Understanding the Strategic Marketing Needs of Technical B2B Organisations and How They Cohere With the Upcoming Strategic Marketing Trends

Track choice - Strategic Marketing & Servitisation

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Purpose – The aim of this research is to identify the needs of technical (B2B) organisations in regards to strategic marketing and see how these cohere with the B2B strategic marketing trends. Eventually, general marketing and strategy consultants can use the identified relevant B2B strategic marketing trends in coherence with the needs of technical (B2B) organisations to potentially rethink their programs in the field of strategic marketing for technical B2B companies in order to possibly reignite the interest in strategic marketing.

Methods – This research consists out of a systematic literature review, empirical research and desk research. For the empirical research, 11 semi-structured interviews with managers & marketing employees of technical B2B organisations have been done. In the semi-structured interviews the needs of technical B2B organisations, in regards to strategic marketing, and the 8 marketing trends, that have been found in the literature, have been discussed.

Results – The results have shown that strategic marketing is a relevant topic within the industry, however, yet to be implemented by technical B2B organisations due to several reasons like capacity, measurability, "cold feet", product focus, company size and the conservativeness of the industry. Furthermore, the main marketing trends that have been established during the research are digitalisation, CSR (corporate social responsibility) and social media.

Research limitations – The research has been done through a qualitative approach, however, it would be interesting to test the 8 established marketing trends by using a quantitative approach. Furthermore, the generalizability of the research is also an issue due to the sample selection of Dutch technical B2B organisations in the network of a marketing consultancy.

Keywords - Strategic marketing, strategic marketing trends, technical b2b organisations, strategic marketing needs and view on strategic marketing.

1. Introduction

New strategic marketing trends, for example implementation of AI and servitization, arise from the different technologies that are being developed over time and create new strategic marketing opportunities for technical (B2B) organisations. However, the research of Setkute & Dibb has shown that there is currently a reluctance to implement strategic marketing in technical B2B organisations due to different reasons like generational differences, focus on relationships, limited resources and

limited marketing role (Setkute & Dibb, 2022). New strategic marketing trends can offer interesting opportunities and can reignite the interest of technical B2B organisations in strategic marketing.

There can be a lot of definitions regarding strategic marketing, however, one thing that is in common in all the definitions of strategic marketing is that it is long-term oriented (Yamagishi et al., 2021). First of all, it can be stated that strategic marketing is based on generating strategic plans for the future, which explains the main decisions and directions of a company, to capitalize on the needs and wants of it's customers (Mongay, 2006). Adding to that, according to Matušínská & Stoklasa, strategic marketing can be seen as the direction toward an ambiguous long-term goal based on a clear understanding of the external environment (Matušínská & Stoklasa, 2019). Strategic B2B marketing trends can be seen as the key changes in strategic direction within the B2B marketing landscape that impacts the way marketers should interact with their target audience (Gartner, 2021).

This research will compare the different B2B strategic marketing trends that have been found in the literature, through analysis of the recent volumes of industrial marketing management and journal of business and industrial marketing, with the needs of technical B2B organisations, in regards to strategic marketing. Hereby, managers and marketing employees of technical B2B organisations will be interviewed to uncover the most relevant strategic marketing trends for the industry and the view toward strategic marketing within the industry. Examples of the B2B strategic marketing trends that have been found in the literature are implementation of AI, social media presence, corporate social responsibility and servitization.

This research aims to identify the needs of technical (B2B) organisations in regard to strategic marketing and see how these cohere with the B2B strategic marketing trends that have been found in the literature. The research of Setkute & Dibb has shown that technical B2B organisations are reluctant to implement strategic marketing within their organisation. During this research, it will be investigated whether technical B2B organisations in the Netherlands are also reluctant to implement strategic marketing by testing the 8 marketing trends on the base of current application and future potential in the industry. Through this aim, the needs/view of technical B2B organisations in regards to strategic marketing will be revealed and which marketing trends are indeed relevant for the technical B2B organisations. Eventually, general marketing and strategy consultants can use the identified relevant B2B strategic marketing trends in coherence with the needs of technical (B2B) organisations to potentially rethink their programs in the field of strategic marketing for technical B2B companies to possibly reignite the interest in strategic marketing.

To come up with the final results and recommendations for this thesis, the central research question will be answered. The central research question is formulated as follows:

"How do the needs of technical (B2B) organisations, in regards to strategic marketing, cohere with the upcoming B2B strategic marketing trends?".

Furthermore, the research is divided into different sub-questions which are as follows:

- i. What B2B strategic marketing topics are a trend?
- ii. Which B2B strategic marketing trends are most relevant for technical (B2B) organisations?
- iii. What are the developments in regards to the view on strategic marketing in technical (B2B) organisations?
- iv. What are the needs of technical (B2B) organisations in regards to strategic B2B marketing?
- v. What is the current offering of marketing consultancies in regards to strategic marketing for technical (B2B) organisations?

Regarding the structure of the thesis, it was decided to split the methodology into two sections, one before the literature review and one after the literature review. The one section before the literature review is the methodology (part I) which consists of the methodology for marketing trend selection

and the literature review. The second section, which is the methodology (part II), is positioned after the literature review since this consists of the methodology for empirical research and desk research. The structure of this thesis can be found in table 1.1 to get a clear overview of the thesis.

1. Introduction	
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Table 1.1: Structure of the thesis

This thesis will potentially contribute to the strategy of general marketing and strategy consultants in regard to the upcoming strategic marketing trends. This research can provide general marketing and strategy consultants with relevant B2B strategic marketing trends, to keep their consulting services up-to-date with the current marketing trends. Furthermore, consulting agencies can use the results of the research to base their future programs, communications and services on.

2. Methodology (part I)

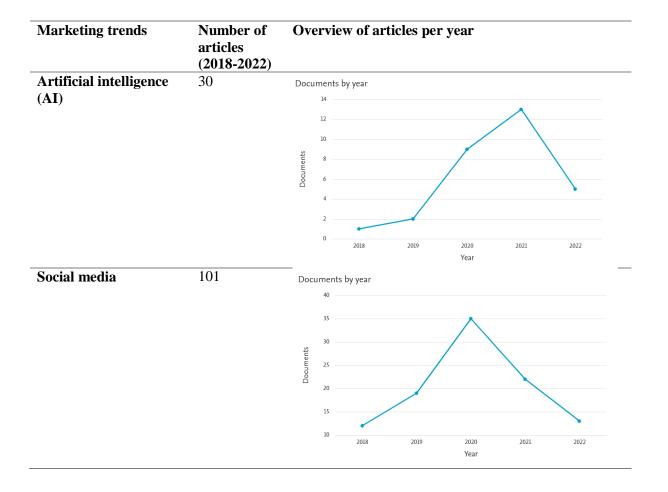
2.1 Methodology for marketing trend selection

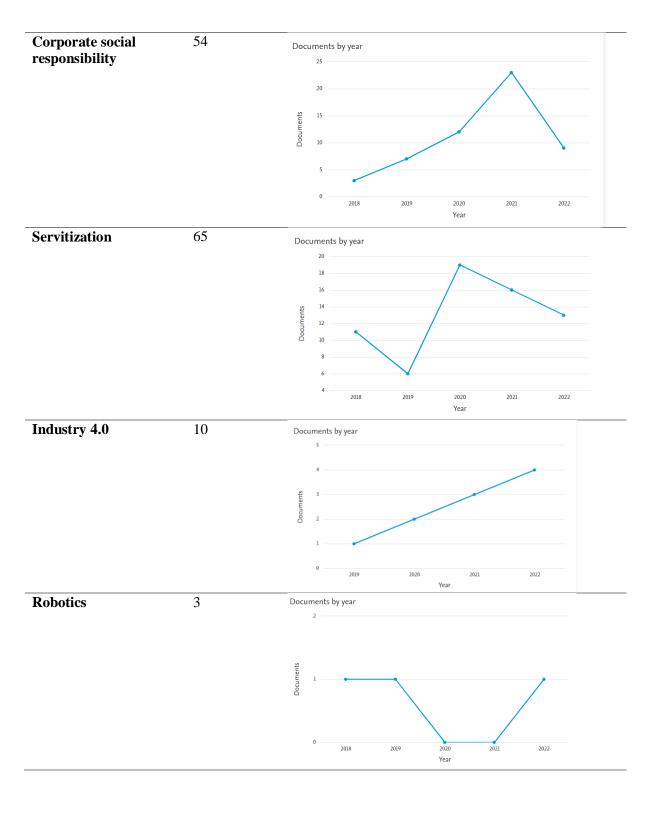
For this research, the articles in the period of 2018-2022 from Industrial Marketing Management (IMM) and Journal of Business and Industrial Marketing (JBiM) have been scanned to find the B2B strategic marketing trends for this research. Through scanning the articles 10 trends were found in the Industrial marketing management and Journal of Business and industrial marketing journals between 2018-2022, which can be found in table 2.1. For a marketing trend to be eligible for this research, it was decided that there should be 10+ papers published in the journals, IMM and JBiM over the period of 2018-2022 regarding a marketing trend. Therefore, Scopus was used to get a clear overview of the number of papers that were published regarding a marketing trend, to select the marketing trends for this research. The keyword search that has been used TITLE-ABS-KEY ("MARKETING TREND INPUT") AND (LIMIT-TO (EXACTSRCTITLE, "Industrial Marketing Management") OR LIMIT-TO (EXACTSRCTITLE, "Journal Of Business And Industrial Marketing")) AND (LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018)) AND (LIMIT-TO (LANGUAGE, "English")). For the MARKETING TREND INPUT, table 2.1 has been used. Eventually 8 trends were selected based on the requirement of 10+ papers published in the journals which were AI, social media, corporate social responsibility, servitization, industry 4.0, big data analytics, co creation and service ecosystems.

	Marketing	trends	Keywords #	‡1
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Artificial intelligence (AI)	"artificial intelligence" OR AI OR "machine learning"
Social media	"social media" OR "social networks" OR Instagram OR Twitter OR Facebook
Corporate social responsibility	"social corporate responsibility" OR "corporate social governance" OR sustainability
Servitization	servitization OR servitisation
Industry 4.0	"industry 4.0" OR "industry 5.0" OR "smart industry"
Robotics	"robotics" OR "robots" OR "robot"
Big data analytics	"big data analytics" OR "data analysis" OR "data mining"
Cybersecurity	"cybersecurity" OR "cyber security" OR "data security"
Co-creation	"co-creation" OR "co-build" OR "co-manufacture"
Service ecosystems	"digital ecosystem" OR ecosystem OR "service ecosystem"

Table 2.1: Keywords for "marketing trend input" via Scopus





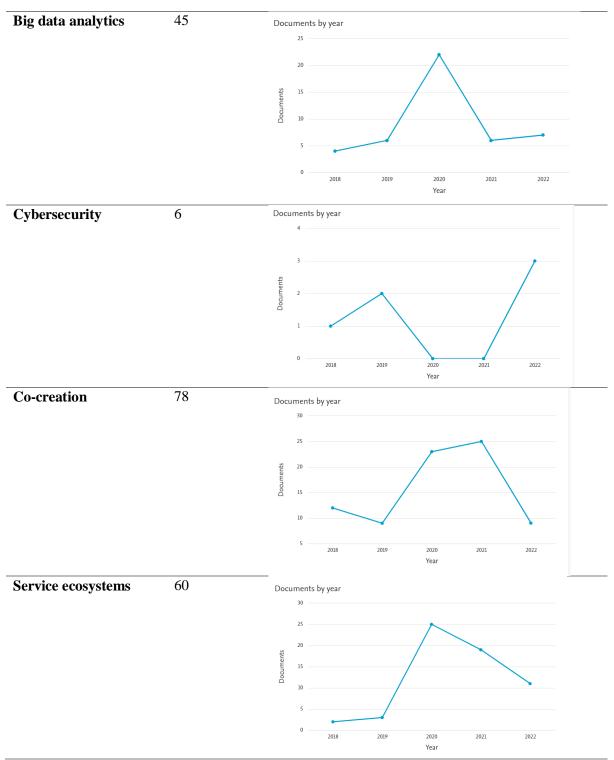


Table 2.2: B2B strategic marketing trend research, through IMM and JBiM (scopus)

2.2 Methodology for literature review

The literature review has been done by doing keyword research via Scopus on each individual B2B strategic marketing trend. The keyword searches that have been done for the individual trends are as follows, (TITLE-ABS-KEY ("MARKETING TREND INPUT") AND TITLE-ABS-KEY (b2b OR "business-to-business") AND (LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018)) AND (LIMIT-TO (LANGUAGE, "English")).

Concepts	Keywords #1	Keywords #2
Artificial intelligence (AI)	"artificial intelligence" OR AI OR "machine learning"	B2B OR "business-to-business"
Social media	"social media" OR "social networks" OR Instagram OR Twitter OR Facebook	B2B OR "business-to-business"
Corporate social responsibility	"social corporate responsibility" OR "corporate social governance" OR sustainability	B2B OR "business-to-business"
Servitization	servitization OR servitisation	B2B OR "business-to-business"
Industry 4.0	"industry 4.0" OR "industry 5.0" OR "smart industry"	B2B OR "business-to-business"
Big data analytics	"big data analytics" OR "data analysis" OR "data mining"	B2B OR "business-to-business"
Co-creation	"co-creation" OR "co-build" OR "co-manufacture"	B2B OR "business-to-business"
Service ecosystems	"digital ecosystem" OR ecosystem OR "service ecosystem"	B2B OR "business-to-business"
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Table 2.3: Keyword research regarding strategic marketing trends for B2B organisations

3. Literature review

3.1 Strategic marketing

3.1.1 Definition

The definition of strategic marketing that will be used during this research has been based on the literature of Yamagishi et al., Mongay, and Matušínská & Stoklasa and is formulated as follows "strategic marketing is the long-term orientation towards and ambiguous long-term goal based on generating strategic plans for the future, which explain the main directions of a company.". Strategic marketing decisions can be seen as the marketing decisions of a firm that are crucial to the long-term performance of the firm (Varadarajan, 2017). Furthermore, the characteristics of strategic marketing decisions can be seen in table 3.1.

Chara	cteristic	Definition
1.	Resource commitments	Strategic marketing decisions are large in magnitude, long-term oriented, spread over a longer time period, emphasis on the achievement of competitive cost and/or differentiation advantage, and irreversible/difficult to reverse.
2.	Trade-offs	Strategic marketing decisions will mean that other courses of action would be less focused on.
3.	Higher level in an organisation	Strategic marketing decisions are made at the highest level of the organisation (top management) or at the higher levels within the marketing department

Table 3.1: Characteristics of strategic marketing decisions (Varadarajan, 2017)

Strategic marketing has become an area of major interest for organisations, due to the fast-changing environment (Matušínská & Stoklasa, 2019). There are 4 questions which are fundamental to strategic marketing, which are; Where are we now?, How did we get there?, Where do we want to go? And How do we get there? (Matušínská & Stoklasa, 2019). The beforementioned questions give a clear strategic direction and evaluate the current position of an organisation in regards to it's vision. There are some fundamental differences between marketing management and strategic marketing which is essential for this research. The difference between marketing management and strategic marketing can be found in table 3.2.

	Marketing management	Strategic marketing
Objectives	Short-term	Long-term
Activities	Creation, communication, pricing and promotion of goods	Analysis of market, segmentation and competitor offerings
Level of management	Lower/middle management	Top management
Magnitude	Small	Large
Business strategy	Tactical	Strategic

Table 3.2: Differences between strategic marketing and marketing management (D'Andrea & Luce, 2021)

3.1.2 View on strategic marketing

Previous research has shown that many organisations in the technical B2B industry have been reluctant to implement strategic marketing, due to lack of time & training, money, unfamiliarity and negative views about the usefulness (Michaelidou et al., 2011). Furthermore, technical B2B organisations seem to be reluctant to use specific topics like social media and digital marketing. According to the research of Setkute & Dibb, the key reason for the preference for traditional face-to-face communications is the underappreciation of social media and the uncertainty regarding how it can support the brand in technical B2B organisations (Setkute & Dibb, 2022). Adding to that, most technical B2B organisations lack the knowledge & resources and find it difficult to measure return on investment when implementing digital marketing (Setkute & Dibb, 2022).

Setkute & Dibb has done 14 semi-structured interviews with small SMEs regarding the barriers to implementing digital marketing (Setkute & Dibb, 2022). The main reasons for a lack of implementation that were found in these semi-structured interviews were generational differences, focus on relationships, limited resources and limited marketing role (Setkute & Dibb, 2022). Adding to that, the research of Chen et al. have done research into the barriers to implementing AI in the organisation (Chen et al., 2020). It became clear that the main barriers to implementing AI are lack of motivation, resistance to AI adoption, complexity and information security (Chen et al., 2020).

3.2 Marketing trends

The following marketing trends have been defined through keyword research via Scopus, which are AI (artificial intelligence), social media, CSR (corporate social responsibility), servitization, industry 4.0, BDA (big data analytics), co-creation and service ecosystems.

3.2.1 Artificial intelligence (AI)

There are several different definitions of artificial intelligence (AI), however, the most widely accepted definition is "Artificial intelligence is the intelligence demonstrated by machines, which can learn/understand how to perform a task that would normally require human intelligence" (de Bruyn et al., 2020). Artificial intelligence (AI) can be used in the B2B environment by extracting information from the huge amount of data which would normally be rather difficult, if not impossible (R. Han et al., 2021). Things that can be improved by AI are, for example, the management of data, daily operations and marketing strategies (R. Han et al., 2021). Decision support systems and machine learning techniques are great examples of AI that are already being used extensively by B2B

companies, however, there are so many more opportunities for the use of AI in B2B marketing (R. Han et al., 2021). AI allows organisations to significantly improve the efficiency of processes (R. Han et al., 2021). According to Chen et al, 9 aspects of B2B marketing could benefit from the use of AI, which are product & advertisement recommendation, transaction negotiations, personalised service, order optimisation, market segmentation, marketing data & strategy analysis, pricing and customer relationship management (Chen et al., 2022).

Three types of AI can be used in B2B strategic marketing, which are decision support AI, process automation AI and customised service provision AI (Chen et al., 2022). Let's start with the decision support AI, which is a system designed to solve problems based on available data instead of the instincts of managers (Chen et al., 2022). This type of AI contains the knowledge to improve the efficiency of managers but also improves the accuracy when segmenting customer groups, due to the extensive knowledge that this type of AI has available (Chen et al., 2022). Furthermore, decision support AI can help organisations avoid wasting valuable resources on defecting customers by predicting customer churn (Chen et al., 2022). The second type of AI is process automation AI, which is used to automate different marketing processes. This type of AI is way more efficient when it comes to the collection and processing of data, while also reducing costs by replacing the human that would normally do these jobs (Chen et al., 2022). Last of all, the customised service provision AI can provide different customers with different personalised services to improve customer relations (Chen et al., 2022). This type of AI can assist customers by finding the appropriate products that they would be interested in which can ultimately help increase sales and increases the accuracy of targeting in advertisement (Chen et al., 2022).

3.2.2 Social media

Social media is already being extensively used in the B2C environment for strategic marketing purposes to attract interest/maintain the interest of customers and has completely transformed communication channels. For B2B marketing this is a little bit different, B2B organisations do use LinkedIn for example to communicate messages to their customers however are yet to investigate the other social media platforms (Dwivedi et al., 2021). Social media can play a huge part in managing customer relations through communication via a social media platform (Dwivedi et al., 2021). Through the exposure of businesses on social media, it can improve business performance and can also help in business decision processes. According to the research of Dwivedi et al., 82% of B2B buyers mentioned that social media has an impact on their purchase decision (Dwivedi et al., 2021). Social media can be used to share content regarding the production processes within a company to attract interest from current/future customers. Examples of social media platforms that can be used by B2B companies are LinkedIn, Facebook, Instagram and Twitter.

According to Gruner & Power, research has shown that more than 90% of B2B organisations are using social media, however, only 12% feel that they are using it effectively (Gruner & Power, 2017). Social media can be used in various ways for example, the most common use is to build customer relationships, however, it can also be used as a sales technique (Gruner & Power, 2017). This can be validated by the definition that Vasudevan et al. use regarding B2B social media usage, which is that B2B companies use social media as communication to improve customer relationships, build brands and support sales as a service, product information, seeking and recruiting tool (Vasudevan et al., 2018). B2B social media can also be used to gain valuable information from customers or network with customers (Vasudevan et al., 2018). Furthermore, social media is also being used for the acquisition of future customers by letting the potential customers identify themselves with the company through the social media appearance of the promoting organisation (Vasudevan et al., 2018).

3.2.3 Corporate social responsibility (CSR)

Corporate social responsibility is the responsibility of a company to make a positive influence on the world, through economic, societal and environmental aspects (Glavas, 2016). Recent research has

shown that CSR has been recognized as one of the most important marketing activities for maintaining relationships with the customers of an organisation (S. L. Han & Lee, 2021a). CSR in B2B markets can be of great importance when selecting a supplier that should have the same values as the buying company in regards to sustainability for example. Research has already shown that CSR activities have a positive effect on trust and relationship performance between organisations (S. L. Han & Lee, 2021a). The usage of corporate social responsibility is becoming way more important for all the stakeholders of an organisation (S. L. Han & Lee, 2021b). According to S.L. Han & Lee, an organisation it's growth is determined by the maintenance of stakeholder relationships (S. L. Han & Lee, 2021b). The importance of CSR is already showcased by a large number of international companies. When taking a look at the Fortune 500 companies, it can be seen that 90% of the companies already have a CSR activity plan and 50% of the companies are already publishing annual CSR reports (S. L. Han & Lee, 2021b).

3.2.4 Servitization

Servitization has been one of the major developments in the B2B markets that have gone hand in hand with the trend of digitalization (Hofacker et al., 2020). It can be seen as offering a service alongside the product to maintain a relationship with a customer (Hofacker et al., 2020). Also, servitization can be a great way of differentiating yourself from competitors by offering a little bit extra to the customer. According to Hofacker et al., organisations in the B2B industry are typically known for having a product-centred approach (Hofacker et al., 2020). However, servitization has caused B2B firms to switch from a product-centred approach to a service-centred approach (Hofacker et al., 2020). Examples of servitization in B2B markets are installation, maintenance, support distribution and training (Graça, 2021). Servitization offers organisations the potential to improve the customer closeness with an organisation and the offer of a service to complement the product that is being sold by an organisation (Hakanen et al., 2017). The goal of implementing servitization is to sell an integrated product to the customer to deliver value-in-use for the customers (Hakanen et al., 2017). Recent years have seen customer interaction changing from a transaction-based to a relationship-based interaction, which has accelerated the use of servitization.

3.2.5 Industry 4.0

Industry 4.0 can be described as the fourth industrial revolution that has occurred in the industry. According to McKinsey, industry 4.0 can be described as the digitalization of the manufacturing industry, which consists of putting sensors in products, taking care of cybersecurity and analysing relevant data (McKinsey, 2015). Industry 4.0 is driven by four different kinds of clusters, which are data, analytics & intelligence, human-machine interaction and digital-to-physical conversion (McKinsey, 2015). Industry 4.0 can have a huge effect on the operations of a company by improving productivity through enabling manufacturers to get data from the sensors that are implemented in the machine (McKinsey, 2015). This allows the organisation to analyse the data and see how the machine can be more productive (McKinsey, 2015). Industry 4.0 has contributed to the improvement of industrial value creation, both for individual companies and the whole supply chain (Veile et al., 2022). According to Veile et al., industry 4.0 has significantly improved efficiency in the value creation process & individualization and quality improvements in regards to the value offerings of an organisation (Veile et al., 2022). In addition, according to Zheng et al., industry 4.0 has improved production processes, optimised operational performance and developed products and services (Zheng et al., 2021). Technologies like for example, IoT (internet of things) and cyber-physical systems are central to Industry 4.0 (Veile et al., 2022). This is further explained by the paper of Bonamigo & Frech (2020). Where it is mentioned that there are 9 technologies which are central to industry 4.0, which are IoT, cybersecurity, horizontal & vertical system integration, cloud, big data analytics, simulation, additive manufacturing, autonomous robots and augmented reality (Bonamigo & Frech, 2020). This 4th industrial revolution has caused a transformation from machine dominant manufacturing to digital manufacturing (Oztemel & Gursey, 2020).

3.2.6 Big data analytics (BDA)

Big data analytics is one of the most important resources of a company nowadays. It can be used to create business knowledge and help to get information to understand the processes of an organisation and the business environment (Hallikainen et al., 2020). This eventually helps the company in the decision-making process, since it helps companies make better-informed decisions and can also be used for the optimization of a business process or a better understanding of who the customer now actually is (Hallikainen et al., 2020). Furthermore, big data analytics can be used as a strategic asset to improve the internal and external organisations (JIWAT & Zhang, 2022). Big data analytics can obtain real-time data to provide information to the firm. An example of this can be customer data, which can be used to generate valuable insights regarding the customers of an organisation (Hallikainen et al., 2020). According to JIWAT & Zhang, big data analytics can help companies identify opportunities in the market, enhance internal operations, develop new products and services, improve decision making, and enhance financial performance (JIWAT & Zhang, 2022). In accordance to this, Ram Excellia et al. describe that big data can help companies identify new business opportunities, improve product innovation, profile customers and enhance decision-making (Ram Excelia et al., 2020). The most common reason for a lack of implementation of BDA (big data analytics) is the lack of knowledge regarding what type of data can be valuable and how to collect this type of data (JIWAT & Zhang, 2022). According to Ram Excellia et al., the reason for a lack of BDA implementation can be explained by three factors which are, managerial, strategic and technological factors (Ram Excelia et al., 2020). Examples of these factors are the availability of appropriate BDA technologies, costs vs benefit consideration and view on BDA not being a strategic tool so not included in long-term goals (Ram Excelia et al., 2020). Big data analytics can be used in very different departments of an organisation like digital marketing, finance, logistics, e-commerce and manufacturing (JIWAT & Zhang, 2022). However, literature agrees that BDA is already extensively being used in the B2C industry while the B2B industry still lags behind (JIWAT & Zhang, 2022) (Ram Excelia et al., 2020).

3.2.7 Co-creation

Co-creation can be described as the joint creation of value between companies in the B2B industry, where two companies work towards the same goal (Li et al., 2021). According to Watanabe, cocreation can be defined as creating more value when an organisation works together with its customers than when an organisation produces and delivers its services independently (Watanabe, 2019). The reason for co-creation could be to provide a superior product by combining resources. To offer a superior product companies should understand their customer, to efficiently make use of cocreation (Li et al., 2021). Co-creation can help a lot with innovation by combining resources to both benefits each other and create a product/service that satisfies the customer (Li et al., 2021). Cocreation can be done in combination with the customer or with other competitors. The reason for cocreation can be that organisations do not have the knowledge/resources in-house so they need to seek business partners who do have this knowledge/resources, to cooperate (Bonamigo et al., 2020). The change from a product dominant logic (PDL) to a service-dominant logic (SDL) is central to the adoption of co-creation (Bonamigo et al., 2020). According to Bonamigo et al., the benefits of cocreation are cost reduction, development of new services, products & systems and the enhancement of services (Bonamigo et al., 2020). Furthermore, the study by McKinsey, found that 90% of the organisations were eager to integrate the opinions of customers into their core processes, while actually, only 12% did this (Pathak et al., 2021).

3.2.8 Service ecosystems

Over the last decades, value creation has shifted from individual company value creation to the creation of value through a complex service ecosystem (Hein et al., 2019). Service ecosystems can be described as a system where companies interact to create value with each other (Valdez-De-Leon, 2019). The main goal of an ecosystem is to connect companies via this ecosystem and eventually

create value for the customer (Valdez-De-Leon, 2019). According to Hein et al., service platforms are the centre of an ecosystem and facilitate the supply and demand of the market (Hein et al., 2019). This means that companies are switching from creating value through their organisation to creating value through a platform in cooperation with other organisations (Valdez-De-Leon, 2019). According to McKinsey, companies that participate in a digital ecosystem are more likely to have higher earnings than companies that do not participate in a digital ecosystem (McKinsey, 2015). The biggest risk of not participating in a digital ecosystem is that it could be that competitors do choose to participate, which means that a company gets left behind (Valdez-De-Leon, 2019). Internet of Things platforms are great examples of digital platforms in the B2B industry, which enable the provision of digital services in the technical B2B industry based on machine data (Benz et al., 2021).

4. Methodology (part II)

The research consists of one central research question and five sub-research questions which have been used to answer the central research question. The overview of the methods that have been used for each research question can be found in table 4.1.

Resear	ch question	Method
1.	What B2B strategic marketing topics are a trend?	Systematic literature review
2.	Which B2B strategic marketing trends are most relevant for technical (B2B) organisations?	Empirical research
3.	What are the developments in regards to the view on strategic marketing in technical (B2B) organisations?	Empirical research
4.	What are the needs of technical (B2B) organisations in regards to strategic B2B marketing?	Empirical research
5.	What is the current offering of marketing consultancies in regards to strategic marketing for technical (B2B) organisations?	Desk research

Table 4.1: Overview of methods

4.1 Methodology for empirical research

The data has been collected through semi-structured interviews that have been based on the needs of technical B2B organisations in regard to strategic marketing and the 1 8 marketing trends that have been found in the literature. Semi-structured interviews allowed the interviewer to ask follow-up questions to acquire more relevant data. The sampling criteria for the semi-structured interviews were 10-15 interviews that have been done with a manager or marketing employee of a technical (B2B) organisation in the Netherlands.

For the interviews and results, the marketing trends have been divided into 4 categories which are; digitalization trends (AI and big data analytics), network trends (co-creation and service ecosystems), value-adding trends (servitization and industry 4.0) and customer engagement trends (social media and corporate social responsibility). The reason for dividing the marketing trends into 4 categories for the interview is to keep the interview within the one-hour mark and not have to rush through certain relevant topics due to having 4 categories instead of separately discussing all 8 marketing trends. The interviews have been used to go further in-depth on the industry's vision regarding the different

marketing trends and strategic marketing. The interview questions that have been created to successfully conduct the interviews can be found in table 4.2.

Introductory questions	1. Could you give a brief introduction about yourself and your
_	position?
N# 1 4'	2. Can you give a brief introduction about the company?
Marketing	3. Can you describe which marketing activities are taking place
_	in your company?
	4. Is there a marketing department within your company? If
_	yes, how is it organised?
C44	5. Who makes the marketing decisions?
Strategic marketing	6. How important is strategic marketing to your business?
_	7. Which strategic marketing activities are carried out at your company?
	8. What opportunities do you see in the field of strategic marketing for technical B2B companies?
_	9. What are the factors that hold you back from using strategic marketing?
_	10. Do you think your company should focus more on strategic marketing?
	11. What do you think is the main reason customers choose your company?
	12. Does your company need strategic marketing?
	13. Does your company value the short-term or long-term more?
	14. Is your company concerned with strategy? If so, in what way?
_	15. What is your company missing in terms of marketing?
Marketing trends general	16. What do you see as important trends in the technical B2B
	industry right now? Which trend is most relevant to your company?
Digitalization trends (AI	17. Are you familiar with AI and big data analytics?
and Big data analytics)	18. Have you already started with some form of AI of big data
, ,	analytics? What are your company's experiences with AI and big data analytics?
_	19. Have you heard from customers and/or competitors whether they use AI or big data analytics?
	20. How would you implement AI or big data analytics in your organisation?
Network trends (Co-	21. Are you familiar with co-creation and service ecosystems?
creation and service	22. Have you already started with some form of co-creation or
ecosystems)	participation in an service ecosystem? What are your
	company's experiences with co-creation and service
_	ecosystems?
	23. Have you heard from customers and/or competitors whether
	they use co-creation or participation in an service
_	ecosystem?
	24. How would you implement co-creation or participation in an service ecosystem into your organisation?
Value-adding trends	25. Are you familiar with servitization and industry 4.0?
(Servitization and	26. Have you already started with some form of servitization or
Industry 4.0)	industry 4.0? What are your company's experiences with servitization and industry 4.0?
	• • • • • • • • • • • • • • • • • • • •

	27. Have you heard from customers and/or competitors whether they use servitization or industry 4.0?
	28. How would you implement servitization or industry 4.0 into your organisations?
Customer engagement trends (Social media and	29. Are you familiar with social media and corporate social responsibility?
Corporate social responsibility)	30. Have you already started with some form of social media or corporate social responsibility? What are your company's experiences with social media and corporate social responsibility?
	31. Have you heard from customers and/or competitors whether they use social media or corporate social responsibility?
	32. How would you implement social media or CSR into your organisation?

Table 4.2: Interview questions, semi-structured interviews

The interviews have been done with managers or marketing employees of technical B2B organisations that have been found through the network of a marketing consultancy. The companies are selected based on operating in the B2B industry, providing technical products and located in the Netherlands. Due to the previous literature suggesting that technical B2B organisations are less focused on strategic marketing these organisations were chosen to interview, to investigate their current stance regarding strategic marketing and the upcoming strategic marketing trends. The interviews were done in Dutch for the interviewees to answer the questions without having any language barriers. Furthermore, the interviews were done online via teams due to the travel distance and the time limitations of the managers and employees. Teams meeting has given a great opportunity to record the interviews and speak face-to-face with the interviewees. An overview of the interviewees can be found in table 4.3.

	Function	Industry
Interviewee A	Global sales manager	Special cable
Interviewee B	CEO	Food machine builder
Interviewee C	Marketing and sales manager	Plastic and chemical
Interviewee D	CEO	Online industry publisher
Interviewee E	Head of marketing	Software/hardware producer machines
Interviewee F	Director of business development	Industrial and IT housing cabinets
Interviewee G	Sales and marketing manager	Industrial 3D print
Interviewee H	Marketing engineer	Industrial automation
Interviewee I	Commercial technical manager	Industrial automation and motion control
Interviewee J	Head of sales	Anchoring systems
Interviewee K	Business development	Software consultancy

Table 4.3: Interviewee information

The data has been analysed by an inductive approach which is the Gioia method. The Gioia methodology is a qualitative approach that uses 1st order concepts, 2nd order themes and aggregate dimensions to develop results from the research (Gioia, 2012). The 1st order concepts consist of quotes from the semi-structured interviews and based on these quotes the 2nd order themes and aggregate dimension have been built. The interviews have been transcribed manually to do the first analysis of the data during the transcription. The interviews have been transcribed in Dutch, however, the quotes were eventually translated to English.

The first analysis of the data was done during the transcribing period to filter the most relevant data for this research. After this period of transcribing, the 1st order concepts were created based on the quotes of the interviewees, where the interviewees were labelled alphabetically for them to stay anonymous. Subsequently, the 2nd order themes were created based on the 1st order concepts that

could be matched, to eventually create the aggregate dimensions. Based on the Gioia table, the results were eventually interpreted by taking a look at the aggregate dimensions & 2nd order themes and 1st order concepts. Table 4.4 shows a clear overview of what the coding scheme using the Gioia methodology will look like.

1 st order concepts	2 nd order themes	Aggregate dimensions
••		
••		
••	··	
••		

Table 4.4: Coding scheme Gioia methodology, template

4.2 Methodology for desk research

There are multiple different providers of technical marketing education in the Netherlands. The technical market education institutions that will be researched during the desk research are consultancies, NIMA-B and C education and business schools. All the different categories have been analysed individually to take a look at the different offerings in regard to technical B2B strategic marketing. All the education that will be analysed needs to apply to technical B2B strategic marketing. The keywords that have been used for the research are "B2B marketing academy Nederland", "industrial marketing academy Nederland", "NIMA B en NIMA C B2B marketing" and "business schools B2B marketing Nederland". During the desk research, the websites of the different institutions have been analysed based on their offerings in regard to different marketing topics.

5 Results

The results of 5.1 and 5.2 have been based on the interview findings which have been visualised by using the Gioia methodology in tables 5.1 and 5.8. The results of 5.3 have been found through desk research, where multiple strategic marketing education institutions have been analysed.

5.1 Strategic marketing needs

keting
keting
keting
keting
Strategic marketing

Do not have the capacity for more marketing activities in regards to people	Capacity	
	Capacity	
Unable to double growth since		
the capacity cannot handle this		_
Impact of marketing is	Measurability	
extremely difficult to measure		_
Companies get cold feet since		
it is something unknown	Cold feet	
Employees do not have the	-	
knowledge regarding		Reasons for not implementing
marketing		strategic marketing
Industry is still thinking too		_
much about the product	Product focus	
Focus lies more on product and	-	
customer relations		
Smaller companies fail to adapt		_
to marketing while bigger		
companies are already using it	Size of company	
Amount of marketing depends	1 2	
on the size of company and if it		
is globally active		
Industry is falling behind in		_
regards to marketing		
Technical B2B organisations	Conservative industry	
are still too "old school"	Conservative industry	
The industry is too	-	
conservative		
		_
One of the biggest problems in	Ctoff about an	
the industry is staff shortage	Staff shortage	
There is a shortage of educated		
staff		

Table 5.1: Gioia methodology, strategic marketing needs

The interviews have shown that strategic marketing is becoming a more relevant topic in technical B2B organisations, however, it can be said that companies are still yet to implement it in their organisations. Technical B2B organisations seem to know the relevance of strategic marketing however due to different reasons are yet to implement it within their organisation. The interviewees have also indicated that there is a definite need for strategic marketing. Furthermore, the technical B2B organisations have indicated that strategic marketing has only become a relevant topic over the last couple of years since there was no need for strategic marketing a few years ago.

[&]quot;Strategic marketing is becoming more important, however, companies are yet to implement it into their organisation" – (CEO, Online industry publisher)

[&]quot;Our company has a need for strategic marketing, however, we are yet to implement it within our organisation" – (Head of sales, Anchoring systems)

[&]quot;At first, we just tried to launch some campaigns and see how this would go, now we are focusing more on creating a long-term plan in regards to marketing." – (Business development, Software consultancy)

Also, the interviews have shown that some technical B2B organisations are outsourcing their marketing activities. The reasons that were mentioned for the outsourcing are the lack of knowledge regarding marketing and capacity problems. It became clear that multiple B2B organisations hire a marketing agency to fulfil their marketing duties which most of the time include managing social media accounts.

"We have an external person who works on our marketing by doing LinkedIn and creating videos" – (CEO, Food machine builder)

"An external bureau is currently being used for the marketing activities" – (Marketing and sales manager, Plastic and chemical)

Table 5.3: Exemplary quotes regarding the outsourcing of marketing activities by Dutch technical B2B organisations

The marketing channels that are currently being used by technical B2B organisations have shifted more towards online instead of using the traditional print media. However, print media is still being used in the technical B2B industry due to the conservativeness of the industry. Examples of online marketing channels that are being used are social media, marketing automation, google ads and LinkedIn advertising.

"We have started doing more with online marketing, however, we are still using print media since this is still very popular in the industry" – (Director of business development, Industrial and IT housing cabinets)

Table 5.4: Exemplary quote regarding the marketing channels that are being used by Dutch technical B2B organisations

It also seems that the focus has shifted from product-oriented to more service-oriented within technical B2B organisations. This shift towards service-oriented goes hand in hand with organisations being more long-term oriented. Technical B2B organisations seem to have realised the importance of service and delivering a total solution to the customer instead of focusing solely on the quality of the product. This can indicate a switch to strategic marketing instead of solely focusing on the quality of the product.

"We are focusing more on the services around the product instead of focusing solely on the product" – (Director of business development, Industrial and IT housing cabinets)

"We are extremely long-term oriented and are focusing intensively on strategy" – (Sales and marketing manager, Industrial 3D print)

Table 5.5: Exemplary quotes regarding the switch from product-oriented to service-oriented in Dutch technical B2B organisations

Several reasons were found for not implementing strategic marketing, however, the most common reason that was mentioned in the interviews was the lack of capacity to implement strategic marketing. Due to the high amount of work on daily operations, there were no employees available to work on strategic marketing. Other reasons for the lack of implementation of strategic marketing are cold feet, difficult to measure, product focus, size of the company, conservative industry and staff shortage.

Several interviewees indicated that a reason for not implementing strategic marketing is cold feet, which means that companies are afraid to implement strategic marketing due to a lack of knowledge for example. Another reason for not implementing strategic marketing is the difficulty of measuring the results of strategic marketing. For example, when hiring a new sales employee, it can be measured

how many sales were completed, but when using marketing activities it is almost impossible to measure whether an extra sale was completed due to the marketing activities. Also, the focus still lies hugely on the product instead of services within the industry which hinders the implementation of strategic marketing. The research has also shown that the size of the company affects whether an organisation makes use of strategic marketing. Interviewees indicated that larger companies have already implemented strategic marketing while smaller companies are yet to implement strategic marketing due to capacity problems.

"Capacity is a factor why we are focusing less on strategic marketing since I am currently doing marketing on my own" – (Commercial technical manager, Industrial automation and motion control)

"More reasons for the lack of implementation of strategic marketing is that the impact of marketing is extremely difficult to measure and there is not enough capacity" – (Sales and marketing manager, Industrial 3D print)

"The reasons for companies to not implement strategic marketing are cold feet for something unknown and resources (time and money)" – (CEO, Online industry publisher)

"The industry is still thinking too much about product and less about the services, which hinders the implementation of strategic marketing" – (Sales and marketing manager, Industrial 3D print)

"Larger companies are implementing strategic marketing and are putting together a strategical plan regarding marketing, while smaller companies are doing marketing based on gut feeling and the own experiences that they have" – (CEO, Online industry publisher)

"The current reason for not implementing strategic marketing is the lack of knowledge and experience and the staff shortage." – (Business development, Software consultancy)

Table 5.6: Exemplary quotes regarding the reasons for not implementing strategic marketing in Dutch technical B2B organisations

Furthermore, the interviews have also shown another main reason for not implementing strategic marketing within technical B2B organisations is due to the industry still being too conservative. Multiple interviewees have mentioned that the industry is falling behind in regard to marketing due to the conservativeness of the industry and the people working within the industry.

"There are still too many technical B2B organisations who are too "old school" – (CEO, Online industry publisher)

"Our industry is conservative and is falling behind on the rest of the world" – (**Head of marketing**, **Software/hardware producer machines**)

"The B2B is way more conservative, a conservative branch and industry, however, this offers opportunities to other companies in regards to online" – (Marketing engineer, Industrial automation)

"Lots of older people in the industry are not thinking about digital marketing yet since they are more "old school"." – (Commercial technical manager, Industrial automation and motion control)

"When I am looking at the industry, I see an extremely conservative industry." – (Head of sales, Anchoring systems)

Table 5.7: Exemplary quotes regarding the conservativeness of the industry

5.2 Strategic marketing trends

3.2 Strategic marketing t		A acres - 4 - 32 *
1st order concepts	2nd order themes	Aggregate dimensions
Organisations are pushing		
towards online and	D' '- 1' - '	
digitalisation	_ Digitalisation	
The marketing trends are		
especially regarding		
digitalisation		
Social media is one of the		
biggest marketing trends in the	Social media	
industry	_	General
A trend that has been seen is		
the use of LinkedIn		
Important topics are		
sustainability, renewability,		
efficient energy-usage and	Sustainability	
environmental friendly	•	
Sustainability will have an	_	
impact on the future of our		
work		
AI is currently not being used		
within the company however		
big data analytics is being used		
•	Company	
extensively	Company	
AI and big data analytics are		
being used through marketing		AT 0.1: 1 . 1 .:
automation	_	AI & big data analytics
Predictive maintenance is		
being used through AI		
Preventive maintenance is the	Relevancy	
future	_	
AI & big data analytics is not		
relevant for our company due		
to being a rather small		
company	_	
AI & big data analytics is	_	
being invested heavily in		
AI & big data analytics is	_	
becoming more relevant,		
especially dashboarding and		
predictive maintenance		
AI is rarely being used in the		
industry due to		
conservativeness	Industry	
AI & big data analytics is	_ 11144541 9	
being used in the industry		
-		
however not enough		
Co-creation is being used to		
connect companies through		
demand and needs	_	
There is a need for co-creation		
in our industry	Company	

Co-creation is being looked at		
in order to create more value		
for customers	_	
Ecosystems are not being used		
and would not know how to		Co-creation and service
use it in the industry		ecosystems
Ecosystems are not relevant for		_
the industry	Relevancy	
I do not see a future for service	_	
platforms in the technical B2B		
industry		
There have been some		-
platforms but they did not	Industry	
make it in the industry		
Co-creation is being used often	_	
within the industry		
The mindset is still product		
centred which prevents the		
implementation of servitization		
We rarely do anything on	_ Company	
paper since our whole	Company	
company is digitalised		
I do not know how to	_	
implement servitization within		Servitization and industry 4.0
our organisation		Scrvittzation and madstry 4.0
Long-term service		
relationships could be an		
opportunity for companies	Delever or	
Servitization is a necessity	Relevancy	
where preventive maintenance,		
remote access, digital twin,		
asset management and ticket		
management play a major role		-
Lots of talk regarding		
servitization, however no		
implementation due to not	Industry	
seeing the added value	_	
Some industries I can see		
servitization working however		
not in the metal industry		
Social media is one of the most		
important trends	_	
First year of publishing a		
sustainability report that will		
highlight all the sustainability	Company	
activities	_	
More focus on sustainability	_	
goals in strategy		
Most companies are making	_	
use of LinkedIn		
Sustainability offers a great		Social media & CSR
business model		
Government stimulating CSR	Relevancy	
activities		
	_	

Social media has been done for	
14 years now	
The larger companies	
determine to commit to CSR	
activities or not	
Sustainability is being talked	Industry
about in the industry	
Sustainability is being	
implemented more due to	
companies seeing the revenue	
that can be made through CSR	

Table 5.8: Gioia methodology, strategic marketing trends

The main topics that have been mentioned by the interviewees are digitalisation, sustainability and social media. When talking about digitalisation, the most relevant topics that were discussed were data analytics, AI, smart industry, robotics and cybersecurity. Social media, in particular, LinkedIn was seen as one of the biggest trends in the B2B industry, where companies see great potential, in regards to testimonials, content calendars and brand awareness. Sustainability was seen as a huge trend in the technical B2B industry due to how it will affect the future work of companies. The government is already creating several regulations that influence the current behaviour of technical B2B companies.

"The most relevant trends are digitalisation and sustainability" – (Commercial technical manager, Industrial automation and motion control)

"The most relevant marketing trends are AI and corporate social responsibility since this will have an impact on the future of our work" – (Marketing engineer, Industrial automation)

"Social media, servitization, sustainability and virtual reality are the most important trends for our industry" – (CEO, Food machine builder)

"The trend is that marketing is changing to digital, especially marketing automation. The most important trends are digitalisation, increased cloud and software usage, AI, smart industry, robotics, cybersecurity, need of working together in an ecosystem, from products to services (servitization), sustainability, reshoring and energy transition" – (Director of business development, Industrial and IT housing cabinets)

Table 5.9: Exemplary quotes regarding the three most relevant marketing trends (digitalisation, sustainability, social media)

In regards, to AI and big data analytics, it can be said that technical B2B organisations are consciously discussing this topic internally, however, most companies are yet to implement it within their organisations. However, larger organisations have shown signs of implementing AI and big data analytics through marketing automation and predictive maintenance. Technical B2B organisations see huge potential in AI and big data analytics, especially in regards to, preventive maintenance, dashboarding and marketing automation. The interviews have shown that the industry is starting to implement these trends, however still not enough according to different interviewees.

"We are using AI and big data analytics, by having a marketing automation system that analyses the behaviour online" – (Head of marketing, Software/hardware producer machines)

"We are making use of predictive maintenance through AI and we are making use of data in the marketing department through business intelligence" – (Director of business development, Industrial and IT housing cabinets)

"Larger companies are already working with AI and big data analytics, however, smaller companies are yet to be implementing it into their organisation" – (Sales and marketing manager, Industrial 3D print)

"AI and big data analytics is being used in the industry, however, I think still not enough" – (CEO, Online industry publisher)

"AI and big data analytics will become essential for marketing and targeting" – (**Head of sales**, **Anchoring systems**)

"AI and big data analytics is extremely relevant for our industry, in regards to for example preventive maintenance." – (Business development, Software consultancy)

Table 5.10: Exemplary quotes regarding the current relevancy and future potential of AI & big data analytics

Concerning, co-creation & service ecosystems, it can be said that technical B2B organisations see co-creation as a valuable opportunity in the industry. Although service ecosystems are not seen as an opportunity since organisations have seen other platforms disappear due to no demand for platforms in the industry and they find it difficult to imagine a successful platform idea for the technical B2B industry. It can be said that the interviewees were extremely enthusiastic about co-creation, in regards to current relevancy and future potential and most the technical B2B organisations are already working on co-creation.

"Co-creation is one of the main objectives of our strategic marketing plan since our goal is to work together with the engineers of the customer in order to create value together" – (Global sales manager, Special cable)

"We are making use of co-creation since there is a need for co-creation in the industry" – (Director of business development, Industrial and IT housing cabinets)

"I do not see a future for platforms in the technical B2B industry" – (Marketing engineer, Industrial automation)

"There have been some platforms in the industry, however, I think the industry was not yet ready for it, due to the industry being to conservative" – (Marketing and sales manager, Plastic and chemical)

Table 5.11: Exemplary quotes regarding the current relevancy and future potential of co-creation & service ecosystems

Regarding, servitization and industry 4.0, it can be said that these are relevant topics within the industry. Servitization is being seen as something for the future, however, most technical B2B organisations are yet to implement this within their organisation. Reasons that were mentioned were, not seeing the added value of servitization and still being too product-centred as an organisation. The topics that came up during the interviews in regards to servitization were service contracts, preventive maintenance, remote access and digital twins. Industry 4.0 is a term that is being used in the industry quite often since it is an overlapping term for the digitalisation of the industry. Most technical B2B organisations are already digitalising certain parts of their company and see this as the future.

"The mindset is still product centred instead of service centred, which prevents the implementation of servitization" – (Director of business development, Industrial and IT housing cabinets)

"All our products have an IoT interface and we are currently working on remote controlling" – (Director of business development, Industrial and IT housing cabinets)

"We rarely do something on paper since everything within our company is digitalised" – (Sales and marketing manager, Industrial 3D print)

"We are currently looking at servitization, however, it will probably take 4-5 years until it will be implemented" – (CEO, Food machine builder)

"Servitization is beginning to be talked about, however, it is yet to be implemented" – (CEO, Online industry publisher)

Table 5.12: Exemplary quotes regarding the current relevancy and future potential of servitization & Industry 4.0

In regards to, social media and CSR (corporate social responsibility), it can be said that the beforementioned are extremely relevant topics in the industry. Social media is said to be one of the most important trends in the technical B2B industry, where LinkedIn plays a major role. Most smaller companies are using LinkedIn, however not effective due to only sending information instead of interacting. Larger companies are already using several social media platforms like LinkedIn, Instagram and Youtube. CSR is starting to play a more relevant role in technical B2B organisations due to government regulations and changing demand. It became clear during the interviews that when talking about CSR, companies would instantly be focusing on sustainability instead of all the other parts of CSR. Technical B2B organisations are getting more aware of needing to change their operations to adapt to new regulations and demands. Currently, smaller companies might want to implement CSR but do not want to pay the price for it, however in the future companies are obliged to implement CSR to adapt to new demands and new regulations. To conclude, larger technical B2B organisations are leading the way for smaller organisations in regard to CSR.

"Social media is one of the most important trends, also due to the corona pandemic, however, there is still a lot that we can improve in this department" – (Global sales manager, Special cable)

"In regards to the strategy we have said that we want to focus more on sustainable development goals during our next projects" – (Marketing engineer, Industrial automation)

"Government is stimulating companies to improve CSR activities in terms of energy transition and sustainability for example" – (Director of business development, Industrial and IT housing cabinets)

"Reasons for CSR are demand for CSR, satisfy market needs and government agreements" – (Director of business development, Industrial and IT housing cabinets)

"The larger companies determine whether the industry will commit to sustainability" – (CEO, Food machine builder)

"Customers would like to work on sustainability however they do not want to pay the price for it" – (Sales and marketing manager, Industrial 3D print)

"Larger companies are working more and more towards sustainability." – (**Head of sales**, **Anchoring systems**)

Table 5.13: Exemplary quotes regarding the current relevancy and future potential of social media & CSR

5.3 Strategic marketing education offerings

Consultancies

Outdo	Outdo is an organisation that helps entrepreneurs in the sectors of IT, industry and technology to improve their sales, without hiring a new salesperson, but by improving conversions. Outdo was founded in 2014 by Karen van Riel and Martine Teeselink. According to the website of Outdo, it has helped 224 SMEs in the technical, software and technological industries. They have helped SMEs by giving masterclasses, presentations and webinars. The main goal of Outdo is to improve the sales skills of entrepreneurs to improve the sales of the organisations.
Maaketing	Maaketing is an organisation that helps entrepreneurs in the technical B2B industry to start with marketing. Furthermore, Maaketing offers 4 intensive and creative sessions to find a solution for the marketing strategy of technical B2B organisations. ² Also, they offer webinars regarding the improvement of LinkedIn and recruiting.
TEUN	TEUN helps technical B2B organisations to get into contact with new customers, through the acquisition of valuable leads. TEUN helps technical B2B organisations by setting up industrial marketing campaigns. ³ The organisation consist of three employees which are, Tim van der Aa, Frank Jochems and Jelle van den Elzen, who all have different expertise to help the customers. It can be said that TEUN focuses mostly on creating a marketing campaign for a technical B2B organisation.
B2B marketeers	B2B marketeers is a B2B marketing academy that helps organisations develop marketing skills through practical training sessions and different tools. The topics that are being discussed in the academy of B2B marketeers are content marketing and account-based marketing. ⁴
B2B sales academy	B2B sales academy is an organisation that offers masterclasses and online programmes. The main topic that is central to the vision of B2B sales academy is social selling. During the masterclasses and online programmes topics like sustainability and digitalisation will be discussed following the marketing trends. ⁵
Presult	Presult is a B2B digital agency that focuses extensively on digitalisation to help improve the revenue of technical B2B organisations and decrease their costs. The three main topics within this organisation are digital strategy, inbound marketing and Hubspot. ⁶ The goal of Presult is to implement these three topics into the company to boost revenue.
RVS marketing academy	RVS is a marketing academy that is specifically focused on B2B marketing and sales. Their programme consists of four domains which are essentials, cases, classes and skills. The goal of RVS is to provide relevant knowledge regarding B2B marketing. The

¹ https://outdo.nl/over-outdo/

² https://maaketing.nl/

³ https://www.teun-marketingmaakindustrie.nl/over-teun

⁴ https://academy.b2bmarketeers.nl/

https://b2bsalesacademy.online/
 https://www.presult.nl/over-ons/

	marketing topics that are discussed in this marketing academy are
	LinkedIn, Facebook, Instagram, automation and neuromarketing. ⁷
NIMA-B and C education	
NCOI	NCOI offers different education in the Netherlands and can be seen as one of the biggest private education institutions in the Netherlands. NCOI offers the NIMA B Business marketing course, which teaches B2B marketeers how to use strategic marketing. During this course you will focus on different topics which are involved in strategic marketing like STP (segmentation, targeting, positioning), operational marketing
	plan, product positioning and internal analysis.
SRM	SRM is an educational institute for ambitious marketing professionals that offers marketing and communication courses. ¹⁰ SRM also offers the NIMA B Business marketing course, which teaches B2B marketeers how to use strategic marketing. ¹¹ The format of the course is the same as the NCOI offering.
ICM	ICM are offering several different courses and training to organisations in the Netherlands. ¹² ICM also offers the NIMA B business marketing course, where you analyse your own company, learn new marketing knowledge and specialise in the B2B market. ¹³ The most important topics strategical marketing policy, internal & external analysis, market research and online & offline marketing tools.
Business schools	
Nyenrode	Nyenrode business university is a university that focuses solely on business and offers around 200 courses varying from bachelor to master level. ¹⁴ Nyenrode offers a 3-month course regarding strategic marketing management where they teach marketing employees/managers to further develop their strategic marketing skills. ¹⁵ The course focuses on marketing strategy, leadership and financial management
TIAS	TIAS business school offers all types of different courses regarding business. Marketing masterclasses that are being offered are cooperation in networks, AI & digital transformation, marketing strategy, pricing strategies and story telling. 16
Beeckesteijn	Beeckestijn is another business school that offers a lot of different courses regarding business. Beeckestijn offers 3 B2B courses regarding different topics, which are B2B marketing & sales management, B2B online marketing and B2B pricing. The topics that are being discussed in B2B marketing & sales management are branding, online marketing, social media (LinkedIn), CRM

⁷ https://rvsmarketingacademy.nl/programma-overzicht/

⁸ https://www.ncoi.nl/ncoi-opleidingen-en-trainingen.html

⁹ https://www.ncoi.nl/opleiding/nima-b-business-marketing.html

¹⁰ https://www.srm.nl/over-ons.html

 $^{^{11}\} https://www.srm.nl/nima-opleidingen/nima-marketing-opleidingen/nima-b-business-marketing.html?tab=programma$

¹² https://www.icm.nl/over-icm/wie-zijn-wij/

¹³ https://www.icm.nl/opleidingen-en-trainingen/marketing/nima-b-business-marketing/

¹⁴ https://www.nyenrode.nl/over-nyenrode

¹⁵ https://www.nyenrode.nl/opleidingen/p/strategic-marketing-management#introductie

¹⁶ https://www.tias.edu/opleidingen

and marketing automation.¹⁷ In the course of B2B online marketing the following topics will be discussed: content strategy, lead generation, conversion optimization and marketing automation.¹⁸

Table 5.14: Competitor analysis

There are multiple different providers of technical strategic marketing education in the Netherlands. Examples of technical marketing education institutions are consultancies, NIMA-B and C education and business schools. All the different categories have been analysed individually to take a look at the different offerings in regard to technical B2B marketing. During the analysis, it could be seen that the main topic for courses that consultancies offer is digitalisation. This can be in the form of LinkedIn optimisation, content marketing, digital strategy, Hubspot and marketing automation. Furthermore, another focus point of consultancy agencies is the improvement of leads and eventually sales. It can be seen that a high volume of consultancy firms are putting their focus there based on the demand from within the industry for more leads and sales.

1	Education topics
Outdo	Sales improvement
Maaketing	Linkedin optimalisation
	• Recruiting
TEUN	Industrial marketing campaigns
B2B marketeers	Content marketing
	Account-based marketing
B2B sales academy	Social selling
	Sustainability
	Digitalisation
Presult	Digital strategy
	Inbound marketing
	 Hubspot
RVS marketing academy	• Linkedin, Facebook and Instagram automation
	Neuromarketing
NCOI	• STP (segmenting, targeting and positioning)
	Operational marketing plan
	Product positioning
	Internal analysis
SRM	Strategic marketing
ICM	Strategic marketing policy
	 Internal and external analysis
	Market research
	Online & offline marketing tools
Nyenrode	Marketing strategy
	 Leadership
	Financial management
TIAS	Cooperation in networks
	AI & digital transformation
	Marketing strategy
	Pricing strategies
	Storytelling
Beeckesteijn	Branding

¹⁷ https://www.beeckestijn.org/opleidingen/b2b-marketing-sales-management#section-2810

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¹⁸ https://www.beeckestijn.org/opleidingen/b2b-online-marketing#section-3073

- Online marketing
- Social media
- CRM
- Marketing automation
- Content strategy
- Lead generation
- Conversion optimalisation
- Marketing automation

Table 5.15: Education topics, Dutch strategic marketing education institutions

The analysis of the NIMA-B and C education has shown that there is more focus on strategic marketing topics like STP, product positioning, operational marketing plan, internal & external analysis, market research and online & offline marketing tools. When taking a look at the business schools it can be said that they are focusing more on the current marketing trends instead of basic tools. Topics that were seen in those courses are cooperation in networks, AI & digital transformation, storytelling, branding, social media, CRM and marketing automation.

When we take a look at the total offering of all technical strategic marketing education organisations it can be said that digitalisation is the most important topic that is being taught to marketeers. Digitalisation is the overlapping term that involves everything that has to do with the digital environment where social media plays a massive part.

6. Discussion

6.1 Discussion of findings and contributions to the literature

The results of this research show that strategic marketing is becoming a more relevant topic within the Dutch technical B2B organisations, however, are yet to implement it within their organisation. These results support the idea of Setkute & Dibb, that there is a reluctance to implement strategic marketing in technical B2B organisations. Adding to that, the current study has also found several reasons for a reluctance towards implementing strategic marketing, which are lack of capacity, conservativeness cold feet, difficult to measure, product focus, size of the company, conservative industry and staff shortage. Some of these results are in line with the findings of previous studies, for example, the beforementioned study of Setkute & Dibb, where similar reasons like limited resources and generational differences are mentioned (Setkute & Dibb, 2022). Although, the current research does not match the observed results in the study of Chen et al., where the main reasons that were found for not implementing AI were lack of motivation, resistance to AI adoption, complexity and information security (Chen et al., 2020). Reasons for this could be that the research of Chen et al. focuses solely on AI implementation while this research focuses on the totality of strategic marketing. One of the main reasons for not implementing strategic marketing that was found during this research is the lack of capacity, which has simultaneously been stated in the research of Setkute & Dibb in regards to limited resources. It seems possible that these results are due to the staff shortage that has been mentioned several times in the interviews, which implies not having the capacity, in regards to people, to carry out marketing.

The results of this research show that the most relevant marketing trends for Dutch technical B2B organisations are digitalisation, sustainability and social media. Part of these results are supported by the number of papers regarding a marketing trend since there were 101 papers regarding social media in the two selected journals from 2018 to 2022, which was the highest number of papers regarding a marketing trend out of all the marketing trends that have been researched. However, sustainability, for example, only had 54 papers published in the two selected journals from 2018 to 2022, which was average in regards to the other marketing trends. The results that show the most relevant marketing trends should be interpreted with caution since it is based on the view of 11 Dutch technical B2B

organisations within the network of this marketing consultancy. Also the 2 marketing trends, robotics & cybersecurity, that were found in the journals but only had 3 & 6 papers published, did got mentioned in the interviews which could imply that these trends are also extremely relevant while the literature might not pay as much attention to them.

6.2 Research limitations & future research directions

Despite these promising results, there are still several research limitations which can indicate potential future research directions. Firstly, the semi-structured interviews have been done with managers and marketing employees in Dutch technical B2B organisations that were in the network of a marketing consultancy. Therefore the only data that has been analysed is the view of people within the network of this marketing consultancy, which can cause a bias due to being related to a marketing consultancy. It would be interesting to see whether technical B2B organisations that are not within the network of the marketing consultancy would also provide similar data, due to not being affiliated with a marketing consultancy. The sample characteristics that would be recommended are 100 randomly selected technical B2B organisations in the Netherlands to see whether the same results will be found. Secondly, the study was done using a qualitative approach to obtain in-depth insights regarding the need for strategic marketing and the upcoming B2B strategic marketing trends. It would be interesting to test the marketing trends using a quantitative approach to test which marketing trend would score highest based on relevancy, the actual usage and future potential of marketing trends. Thirdly, the generalizability is an issue due to the sample selection that has been based on the network of the marketing consultancy. Lastly, this study has focused on examining the need for strategic marketing and the different marketing trends in the total technical industry. It would be interesting to see whether the needs are similar in all the sub-industries or whether the needs for strategic marketing are different in the sub-industries.

7. Conclusion

This study has focused on the central research question that is formulated as follows ''How do the needs of technical (B2B) organisations, in regards to strategic marketing, cohere with the upcoming B2B strategic marketing trends?''. To answer this question, the research was divided into 5 subquestions that would help to come to an answer for the central research question which were formulated as follows.

- i. What B2B strategic marketing topics are a trend?
- ii. Which B2B strategic marketing trends are most relevant for technical (B2B) organisations?
- iii. What are the developments in regards to the view on strategic marketing in technical (B2B) organisations?
- iv. What are the needs of technical (B2B) organisations in regards to strategic B2B marketing?
- v. What is the current offering of marketing consultancies in regards to strategic marketing for technical (B2B) organisations?

To answer the central research question, the marketing trends were found in the Industrial Marketing Management (IMM) and Journal of Business and Industrial Marketing (JBiM), to eventually discuss these marketing trends in the semi-structured interviews with managers & marketing employees of technical B2B organisations.

During the literature review, 8 marketing trends were found which were eventually tested in the semi-structured interviews. The 8 marketing trends that have been found in the literature were AI (artificial intelligence), social media, CSR (corporate social responsibility), servitization, industry 4.0, BDA (big data analytics), co-creation and service ecosystems. To add to that, several marketing trends were exposed during the interviewing period, which was cloud and software usage, robotics, cybersecurity, energy transition and virtual reality. This has eventually answered the first research question, which has been formulated as follows, "What B2B strategic marketing topics are a trend?".

To answer the following research question, which has been formulated as follows "Which B2B strategic marketing trends are most relevant for technical (B2B) organisation?", semi-structured interviews were used. The interviews have shown that the most relevant topics for technical B2B organisations are digitalisation, social media and CSR. The main topics that were discussed in regards to the trend of digitalisation were data analytics, AI, smart industry, robotics and cybersecurity. In regards to social media, LinkedIn is seen as one of the biggest trends in technical B2B organisations due to the number of possibilities it offers in regard to recruiting and advertising. The research has shown that CSR is starting to play a more relevant role in technical B2B organisations due to government regulations and changing demand.

When taking a look at the third research question, which is formulated as follows "What are the developments in regards to the view on strategic marketing in technical (B2B) organisations?", the semi-structured interviews have shown comprehensive insights into the view of technical B2B organisations, in regards to strategic marketing. Technical B2B organisations seem to know the relevance of strategic marketing however due to different reasons are yet to implement it within their organisation. The main reason that was indicated for the reluctance of implementing strategic marketing was the lack of capacity (time & resources) to successfully implement strategic marketing. Other reasons for the lack of implementation of strategic marketing are cold feet, difficult to measure, product focus, size of the company, conservative industry and staff shortage. Furthermore, another interesting point that was found in the research is that several technical B2B organisations are outsourcing their marketing activities which indicate their level of knowledge regarding marketing and potentially confirm the reluctance of implementing marketing in their organisation

The fourth research question was formulated as follows, "What are the needs of technical (B2B) organisations in regards to strategical B2B marketing?". The semi-structured interviews have shown that several technical B2B organisations are discussing strategic marketing within their organisation however are yet to implement it. During the interview when being asked about the need for strategic marketing companies were unanimous that there is a definite need for strategic marketing in the technical B2B industry. Although, several reasons for not implementing strategic marketing yet seem to indicate that the need for strategic marketing might not be this definite as being showcased in the interviews. The interviews have shown that strategic marketing has not been implemented due to capacity reasons, since in a lot of technical B2B organisations employees are already extremely busy with day-to-day tasks which means that there is almost no time available for the practice of strategic marketing. This reason can be confirmed by looking at the biggest problem that has been stated in the interviews, which is the staff shortage within the industry. The main topics that were of interest for technical B2B organisations in regards to strategic marketing were digitalisation, social media and CSR. To conclude, technical B2B organisations seem to be interested in strategic marketing and there is a need for it, however, they are yet to implement it in their organisation.

The final research question was formulated as follows, "What is the current offering of marketing consultancies in regards to strategic marketing for technical (B2B) organisations?". A competitor analysis was conducted, regarding consultancies, NIMA-B and C education and business schools. When we take a look at the total offering of all technical strategic marketing education organisations it can be said that digitalisation is the most important topic that is being taught to marketeers. Digitalisation is the overlapping term that involves everything that has to do with the digital environment, which is, for example, LinkedIn optimisation, content marketing, digital strategy, Hubspot and marketing automation.

The purpose of this study was to expose the actual needs of technical B2B organisations in regard to strategic marketing and see how they cohere with the upcoming strategic marketing trends. The research has been based on findings in the literature, semi-structured interviews with managers & marketing employees of technical B2B organisations and the desk research. The research has shown

that there is a need for strategic marketing, however, it is yet to be implemented due to different reasons like lack of capacity (time & resources), cold feet, difficult to measure, product focus, size of the company, conservative industry and staff shortage. This adds to the literature of Setkute & Dibb, where reasons for not implementing digital marketing were described, which were generational differences, focus on relationships, limited resources and limited marketing role (Setkute & Dibb, 2022).

The view of technical B2B organisations towards strategic marketing has significantly changed in the last 5-10 years. The focus has shifted from a short-term focus to a long-term focus, equivalently the focus has also changed from a product-oriented focus to a more service-oriented focus which has all contributed to a change in view towards strategic marketing. Technical B2B organisations finally seem to recognize the benefits of strategic marketing, however, it is still in the discovery phase and most technical B2B organisations are still reluctant to implement it into their organisation, due to the reasons that are mentioned in the previous paragraph.

To conclude, there is a definite need for strategic marketing in the technical B2B industry, however, technical B2B organisations are still reluctant to implement it due for different reasons. Reasons like a lack of knowledge offer a great opportunity for marketing consultancies to adapt, by providing masterclasses and programs to improve the knowledge of these technical B2B organisations. The marketing trends that are considered most relevant in the industry are digitalisation, social media and CSR. Marketing consultancies should adapt their programs and masterclasses to these three trends to satisfy the needs of technical B2B organisations. The main topics that were discussed in regards to the trend of digitalisation were data analytics, AI, smart industry, robotics and cybersecurity. In regards to social media, LinkedIn is seen as one of the biggest trends in technical B2B organisations due to the number of possibilities it offers in regard to recruiting and advertising. The literature of Gruner & Power has shown that more than 90% of B2B organisations are using social media, however, only 12% feel that they are using it effectively (Gruner & Power, 2017). This provides a potentially great opportunity for marketing consultancies to provide these technical B2B organisations with excellent knowledge regarding the use of social media. The research has shown that CSR is starting to play a more relevant role in technical B2B organisations due to government regulations and changing demand. Research has also shown that larger organisations are leading the industry when it comes to CSR, which can also be confirmed Han & Lee, where the importance of CSR is shown by taking a look at the Fortune 500 companies where it can be seen that 90% of the companies already have a CSR activity plan (S. L. Han & Lee, 2021b).

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10. Appendices

10.1 Appendix A : Gioia methodology (including quotes)

Strategic marketing

1st order concepts

2nd order themes Aggregate dimensions

Interviewee A: "5 years ago there was no focus on strategic marketing, however the marketing manager and sales manager have explained the importance which is why it became so important within our company"

Interviewee D: "Strategic marketing is becoming more important, however companies are yet to implement it into their organisation"

Interviewee E: "The industry is very traditional, machine builders values print media a lot, however the communication is changing from print to digital"

Interviewee E: "We should focus more on strategic marketing, since digitalisation has increased and new companies have entered the market" View on strategic marketing

Interviewee F: "Strategic marketing has always Strategic marketing been important and we have been following the marketing trends in the market" Interviewee G: "Strategic marketing is extremely important for our company, especially branding and creating awareness of industrial 3d printing" Interviewee J: "Our company has a need for strategic marketing, however, we are yet to implement it within our organisation" Interviewee K: "At first, we just tried to launch some campaigns and see how this would go, now we are focusing more on creating a long-term plan in regards to marketing." Interviewee A: "During the corona period we have expanded our online marketing strategy by renewing the website, implementing hubspot and creating content together with an external party" Interviewee B: "We have an external person who works on our marketing by doing LinkedIn and Marketing creating videos" outsourcing Interviewee C: "An external bureau is currently being used for the marketing activities" Interviewee H: "The marketing is being done in the holding instead of our company, where branding is one of the most important topics" Interviewee D: "Companies are moving more and more to online, like for example websites and social media" Interviewee E: "We are focusing more on story telling instead of advertising, which is done on different platforms like social media and online trade magazines" Marketing channels Interviewee F: "We have started doing more with online marketing, however we are still using print media, since this is still very popular in the industry" Interviewee F: "The marketing channels that we are using are showrooms, international fairs, seminars, workshops, newsletter, content marketing, campaigns, marketing automation, social media, google ads, linkedin advertising" Interviewee J: "We are making use of

flyers/brochures, targeting via emails and social

media posts"

Interviewee A: "Strategic marketing is our priority now and based on the strategic marketing plan we are making our decisions"

Interviewee F: "We are focusing more on the services around the product instead of focusing solely on the product"

Interviewee G: "We are extremely long term oriented and are focusing intensively on strategy"

Interviewee H: "Our new focus areas in regards to marketing are AI and robotics"

Interviewee H: "We have strategic goals for the upcoming years including working on more projects that will contribute to the sustainable development goals and we are focused on the long term, since we want to build relationships with our customers, which is extremely important for us"

Interviewee I: "We are making use of strategic marketing and are focusing on the long-term (3-5 years)"

Interviewee J: "We have a strategic plan (5 years) that is aimed on providing the total solution where we are also slightly focusing on marketing"

Interviewee B: "We would like to do more regarding marketing, like for example LinkedIn, Facebook and Google ads, however we do not have the capacity (people) to do so"

Interviewee I: "Capacity is a factor that we are focusing less on strategic marketing since I am currently doing marketing on my own"

Interviewee I: "We cannot double our growth since our capacity cannot handle this, so I should not be too aggressive in regards to marketing"

Interviewee G: "More reasons for the lack of implementation of strategic marketing is that the impact of marketing is extremely difficult to measure and there is not enough capacity"

Interviewee K: "Another reason for not implementing strategic marketing is that it is difficult to measure the results of marketing when looking at the sales."

Interviewee C: "The reason for not implementing marketing could be getting cold feet for trying something new, not having enough time for marketing and not seeing the results of marketing"

Company focus

Capacity

Measurability

Reasons for not implementing strategic marketing (part I)

Interviewee D: "The reasons for companies to not implement strategic marketing are cold feet for something unknown and resources (time and money)"	Cold feet	
Interviewee J: "Reasons for not implementing strategic marketing is employees not knowing the importance of marketing, low knowledge/skills regarding marketing and the growth of the company."		
Interviewee K: "The current reason for not implementing strategic marketing is the lack of knowledge and experience and the staff shortage."		
Interviewee G: "The industry is still thinking too much about product and less about the services, which hinders implementation of strategic marketing"		
Interviewee B: "We are already working on marketing, by for example using LinkedIn, however our focus lies more with the product and customer relations"	Product focus	
Interviewee H: "Industry is price oriented and the tenders is more quality oriented, however we are trying to focus more on quality in the industry"		
Interviewee C: "The bigger companies are already using marketing intensively while smaller companies fail to adapt"		Reasons for not implementing strategic marketing (part II)
Interviewee D: "Larger companies are implementing strategic marketing and are putting together a strategical plan regarding marketing, while smaller companies are doing marketing based on gut feeling and the own experiences that they have"	Size of company	
Interviewee D: "Most of the trends that have been talked about are relevant for larger companies, while less relevant for smaller companies that seem to postpone implementation of these trends"		
Interviewee E: "The amount of strategic marketing depends on size of the company and whether it is globally active"		_
Interviewee C: "The chemical industry/technical B2B organisations are falling behind in regards to marketing"		

Interviewee E: "Our industry is conservative and is falling behind on the rest of the world"

Conservative industry

Interviewee G: "The industry is quite old school in regards to strategic marketing, so it is really important that companies will adapt it"

Interviewee H: "The B2B is way more conservative, a conservative branch and industry, however this offers opportunities to other companies in regards to online"

Interviewee I: "Lots of older people in the industry are not thinking about digital marketing yet since they are more "old school"."

Interviewee J: "When I am looking at the industry, I see an extremely conservative industry."

Interviewee D: "One of the biggest problems in the industry is the staff shortage"

Interviewee E: "There is a shortage in educated staff, which is a huge problem in the industry, since everybody is searching for the same profiles"

Staff shortage

Interviewee I: "The biggest problem in the industry is staff shortage"

Marketing trends

1st order concepts 2nd order themes dimensions Interviewee A: "At the moment, organisations are pushing towards online and

Interviewee A: "At the moment, organisations are pushing towards online and digitalisation. The most relevant topic is industry 4.0, in particular collection of data systems and big data analytics"

Interviewee F: "The trend is that marketing is changing to digital, especially marketing automation. The most important trends are digitalisation, increased cloud and software usage, AI, smart industry, robotics, cybersecurity, need of working together in ecosystem, from products to services (servitization), sustainability, reshoring and energy transition"

Interviewee G: "The most relevant marketing trends are data analytics, social media and ecosystems"

Interviewee I: "The marketing trends are especially digitalisation where there are small

Digitalisation

topics like dashboarding, digital twin, predictive maintenance en servitization"		
Interviewee K: "The most relevant marketing trends for our company would be AI & big data analytics."		General
Interviewee B: "Social media, servitization, sustainability and virtual reality are the most important trends for our industry"		-
Interviewee D: "Social media is one of the biggest marketing trends in the industry since the industry is still quite conservative"		
Interviewee G: "Companies are making more use of LinkedIn and testimonials to create a story"	Social media	
Interviewee H: "Other trends are robotics, content calendar, brand identity, energy transition and sustainable development goals"		
Interviewee J: "The trend that I am seeing within the industry is the use of LinkedIn, since I see a lot of competitors use it extensively."		
Interviewee C: "The most important topics are sustainability, renewability, efficient energy-usage and environmental friendly"		
Interviewee H: "The most relevant marketing trends are AI and corporate social responsibility, since this will have an impact on the future of our work"	Sustainability	
Interviewee I: "The most relevant trends are digitalisation and sustainability"		_
Interviewee E: "There has been more demand for fairs after the corona pandemic due to less contact"	Others	
Interviewee A: "AI is currently not being used within our organisation however big data analytics is already being used extensively"		
Interviewee E: "We are using AI and big data analytics, by having a marketing automation system that analyses the behaviour online"	Company	
Interviewee F: "We are making use of predictive maintenance through AI and we are making use of data in the marketing department through business intelligence"		

Interviewee H: "We are applying AI on vision and we are using big data analytics for maintenance" Interviewee B: "Preventive maintenance is something that we see a huge future in, since it satisfies the needs of the customer" Interviewee C: "AI and big data analytics is AI & big data not relevant for our company since we are a analytics rather small company" Interviewee G: "Larger companies are already working with AI and big data Relevancy analytics, however smaller companies are yet to be implementing it into their organisation" Interviewee H: "AI and big data analytics can bring added value and we are investing highly into these two trends" Interviewee I: "AI and big data analytics are becoming more relevant for our company, especially dashboarding and predictive maintenance look to have high potential" Interviewee J: "AI and big data analytics will become essential for marketing and targeting" Interviewee K: "AI and big data analytics is extremely relevant for our industry, in regards to for example preventive maintenance." Interviewee A: "AI is rarely being used in the industry since the industry is rather conservative" Interviewee C: "AI and big data analytics is definitely a trend in the chemical industry, Industry like for example standardized products can be sold by AI, which is already being seen in the industry" Interviewee D: "AI and big data analytics is being used in the industry, however I think still not enough" Interviewee A: "Co-creation is one of the main objectives of our strategic marketing

plan, since our goal is to work together with the engineers of the customer in order to

create value together"

Interviewee C: "We are using co-creation to connect companies through demand and needs"

Interviewee E: "We are working on cocreation through horizontal and vertical integration"

Company

Interviewee F: "We are making use of cocreation, since there is a need for co-creation in the industry"

Interviewee G: "We are currently looking at creating a platform, which was invented by looking at the demand of the customer"

Interviewee H: "Due to the amount of work that we already have there is no demand for co-creation"

Interviewee I: "We are making use of partnerships, by having meetings to expose each others interests, which is the lack of staff shortage"

Interviewee J: "Together with allies in the market, we are looking at co-creation in order to create more value for our customers"

Interviewee K: "We are trying to cooperate with different organisations from within our industry, which can be seen as a type of cocreation."

Interviewee A: "Ecosystems are not relevant for this industry, however there are sometimes projects where 5 organisations are working together"

Interviewee B: "I do not see co-creation and ecosystems work within our industry, however it could work in specific different industries"

Interviewee H: "Co-creation and ecosystems is something that I support however my company is still too traditional"

Interviewee H: "I see a huge future in data platforms where companies can upload their data anonymously to benefit from each others data, however I do not see a future for economical platforms"

Interviewee H: "I do not see a future for platforms in the technical B2B industry"

Co-creation & service ecosystems

Relevancy

Interviewee K: "I do not see potential in an ecosystem for our industry." Interviewee C: "There have been some platforms in the industry, however I think the industry was not yet ready for it, due to the industry being to conservative" Interviewee D: "Co-creation is being used in Industry the machine builder industry, especially in regards to system integration" Interviewee I: "During 1 project you often need 10 different expertise's of different companies in order to complete the project, which can be seen as co-creation" Interviewee A: "In terms of Industry 4.0, we are making use of a machine that can read optical fiber to see whether the cable can still be used or it should be replaced" Interviewee F: "The mindset is still product centred instead of service centred, which prevents the implementation of servitization" Interviewee F: "We are doing knowledge sessions for our staff in order to change the view on what the needs are of our customers Company and how we can satisfy those needs" Interviewee F: "All our product have an IoT interface and we are currently working on remote controlling" Interviewee G: "We rarely do something on paper since everything within our company is digitalised" Interviewee H: "We do a lot of maintenance Servitization & however we have not yet started with industry 4.0 preventive maintenance due to capacity" Interviewee K: "I do not know how to implement servitization within our company." Interviewee A: "Long term service relationships could be a possibility for our company in the form of servitization, however the customers do not yet have a need for this" Interviewee B: "We are currently looking at servitization, however it will probably take 4-5 years until it will be implemented"

		Relevancy	
	Interviewee E: "Servitization is a necessity		
	where preventive maintenance, remote		
	access, digital twin, asset management and		
	ticket management play a major role"		
	Interviewee G: "We could provide service		
	contracts to different companies in the way		
	of servitization"		
	of servitization		
	I		
	Interviewee J: "The upcoming 5 years we		
_	will not be investing in digitalisation."		
	Interviewee B: "A lot of people are talking		
	about servitization, however it won't be		
	implemented due to companies not seeing the		
	added value of using it"		
	Interviewee D: "Servitization is beginning to	Industry	
	be talked about, however it is yet to be		
	implemented"		
	implemented		
	Tut		
	Interviewee H: "A big problem in the		
	industry is the shortage of skilled staff,		
	however this offers our company the		
	opportunity to sell robots to customers"		
	Interviewee J: "I have worked in an industry		
	where servitization played a major role,		
	however in the metal industry it might be too		
_	early."		
	Interviewee A: "Social media is one of the		
	most important trends, also due to the corona		
	pandemic, however there is still a lot that we		
	can improve in this department"		
	Interviewee A: "We are looking at different		
	ways of generating energy, sustainable		
	production and alternative sustainable		
	materials, since there is a demand for this"		
	materials, since there is a demand for this		
	I CONTRACTOR OF THE CONTRACTOR		
	Interviewee E: "The mindset regarding CSR		
	is still that it is an advantage of cost saving		
	instead of a business model, however this		
	will probably change in 5 years"	Company	
	1	T 7	
	Interviewee F. "This wear is the first wear that		
	Interviewee F: "This year is the first year that		
	we will be publishing a sustainability report		
	where we will highlight all our sustainability		
	activities"		Social media & CSR
	Interviewee F: "We have been working on		
	social media 14 years so it is not really a		
	trend anymore"		

Interviewee G: "Social media is limited to LinkedIn, which we have also used for recruiting of new employees"

Interviewee H: "In regards to strategy we have said that we want to focus more on sustainability development goals during our next projects"

Interviewee H: "We are using a content calendar for Instagram, LinkedIn and Youtube to send content to customers, while we are yet to interact on social media with customers"

Interviewee I: "We are a great example of a sustainable business, since we have an energy neutral building and are focusing on efficient energy usage"

Interviewee J: "We are making use of LinkedIn, however we should use it more purposefully."

Interviewee B: "Sustainability offers the opportunity to create a new business model"

Interviewee F: "Government is stimulating companies to improve CSR activities in terms of energy transition and sustainability for example"

Relevancy

Interviewee F: "Reasons for CSR are demand for CSR, satisfy market needs and government agreements"

Interviewee G: "Government regulations have helped in pushing companies to work on CSR, however the industry does not have a need for sustainability yet"

Interviewee K: "At the moment, CSR is not relevant for us as a company, however it is relevant to our customers."

Interviewee A: "Our industry is an conservative industry however, we are beginning to work on sustainability"

Interviewee B: "The larger companies determine whether the industry will commit to sustainability"

Interviewee C: "Sustainability is being talked about in the industry, however they are yet to implement it into their operations"

Interviewee D: "In the process industry, sustainability is becoming a more trending topic due to being closer to the end user"

Industry

Interviewee E: "Sustainability is playing a major role in the industry, since businesses are seeing that revenue can be made through CSR"

Interviewee G: "Customers would like to work on sustainability however they do not want to pay the price for it"

Interviewee I: "Everybody in the industry is working on sustainability since the government has set regulations for 2030 and 2050"

Interviewee J: "Larger companies are working more and more towards sustainability."