, also opt-out rate was added to the data set to enrich the graph. The new graph now tells a story of how message frequency affects the opt-out volume.

Fourth, the conversion-based view received a lot of positive feedback from the stakeholders. It was considered to be a welcomed addition to the channel reporting, since it gave a new perspective into the data. The view received two suggestions for improvements, which are displayed in Figure 30 below.

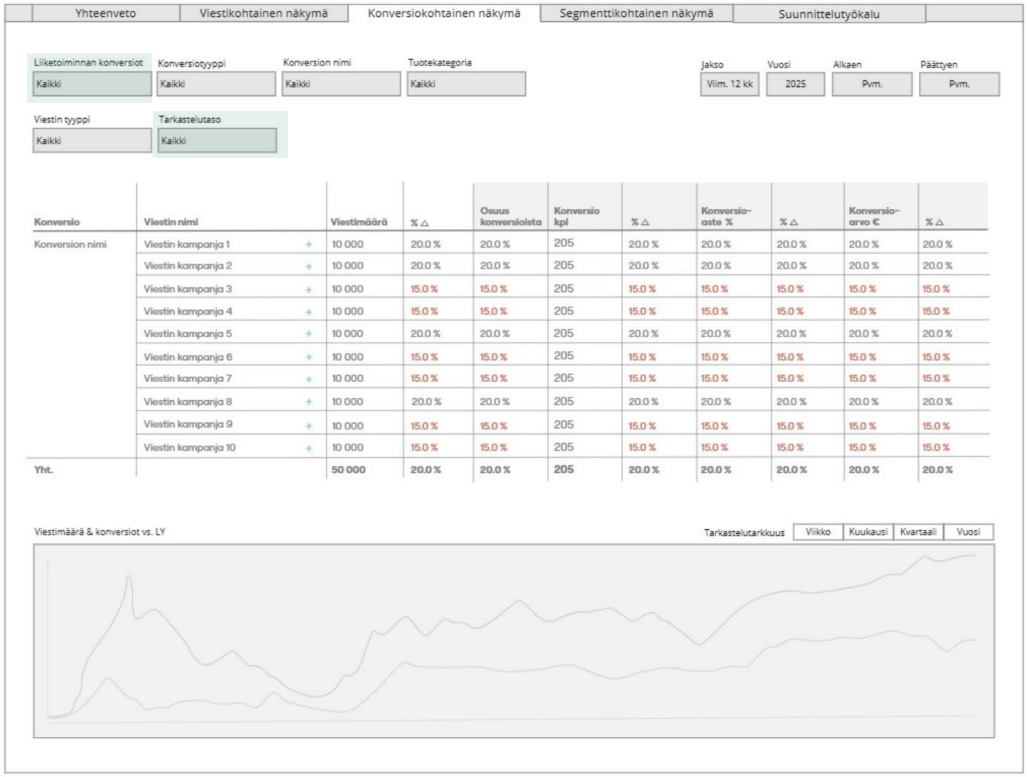


Figure 30. Developments made to the conversion-based view.

Highlighted green in Figure 30 are the developments that were made to the conversion-based view. The operational marketers suggested two additional filters – business unit conversions and message level. The first provides an opportunity to look at what messages bring the most conversions to a business unit. It would give an additional top-level view to performance. The second would control on what level the message KPIs are looked at.

Finally, the segment view received four suggestions from the stakeholders: two additional filters were suggested as well as two additional data visualizations. The developments done are displayed in Figure 31 below.

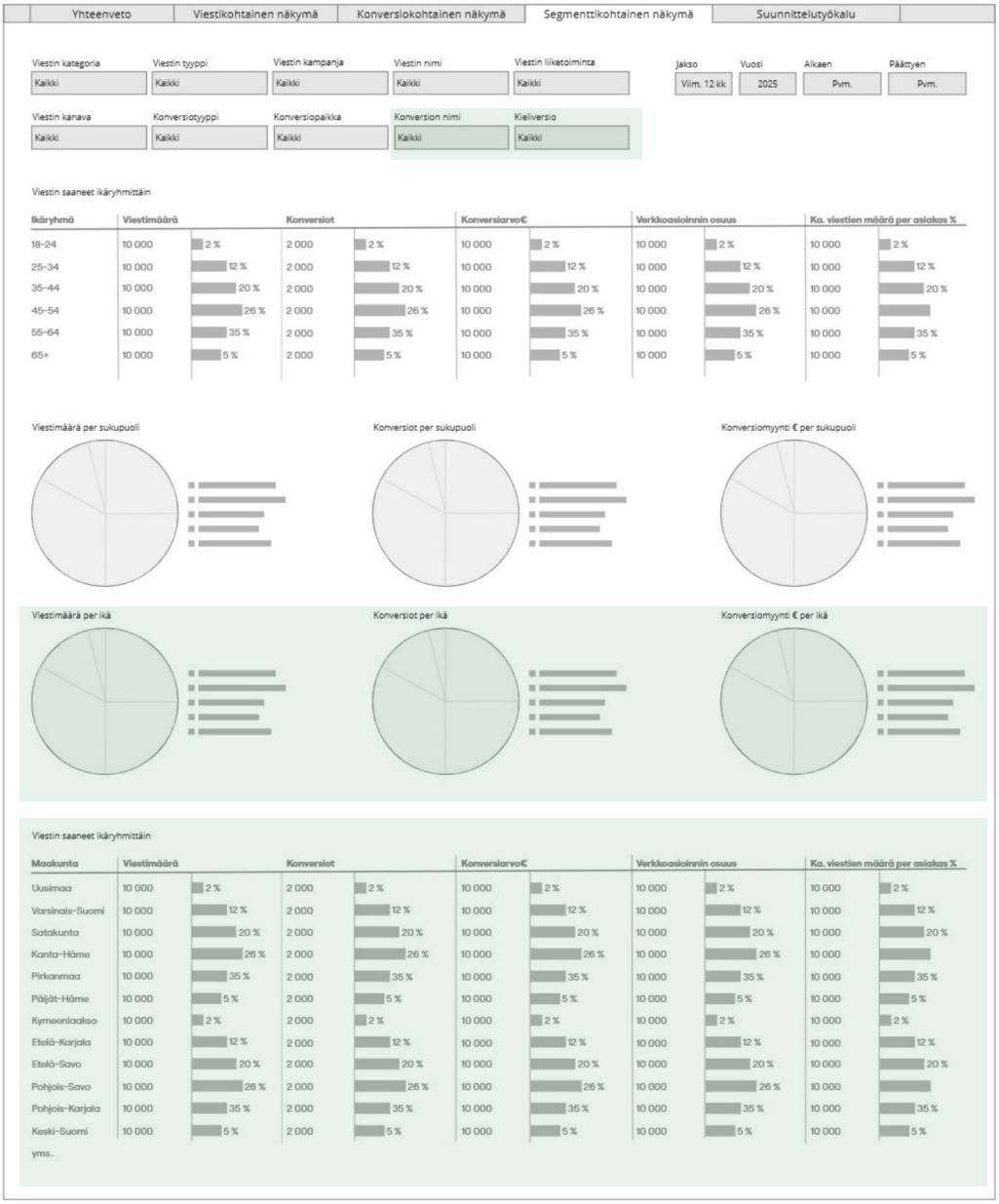


Figure 31. Developments made to the segment view.

Highlighted green in Figure 31 are the developments that were made to the segment view. Two filters were added to the view based on the stakeholder suggestions. Filter for message language was suggested by one of the operational marketers to be able to see how segment data differs between customers who receive messages with different languages. Adding the filter required also an additional parameter to be added to the

naming convention. Filter for conversion name was added on the suggestion of the head of marketing, who wanted to be able to see segment data from customers converting to, for example, specific booking service.

In addition, two new data visualizations were added to the view. The head of marketing suggested that regional data should be displayed in the segment view, since it would help the team make better regional optimizations to the messages. One of the operational marketers suggested that age group specific pie charts should be added to the view next to gender specific pie charts. Both suggestions were added to the segment view.

When reviewing the initial proposal, the stakeholder group got an idea of a new view that would help with the channel planning. Since the suggested new dashboard view was a logical continuum to the already proposed views, it was agreed to be added to the scope. The new planning view uses the same filters as the operational view, and the data table is only slightly different to the one used in the conversion view, so it would not take much additional time to develop technically. It also provides a new way of planning the channel's performance for the managers and for the operational marketers. The planning view is illustrated in the below figure 32.

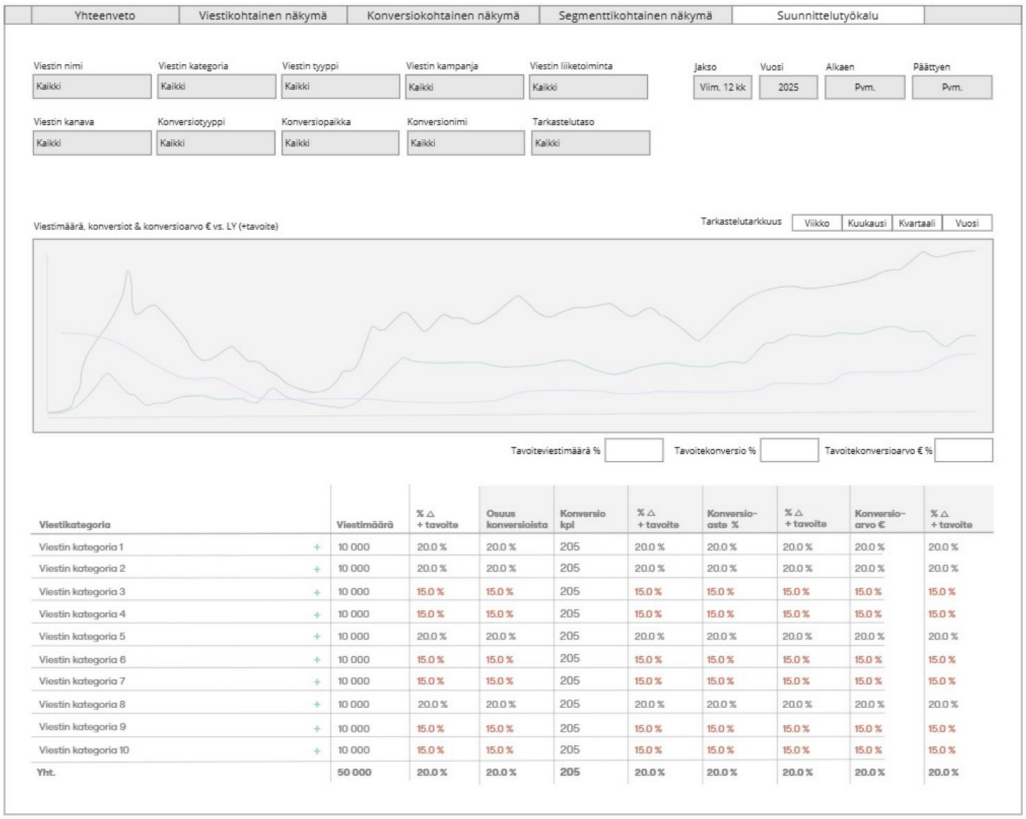


Figure 32. A new view to help with the channel related planning.

As seen from Figure 32, the new planning view is a simple view that consists of filters, graph that displays the most important KPIs and a KPI table. The view's purpose is to help the operational marketers in planning their message volumes to meet their channel goals. The planning view differs from the other views by having elements where data can be inputted. In this view the operational marketer can add percentage increase or decrease to main KPIs and have the data reflect that. For example, if 10 % increase in message volume is added, the view compares current message performance to last year's message performance with the additional 10 % increase added to the top. The adjustable values are message volume, conversion number and conversion value.

6.2.3 Developments to the Naming Convention

The naming convention was evaluated and discussed with the operational marketers. The feedback and the development to the naming convention is listed in Table 12 below.

Table 12. Stakeholder feedback (findings of Data 3) for the naming convention.

	Naming convention parameters	**Parts commented in Validation**	**Description of the feedback**	**Development to the naming convention**
1	**Message number**	Name and purpose of the parameter	The operational marketers needed the message name to sometimes include information about a message segment or A/B test variation, to analyze the results of their optimization experiments. It was suggested that the 'Message number' parameter would be changed into 'Message specifier'. That way it could hold information about the message number and other needed information.	The parameter was changed to Message specifier and its description was changed accordingly in the documentation.
2	**Additional parameter suggested 'Language'**	A new filter: Language	One of the operational marketers suggested an additional language filter to be added to the language view of the dashboards, so it would be possible to see data	A new Language parameter was added at the end of the naming convention.

			from messages based on the message's language.	

As seen from Table 12, the naming convention received two suggestions: one relating to re-defining a parameter and one to adding a new parameter to the naming convention. The first improvement related to a message name parameter that was intended to only provide additional detail to the operational marketers; therefore, changing the name and description of the parameter was a simple fix.

The second suggestion proposed adding a new parameter to the naming convention, that could also be used as a filter in the dashboards. When discussing this with the operational marketers, they all felt that the new parameter would provide them with value, but they felt reluctant to add a seventh parameter to the message names due to it lengthening the name further.

A development was done to add the language parameter as the last parameter of the message name, so it could be used as an optional parameter. Positioning the parameter at the end allows parsing the name whether the parameter is present or not. This allows skipping it when sending Finnish messages, which vast majority of the case company's messages are, and only using it when sending messages in another language. This was agreed upon by the stakeholder group. As a results, the improved naming convention is illustrated in Figure 33 below.

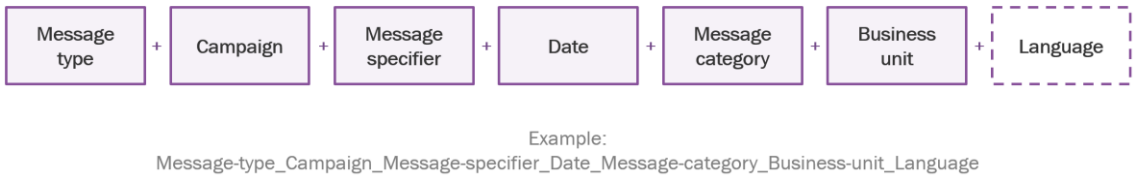


Figure 33. The improved naming convention.

6.3 Final Proposal

Based on the feedback and suggestions received regarding the initial proposal, the final proposal was created. The final proposal for centralized reporting for the customer communication channel included business requirements, reporting KPIs, data plan and dashboard wireframes. The final proposal is illustrated in below Figure 34.

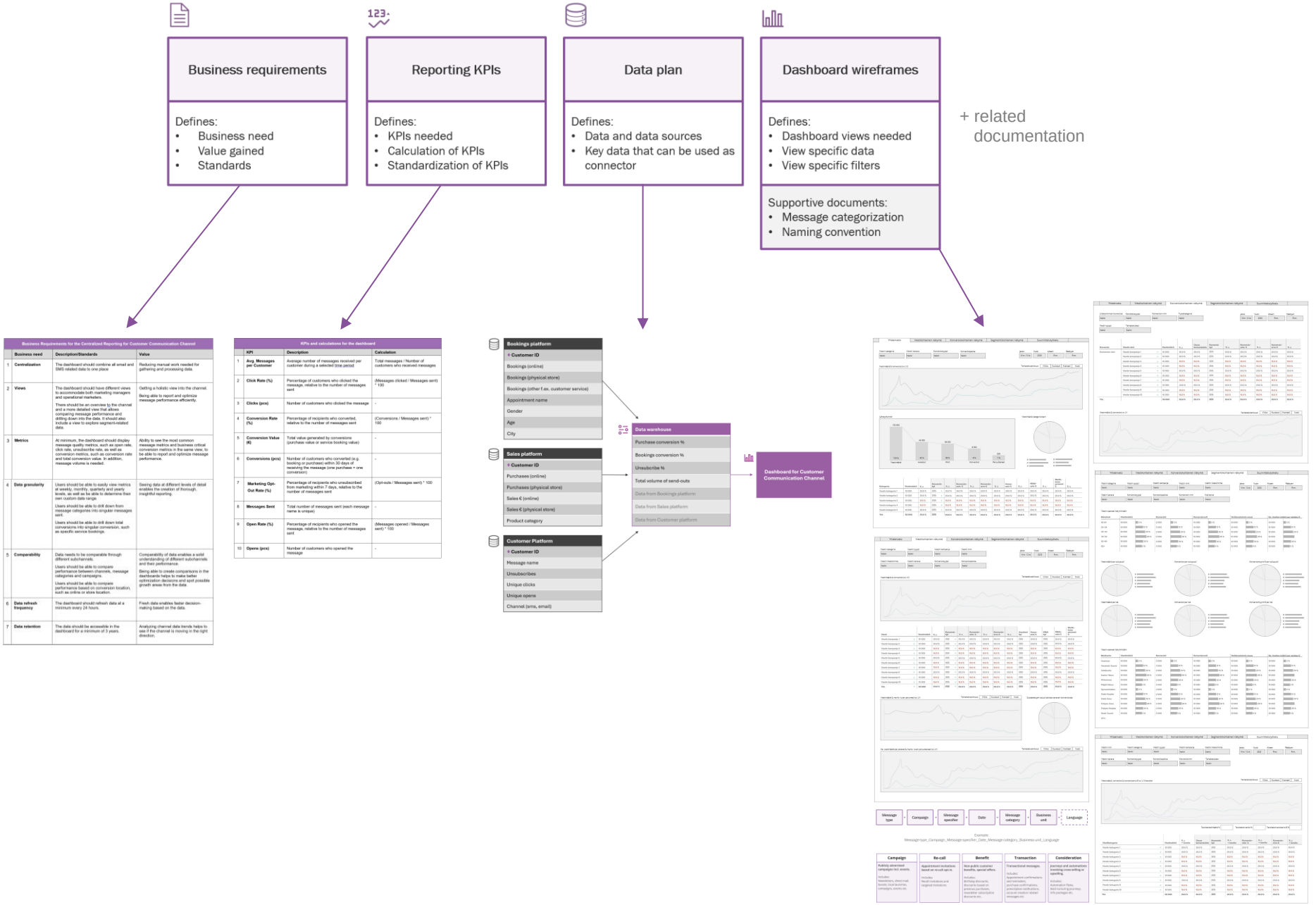


Figure 34. Final proposal for a Plan for the centralized reporting for customer communication channel.

6.4 Implementation

The plan for the centralized reporting for customer communication channel was presented to the case company in March 2025. The plan was approved for technical development, which started in the following month. The reports are estimated to be completed at the end of May 2025. The implementation will be done by the case company's analytics and development team.

6.5 Recommendations for Further Development

Most of the development ideas for the channel's centralized reporting were implemented during the proposal phase of the thesis, but some ideas were agreed to be left outside the scope for future development. The following development ideas were left out from the proposal but would enhance the channel reporting and optimization: (1) adding control group data, (2) including channel goals, and (3) adding audience performance.

Having a control groups part of the message send-outs and in the reporting would improve decision-making, since it would allow message audiences to be compared to a group who did not receive the message. Due to customers being able to convert either online or in a physical store, it is difficult to attribute a message to a conversion with 100 % certainty. A control group would allow the operational marketers to see the impact of their messages with a higher certainty than is currently possible.

Having goals in the reporting would improve the overview of the channel's performance. Creating goals for subchannels and displaying them next to performance KPIs would give the marketers the ability to evaluate subchannel success and optimize accordingly.

Adding message audiences to the reporting would help to determine how different audiences perform and what could be done to optimize the performance. Visibility into audience-based performance would potentially reveal where there is room for growth. Adding audience data into the channel reports is achievable if further development is done to the integration between the marketing automation platform and the customer platform.

Thus, implementing the three recommendations above would enhance the strategic value of the reporting. They would improve the accuracy of performance evaluation, support data-driven decision-making, and help to find new growth opportunities within the customer communication channel.

7 Conclusion

This section summarizes and evaluates the thesis from its initial objective to the outcome. The section starts with an executive summary, moves to thesis evaluation and ends in closing words.

7.1 Executive Summary

Marketing has a tendency of generating vast amounts of data – about customers, marketing actions, channels, performance and results. But having data on all the different areas of marketing is not enough to be able to make effective data-driven decisions, marketers also need a simple way of combining and analyzing that data.

The case company's customer communication channel data is scattered to several platforms, making reporting and analysis highly manual and therefore time-consuming. Due to the siloed data, the channel's optimization is difficult and, in some cases, impossible, which hinders the potential growth of this strategically important channel. This thesis focused on solving those issues by developing a plan for centralized reporting for the customer communication channel, that combines all the needed data under one roof for automated reporting and visualizes growth opportunities for improved data-driven decision-making.

This thesis belongs in the realm of applied research and uses qualitative approach in its data collection. The research design included current state analysis and literature and best practice review, proposal development and proposal validation. The data collected for the thesis consisted of multiple interviews, group discussions, workshops and analysis of internal documents and data flows.

In the current state analysis phase, the following four findings were discovered: scattered data causes manual work, individual reporting practices lack comparability, siloed reporting prevents full visibility to the channel performance, and current reporting setup blocks growth. The findings formed the focus areas for the development, which were: building centralized reporting, unifying reporting processes and KPIs, adding channel overviews, and enabling easier optimization.

These focus areas discovered in the current state analysis guided the selection of literature and best practices researched for this thesis.

The theoretical framework of the thesis dives into topics such as the customer communication channel's role in marketing, centralized reporting, KPI setting and growth orientated dashboards. Based on the researched literature, the conceptual framework of the thesis was formed.

The proposal building phase was based on findings from the current state analysis, the conceptual framework, and a new round of inputs from the stakeholders, which were gathered from interviews and co-creation workshops. The initial proposal consisted of four parts: business requirements, reporting KPIs, a data plan and dashboard wireframes. The business requirements defined the stakeholder's needs for centralized reporting, what value it would bring and what standards it needed to meet. The reporting KPIs highlighted what KPIs were needed for the reporting and how they should be calculated. The data plan mapped where the data for the selected KPIs is available and what key data should be used in combining different data sets. Finally, the dashboard wireframes illustrated the needed structure for the reporting views, including view specific filters, data visualizations and KPIs.

The initial proposal was validated by the stakeholders through individual and group discussions. Developments were made to the proposal based on the stakeholders' feedback and improvement ideas. In the validation phase, the proposed business requirements and data plan did not require further improvements, but reporting KPIs and the dashboard wireframes received ample suggestions for added development. The suggested developments related mostly to defining certain KPIs more precisely and adding new filters or visualizations to the proposed reporting views. Additionally, one extra reporting view was also developed based on the stakeholder suggestions.

After the improvements were made, the final proposal of a plan for the centralized reporting for customer communication channel was presented and handed over to the case company. The final proposal received good feedback from the stakeholders, and it was considered to improve the customer communication channel reporting substantially. The technical development for the centralized reporting started shortly after the handover.

The new reporting for the customer communication channel will give the case company a comprehensive view of the channel's performance. It will make reporting performance, comparing results and finding growth opportunities easier, while freeing time from manual reporting and data handling. With better data, the case company can grow the channel in a more strategic way – bringing more value to both the customers and the business.

7.2 Thesis Evaluation

The objective of this thesis was to develop a plan for centralized reporting for the case company's customer communication channel, that would combine key data from different platforms and visualize growth opportunities in the channel. The outcome met the objective.

The current state analysis revealed four main weaknesses in the current reporting. By centralizing the reporting, the case company can tackle the first two weaknesses: manual work and lack of comparability. When data is pulled under the same roof, the marketers do not need to use time to manually gather or clean the data. Moreover, when everyone is using the same data, calculations and views, the reporting stays comparable and transparent. The third weakness, lack of channel overview, was tackled by dedicating one of the dashboard views to a more top level. The view will help to see the full volume of the channel, the overall performance and the most important metrics, without going to too detailed level. The fourth weakness, the difficultness of optimizing the channel, was addressed by co-creating the dashboard views closely with the operational marketers, so the views would answer the most important optimization questions and allow the marketers to look at the data from several different angles.

The most challenging part of this thesis was to find high quality, up-to-date sources specifically related to centralized reporting in marketing. There was ample material about centralizing analytics teams or building centralized data hubs, but not much on the best practices of centralizing reporting and what it takes in marketing. To gather the needed information, the thesis researcher had to break the topic down and explore the topics separately to make sure the key areas were covered.

The most rewarding part of the thesis process was data gathering. Doing the interviews and workshops with the case company taught the thesis researcher a lot about the business, the value of asking the right questions and the importance of facilitating meetings well. The stakeholder group was motivated to participate and eager to get to the outcome, which made the whole process smooth and enjoyable. The thesis process was very motivating, since it was clear from the start that the outcome would provide the case company with concrete value in terms of time saved and growth gained.

7.3 Closing Words

This thesis highlights the importance of managing large amounts of data in a smart and effective way. As marketing channels, and the data with it, keep growing, it is not enough to just report on metrics – marketing teams need reports that answer the right business questions and make decision-making easier.

If I was to do this thesis again, I would spend more time preparing for the user research, instead of rushing ahead. When doing the first interview rounds with the stakeholders, I did not ask all the right questions and needed to get that information through additional discussions later. I could have saved mine and the stakeholders time with more thorough preparation. In hindsight, I would also make more time for going through the analysis and explaining my findings to the stakeholder team. I think that would have brought more insight and structure to the workshops.

All in all, I am satisfied with the outcome, especially since it brought clear value to the case company. After the final proposal was handed over, it was very rewarding to hear the stakeholders looking forward to working with the new reports.

When reporting is done well, it brings more clarity to the team and helps them guide their work in the right direction. In today’s marketing world, these things are key to working more efficiently and creating real value for both the business and its customers.

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WRITTEN STATEMENT on the use of AI-based tools in this thesis
by Sofia Härö, the student of BI Master´s Degree Programme

Thesis title: Developing a Centralized Reporting Plan for Customer Communication Channel to Drive Marketing Growth

According to the "Guidance for addressing the use of AI-based tools in studies at Metropolia Business School (for written submissions)" from August 2023, I make this statement on the use of AI-based tools in my submitted Master´s thesis.

1) Which AI-bases large language models or other AI-based tools I used:
   Chat-GPT.

2) In which parts of the thesis which tools were used, and for which tasks:
   Not in any particular part.

3) What portion of the text was helped with these tools, for each use:
   Not any particular part of the text.

4) Which prompts were asked, exactly *(please indicate the page number in the text where used):*
   "Give me synonym for word …"
   "Give me a definition of a word …"

5) Here, I describe what continues an ethical and reliable use of AI-based tools that I used:
   The recommended documents from "MBS Guidance" referred to above.

6) Here, I describe how ethically and reliably I used the AI-based tools in my thesis submission:
   AI was used minimally in the thesis, for example for quickly finding synonyms for repeating words like 'insight' or 'improve'. AI was also used to find definitions of some less used words, to see if they are used correctly in the context. AI was not used to generate text for the thesis.

This written statement makes part of my thesis and is done to help in evaluation and assessment.

26.4.2025 Espoo
(Data and place)

Sofia Härö
(Signature)

Interview questions for Operational Marketers (Data 1)

	Topic(s)	Questions	Field notes
1	Channel Structure	What different messages are sent from the customer communication channel? Who sends them?	
2		What is the volume of the different message categories?	
3		What are the primary objectives of the channel?	
4		From which platforms are the messages sent?	
5	Reporting and Metrics	What metrics and KPIs do you track in email and SMS channels?	
6		Which of these KPIs are the most important, and why?	
7		Are there any essential KPI missing?	
8		How often is reporting produced, and who are the primary users of the reports?	
9		In your opinion, is the current channel reporting sufficient?	
10		Could you describe the process of producing reports from these channels?	
11		What works well in the current reporting or reporting process?	

12		What are the biggest challenges or limitations in the current reporting or reporting process?	
13		Do you have any external reports or summaries outside of the platforms? If yes, what purpose do they serve?	
14	Optimization and Growth Opportunities	What tools or methods are currently used to optimize the performance of the channels?	
15		How are development or growth opportunities identified in these channels today?	
16		What data points or trends are used in channel optimization decisions?	
17		What challenges or limitations exist in the current optimization efforts?	
18		Are there gaps in the current reporting structure that limit your ability to evaluate channel performance and growth opportunities?	
19	Data Accessibility and Transparency	How easily can different teams or stakeholders currently access the data?	
20		How long does it take to retrieve and analyze data?	

21	Desired Improvements	If there were no resource constraints, what improvements would you like to see in reporting and optimization?	
22		Are there specific KPIs or metrics you would like to have more insights or visibility into?	
23		What would your ideal dashboard look like? What features would be the most helpful?	
24	Project Management	How would you like to be heard and involved during the project?	
25		Any other wishes regarding how the project is carried out?	
26	Additions	Is there anything else you would like to add?	

Interview questions for Marketing Managers (Data 1)

	Topic(s)	Questions	Field notes
1	Channel Structure	What different messages are sent from the customer communication channel? Who sends them?	
2		What is the volume of the different message categories?	
3		What are the primary objectives of the channel?	
4		From which platforms are the messages sent?	
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23		What would your ideal dashboard look like? What features would be the most helpful?	
24	Project Management	How would you like to be heard and involved during the project?	
25		Any other wishes regarding how the project is carried out?	
26	Additions	Is there anything else you would like to add?	